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Market-Driven Next Generation Product Portfolio

Analysing the Market Demand for ABB IEC LV Motors

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ABSTRACT:
In the context of market analysis, the research question emerged: which product segments should a conceptual product portfolio of ABB IEC LV Motors consist of to meet the strategic objectives of the division? By emphasising the value perceived by customers, companies can distinguish themselves from competitors in markets where the dominant promotion strategy revolves around product push. A research gap was identified at the intersection of the marketing concept and product portfolio management, specifically in the German IEC LV motor market. This thesis contributes to the body of knowledge on customer-centric product portfolio decision-making and its communication to the market through a sales strategy.

Literature review was conducted by presenting relevant findings on the keywords marketing concept, market-driven, product portfolio, and sales strategy, in the context of the German IEC LV motor market. The theoretical framework was further used for structuring the empirical research and applying researched data to the benefit of the case company. Descriptive design science methodology was selected for the methodology of this conceptual case study. Quantitative word frequency analysis was used for revealing common insights in a survey for salespeople, and the data from the surveys, company secondary sources, and observation were interpreted qualitatively.

The IEC LV motor market demand in Germany was studied by analysing the word frequencies in open-ended survey questions responded to by the salespeople that know the customers in the market by their practical and personal experience. The questions were formulated to support providing honest customer feedback from humane standpoint instead of technology focus. The next generation product portfolio was drafted by presenting possible harmonisations between safe area and Ex motors, and as an outcome of the harmonisation, two modular product platforms called “High efficiency SynRM” and “Flexible process performance” were suggested. These platforms were reflected to the researched market demand, and demonstrated to be potential for achieving advantage in the market. To communicate the next generation portfolio to customers and achieve more customer-driven practices in the local sales unit, data was collected from salespeople and sales management, and as a conclusion of the results four focus points were suggested in the form of a sales strategy. Applying the research results would lead the organisation towards more strategy-driven and customer-oriented business. Technical implementation of modular product platforms should be further researched to scale the results globally.

KEYWORDS: marketing concept, market-driven, product portfolio, sales strategy

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TIIVISTELMÄ:
Markkina-analyysin kontekstissa nousi esiin tutkimuskysymys: mitkä tuotesegmentit tulisi sisällyttää ABB IEC LV Motorsin tulevaisuuden tuoteportfolioon, jotta portfolio vastaisi divisioonan strategisia tavoitteita? Asiakkaiden kokemaa arvoa korostamalla yritykset voivat erottua kilpailijoista markkinoilla, joilla on totuttu tuotteita markkinoille työntävään myynninedistämiseen. Markkinointikonseptin ja tuoteportfolion hallinnan yhdistämistä tutkitaan tässä diplomityössä erityisesti Saksan pienjännitemoottorimarkkinan osalta. Tapaustutkimus täydentää tutkittua tietoa asiakaslähtöisestä päätöksenteosta tuoteportfolion hallinnan suhteen, sekä sen viestinnästä kohdemarkkinalle myyntistrategian avulla.

Kirjallisuuskatsaus koostettiin Saksan pienjännitemoottorimarkkinan kannalta olennaisesta tiedosta liittyen avainsanoihin markkinointikonsepti, markkinalähtöisyys, tuoteportfolio ja myyntistrategia. Teoreettista viitekehystä hyödynnettiin empiirisen tiedon jäsentämiseen ja tutkitun tiedon soveltamiseen tapausyrityksen tarpeisiin. Tutkimusmetodiksi valittiin suunnittelututkimus. Määrällisesti tutkimuksessa analysoitiin sanojen esiintymistiheyttä avoimissa kyselyvastauksissa, ja laadullista tutkimusta hyödynnettiin kyselyvastausten sekä yrityksen toissijaisten lähteiden ja työympäristössä havainnoidun tiedon tulkinnassa.

Pienjännitemoottorien markkinakysyntää Saksassa tutkittiin sanojen esiintymistiheyden avulla Saksan operatiivisten myyjien antamista vapaamuotoisista vastauksista. Myyjät valittiin kyselyn vastaajiksi heidän henkilökohtaisen ja käytännönläheisen asiakastuntemuksensa vuoksi. Kysymykset muotoiltiin tukemaan vastaamista kysymyksiin asiakkaiden tarpeista inhimillisestä ja rehellisestä näkökulmasta. Seuraavan sukupolven tuotetarjonta hahmoteltiin sen perusteella mitkä turvallisen tilan ja räjähdysherkän tilan moottorit olisi teknisesti mahdollista yhtenäistää, ja tuloksena esitettiin kaksi modulaarista tuotealustaa nimeltään “Korkean hyötysuhteen SynRM” ja “Joustava process performance”. Esitetyt tuotealustat vastasivat tutkimuksen osoittamaa markkinakysyntää, ja niiden osoitettiin mahdollisesti hyödyttävän markkina-alueella kilpailussa. Uuden sukupolven viestimiseksi asiakkaille ja asiakaslähtöisempien käytäntöjen lisäämiseksi Saksan myyntiyksikön myynniltä ja myynnin johdolta kerättiin tietoa, ja tuloksena ehdotettiin myyntistrategiaa, jossa on neljä keskeistä painopistettä. Tutkimustulosten soveltaminen käytäntöön ohjaisi organisaatiota kohti strategia- ja asiakaslähtöisempää liiketoimintaa. Jotta tuloksia voidaan hyödyntää maailmanlaajuisesti, modulaaristen tuotealustojen toteutus vaatii jatkotutkimusta.

AVAINSANAT: markkinointikonsepti, markkinalähtöisyys, tuoteportfolio, myyntistrategia

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1 Introduction

As multiple competing solution providers enter the market, customers switch focus from purchasing whatever is available to purchasing from the company who can offer the best experience, forcing it a critical factor for the business of companies (Reason et al., 2015). This growing trend and its benefits on creating revenue through outstanding customer experience continues to increase the interest in businesses to replace product thinking, that focuses on providing narrow and specific solutions, with a more holistic and deeper understanding on customer expectations and how solutions can be designed to meet their needs. Service design approaches business from an outside-in perspective where market requirements and especially customer needs and expectations define the foundation for all operations.

In the currently emerging trend of shaping business models, customers, and thus services that aim to fulfilling their needs, are at the centre of the business. Value is created when a customer uses a product to solve their problem instead of the company perceiving value in simply manufacturing or delivering the product. Vargo & Lusch (2004) argue that from the marketing point of view goods and services should not be seen as separated and exclusive dimensions of a product, but rather as services provided either directly to the customer, or through a tangible good as a tool of distribution. They justify this perspective for example with the research that customers purchase products for their intangible benefits and participate in creating value through the solution regardless of whether they purchase a physical good or a service in the traditional, manufacturer-based sense.

This thesis is conceptual research for aiming to enhancing customer experience by modifying the product portfolio of a case company through market research. Based on the drafted exposition of the product portfolio, an operational sales strategy for the company is created from the perspective of customer value creation through viewing products as services. The goal for the case company is to be able to differentiate from competitors in the market with customer-centric approach to business.

1.1 Background of the study

This thesis is done as a commissioned work for Asea Brown Boveri (ABB) Group. ABB is a multinational corporation that offers solutions to achieve sustainability and resource-efficiency (ABB, 2023). The group consists of four business areas that have leading global positions in the markets of Motion, Electrification, Process Automation, and Robotics and Discrete Automation.

Specifically, this research is conducted for the business area Motion, business unit Motors and Generators, and the division International Electrotechnical Commission Low Voltage (IEC LV) Motors. The division manufactures low voltage electric motors according to IEC standards with a strong emphasis on research and development of high efficiency motors. Motors are designed for all industries and applications globally, and thus the business is heavily impacted by different regulations as well as market changes.

The contemporary product portfolio of IEC LV Motors includes four main categories that are General performance motors, Process performance motors, Motors for explosive atmospheres, and Industry and application specific motors. Customers who need off-the-shelf availability and simplicity from the motor often select general performance induction motors, that still have the option for modifications. Within the other categories, the motors are divided into smaller sections based the type of industry or application they suit. Process performance motors are divided into process performance induction motors, synchronous reluctance motors, permanent magnet motors, liquid cooled motors, and high speed motors. Motors for explosive atmospheres consist of dust ignition proof motors, flameproof motors, increased safety motors, and motors for underground mining. Industry and application specific motors are presented in four groups that are brake motors, roller table motors, smoke extraction motors, and high dynamic performance motors that are designed for rough operating conditions.

Besides these sections, different motor types are also limited to different energy efficiency classes, frame sizes and power outputs. For certain motors these specifications

also depend on whether the building material of the motor is cast iron or aluminium. The combination of all these segmenting criteria makes it difficult to present the contemporary product portfolio of ABB IEC LV Motors clearly, which is viewed as problematic for both customers and the division internally.

The division states in their strategy that one of their objectives for 2025 is to [redacted] offering, and based on that this thesis topic was assigned. The assumption is that the product portfolio would increase profitability with [redacted] with [redacted] options. This thesis is a study of the local LV electric motor market of Germany, and it develops a high-level product strategy to [redacted] the product portfolio of the division based on contemporary and future market demand. A visual model of a [redacted] portfolio is designed, and an operative sales strategy for the company is created to suit market needs more accurately.

1.2 Research gap, research question and objectives

The process of defining the research gap for this thesis began from the strategic initiative of the case division and the drive to apply the strategy on practical product management level. Further searching of literature showed that especially the keyword “market-driven” has been widely researched in the ScienceDirect database during the past five years. Recently published literature on the marketing concept, sales strategies, and product portfolios can also be found, which makes reviewing existing literature for this thesis possible. An extensive number of articles about LV motors and their technical properties were found, and even more articles have been written about the application or industry specific LV motors. However, this thesis focuses on rearranging an existing electric motor portfolio and hence the technical details are not relevant to any extent on top of the information that the case company has available, but some relevant literature on the LV motors combined with the search word “sales” can be found.

For the initial research gap mapping, other databases accessed through a University of Vaasa credentials were Taylor & Francis Online Journal Library, Wiley Online Library Journals, and ProQuest Ebook Central. These databases provided the numbers of search

results between the years 2019 to 2023 as Figure 1 shows. Articles related to the marketing concept were emphasised in Taylor & Francis and Wiley Online Library Journals, and Ebook Central seemed to focus more on the LV motor sales and less on market-driven principles compared to other databases reviewed.

Number of hits for each search word	Market-driven	Product portfolio	Marketing concept	Sales strategies	Low voltage motors & sales
ScienceDirect	138061	30912	43571	60239	1089
Taylor & Francis Online Journal Library	99508	15842	104649	25984	74
ProQuest Ebook Central	427	2669	5092	4950	235
Wiley Online Library Journals	103718	19464	135699	35961	25124
Total	**341714**	**68887**	**289011**	**127134**	**26522**

Figure 1. Number of articles from years 2019 to 2023 found on the keywords of this thesis in selected databases.

Various databases are used to access existing research for the literature review of this thesis. However, the sample of these four databases can provide some insight into the popularity of the research conducted on the keywords overall and therefore the total distribution of the popularity of the search words in the selected databases is visualised in Figure 2. Marketing concept and market-driven were by far the most researched topics in this investigation. Articles on sales strategies and product portfolios were also found. Expectedly, the sales aspect of LV motors has been researched less.

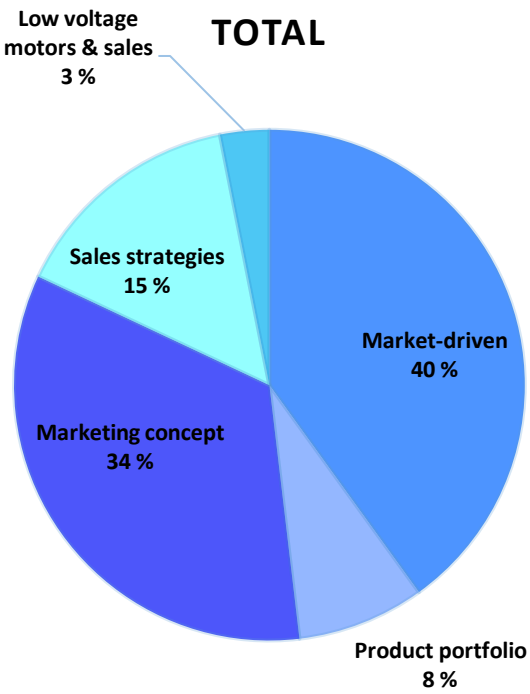

Figure 2. Total distribution of articles found on the keywords of this thesis in selected databases.

Based on further research, "IEC LV motors" from the sales perspective is decided to be removed from the keywords, as the found literature does not provide relevant background information or added value to the information that can be empirically discovered. IEC LV motors are discussed throughout the thesis as they relate to other concepts.

Related to the marketing concept and market-driven approach, customer centricity seems to be a popular research topic. Further, the irrelevancy of search results found for implementing customer centricity specifically through product portfolio modification indicates that this niche is not a widely researched topic. This thesis pursues to filling that gap from the IEC LV motor perspective, as illustrated in Figure 3. For the case division, this thesis aims to providing managerial implications on changing the sales perspective and displayed product portfolio structure, and thus standing out as a customer-centric company in the market. In case the research results can be successfully applied in the German market, it might be possible to utilize this thesis as a guideline for portfolio and sales modifications within the division globally in the future.

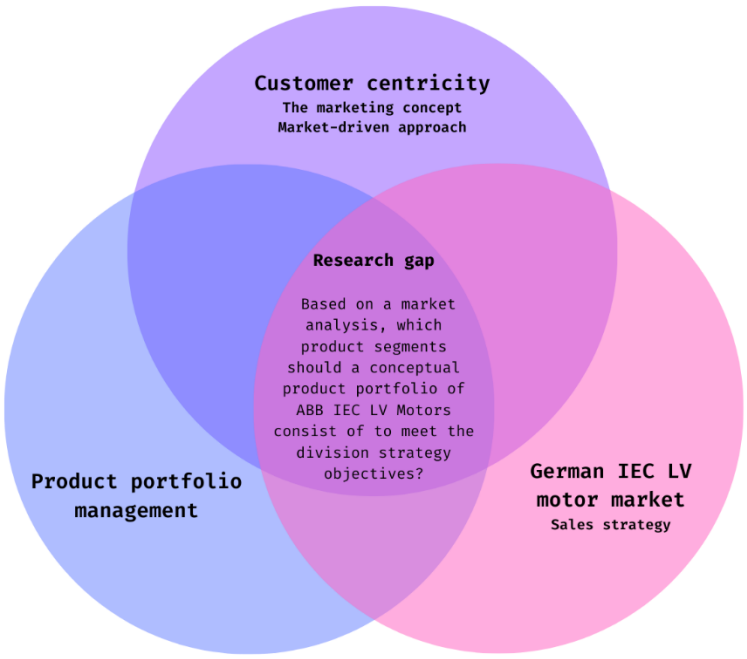

Figure 3. Research gap.

This thesis studies the process of transitioning the sales perspective of a large corporation from mainly product-centric and technical approach towards more customer-centric and hence more sustainable sales and marketing model in the changing market environment. However, the primary research problem of this thesis is more specific and focuses on the need of ABB IEC LV Motors division for a simpler and more market-driven product portfolio. To better describe the different perspectives of the assigned research topic, three objectives are defined for this study:

1. *To analyse the market demand and identify relevant contemporary and future needs of electric motor features in the German market.*
2. *To suggest a visual model of a modified and market-driven portfolio based on the market analysis results.*

3. To identify advantages of the proposed offering model for a large corporation in the LV electric motor market and create an operational sales strategy for the division.

The research problem and the core of the presented objectives are concluded into the following research question:
Based on a market analysis, which product segments should a conceptual product portfolio of ABB IEC LV Motors consist of to meet the strategic objectives of the division?

The research question, in addition to the introduced objectives, are the guidelines for this thesis. The literature review provides universal background information on the keywords, which is then applied specifically for the analysis of the German market of ABB IEC LV Motors in the empirical part to find a solution to the research problem.

1.3 Research scope and limitations

In this section, the scopes of the keywords in this thesis are defined. In addition, the case specific limitations are set.

The marketing concept is a customer-centric business philosophy used in this thesis to guide the process in which the case company promotes its products and services to the market (Helmold, 2022). Customer satisfaction is seen as the primary tool for achieving strategic targets, and a mutually beneficial relationship between the company and customer is desired. In the context of this thesis, the main point of the marketing concept is the idea of having the market demands in the centre of the business. As customers can purchase what they need from anywhere in the world in the current globalised situation, large corporations do not have a monopoly in the market anymore, causing the need to search competitiveness-enabling factors to the offering from the markets instead of internally (Fuciu & Dumitrescu, 2018).

Market-driven in the context of this thesis means responding to changes in the market and understanding customer needs and behaviour (Randhawa et al., 2021). It includes promoting products and services to solve the problems of customers and therefore enable customers to experience addition of value, instead of executing business activities based on product-push and focus on improving technical details (Hollensen & Opresnik, 2019). Market-driven companies also interpret other external factors and stakeholders in addition to customer needs, such as competitors, technological and economic trends, and regulations (Hendarwan, 2023). However, the main purpose of the market-driven approach in this thesis is the transition towards more customer focused atmosphere.

Product portfolio in this thesis means a range of products that a business offers to the market (Riesener et al., 2019). Strategic, financial and operative goals are attainable because of a well-planned product portfolio. Products included in the portfolio can be selected based on internal data and external data gathered from the markets (Hannila et al., 2022).

Sales strategy in this thesis means a plan of a company for achieving their sales goals. It includes segmenting and prioritising target customers, a plan for how to pursue them to purchase, including value proposition, and a variety of selling channels (Panagopoulos & Avlonitis, 2010). The sales strategy should be implemented on an individual salesperson level, leading to enhanced revenue generation (Inyang & Jaramillo, 2020).

Motors are devices for converting electrical energy into mechanical energy through electromagnetic induction (Kim, 2017). This thesis focuses on low voltage electric motors by ABB that fill the standards of International Electrotechnical Commission and range up to 1000 volts according to the IEC 60038 standard, and therefore the motors are named IEC LV motors.

The ABB business unit Motors and Generators includes offerings of generators, high voltage induction motors, IEC LV motors, NEMA low voltage motors, synchronous motors, and synchronous condensers (ABB Group, 2024). This study is, however, limited to the IEC LV Motors division. Within IEC LV Motors, this thesis only focuses on the German market demand and is conducted in collaboration with the local sales unit of the company in Germany, even though the division strategy is managed globally. This limitation is set to develop a clear concept that can potentially be scaled to the global offerings in the future and that gives maximal benefit for the division. The thesis focuses on the sales strategy from the product offering perspective. The research topic was chosen and limited based on the requirements of the company, and it aims to solving problems that are designated in the division strategy.

In this thesis the results are not compared to competitor portfolios. Due to the large set of product types in the current portfolio and customer needs, individual products are not examined, but the products are divided into segments based on their characteristics and applications. Some properties of the products will be discussed to differentiate the market demands, but this thesis does not include further technical analysis of the products. This thesis does not cover how portfolio modification would affect research and development or other functions in the division, or how stakeholders would be involved in the decision-making process of the modification. Any comprehensive analyses on the impacts of technological advancements, market trend changes, regulatory changes, and for example consumer behaviour changes on profitability are not included in the scope of this thesis. Furthermore, the market is not segmented but treated more from individual customer and the German market perspective. The marketing mix as a part of the marketing concept is not comprehensively surveyed in this thesis, even though aspects of the 4Ps are discussed. Regarding future strategies, artificial intelligence applications are not discussed in this thesis, but are mentioned on a high level as they can be beneficial tools when implementing changes in the organisation.

Instead of the marketing concept, customer focus could also be achieved for example through service-dominant logic theory that emphasises services as the tools of all exchange in business and aims to co-creating value with the customer (Vargo & Lusch, 2018). Even though similar objectives are pursued in this thesis, the pure service-dominant logic is not aimed at because the case company wants to keep their products as their main offering instead of switching the primary focus to asking customers how they want to shape the intangible elements, interactions, or processes related to the products, and therefore the marketing concept seems a better fit here.

1.4 Structure of the thesis

This chapter describes the structure of the thesis. The primary structure is illustrated visually in Figure 4.

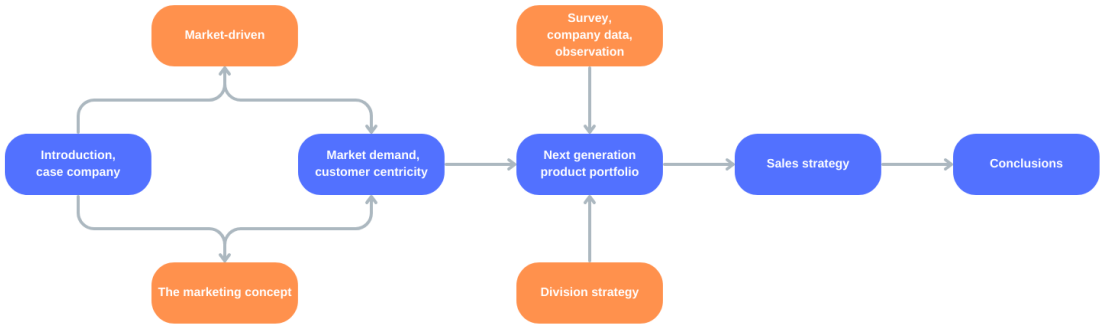

Figure 4. The structure of the thesis.

The introduction gives an overview of why and how this thesis is composed. Background information of the study is given, including a description of the case corporation and their problem that constitutes the core of this thesis. Research gap is identified, and a research question and objectives are stated to support keeping the focus on solving the problem of the case company throughout the study. The topic is framed with research scope and limitations, and the structure of the thesis is described.

In the literature review, a foundation for this study is built by concluding relevant concepts in existing literature. The principal themes of this thesis relate to the marketing concept and customer centricity, market-driven product portfolios, and sales strategy creation. Design science method is utilized for the methodology of this thesis, and a figure of product lines is designed based on the own databases of the case company making the research conceptual.

The result of the empirical research is a visual model of product segments describing which products should be included in a market-driven portfolio. The results also briefly discuss how the new product portfolio would compare to the current portfolio, and if this suggested presentation of a portfolio would suit the service design concept and give value to the company, customers, and stakeholders. Finally, the conclusions of this thesis reflect on if the goals of the research were met, if the corporation can apply the results, and what kinds of future research opportunities there would be related to this thesis.

2 Literature review

The literature review is divided into four main themes that contribute to the body of literature as well as the framework for the empirical study on product portfolio structure and strategic thinking. First the marketing concept as the philosophy of doing business is described. Market-driven approach is then emphasised, followed by related aspects on product portfolio management and sales strategies.

2.1 The marketing concept as the philosophy of business

An inside-out approach to producing and selling LV motors has historically been intuitive and logical, because the competition for such a highly technical system has been relatively low considering the high certainty of demand. However, targets to grow revenue and enhance reputation forces organisations to react to changes in the market, one of which in the 2020s seems to continue to be the power of customers. The marketing concept is one of marketing management concepts along with production concept, selling concept, and societal marketing concept (Mehek, 2020). The marketing concept is based on the idea of customising products to fit the exact customer wishes instead of finding customers for pre-defined products. The idea of the societal marketing concept, that aims to societal value in addition to customer and business value, is not further discussed in this thesis but is also applied as a byproduct of the marketing concept due to the nature of the LV motor business and its market trends that emphasise for example energy efficiency.

The marketing concept is a core philosophy of business that is also referred to as customer orientation (Jobber et al., 2019). It originates from the 1950s and was developed to respond to the dissatisfaction to product orientation and sales orientation in the growing competition, as they approach the market with products whose quality and performance are optimised and focus on how to ensure they get sold. The marketing concept still highlights quality and performance of products and services, as well as includes tactics from the sales orientation, but the approach to the market is more about

finding out what customers want and with that knowledge investing in truly beneficial details rather than perfecting the products technically and then trying to sell them to the market. The marketing orientation has not eliminated inside-out business models, which means that product and selling orientations are also still widely used for doing business today. However, the current trend is that even objectively superior product features and optimised sales practices are not enough anymore if there is an alternative option with better and customised service in the highly competitive business environment of today.

The marketing concept requires the whole organisation to think their main purpose of working to be fulfilling customer wishes to achieve excellent customer service (Jobber et al., 2019). When customers are seen as the most important factor for the business throughout the whole organisation, including marketing as well as strategic planning, value is created through satisfying customer needs and wishes. On the other hand, having customers in the centre of the business enables the company to differentiate in the market from more product or selling oriented competitors when customers experience added value from feeling heard in the process of designing and manufacturing their products. The marketing department has a central role in the marketing concept, as their job is to form a clear picture of what competitors offer to the market to be able to adopt best practices, find functions of the products and services that customers do and do not find beneficial, and find gaps for new opportunities in the market.

Instead of product profitability focused hard facts and finances driving all decisions, the marketing concept highlights different data and reading customer emotions and their subjective perceptions of value and quality (Yrjölä, 2021). Even though companies market themselves as customer-centric, rarely a genuine outside-in strategy and mindset are implemented in the operations. In this environment, having the marketing concept as the philosophy of business likely increases brand value in the eye of customers, resulting in sustainable business success for the company (Novak et al., 2023). To succeed in the business philosophy change, prioritising brand recognition and embracing

the change are important as they are visible for customers, on top of the internal cross-functional culture change and thorough market research.

The marketing concept emphasises the importance of the marketing function in the organisation, so a comprehensive and updated marketing plan is vital for satisfying market needs with the offered products more effectively than competitors (Mehek, 2020). A marketing plan includes a marketing strategy that consists of strategies for the 4Ps, also known as the marketing mix: product, price, promotion and place (Hollensen & Opresnik, 2019). The 4Ps and the extended alternative 7Ps that also includes people, process, and physical evidence, are tools to compare differences between the positions of a company and its competitors in the market (Rathod, 2016). In terms of market-driven product design, promotion means how the customer perception of value is affected, and place means the distribution channels (Donndelinger & Ferguson, 2020). These can affect setting the price for a product, but the set price can also affect the promotion and place.

2.2 Adapting a market-driven approach

Now that a new possible outside-in philosophy for the business is introduced with the aim to gain competitive advantage by developing internal coordination and truly prioritising customer experience instead of heavily investing in internal aspects such as production or selling, more focus is given to the idea of a market-driven and especially a customer-centric mindset. A market-driven approach can add value for both the company and customer by aligning business strategies with the market needs and preferences (Ayar Şentürk & Özkan, 2023). Product development and decision-making processes in market-driven organisations are based on analysed market demand, customer feedback, and changing trends in the market (Wilden et al., 2019).

Market-driven organisations react to the market with a comprehensive understanding on the needs of their customers and capabilities of competitors, and that recognise the benefit of knowing and serving the market needs in all levels of the organisation

(Kindström et al., 2021). Information transparency, as well as the globalised environment and with that changing markets and customer demand, forces product-oriented organisations to think longer-term value creation to stay relevant in the market, and hence adopt a more market-oriented perspective. Thus, market-driven approach is one way to react to the requirement of the previously discussed marketing concept to make the business practices sustainable and strategic.

The reasoning and benefits for driving change in the organisation culture and procedures should be clarified, especially when the change towards market-driven approach and the marketing concept require efforts from everyone in the organisation. Hooley et al. (2020) emphasise that the competitive positioning of an organisation in a market can seem very different from the perspective of a customer than that of the manufacturer. When a customer buys a product, from their perspective they do not buy a product or its technical details, but they buy what the product can do to give them value. Therefore, organisations should abandon the idea of only promoting their current offering and switch the mindset towards solving the problems of customers with their products and services. However instead of going to extremes with listening to all market needs, a resource-based marketing approach somewhere between product push marketing and customer-led marketing should be taken. With this approach the customer needs are a driving force, but an organisation only tries to compete, develop, and fulfil the customer wishes in selected markets where competitive advantage can be reached.

The contemporary reasons to adapt a market-driven approach to business include understanding customer needs and competitor capabilities to be able to utilise data-based decision-making and create sustainable growth opportunities using artificial intelligence (Moreno et al., 2019). In addition, a good customer experience does not only depend on how well a company succeeds in scanning and fulfilling customer needs regarding products, but also the success of adapting new modern and competitive business models, like the market-driven approach discussed, affects how customers view the company and thus has an impact on the business success (Keiningham et al., 2020).

The newest literature suggests that the approach to marketing innovations should be market-driving instead of market-driven, as they create more value for the organisation with more opportunities for future cash flow (Tang et al., 2021). Market-driven approach should still be strategically selected to secure market shares in existing markets and to increase short-term sales, but market-driving is demonstrated to be a more sustainable, yet higher-risk, method in technologically advanced markets. Market-driving organisations proactively sense their markets and create radically new technologies and thus shape their own future customer demands (Schweitzer et al., 2023). However, the market-driving approach seems to assume that the competitive field already functions based on market-driven thinking and is another way to differentiate in the market. Instead of turning down the market-driven approach like the newest trend appears to be, Carpenter (2023) presents a dual market orientation, where markets are viewed from both outside-in and inside-out. They note that in the observed, successful companies the case is often that the market needs are served but at the same time part of the organisation creates solutions that aim to be market-driving based on strategic choices.

When listening to customers and creating solutions with them to solve their problems is the main objective of the business, even tangible products can be viewed primarily as services. Service design is one outside-in perspective to doing business (Reason et al., 2016). The method describes the customer story to understand their needs, and on the other hand, helps the business to create another story on how to serve the customer better as truly acting is often difficult for organisations. Tools for solving business challenges with the service design approach are for example standardised customer profiles, customer journeys, customer lifecycles, and customer insights regarding needs, experience, behaviours, and motivations. Service design and its tools mix into the market-driven approach due to experiments that the case company is implementing on agile projects, as service design can be utilised to define customer requirements for the offering and agile can be selected for managing the implementation process with finding creative solutions to fulfil the requirements with recurring testing.

2.3 Strategically developed product portfolios

So far, the marketing concept has been described to develop fundaments for strategic decisions, and market-driven approach to business has been introduced for emphasising sustainable and long-term thinking in an organisation where customers and the market drive the whole business. Next, product portfolio management is discussed to be able to combine these theories in the empirical research and answer the research question that asks what the product portfolio of the company should consist of for one specific market.

Product portfolio management includes evaluating and prioritising the offering based on business strategies and the situation in the market (Cheng et al., 2022). It also aims for highest possible profits through abandoning or modifying old products or introducing new products to replace them. If demands of different markets are not considered while making these decisions, some customers end up unserved in terms of products that are not needed in other markets, resulting in lost profit. Therefore, this thesis focuses on one specific market instead of trying to cover global demand and hence possibly generalise the customer needs too much.

According to the Pareto principle, 80 percent of the output is a result of 20 percent of the input (Kharub et al., 2022). This can be applied in many areas in the manufacturing industry, and one example could be 80 percent of sales resulting from 20 percent of the products. The 80/20 rule has been recognised in the sales of IEC LV motors and therefore the width of the product offering is questioned and researched in this thesis. Competition and changing needs in the markets cause product portfolios to expand more than it would strategically be beneficial (Riesener et al., 2019). To narrow down the offering, the strengths and weaknesses of the portfolio in the market should be defined and based on the weaknesses, some product lines should be either improved or phased out. Examining the product lines from market and customer perspectives, market size and growth rate, number of competitors in the market, number of customers for each product line, and the number of product variants should be defined to form an

overview on the strengths and weaknesses. It should also be identified which product lines in the portfolio aim for which strategic goals.

The specification to create a market-driven product portfolio includes the assumption that the portfolio should be strongly based on data and strategic decisions. Doorasamy (2015) introduces four alternatives for product portfolio strategies. The first strategy is to leave markets that are already competitive and focus on new opportunities. The second strategy is to speed new products to the market before competitors. The third strategy is to find the most profitable projects and pay attention to high quality of the processes. The last strategy aims to low-risk investments by having a diverse product portfolio. Data-driven product portfolio management aims to finding the best strategic fit, maximising value, and obtaining balance in the portfolio (Hannila et al., 2019). It requires agreed and consistent product structures for a basis of reporting and analysis, and products should be classified in terms of whether they provide strategic value, support the strategy, or are purely non-strategic products. Generally, organisations struggle with balancing their product portfolio contents strategically and commercially if profits are not measured for each product type separately.

Product portfolio optimisation generally examined from a narrow financial perspective, neglecting strategic and portfolio balance aspects (Riesener et al., 2019). Cooper (2013) notes that the common tools for product portfolio value maximisation are deficient because methods like decision trees, Monte Carlo simulations, and strategic selection can give unreliable results. Financial tools, again, seem to favour products with low risk and low profit, which does not take aims for competitive advantage into account. For example, Riesener et al. (2019) provide a framework for more comprehensive portfolio analysis and propose future research opportunities in developing machine learning algorithms for even more efficient decision making. Cheng et al. (2022) suggest one algorithm for artificial intelligence to predict which non-financial measurements in a portfolio would lead to high probability of success, and then recommend the portfolios of those with largest profits based on mathematical modelling. This algorithm is however

too extensive for this thesis research as it calculates performance in multiple markets as well as of products that do not exist yet, but similar tools for enhanced product portfolio profit prioritisation can be expected in the future and should be considered for achieving optimal results for the portfolio management beyond this thesis.

2.4 Sales strategy to support product portfolio decisions

Finally, based on the product portfolio decisions and the overall business strategy, a supporting sales strategy is considered. Strategic operations mean processes that are applied for long-term success by implementing well-planned frameworks that consider resources and their allocation (Rauschnabel et al., 2022). A sales strategy includes customer segmentation and prioritisation, selling model and the objectives of maintaining relationships, and how different sales channels are used (Panagopoulos & Avlonitis, 2010). What is valuable for the customer brings value to the company, and this is communicated through value proposition (Eggert et al., 2018). In addition, the growth in strategic portfolio management can be pursued through cross-selling that is selling additional products, and upselling that means selling upgraded products for higher profit, though they have been little researched in relate to customer-driven strategies (Johnson & Friend, 2015).

The central marketing role in a market-driven company includes selecting market segments. Based on the marketing strategy and the related product portfolio decisions, the sales strategy is created for how to reach individual customers in the segments and how to divide resources between customers that can provide different levels of value (Nikolaos et al., 2010). The individual customers can be identified for example based on their purchasing behaviour, customer profitability, and customer lifetime value, and logically grouped by their types in each market segment. With the typologies, the sales organisation can easily form the big picture of the market segment yet address customers in a way that is individual enough. Sales and marketing activities complement each other, as marketers need information of customers, marketing success and market changes from the sales function (Jobber et al., 2019). On the other hand, salespeople

benefit from understanding market segmentation so value propositions can be tailored to each segment and key selling points can be used for achieving satisfied customers.

When analysing the situation of a market, the current size and growth of the market for each segment should be mapped (Jobber et al., 2019). Customer needs and the trends in their purchasing behaviour are essential to determine, and in terms of competitors, useful information would be for example their strategy, performance and market share, strengths and weaknesses, and how they are expected to behave in the future. Based on this analysis, sales potential is forecasted, and a sales strategy is generated. An effective sales strategy has the power to identify key segments and state how customers in those segments are prioritised, strategically approach customers through multiple sales channels, and prioritise resources in mutually beneficial relationships (Katsikea et al., 2019).

Moving forward from customer relationship management systems, social selling and customer data analytics, also artificial intelligence will most likely play a part in sales functions by adding new opportunities to creating value to customers (Rapp & Beeler, 2021). Artificial intelligence tools can provide more individualisation to the offers and help with timing, pricing, and contents to meet and optimise the sales strategy.

2.5 Summary of the theoretical framework

Figure 5 concludes the main aspects of each topic discussed in the literature review, forming a theoretical framework for the empirical research of this thesis. The marketing concept and market-driven approach come together for the empirical research of market demand, emphasising customer centricity. The customer centric approach is examined from the product portfolio standpoint, and on the other hand, the market demand is used for determining the product portfolio decisions. The product portfolio decisions further impact the suggested sales strategy. Sustainability and long-term success are a repeating pattern in all the main topics of this thesis, as concluded in the “Why?” row in Figure 5.

	Market demand			
	The marketing concept	**Market-driven**	**Product portfolio**	**Sales strategy**
What?	Outside-in business	Decisions based on customer needs and feedback, competitor capabilitites, and market trends	Aiming for optimal range of offering	Planned and straightforward framework to support sales decisions
	Alternative for product and sales orientations	Mindset change: customers experience value from products as solutions to their problems instead of products as technical devices	Portfolio balance and strategic products in addition to short-term financial decisions	
Why?	Increased customer perception of value	Sustainable product decisions	Sustainable business by maximising profit and minimising loss from product offering	Long-term success in selling the portfolio offerings
	Sustainable business philosophy	Competitive advantage from knowing and serving the market		
How?	Customers in the centre of business	Strong desire to serve customers throughout the organisation	Narrow down the portfolio by informed decisions: market analysis, strengths and weaknesses of product lines, strategic or non-strategic products	Customer segmentation and value proposition
	Strategic role of marketing			Maintaining relationships
				Use of sales channels

Figure 5. Summary of the literature review.

3 Methodology and research process

The methodology chapter first introduces the methods used in the thesis and describes the research process. As parts of the research process, data collection methods are then introduced, followed by description of the data analysis process. Finally, the reliability of this research is analysed. This chapter describes how the research question *Based on a market analysis, which product segments should a conceptual product portfolio of ABB IEC LV Motors consist of to meet the strategic objectives of the division?* was studied and answered.

This thesis is based on a descriptive design science method to address specific requirements of the company, as they expect a visual model of the next generation product portfolio based on which products provide the most value to customers. In addition to presenting complex information such as salespeople insights and presentation materials in a compact and visual form, descriptive design science was selected to provide clarity and understanding on the market demand in the context of modifying the next generation product portfolio. The methodology is visible throughout the thesis, as the results of market demand analysis are presented in table form to describe salesperson experiences in a compact way, the next generation product portfolio aligned with the division strategy is illustrated visually, and a customer centric strategy for selling the proposed portfolio is concluded in a compact figure from the portfolio findings, survey results, and the division strategy.

More specifically the thesis is a case study, focusing on one specific company division and its one market region. The limitation enables a practical approach and in-depth understanding to the market within the time and resource limitations of this thesis. With more resources, the validity of the thesis as academic research could be enhanced with a comparative analysis by researching the market demand from the perspective of competing companies in the market. From the case company standpoint, the framework presented in this thesis could be used for a comparative analysis between different market regions for more robust and general results on the market needs.

The research is also conceptual, as the market research is created based on the case company owned databases. To complement the practical customer experiences collected with salespeople surveys, existing company data provides deeper understanding on the strategic approach to sales. Cross-validation was ensured, because the survey results were also found to validate some of the secondary data, where the daily customer experiences align with previously analysed and more comprehensive data.

Multi-method research, based on qualitative secondary research of case company data and expert surveys that are analysed quantitatively, is used for conducting a market analysis and then generating a model of a strategy-based product portfolio. A sales strategy to apply the market-driven portfolio decisions is planned based on the market analysis results as well as survey responses. The collected data was complemented with observing and taking notes on informal discussions in the case division.

The methods were selected based on the proposition of the case company to collect existing data and use it to research strategy implementation possibilities. Expert surveys were utilised to discover information that was not found in secondary data. For the sales strategy, open-ended survey questions were selected to avoid limiting the scope of the respondents. Only responses from ABB accounts were accepted in the Microsoft Forms template, but the survey responses were collected anonymously. The respondents were informed on where the data is utilised. The sales strategy was created from the ground up and therefore expert opinions are needed in addition to documented data, and the sales unit is where the industry experts know the customers and the market best. Customer surveys were left out of this thesis due to the extensive and up-to-date data and knowledge about the market already collected in the company. Informal discussions were selected for collecting data that was not found in documents or sales expert surveys but that could be discovered from product portfolio expert knowledge. The people discussed with were informed that what they share is used for this thesis.

The research process of this thesis began with defining the research problem and the objectives to approach the problem from different perspectives. The research question was then determined with the scope and limitations of the thesis research, based on a defined research gap in literature. A literature review was conducted around the keywords of the thesis. The empirical data was then collected with secondary research and interviews and analysed to find a solution to the research question. Research requirements were concluded from the literature review and company needs and are described in Figure 6. The research requirements guided the data collection and analysis, and further provided a framework for the research result interpretation.

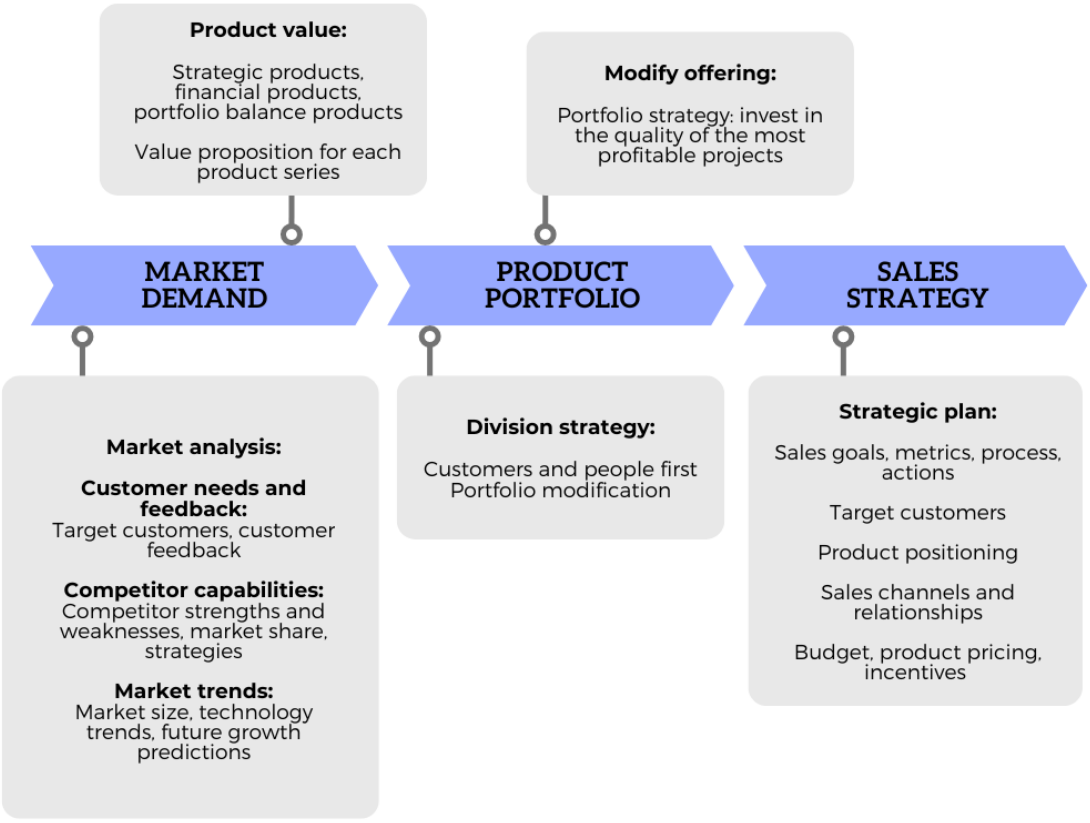

Figure 6. Research requirements.

3.1 Data collection

Secondary data was collected from presentation materials selected by Head of Global Product and Platform Management, including product marketing material, division strategy information, and product information specific to the German market. Relevant data was selected from the presentation materials for each section illustrated in Figure 6: to create a market analysis, to enable analysing the product value, to meet division strategy, to modify the offering, and to create a strategic plan for sales. The selected materials are available internally in the case company but excluded from the public version of the thesis due to confidentiality.

Survey questions were formed based on the research requirements by exploring the gaps on secondary data. Survey questions are presented in Appendix 1. The purpose of the first survey was to collect data on customer experiences from indoor and outdoor salespeople. The survey was sent to all salespeople in the sales unit, and hence the sample population was 50 people. 14 responses were received, which is 28 % of the whole sample population. The second survey was sent to two people who were selected within the sales unit that have the expertise to comment on revenue, budget, product pricing, and incentives, and the results of this survey were utilised as information with no word frequency analysis.

Informal discussions, occurring organically during team meetings and personal conversations, were utilised in the research process. Expert insights and knowledge shared during these discussions were documented in written notes. These informal discussions provided details essential for understanding the case company context, supplementing information not captured in formal materials or surveys.

3.2 Data analysis

The method selected for analysing data was content analysis, because existing documents and expert knowledge were summarised and visualised for uncovering

applicable information. The analysis was also contextual, as customer needs, competitor capabilities, and market trends as the context of the business were interpreted from the secondary data, surveys, and informal discussions to understand their influence on the product portfolio and sales strategy.

Survey responses were first qualitatively interpreted with thematic analysis and summarised into descriptive words to categorise the responses and identify recurring themes in the responses of different experts. The themes were then analysed with word frequency analysis where common themes and frequently mentioned relevant terms by different respondents are presented in a table organised by the frequency of their occurrence. The method was selected instead of automatically generating visual word clouds because the data required human interpretation, and the purpose of the analysis was to gain a broad understanding of the responses, using the word frequences as a tool to indicate how common the mentioned themes were among the salespeople opinions. The questions were open-ended and hence the spelling of the terms and different terms used for meaning the same thing might vary in the responses, and a suitable artificial intelligence tool was not found for recognising relevant terms from any words in free expression. The survey responses were exported to Excel, and each question was examined separately. Synonyms and descriptive keywords were manually added to cells containing corresponding information to be able to utilise the quantitative methodology, and after this interpretation the word frequency was calculated with Excel COUNTIF function.

The purpose of using word frequency analysis was to find similarities in the responses and thus conclude which terms, such as motor types, key performance indicators, or sales goals, should be included in the product portfolio and sales strategy according to several experts mentioning the same terms. Survey results were interpreted and utilised beyond the frequency analysis where applicable to complement the other research results, and word frequency analysis was not used for some questions because the

responses were fragmented, and it was recognised to be more beneficial to express the results qualitatively in picture or written format.

3.3 Validity and reliability of the research

Data was collected from multiple sources including company documents, word frequency analysis and interpretation of survey responses, and informal discussions, and thus data validity is ensured with triangulation. The information in existing documents has been carefully collected to meet real business needs, and best possible experts are selected to answer the questions on the German market, so the data can be considered accurate. Survey respondents were salespeople in the sales unit of Germany, and their median working years in the company were 8 and the mean was 9,3 years. Questions on budget, product pricing, and incentives were answered by two experts on the German market who have worked at ABB for 11 and 13,5 years. The people were selected as interviewees due to their comprehensive expertise on the local market, sales, division management and business development, and the nature of the questions was agreed to suit written, open-ended survey format.

By analysing the results in a real market context, external factors are considered in the decisions made for creating the proposal for the product portfolio and sales strategy. The validity of the research is strengthened by receiving consistently occurring terms in the analysis of survey responses, meaning that multiple experts agree on the same results. The limitations that come with the relatively small sample size of survey respondents as well as the variability of terminology and spelling are addressed by manual review and careful interpretation of the responses. Unexpectedly some responses to the survey were written in German, which might result in misinterpreting subtle nuances of the language. Objectivity is pursued in making decisions on selecting and analysing data.

By reviewing data provided by the case company, similar results to this research can be derived. For other organisations in the market the results might be completely different. Large enough sample size of respondents was tried to reach to be able to draw reliable

conclusions, but results could be more accurate with higher response rate. Inter-rater reliability was ensured when the respondents provided consistent answers to the questions.

4 Research results

The empirical process and findings of the thesis are presented in this chapter, that is divided into three subchapters based on the research objectives: market demand, product portfolio, and sales strategy. Market demand was analysed with word frequency analysis and used as a basis for suggesting the market-driven next generation product portfolio. Sales strategy was created for the researched market based on the product portfolio findings.

4.1 Salespeople evaluation on market demand

The first objective was to analyse the market demand and identify relevant contemporary and future needs of electric motor features in the German market. According to the research requirements presented in Figure 6, the market is analysed from customer, competitor, and market trend perspectives. Customers are emphasised in this research, while competitors and market trends are briefly analysed.

The division has profiled their target customers in four high-level categories. [redacted] general performance motors that are available off-the-shelf and optimised regionally. [redacted] value flexible modification options on a standard base motor and are therefore offered especially process performance motors. [redacted] need motors that are available for their specific applications or requirements, and [redacted] require customer-specifically modified motors but in large quantities. Based on the division strategy and customer needs, the customer types to be prioritised are proposed.

Customer feedback was collected with surveys. The survey results for questions on market demand are presented with word frequency analysis in this chapter, and some responses are paraphrased or quoted to capture some valuable information. The customer feedback results are applied in the portfolio and sales strategy in chapters 4.2 and 4.3.

The first survey question was to define which motors make customers satisfied and therefore create business opportunities for long-term customer relationships and increase brand advantage in the market. The responses to the question “In your experience, which motors often receive positive feedback from customers?” are presented in Table 1.

Word	**Frequency**
M3BP	7
SynRM	6
Ex motors	2
Motors with a high level of customisation	2

Table 1. Survey results on positive feedback.

Most responses on positive feedback were allocated to M3BP and overall motors with good order-specific modification opportunities, as well as synchronous reluctance motors (SynRM). Motors for explosive areas (Ex) and high dynamic performance (HDP) motors were also mentioned to receive positive feedback. One respondent noted that positive feedback is given to motors that have all relevant marketing material and technical information easily available.

To find out what creates additional value for customers, the survey included a question “What makes the customer happy about the product they received?” Traits increasing customer satisfaction are summarised in Table 2.

Word	**Frequency**
Quality	10
Delivery on time	5
Price	4
Energy saving	2
Variety of options	2

Table 2. Survey results on customer satisfaction.

Based on the interpretation of an Operative Quality Specialist, the mentioned words “robust”, “reliable”, and “fits to the application” were counted in the word frequency of “quality”, resulting in ten respondents commenting that quality makes customers happy about their ABB motor. Delivery on time was commented by five respondents, and four said that reasonable price was important for increasing satisfaction. Two respondents mentioned energy savings and a wide range of options. Other aspects were said to be satisfaction to the customer support and ease of finding the right product, regulation compliance, motor speed range, and user-friendliness of the connection box.

To determine customer needs from the outside-in perspective, “What kinds of product-related customer needs (functionalities, features) come up most often during sales interactions?” was asked. Common customer needs are defined in Table 3.

Word	Frequency
Flexibility for customer modification	4
Energy efficiency	3
Price	2
Regulation compliance and certificates	2
Insulated bearings	2

Table 3. Survey results on common customer needs.

Flexibility was the most frequently mentioned customer need, meaning that the German market is interested in products that can be modified to meet their exact functionalities and features. These functionalities and features were listed to include insulated bearings, PTC thermistors, frequency converter operation, power, RPM, compliance with replacement, possible alternative motors, and variant code availability for all motors. All these customer needs were thus questions or wishes related to availability of features. Other more general customer needs were higher energy efficiency and lower price. The information on whether a certain product currently meets regulatory requirements was also mentioned as a common customer need, as well as the unique selling points compared to equivalent competitor motors and the reputation of the products and the company.

The responses were mostly technical and specific needs for information, which indicates the technology-driven culture in the organisation but probably in customer expectations on what is acceptable to ask and request as well. On the other hand, electric motors are technical, detailed, and performance focused overall, which makes it difficult to define customer needs for agile operations purely from the functionality requirement perspective without assumptions on how the motors have previously been developed.

For defining the standard offering and the 20 percent of motors that generate 80 percent of sales as The Pareto principle referred to in the literature review, “Which are the top 20 % most requested motors?” was asked. The expert insights are given on Table 4.

Word	**Frequency**
M3BP	13
Ex motors (M3KP, M3GP)	5
SynRM	2

Table 4. Survey results on most requested products.

13 out of the 14 respondents answered M3BP to be included in the most requested 20 percent of products. Five also mentioned Ex motors, and two would include SynRM motors in the most requested motors as well. Other motors raised in the responses were M3BC, HDP, and M2BAX. One responded that the requested motors is completely dependent on individual customer needs.

To further define the standard offering, “Which motors are the most successful in terms of closing deals?” was asked. The response distribution is presented in Table 5.

Word	**Frequency**
M3BP	7
Ex motors	3
SynRM	2
M2BAX	2
Motors with a high level of customisation	2

Table 5. Survey results on products that are the most successful in closing deals.

Half of the respondents answered M3BP, and two referenced generally to all motors with high customisation possibilities. Ex motors were also defined as successful for closing deals by three respondents. Two salespeople responded SynRM and M2BAX, and one mentioned M3BC. The results were in line with the responses about motors receiving the most positive feedback on Table 1, so the motors that result in highest customer satisfaction are also the most secure motors to sell.

Table 6 illustrates “Which motors do customers view as high-end or premium, and why?” This question was asked to identify which products could potentially be excluded from the standard offering for their strategic high-end positioning that showcases leadership technology and should not be modified in the product portfolio.

Word	Frequency	Why?
M3BP	6	Flexibility, well established in the market, quality
SynRM	5	Energy efficiency
All ABB motors	3	Reputation and pricing of a premium brand
Ex motors	2	Quality

Table 6. Survey results on premium products.

M3BP was found to be valued especially for its flexible modification possibilities, SynRM for the high energy efficiency, and motors for explosive environments for their perceived quality. In addition, water cooled motors and HDP motors were pointed out with no further explanations. M2BAX was also mentioned as a premium product for those who prioritise cheaper price. Three respondents said that all ABB motors are seen as premium products for the brand reputation and high prices.

The responses to the question “What enhancements or new functionalities would customers find valuable?” were divergent, and therefore the word frequency was not found relevant to be analysed. There were specific technical needs as well as more general needs for better customer experience. One respondent stated that “at the moment the market is more price driven, nobody is paying for additional functionalities”, which added the context to interpreting other responses as well, because instead of future visions, most mentioned functionalities or features would provide value to customers very practically in the current situation. In that sense, this question provided an extension to customer needs in Table 3.

General features included motors even higher energy efficiency and fast response to new regulations and especially the European Minimum Energy Performance Standard (MEPS) with product portfolio updates. Customers would also benefit from a web shop available

to anyone with all ABB Motion products included, easier access to product data, and utilisation of digital twin technology.

More specific technical features included aegis ring outside of the shaft, “motor insulation with VC 405 over ULL= 2000V”, “roller bearing solution for Ex db (eb) IIC motors for the complete range”. Flexibility in product modifications was requested, as well as more compact products, and higher speeds and overload capabilities. Lower lifetime cost for products was also mentioned as an enhancement idea. Product specific ideas included SynRM motors with higher speed and lower current, and M3BP motors with more rotations per minute instead of having to select M3BC motor. Portfolio expansion for HDP motors have also been requested by customers.

Reasons for uncertainty in purchasing decisions were collected with the question “When customers hesitate to purchase, what makes them uncertain?” Reasons for hesitation are presented in Table 7.

Word	**Frequency**
Price	12
Delivery time	2
Dimensions would require additional work for customer	2

Table 7. Survey results on reasons for hesitation.

High price was mentioned as a reason for hesitation in 12 out of the 14 responses. Related economic reasons for hesitation were revealed to be the high price of especially new products, in addition to other suppliers increasing their prices after qualifying ABB as an additional supplier. Long delivery time and additional work for the customer from modifying their machine in order the motor to fit were brought up by two respondents. The general market situation was also mentioned in the responses, in addition to

synchronous reluctance motor specific problems that their high current would require a larger drive, they do not support direct on line (DOL) operation in case of inverter failure, incompatibility with motor starters, the need of larger or different inverter and related training when replacing an old motor with SynRM, and reduced overload capability in acceleration. Additional technical reasons for hesitation were lower maximum speeds and different torque curves, as well as low energy saving potential in switching from already high super-premium efficiency IE4 to ultra-premium efficiency IE5.

Data on products that are the most difficult in terms of uncertainty was collected with the question “Is hesitation more common with some motors than others?” and demonstrated in Table 8. This question was asked to research if the strong emphasis of high price mentioned in Table 7 shows up in specific product level.

Word	**Frequency**
SynRM	5
New technology	3
No difference	3
M3BP	2

Table 8. Survey results on products that cause the most hesitation.

The most hesitation was demonstrated to cause new technologies and especially synchronous reluctance motors. Reflecting to Table 7, the price of motors with the newest technology was said to be higher than for example lower energy efficiency motors in a response to the previous question on reasons for hesitation, but in addition, the respondents likely reflected to a wider audience including customers that ended up selecting another supplier with a lower price. Due to the question formulation, for this question the hesitation-causing motors were likely selected from the feedback from a smaller audience that seriously considered buying an ABB motor. The SynRM-specific

hesitation was well explained by one respondent, and the reasons were reflected related to the previous question.

High price and emerging technology were indicated to cause the most hesitation in customers, but SynRM motors were also mentioned as the most efficient in terms of closing deals by two salespeople in Table 5. Therefore, it can be concluded that there is likely a specific group of customers that are proactively willing to invest in newest technology and high energy efficiency, but for the wider audience these motors are difficult to sell, or they require more reassurance. This conclusion was confirmed by a survey response “[Hesitation is common in] especially motors providing benefits which are not requested by law / local rules”.

Three salespeople stated that they have not noticed difference on the level of hesitation between different products. Two respondents answered M3BP that is also by far the most requested and most successful motor in terms of closing deals based on Tables 4 and 5, which likely explains why some salespeople also face the most hesitation related to this certain product line. The reasons for bringing up M3BP were not clarified. New, application specific motors were also mentioned to cause the most hesitation.

The last question on market demand encouraged the salesperson to interpret the best practices from customer perspective. The question was “If you as an individual human were to purchase a low voltage motor that is available in several companies at the same price, what would you base the decision of selecting the supplier on?”, and the word frequency analysis is presented in Table 9.

Word	Frequency
Best support	6
Delivery time, lead time	4
Quality	4
Brand	4
Personal connection with the salesperson	2
Ease of doing business	2
Option availability	2

Table 9. Survey results on attractive supplier characteristics.

Personalised, friendly and fast support availability was emphasised in the responses for what are the critical factors to closing deals over competitors. Based on the analysis, other common signs of an attractive supplier are product quality, fast lead time, and an attractive brand reputation including global presence and premium offering. Availability of suitable products and modifications was also stated as criteria for selecting the supplier, and ease of doing business was defined by easy buying and order cancelling, clear web interface and online self-service platform, technical information easily available, and a configuration tool. Other criteria mentioned were positive previous experiences with the supplier, and presales engineer professionalism with complex applications.

In the German IEC LV motor market, Innomotics, WEG and VEM are the main competitors of ABB, and [redacted] % of the market share consists of smaller competitors. The strengths of Innomotics are high quality and easy customisation to provide additional value, and their Siemens Mall configuration tool has also been mentioned as advantageous. Their product portfolio is wide, but their strategy seems to focus on high efficiency motors. As Innomotics has separated from Siemens, their ability to offer

comprehensive solutions with the motors has weakened, leaving a growth opportunity in the market for ABB especially in offering solutions combining motors and drives. WEG has only two product platforms that are quickly modified according to customer needs. They produce many of their components internally, which has enabled prices below market average especially in the global supply chain disruptions in the recent years, while the quality is still considered above market average. The Germany-based VEM has a clear product portfolio with less variant options than ABB. In terms of the German market, ABB benefits from a factory in Menden providing fast delivery and modifications. ABB also has competitive prices for explosive area motors and larger frame size motors.

In the survey responses, the size of the total German IEC LV motor market was estimated to be approximately [redacted] euros measured by revenue. Of the total market, the share of ABB was estimated [redacted] %. Additionally, of the accessible market the share of ABB was estimated to be approximately [redacted] %. On a product level, the revenue of ABB IEC LV Motors in Germany is divided in safe area standard motors, Ex motors, and application specific motors. Ex motor sales generate [redacted] % of the revenue and application specific motors result in [redacted] %. Safe area standard motors were stated to create [redacted] % of the revenue with IE4 and higher efficiency, [redacted] % with IE3 motors, and [redacted] % with IE2 and lower efficiency motors.

Regarding future expectations, the division strategy includes motor [redacted] as a technological growth opportunity, and there is a growing demand for data-driven solutions in the market to enhance motor efficiency and reliability. Digital twin technology was mentioned in the survey results on customer needs for the future, and it could enhance for example after sales customer service with predictive maintenance, or bring testing to a new level in the manufacturing phase with simulating possible scenarios. Smart technologies can improve product lifetimes or reduce downtime. Market trends also include sustainability acts such as product lifecycle services and material circularity. Germany is amongst the advanced markets where environmental regulations require higher energy efficiencies, but efficient solutions can also provide

cost savings while energy costs are rising globally. In the German market, price increases are expected to stabilise and in the following years market growth is expected mainly from revenue growth.

4.2 Market-driven next generation product portfolio

In this chapter the data collected from the market analysis is reflected to the division strategy, and a new product portfolio is proposed. Brief value propositions for the contemporarily available product series are described in Table 10. The very short descriptions of the benefits, environments or ability to add customer value for different motors are presented to understand similarities and differences when drafting the proposal for a new portfolio. The descriptions can also indicate unique selling points in the market and customer needs in agile working environments.

Product name	**Product code**	**Value proposition**
Process performance induction motors	M3BP, M3AA	Flexibility, well established in the market, quality
SynRM	M3AL, M3BL	Exceptional energy efficiency
SynRM liquid cooled	M3LL	Exceptional energy efficiency, higher power density from advanced cooling
Permanent magnet motors	M3BJ, M3LJ	Optimal for specific sectors, high operational efficiency, suitable for low speed
Water cooled motors	M3LP	Higher power density from advanced cooling
High speed motors	M3BC	Precise speed control, fast acceleration, compact design, customisable
General performance induction motors	M2BAX	Simple motor, lower price, availability off-the-shelf

Ex flameproof	M3JP, M3KP	Suitable for explosive atmospheres, known for high quality
Ex increased safety	M3GP, M3AA	Suitable for explosive atmospheres, known for high quality
Ex dust ignition proof	M3GP, M3AA	Suitable for explosive atmospheres, known for high quality
Ex SynRM	M3GL, M3HL	Exceptional energy efficiency, suitable for explosive atmospheres
Ex motors for underground mining	M3JM	Suitable for explosive atmospheres, known for high quality
Brake motors	M3AA	Safety from instant stop, customisable, brake applications
High dynamic performance (HDP)	M3ET, M3FT, M3LT	Compact design, high power density
Smoke extraction motors	M3BP	Smoke extraction applications, process performance induction motor as the base
Roller table motors	M3RP	Roller table applications, customisable

Table 10. Value propositions for existing motors.

Based on the survey results, synchronous reluctance motors are clearly strategic products with their high energy efficiency. Besides energy efficiency, the division strategy prioritises special application motors, but because they are a more diverse set of different products for specific needs, industry and application specific motors can be

considered portfolio balance products rather than strategic. M3BP are by far the most requested motors, and therefore they are considered financial products. Ex motors were also proven highly requested in the German market, and therefore they are positioned as financial products even though their price is more competitive in the market than most motors. Additionally, M2BAX motors were noted in products that are the most efficient in terms of closing deals, also indicating cost efficiency. Ex motors and safe area standard motors generate most revenue as well, which supports these decisions.

The division strategy is illustrated in Figure 7 that is excluded from the public version of this thesis. The strategic pillars include [redacted], [redacted], and [redacted] of the division. The focus of this thesis is on [redacted] to enable [redacted], in addition to having [redacted] and providing [redacted]. The product portfolio [redacted] includes [redacted], which is also suggested in this thesis on a high level. Germany is a part of the European business where ABB has a significant role in the motor market, so this research is focused on a [redacted] where the strategic target is to [redacted] business. The division states to aim for [redacted], and [redacted], so these aspects considered while applying the marketing concept and market-driven approach. [redacted] and [redacted] are prioritised according to the strategy, and along with [redacted] motors, [redacted] motors, [redacted], and [redacted] are targeted for growth. According to the strategy, the division also stands for [redacted], and therefore high-efficiency motors are emphasised in the product portfolio proposal.

Excluded from public version.

Figure 7. ABB IEC LV Motors strategy (Inside+, personal communications, March 13, 2024).

The second objective of this thesis was to suggest a visual model of a market-driven product portfolio based on the division strategy and market analysis results. The global product offering of ABB IEC LV Motors in the German market in the first quartal of 2024 is illustrated in Appendix 2. The data was collected from the sales support materials of the division, and sorted by the product lines, motor types, product series, and their IE classes. Products that according to product portfolio overview marketing material are identified to belong in the base portfolio are marked with red. The base portfolio

includes the core offering that serves a wide range of customers. The standard offering that is the subject of modification in this thesis includes the most common configurations on top of the base portfolio. In this research, configurations are examined from the point of view of motor series and their efficiency classes, and for example frame sizes and protection ratings are excluded due to the high-level approach to the portfolio. The global base portfolio was used as a baseline, and survey responses were analysed to refine the scope and product positioning of the standard offering in the German market.

Figure 8 illustrates the baseline for product positioning and the portfolio proposal. Product series were first classified based on their highest available efficiency class. The shape of the figure was selected to describe the number of product series in each category. The base portfolio products were marked with red, as they are assumed to belong in the standard portfolio. The classification of product series whose IE classes are not determined in the sales support materials were estimated by their responsible Global Product Manager. Permanent magnet motors were thus positioned to the IE3 category and high dynamic performance motors were positioned below the IE3 category.

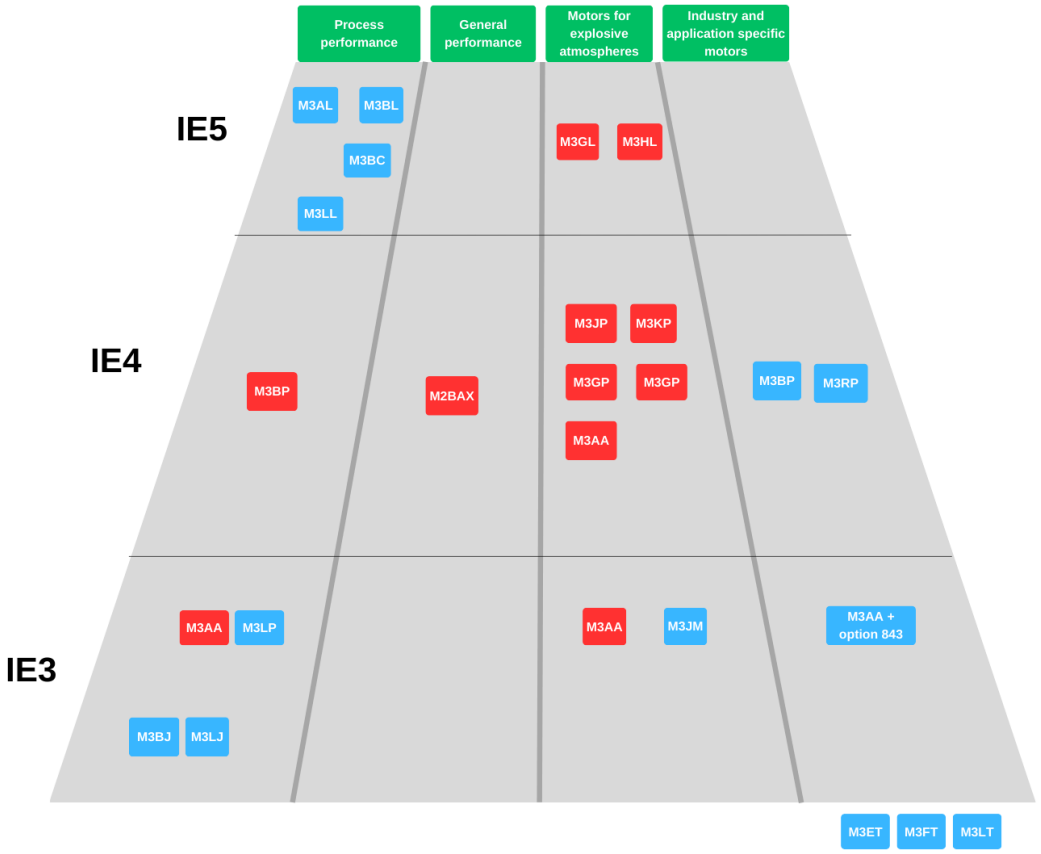

Figure 8. Product series classification based on highest efficiency classes available.

In Figure 9, product positioning is suggested based on the survey results and division strategy. The classifications are rated in relation to other ABB motors in the German market, not competitor motors or other markets. Based on the survey result, all ABB motors are considered premium by the customers. IE classes were used as a starting point for the value that the customers experience from the products. Further, perceived value was based survey results on Tables 1 and 6. For motors that got positive feedback or were mentioned as premium in the eyes of customers, an arrow was drawn up to describe that the experienced value is higher than the value of other products. There are two lengths of arrows, longer for multiple experts agreeing on the added value, and shorter for the products that were mentioned in one response.

High demand products were surveyed with the questions on most requested products and most successful in terms of closing deals, that are presented in Tables 4 and 5. The

higher total word frequency a product series or product line got in the surveys, the wider the outline of the rectangle is with the ratio 20:8:4:2 mentions for M3BP, Ex motors, SynRM, and M2BAX. Explosive area SynRM motors the outline width was marked by both mentions.

In Table 3, there were three customer needs mentioned that could have an impact the product portfolio. These aspects were flexibility for customer modification, energy efficiency, and price. High customisability has already been emphasised in the figure regarding M3BP motors, but most motors can be highly modified with variants. Energy efficiency is the highest in SynRM motors, and high speed M3BC motors can also be found in IE5 according to sales materials. In the German market, Ex motors and larger frame size process performance motors were marked to have a competitive price besides M2BAX. Because the customer needs have already been revealed in other results, they are not separately illustrated in the Figure 9.

High energy efficiency and special application motors especially mentioned suitable for the strategic objectives are marked with yellow background colour. Considering the emphasis of special application motors on the strategy to strengthen the leadership position of ABB, the figure indicates that their budget, revenue, and market demand are relatively low in the German market. Safe area synchronous reluctance motors seem to have a low budget as well despite the ABB desire to stand out as a premium motor supplier.

The shape was changed from Figure 8 to better describe the division strategy. On one hand the shape points up, which can be interpreted as growth focused on high efficiency products and perceived, customer-focused value. On the other hand, ABB wants to position as a premium brand, and therefore the shape points down to describe decreasing focus on lower energy efficiency motors and cheap pricing. The shares of ABB IEC LV Motors Germany product line revenue are expressed in percentage numbers.

Budgets of the product lines are illustrated with the background shades so that the heaviest budget is the darkest and the lowest budget is the lightest.

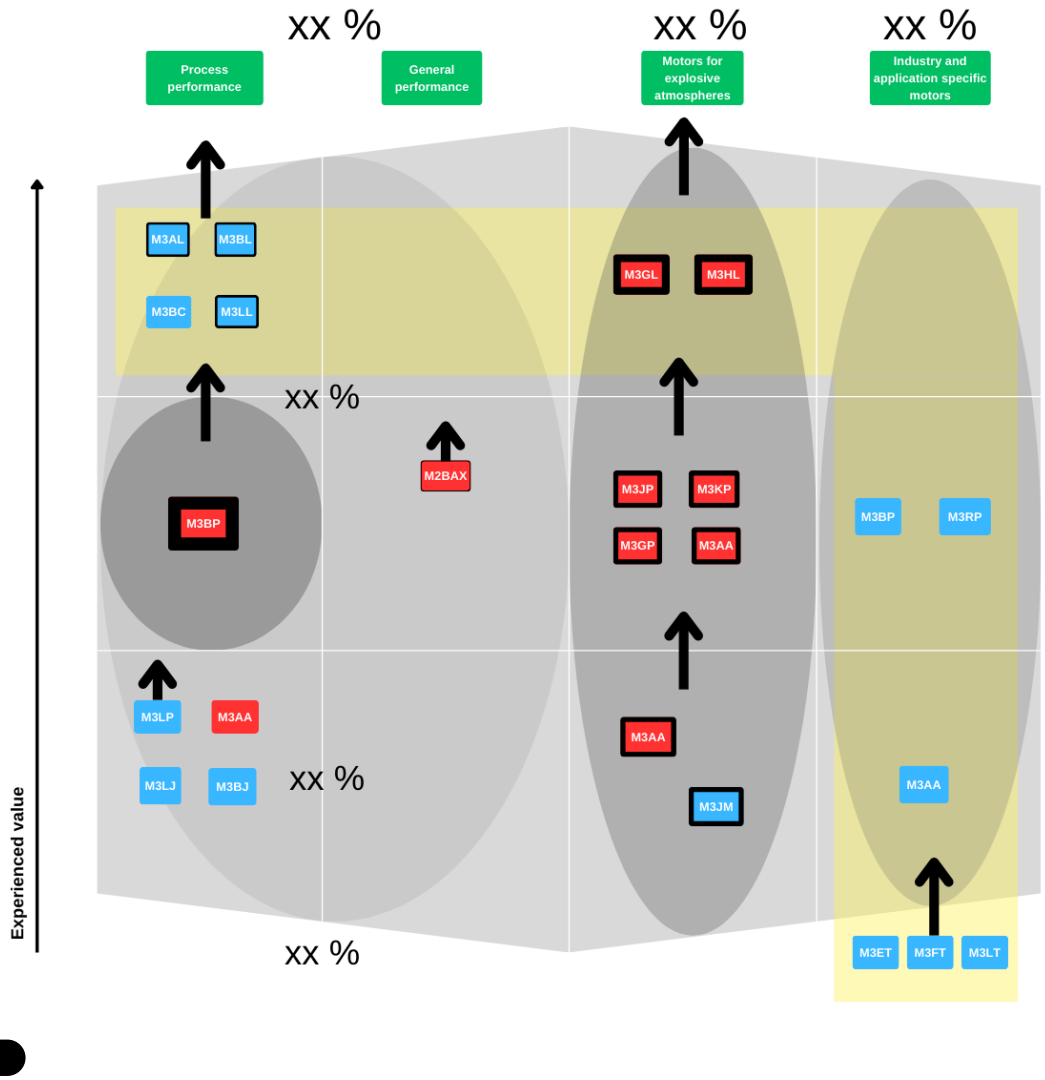

Figure 9. Product positioning proposal.

Further, according to the division strategy, the portfolio should be [redacted] by harmonisation of safe area motors and explosive area motors. Shared properties between the safe area and Ex motors were asked from Global Product Managers in informal discussions. The results are drafted in Figure 10. While drafting the shared properties it was noticed that four of the product series outside of the base portfolio were included in the discussed motors. Because the standard offering as the subject of modification in the division

strategy was noted to consist of the base portfolio and the most common configurations, these motors were thus included in the standard offering and marked purple.

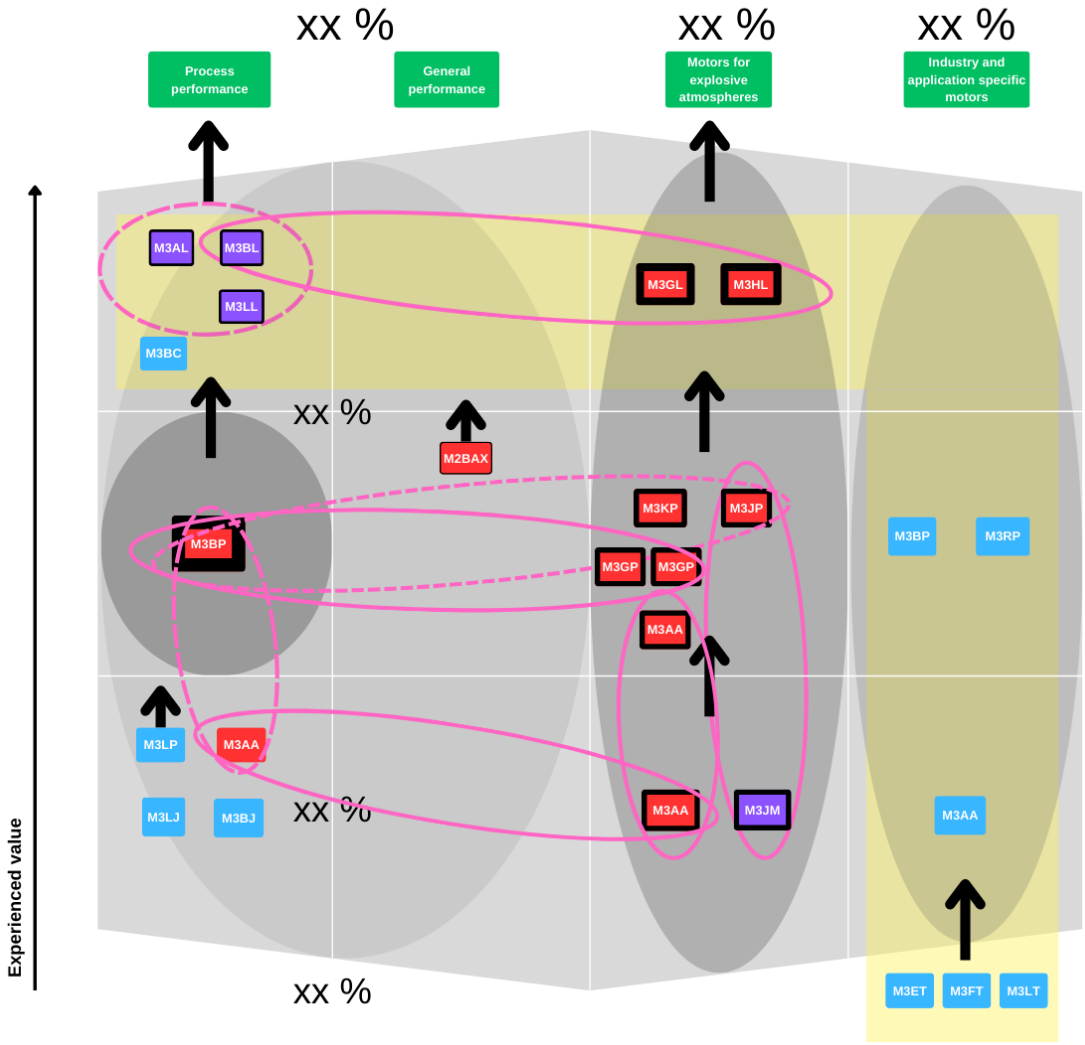

Figure 10. Safe area and Ex motors in the standard offering with shared properties.

Reflecting to the German market, an opportunity was seen for benchmarking a competitor with their product platform-based sales model. Based on the draft of motors with shared properties, safe area and Ex motors that would be possible to harmonise were visualised in Figure 11. The electrical engineering of the products can be used as a base for the harmonisation, and additionally, some mechanical harmonisation can be done between most products. The technical possibilities are however a topic for further research, and are not included in the scope of this thesis as the focus is on market needs

and the customer perspective. The product platforms could be named for example “Energy efficient SynRM” and “Flexible process performance” to highlight that the portfolio responds to the customer needs for energy efficiency and flexible customisation that were raised in the surveys. Additionally, [redacted] and positioning as a [redacted] and [redacted] division are highly emphasised in the division strategy, so these product platforms would fit both market demand and the division strategy.

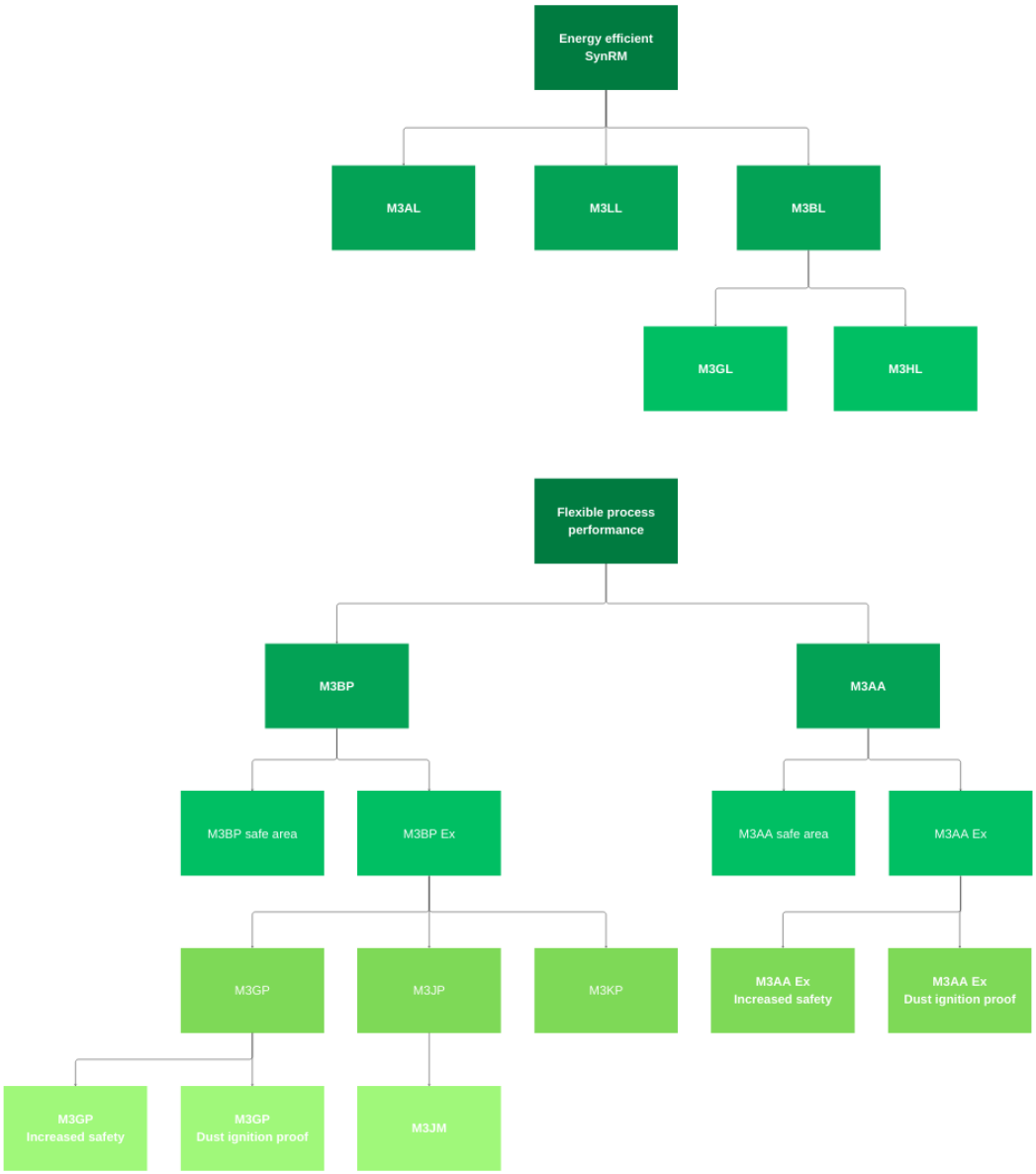

Figure 11. Product platforms SynRM and process performance.

Finally, the full product portfolio with the suggested product platforms is presented in Figure 12 from the customer perspective. The portfolio includes the two suggested product platforms, in addition to the existing product series outside of the standard offering. With this market- and strategy-driven portfolio, value buyers should be targeted with flexible modification options on a standard base motor, and risk avoidance buyers with special motors that fit their application. Hence, general performance motors seem to provide little strategic value in the German market.

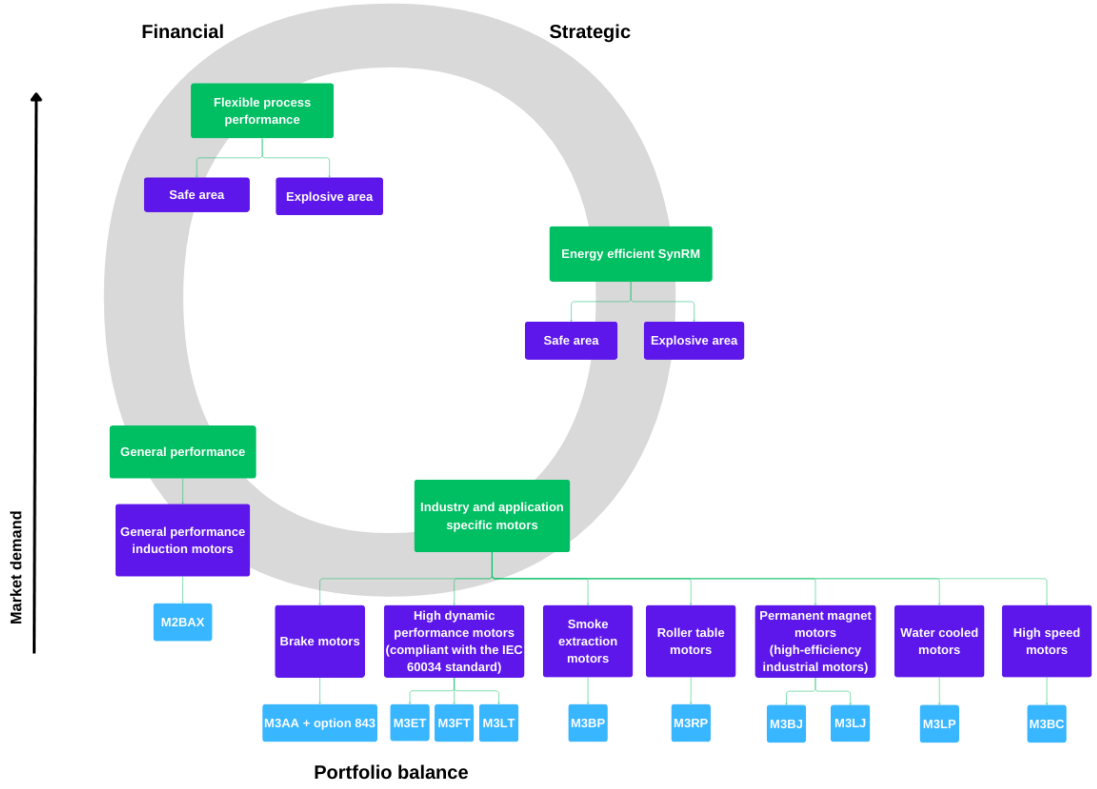

Figure 12. Proposed product portfolio.

Advantages of the proposed next generation product portfolio in the German market would likely include competitiveness against the main competitors, as the proposed model would adopt features of their unique selling points that are the flexible modular designs and the wide portfolio with premium focus. This portfolio would be easier for the salespeople to present to all customers compared to the complex contemporary portfolio, which would improve customer knowledge on the full product range and thus

possibly increase sales of lesser-known motors. As a large corporation, ABB would additionally benefit from the wide range of offering besides motors if for example drives would be offered as easy-to-buy packages as an additional variant in the motors customised from the modular platforms.

4.3 Sales strategy for ABB IEC LV Motors Germany

The third objective was to identify advantages of the proposed offering model for a large corporation in the German LV motor market and to create an operational sales strategy for the division. Target segments and product positioning were discussed in chapters 4.1 and 4.2, and therefore this chapter only includes research results from the surveys, despite target segments and product positioning being parts of the sales strategy.

New and creative ideas for sales goals were asked with the question “What should be the goals of sales in the German market?” The responses divided in three themes: close relationships with customers, T-shaped professionalism, and adding value through products and operations. All noted sales goals aim for best possible customer experience, which indicates that the salespeople do already have the customer-oriented mindset in their work.

Creating long-term partnerships with reliable customers was mentioned in five responses. Available support and fast responses were highlighted, as well as short distance between the customer and salesperson locations. Holistic overview was mentioned by two respondents, of which one stressed deep understanding of customers, and the other recommended expanding the salesperson approach to giving advice more beyond motors, including for example drive products. T-shaped expertise with deep knowledge in one area and broader understanding on what other functions do was further explained by the need for a sales tool to support the motor sizing professionally, and for this engaging in the product design or redesign process was suggested to qualify salespeople in sizing steps and formulas. Close work with the factories for improving future tools and pricing, and continuous technical training were also noted important.

Additionally, the sizing and offering of motor and inverter was recommended to be handled by one salesperson instead of different people.

High product quality was mentioned as a sales goal, as well as shortening delivery times, and positioning “ABB as premium motor supplier with not too high prices”. Achieving good image for ABB, high demand, strong position in the market, and competitiveness even in standard business with lower demand for services were other examples of sales goals, and finally selling additional value was mentioned as one sales goal.

Opinions on good sales metrics were collected by asking “How should the achievement of the sales goals be measured?” The large variety of ideas was difficult to divide in categories. Of the two salespeople who mentioned customer satisfaction as a sales metric, one respondent stated “that´s a difficult question. Mostly it needs time (years) to convince the customer to by our product. The best KPI for sales is the satisfaction of the customer.” Customer satisfaction was suggested by one other salesperson as well. Customer satisfaction might be indicated also if the metric used is hit rate or the number of new customers won. Instead of focusing on the number of customers, order intake and the number of sold units were also proposed for sales metrics, and “order intake” likely referred to measuring the number of units as well. Two respondents commented that sales metrics should not only reflect the budget, and the comment “less KPIs, more focus on the way” likely also referred to the need to measure success with other factors than financial measures. Time-related metrics mentioned were delivery time and the response time to acknowledging an order. In addition to customer satisfaction, another complex metric in the responses was individual salesperson performance.

All mentioned steps responded to the question “What are all the steps that the sales process includes?” are concluded in Figure 13. The steps are divided in three sections to clarify the figure: preparations, offering and handling the order, and reflections. Because the data was collected from several remarkably differing descriptions of the sales process, the order of the steps can be unrealistic. Additionally, all steps are not

necessarily relevant in all customer cases or all sales functions, but the figure aims to provide a general framework to hopefully standardise and support conscious decision-making in the sales process.

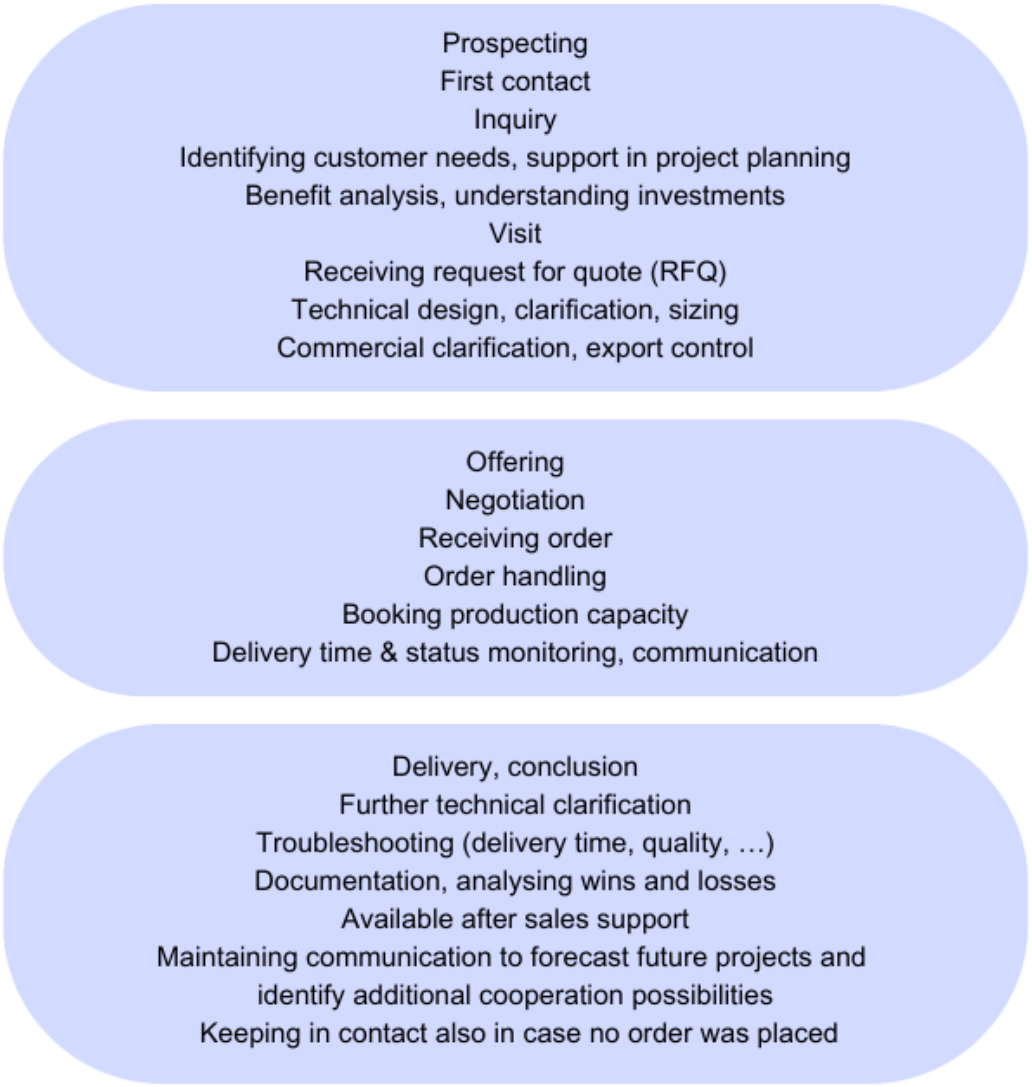

Figure 13. The sales process derived from survey responses.

To improve the sales process described in Figure 13, the salespeople were asked “Is there something that could be changed in the sales process to make the customer feel more valued?” The conclusions are drawn in Table 11.

Word	Frequency
Shorter response time	6
Clarity in the sales process from customer perspective	4
Different price structure	2

Table 11. Survey results on sales process improvement.

Shorter response time was suggested in six responses, and 24 hours was given as an example of a reasonable time frame. Flexible discount structure was suggested, and overall price setting structure was demanded to be changed more realistic instead of starting with a high price and then reducing the price to meet customer tolerance.

Four responses were categorised in improving clarity from customer perspective. These comments mentioned including customer in the sales process, more personnel for back-end sales and order handling, and switching the whole organisation mindset to think in terms of sales whenever encountering customers, but also reducing the number of people involved in the sales process by having one salesperson handle all questions related to the ongoing case instead of forwarding the issues. Other comments on the sales process improvements were that often the optimal product is not offered, and that customers would value an online shop including all products and available for everyone.

Reflecting to the sales process described above, shorter response time affects the first two sections that are preparation, and offering and order handling. Different price structure is mostly related to the preparation section. Clarity in the sales process can possibly be improved with implementing a shared framework for the steps included, but according to the explanations in the responses, additional agreements on dividing responsibilities would be required to improve customer satisfaction in this sense.

Best practices to do business in a customer-centric way were asked with the question “What other sales actions are done or could be done to increase customer satisfaction?” The ideas are presented in Table 12.

Word	**Frequency**
Faster response time	5
Improved communication	2
On-site meetings with customer to inform about ABB motor advantages	2
Faster time to market and more reliable delivery time estimation	2

Table 12. Survey results on beneficial sales actions.

The importance of communication was emphasised as five salespeople said customer satisfaction would increase with faster response time, and two suggested improving the communication overall. Two respondents also thought satisfaction would increase with more in-person meetings and informing potential customers about the full product portfolio ABB has to offer. Faster time to market and more reliable estimations about the delivery time were mentioned as more general business actions. One respondent proposed that it would increase customer satisfaction "to get out in the first price-offer with a real market price". Reduced number and improved clarity of ABB sales tools was suggested, along with a sizing software that would optimise time spent finding sales data by automatically providing relevant documents like datasheets and drawings. In addition, better product availability and more people for back-end sales and order handling were stated to improve customer satisfaction.

Sales channels were surveyed from the customer perspective with the question “What are the possible channels to buy ABB motors from?” Survey responses on available IEC LV motor buying channels were concluded in Figure 14. ABB Shop was mentioned in five responses, of which two referred to it as a future channel: “We need a platform like the

Siemens Mall, I hope the e-shop can implement that". Secondary data revealed that there are additional wholesale eCommerce platforms related to ABB Shop, including cBOL, BOL, OMS and manual order processing, that are in early onboarding phase and therefore part of the salespeople did not recognise it as sales channel in their responses.

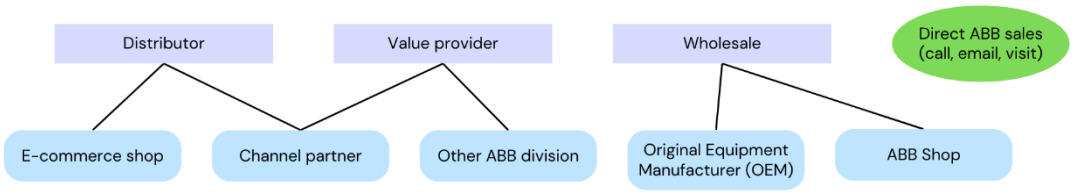

Figure 14. Survey results on available channels to buy ABB motors from.

What do customers appreciate or like about each of these buying channels?

Nine respondents stated that customers value personal contact to ABB, or overall personal and easily approachable support. Two respondents provided more detailed insights for the different channels: pricing was mentioned a benefit of direct sales, wholesales, and value providers. Channel partners were mentioned to provide an offer for everyone, and the benefit of wholesales was said to be fast responses. Anonymity was mentioned as a liked trait for other channels than direct sales. Lack of third parties was mentioned as a benefit of ABB Shop, and e-commerce shops were said to have easy access. Other than personal contact, the responses did not reveal which buying channels are preferred as they all seem to have different benefits.

Practices that the salespeople find good in their work were defined with the question "If you were a new ABB customer, what would you appreciate in the practices that ABB currently uses for creating and maintaining a long-term relationship with you?" Good sales practices are expressed in Table 13.

Word	Frequency
Personal and friend-like contact	5
Technical support	4

Table 13. Survey results on customer relationship maintenance.

Good sales practices were agreed by the salespeople to be personal contact to the customer, preferably with on-site visits, and competent technical support. Two respondents mentioned that they would like to see improvement in the communication on "will I be handled from partner or not" and " the customer should always be informed about the entire ABB motor portfolio". Wide product portfolio and energy efficient solutions were also mentioned as advantages for sales.

The last question in the survey was “What could be changed or added in sales channels or maintaining relationships to ensure that customers keep buying motors from ABB?” Five respondents mentioned the need for improvement of digital tools. They had different perspectives, including tools for order tracking and motor sizing. Digital investments were also mentioned to be needed for reduced time in finding datasheets, drawings, pricing information, delivery time information, as well as a web shop with solid prices and easy buying. One respondent suggested establishing connections between customers and research and development (R&D) for mutual benefit of sharing information. More consistent and transparent product pricing for end user sales was demanded by one respondent. Other aspects mentioned were less bureaucracy, faster response time, new products to stay competitive, cheaper prices, and more back-end salespeople for best possible customer relationships.

Finally, any additional comments were welcomed with “Please write here if you have anything to add regarding customer feedback or sales strategy.” One respondent concluded that customers are happy when they can contact someone from ABB directly and personally for any support, “not over a support line or other contacts”. Response

time, delivery time, and product prices were mentioned in one response as targets of improvement based on customer feedback. One remark was “very good questions”, so the survey might have had a direct impact on increasing consciousness or addressing new perspectives to market-driven approach to sales.

To complement the sales strategy and product portfolio with relevant finance-related information, another survey was conducted. However, the responses are not analysed to the same extent as the first survey results, because the questions were asked for collecting information rather than uncovering customer opinions or creative improvement ideas. The questions asked in the finance-focused survey are listed in the second page of Appendix 1, and the data from the responses is provided below.

The sales budget for orders in the German market for 2024 is [redacted] euros. This budget is divided for the motor types as follows: [redacted] % for [redacted] motors with strong emphasis on [redacted], where only [redacted] % of the budget is for [redacted] motors. Of other cast iron and aluminium safe area motors excluding [redacted], [redacted] % of the budget is reserved for [redacted] motors and [redacted] % for [redacted] motors. [redacted] motors are given [redacted] % of the budget, and similarly to [redacted], most of the budget for [redacted] motors is assigned to [redacted] with [redacted] %. The budgets were commented to be well aligned with current customer demand, but as growth opportunities, more budget should be placed in the future on strategically beneficial motors responding to growing market trends and the division strategy.

Product pricing was described as a [redacted] that considers the type of customer and [redacted]. The criteria for placing a customer on a [redacted] on the [redacted] were identified measurements such as customer [redacted], customer [redacted], and whether the customer is [redacted] or [redacted]. In addition to the [redacted] pricing, high competition in the market forces the price lower for [redacted] and [redacted] motors and overall motors that have [redacted]. To increase product attractiveness for customers, it was commented that the prices of some products should be made publicly available, but at the same time the respondents agreed that the current product pricing is well in line with the division strategy in the German market.

Incentives were reported to be used within the limitations of the yearly budget targets, but necessary actions are done to meet growth strategy requirements. For the types of incentives used were mentioned [redacted], [redacted] based on [redacted] or [redacted], and incentives to achieve [redacted] and desired results. [redacted] from different [redacted] and personal customer contact were also referred to. As improvement ideas related to the use of incentives, more high-quality customer time was suggested, and elaborated with investing more in customer visits by front-end sales and [redacted].

In open comments regarding the product portfolio or sales strategy proposal, more strongly strategy-driven decisions were requested in the area sales level. Another comment was related to strategic pricing of new products. [redacted] and [redacted] were given as example products for a scenario where ABB should [redacted] motors to the market with a [redacted] and [redacted], and as the [redacted] product market [redacted] then later focus on [redacted].

The findings on the sales strategy for ABB IEC LV Motors in the German market are concluded in Figure 15. The strategic focus points are derived from this chapter and the portfolio proposal, with further reasoning designated from the literature review. As the next generation product portfolio in chapter 4.2 was proposed with market-driven approach, the sales strategy similarly highlights the importance of customer focus.

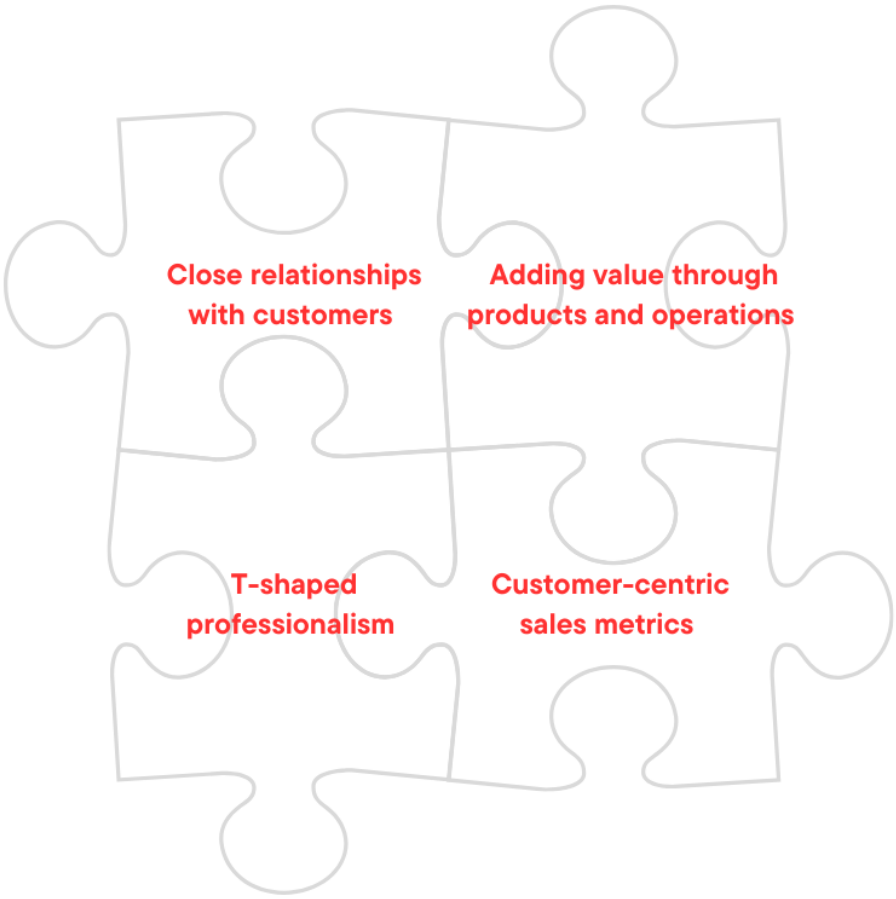

Figure 15. Strategic focus for sales.

Close relationships with customers were emphasised in the survey responses, and salespeople found it important to provide personal contact to customers during the entire sales process as well as longer term. The strategic objective is also to interpret the data from subjective customer experiences and emotions to understand what truly creates value and quality to improve the business.

T-shaped professionalism in this context means cross-functional expertise in individuals on top of their own special function. All levels of a market-driven organisation must adopt the mindset to focus on providing best possible customer experience, which can be utilised for improved internal collaboration and broader expertise of the salespeople. With T-shaped professionalism and the described mindset change, the goal is to avoid

forwarding customer cases to different people and thus prevent confusion and frustration in the customer experience.

For adding value through products and operations, the 4Ps of the marketing mix were considered. In terms of “product”, value buyers are strategically targeted with flexible process performance motors and high efficiency synchronous reluctance motors, including motors for explosive areas. Risk avoidance buyers are especially offered special motors. When products in the portfolio are based on reacting to market demand, value is added for customers, resulting in the customers bringing value to the company. Strategically considered decisions should be made for market-driving products that are not yet demanded by the market. “Price” is addressed with strategic pricing according to the division strategy, but as a response to the customer demand, the prices of some products should be publicly available. The perspective to “promotion” should be selling subjective value instead of the technical product. Examples of added value for the customers in this research were high quality, high efficiency, flexible customisation options and special application motors, unique functionalities, and the global premium brand. “Place” was suggested to include versatile distribution channels, with improved clarity and response time to the communication from customer perspective.

Finally, the success of sales should be measured with metrics that support the goal of achieving customer-centric approach in the daily operations. As examples raised in the survey by the salespeople, number of new customers won, delivery time, and response time could be used. Customer satisfaction would also be a great metric in this case, but the metrics must be first clearly defined based on the value-adding product and operation objectives.

5 Conclusions

The German IEC LV motor market demand was analysed by salespeople survey results on customer needs, and the contemporary and future requirements for electric motors were found to include high energy efficiency, flexibility for customer modifications, and high quality. Motors for explosive areas were found to be highly requested especially in the German market, in addition to M3BP motors with high flexibility and synchronous reluctance motors with exceptional efficiency. These products correspond to the most requested market needs, and are aligned with the division strategy. Lower price or more transparent product pricing were requested in several survey responses, which causes disharmony between the customer needs and the strategic objectives. However, the pricing was not raised as the most important aspect since there is a gap in the market for ABB to position as a premium brand with excellent customer service including high level of customisation and ease in doing business with drive integration in the offering. Based on the market analysis and the division strategy, a next generation product portfolio with two modular product platforms was illustrated, answering to the research question *Based on a market analysis, which product segments should a conceptual product portfolio of ABB IEC LV Motors consist of to meet the strategic objectives of the division?*

To communicate the division strategy, market needs, and the proposed product portfolio on a practical level, a sales strategy was created. Improved communication for customers was raised as the most critical factor for increasing customer satisfaction, and that was highlighted in the proposed sales strategy in addition to comprehensive salesperson expertise, customer-centric sales metrics, and selling additional value through products and services. The sales process and sales channels were concluded from survey results to increase consciousness on what do the customers go through when doing business with ABB IEC LV Motors in Germany.

5.1 Managerial implications

As the market demand for Ex motors was discovered to be significant in the German market, it should be considered whether applying these modular product platforms truly make the customer experience better or only more confusing. Ex motors would be configurations of the standard process performance motor, and the current sales model could confuse customers into thinking that explosive area motors are no longer available because M3BP is now considered only a safe area motor. In case the modular product platforms are implemented, the need for improved communication between salespeople and customers mentioned several times in the survey results should be even more strongly emphasised on practical level.

Considering the emphasis of special application motors on the strategy to strengthen the leadership position of ABB, the figure indicates that their budget, revenue, and market demand are relatively low in the German market. Synchronous reluctance motors were also discovered to have a low budget compared to the strategic targets. To enhance the alignment of the division strategy and daily operations, the budget and marketing efforts could be placed more on SynRM and special motors. While reviewing the division strategy, it was also noticed that in the presentations to elaborate the strategy for internal audience, the technology focus was emphasised. The strategy is likely created based on accurate data on market needs, but the approach in the presentations was turned to fit the inside-out mindset rather than clearly explaining the customer needs before providing the ABB strategy to meet them. As in the literature review, the mindset shift towards a truly customer centric organisation should be strongly led from the management level, and switching the approach in division strategy presentations could be a significant opportunity to increase outside-in thinking cross-functionally and possibly help the transition towards a more agile organisation.

5.2 Future research opportunities

This thesis addressed the market demand and suggested the next generation product portfolio from the customer perspective, considering which motors would technically be possible to harmonise only on the high level. Therefore, technical clarification for how the current product series could practically be changed into the modular product platform variants and which mechanical or electrical designs between the product series could be harmonised is an opportunity for future research.

Further, integrating special application motors to the modular process performance motor platform could be researched in the future. Their processing was excluded from this thesis as the special motors were defined to not belong to the standard offering that was the subject of modification.

The global scalability of the results could also be researched. The data could be collected directly from the global customers to provide even more reliable results on market demand from the requirement perspective instead of technological details and features of already existing motors.

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Appendices

Appendix 1. Survey questions

Customer feedback on products

1. In your experience, which motors often receive positive feedback from customers?
2. What makes the customer happy about the product they received?
3. What kinds of product-related customer needs (functionalities, features) come up most often during sales interactions?
4. Which are the top 20 % most requested motors?
5. Which motors are the most successful in terms of closing deals?
6. Which motors do customers view as high-end or premium, and why?
7. What enhancements or new functionalities would customers find valuable? What are the current or possible near future trends in the market?
8. When customers hesitate to purchase, what makes them uncertain?
9. Is hesitation more common with some motors than others? Which motors cause the most hesitation?

Sales goals, metrics, process, actions

10. If you as an individual human were to purchase a low voltage motor that is available in several companies at the same price, what would you base the decision of selecting the supplier on? What would you value in an ideal motor supplier of your dreams?
11. What should be the goals of sales in the German market? Goals to help achieve the best possible experience for customers.
12. How should the achievement of the sales goals be measured? What should be the KPIs (Key Performance Indicators) for sales?
13. What are all the steps that the sales process includes? For example from prospecting potential customers to maintaining communication after sales.
14. Is there something that could be changed in the sales process to make the customer feel more valued?
15. What other sales actions are done or could be done to increase customer satisfaction?

Sales channels and relationships

16. What are the possible channels to buy ABB motors from? (=sales channels, from the customer perspective)
17. What do customers appreciate or like about each of these buying channels?
18. If you were a new ABB customer, what would you appreciate in the practices that ABB currently uses for creating and maintaining a long-term relationship with you?
19. What could be changed or added in sales channels or maintaining relationships to ensure that customers keep buying motors from ABB?

Other comments

20. What is your role in the company? Job title is collected only to prove the validity of this research. Your answers are treated anonymously.
21. For how long have you worked at ABB (years)? Working years are collected only to prove the validity of this research. Your answers are treated anonymously.
22. Please write here if you have anything to add regarding customer feedback or sales strategy.

Revenue, budget, product pricing, and incentives

Revenue

1. What is the size of the total German IEC LV motor market (revenue)?
2. What is the share of ABB in the German IEC LV motor market (revenue)?
3. What is the revenue of each product line/category in the German market?

Budget

4. What is the sales budget in the German market for 2024?
5. How is the budget divided for all different product lines/categories?
6. Do you think the budgets for each product line/category are well aligned with how beneficial the products are strategically or financially? Why?

Product pricing

7. How are product prices set (the criteria)?
8. What kinds of products are set at a cheaper or more expensive price than others and why?
9. How should pricing practices be improved to make it clear and attractive for customers?
10. Is the product pricing practice in line with the division strategy? Please elaborate on the reasoning why you think it is or is not.

Incentives

11. What different types of incentives are used in the motor sales (monetary and non-monetary)?
12. What are the criteria for using incentives?
13. Should something be changed in terms of incentives to increase customer satisfaction while still working according to division strategy?

Other comments

14. What is your role in the company? Job title is collected only to prove the validity of the research. Your answers are treated anonymously.
15. For how long have you worked at ABB (years)? Working years are collected only to prove the validity of the research. Your answers are treated anonymously.
16. Please write here if you have anything to add regarding finances of the product portfolio or sales strategy proposal.

Appendix 2. Contemporary product offering