Enhancing Sales Strategies through Artificial Intelligence driven Data Analysis

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Master in Management

Supervisor:

PhD Renato Telo de Freitas Barbosa Pereira, Assistant Professor with Habilitation,

ISCTE – Instituto Universitário de Lisboa

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Department of Marketing, Strategy and Operations

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I am also thankful to my family and friends, whose patience and encouragement have been pivotal during the last year.

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Resumo

A integração da Inteligência Artificial (IA) nas estratégias de vendas revolucionou a forma como as empresas se relacionam com os clientes e otimizam as operações, resultando em aumento das receitas. Esta dissertação explora estudos anteriores sobre IA, análise de dados, e a aplicação da IA nas estratégias de vendas. Através de entrevistas semiestruturadas com representantes da Worten, Glovo e Microsoft, esta pesquisa investiga como estas organizações estão a utilizar estas novas tecnologias para melhorar as operações e o seu desempenho nas vendas.

Os resultados revelam que a IA já desempenha um papel crucial na análise preditiva, permitindo às empresas otimizar a gestão do inventário, personalizar as interações com clientes e antecipar as tendências do mercado. Estas estratégias de personalização provaram ser eficazes na relação, retenção e satisfação do cliente, particularmente através de modelos de IA reativos e preditivos que respondem e antecipam as necessidades do cliente.

No entanto, o estudo também identifica limitações, incluindo a potencial parcialidade dos algoritmos de IA, as implicações éticas na utilização de dados e a necessidade de um forte investimento para desenvolver estas tecnologias. A dissertação conclui sugerindo ideias para estudos futuros, enfatizando a necessidade de realizar comparações mais extensas e de longo prazo para entender melhor a evolução da IA nas estratégias de vendas.

Esta dissertação contribui para o conhecimento da IA nas vendas, oferecendo ideias práticas para as empresas que procuram melhorar as suas estratégias de vendas através da IA, enquanto aborda os desafios e as oportunidades que acompanham esta mudança tecnológica.

Palavras-chave: Inteligência Artificial, Estratégias de Vendas, Aumento das Receitas, Otimização do Processo de Vendas, Personalização

Classificação JEL:
M10 Administração de Empresas: Geral
032 Gestão de Inovação Tecnológica e P&D

Abstract

The integration of Artificial Intelligence (AI) into sales strategies has revolutionized the way companies engage with customers and optimize day-to-day operations, which consequently leads to revenue growth. This master dissertation starts by exploring past studies on Artificial Intelligence, data analysis and how AI is used to extract valuable insights from that data, and the utilization of AI into sales strategies. Then, through a series of semi-structured interviews with key representatives from Worten, Glovo, and Microsoft, this research investigates how these three distinct organizations are leveraging these new technologies to improve their operations and enhance their sales performance.

The findings reveal that AI is already playing an important role in predictive analytics, enabling companies to optimize inventory management, tailor customer interactions, and anticipate market trends. These AI-driven personalization strategies have proven effective in improving customer engagement, retention, and satisfaction, particularly through reactive and predictive AI models that respond to and anticipate customer needs.

However, the study also identifies challenges, including the potential for bias in AI algorithms, the ethical implications of data usage, and the need of a strong investment to develop these technologies. The dissertation concludes by suggesting ideas for future studies, emphasizing the need of conducting more extensive and long-term comparisons to better understand the evolving role of AI in sales strategies.

This thesis contributes to the growing knowledge of AI in sales, offering practical insights for businesses looking to enhance their sales strategies through AI while addressing the challenges and opportunities that accompany this technological shift.

Keywords: Artificial Intelligence, Sales Strategies, Revenue Growth, Sales Optimization, Personalization

JEL Classification:
M10 Business Administration: General
O32 Management of Technological Innovation and R&D

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Glossary of Acronyms

AI - Artificial Intelligence

AI HLEG - Artificial Intelligence High-Level Expert Group

AGI - General Artificial Intelligence

ANI - Narrou Artificial Intelligence

ANN - Artificial Neural Networks

ASI - Super Artificial Intelligence

B2B - Business to Business

B2C - Business to Customer

CRM - Customer Relationship Management

GMV - Gross Margin Value

GPS - General Problem Solver

KNN - K-nearest neighbors

KPI - Key Performance Metrics

LSA - Latent Semantic Analysis

ML - Machine learning

PSA - Predictive Sales Analytics

SME - Small and Medium-sized enterprises

Chapter 1: Introduction

This opening chapter is designed to contextualize and introduce the investigation conducted within this dissertation.

In order to gain a deeper comprehension of the research subject, this chapter unfolds across three distinct sub-chapters. Initially, an explanation of the research problem will be provided, followed by the presentation of the research objectives and research questions. Lastly, the structure of this dissertation will be explained.

1.1 Research Objectives

The objectives of this master's dissertation are multiple, aiming to provide an understanding of the intersection between Artificial Intelligence (AI), Data Analysis and companies sales strategies. The specific goals are:

1. Examine the Impacts of Artificial Intelligence:

Investigate and comprehend the various ways in which Artificial Intelligence influences and shapes the operations, processes, and overall dynamics within companies.

2. Explore Diverse Applications of AI in Data Analysis:

Explore diverse applications of AI in the world of data analysis, aiming to uncover the specific methodologies, tools, and techniques that contribute to more accurate insights and informed decision-making.

3. Highlight the Significance of Data-Driven Sales Strategies:

Emphasize the importance of grounding sales strategies in the insights derived from the analysis of data. Explore how leveraging these insights can enhance the effectiveness and efficiency of sales initiatives within companies.

4. How to Develop Strategies for Sales Enhancement through AI:

Study and propose strategies for utilizing Artificial Intelligence to boost sales performance.

Investigate existing approaches, technologies, and best practices that contribute to increased sales and overall business success.

By addressing these objectives, this dissertation plans to contribute to create valuable knowledge to understand AI's impact on companies, with a specific focus on optimizing sales strategies for improved business outcomes.

1.2 Research Questions

To enhance the structure of my master's thesis, I opted to select two primary research questions. These questions will serve as guiding inquiries that will be consistently addressed throughout the study.

• In what ways can AI be utilized to analyze data?

This first research question dives into the various applications of Artificial Intelligence in the analysis of data. The idea is to explore how AI technologies can be used to help interpreting data and extract meaningful insights from extensive datasets.

• How can Sales Strategies be adjusted to be more effective using insights derived from the analysis of data?

The second research question centers on the strategic integration of data insights into sales strategies. This involves examining how sales strategies can achieve a better effectiveness by leveraging the meaningful insights obtained from the analysis of data.

These research questions collectively form the foundation of this dissertation, guiding the dissertation into the relationship between Artificial Intelligence, data analysis, and the enhancement of sales strategies. By exploring these correlations, this research aims to find valuable insights for the business landscape.

1.3 Dissertation Structure

The structure of this dissertation is designed to explore the integration of artificial intelligence (AI) into sales strategies, providing a comprehensive analysis from foundational concepts to practical applications and future implications. The opening chapter sets the stage for the entire dissertation by outlining the primary objectives and formulating the key research questions that guide the study.

The second chapter delves into existing literature, offering a review of past studies on AI. This chapter is divided into three main sections: Past Studies on AI: This section provides a historical perspective on AI development, tracing its evolution and highlighting major milestones in AI research and application; Usage of AI and Data Analysis: Here, the focus shifts to how AI is employed with the analysis of data across various industries. This section examines different AI techniques and tools used for analyzing large datasets, extracting valuable insights, and supporting decision-making processes; Usage of AI and the analyzed data in Sales Strategies: The final section of the literature review lies in

on AI's role in sales. It explores how AI-driven tools and models are utilized to enhance sales strategies, improve customer engagement, and optimize sales performance.

The third chapter presents the methodology applied to conduct the research. It details the research design, data collection methods, and analytical approaches used to investigate the integration of AI in sales strategies. This chapter explains the rationale behind selecting semi-structured interviews as the primary data collection method and describes the process of selecting and interviewing representatives from Worten, Glovo, and Microsoft.

In the fourth chapter, the findings from the applied methodology are presented and discussed. This chapter is structured to reveal the insights gained from the interviews, highlighting key themes such as predictive analytics, personalization, training and development, sales performance, and future aspirations.

The final chapter provides a comprehensive conclusion, synthesizing the research findings and offering final considerations. It discusses the research limitations, acknowledging factors that may have influenced the results and suggesting areas for improvement in future studies.

By following this structured approach, the dissertation aims to provide a detailed and coherent exploration of AI integration in sales strategies, contributing with valuable insights and practical recommendations for both academic and professional audiences.

Chapter 2: Literature Review

2.1 Artificial Intelligence

2.1.1 Concept of AI and its paradigms

Artificial Intelligence (AI) is a dynamic field that generate a variety of perspectives within the research community. Researchers from diverse backgrounds and employing various methodologies actively contribute to the advancement and understanding of AI. This leads to different interpretations and concepts, as enhanced by Sheikh et al. (2023), who argue that defining AI is not easy and there is no generally accepted definition of the concept. They also state that, in its strictest sense, AI involves computers mimicking the intelligence inherent in humans. Saini (2023) characterizes AI as the study of computations that enables perception, reason, and action, while according to Xu et al. (2021), Artificial Intelligence refers to the simulation of human intelligence by a system or machine.

AI can be categorized based on the nature of its intelligence, distinguishing between analytical, human-inspired, or humanized AI. Alternatively, it can be classified according to its evolutionary stages, encompassing Narrow AI (ANI), General AI (AGI), and Super Artificial Intelligence (ASI) (Haenlein & Kaplan, 2019). Artificial Narrow Intelligence marks the initial phase, designed to perform specific tasks, and limited in its ability to expand across diverse domains, often referred to as weak AI. In contrast, Artificial General Intelligence, or strong AI, represents the capability of a machine or system to replicate the cognitive functions of a human brain, allowing for conscious thought and reasoning. As for Artificial Super Intelligence, it remains a speculative future manifestation of AI, envisioned to surpass all human capabilities (Khan, 2021).

To establish a foundation for the subsequent content in this dissertation, it is crucial to acknowledge that Artificial Intelligence encompasses a diverse array of approaches, with Machine Learning (ML) serving as a pivotal methodology within the field. Machine Learning, a subset of AI, is focused on developing algorithms that empower machines to execute tasks without explicit programming. Instead of relying on predefined rules, ML leverages large datasets to identify patterns and construct models, subsequently using them to forecast future values (Miao et al., 2021).

Neural Networks, a distinctive technology within the realm of machine learning, have accumulated significant attention in recent times. Modeled after the human brain's structure, Artificial Neural Networks consists of interconnected neurons organized into layers, each capable of learning specific features from data. The primary applications of these networks include image recognition, pattern recognition, and voice recognition (Mijwil et al., 2019). At the end of this hierarchical sequence lies Deep Learning, a specialized subset of machine learning that employs neural networks with multiple

layers, commonly referred to as deep neural networks. The deep networks possess the ability to autonomously learn difficult representations of data, empowering the technology to uncover and comprehend complex patterns and relationships (Miao et al., 2021).

Figure 2.1: The Relationship Between Artificial Intelligence, Machine Learning, Neural Networks and Deep Learning
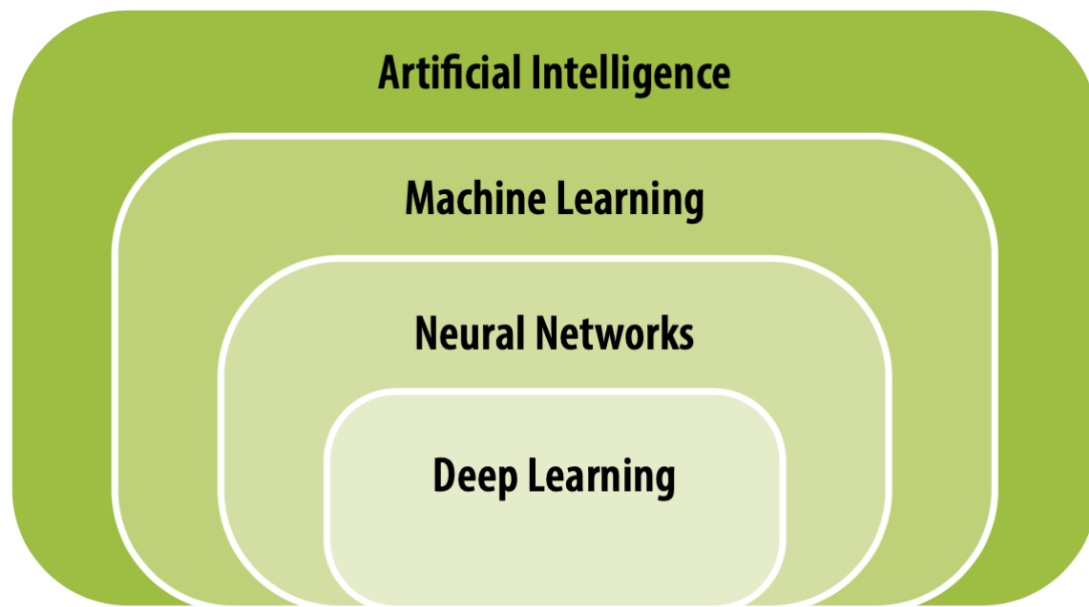
Source: "AI and education: Guidance for Policymakers." Miao, F., Holmes, W., Huang, R., & Zhang, H. (2021).

2.1.2 Evolution of AI and its applications

Throughout the history of humankind, humans always sought ways to enhance their lives and have more convenience. As technology was evolving, this pursuit for comfort has accelerated and artificial intelligence, certainly, aids in becoming this world more convenient and comfortable in various ways.

The concept of "intelligent" machines was first brought to life when Alan Turing wrote the article *Computing Machinery and Intelligence*, in 1950. In this article, the "Turing Test" is introduced, where a judge is challenged to have a conversation through written text, with a human and a machine (computer), without knowing which is which. The goal of the machine is to convince the judge that it is human by imitating human responses, while the objective of the judge is to identify which one is the machine. If the computer was capable of making the judge believe it was human, then it would pass the test and be considered "intelligent" (Haenlein & Kaplan, 2019).

As this idea of bringing human intelligence to computers was emerging, according to Russel & Norvig (2021), Allen Newell and Herbert Simon's created, what is considered by many researchers, the

first artificial intelligence program ever, the "Logic Theorist" (1956), which was a program designed to use logic in order to prove mathematical theorems with a high level of detail.

Even though the concept of computers being able to replicate human intelligence already existed, the term "Artificial Intelligence" was only introduced in 1956, when John McCarthy and Marvin Minsky decided to host a two-month conference in Dartmouth to bring together a group of researchers to discuss the potential of creating machines that could reproduce human intelligence. This event, despite of not leading to major breakthroughs in the matter, is considered to be the main catalyzer for further investigations on what we call today "Artificial Intelligence" (Moor, 2006).

Following this two-month conference, with 10 of the most important researchers on the field at that time, AI experienced remarkable advancements and witnessed the birth of numerous disruptive creations. Particularly, the General Problem Solver (GPS), developed by Newell and Simon (1957), which was considered to be the first program that was intended to replicate the problem-solving skills of a human (Russel & Norvig, 2021) and ELIZA, created by Joseph Weizenbaum (1966) and what is considered to be the very first chatbot ever, demonstrating the potential of AI in understanding and generating human language and, when it first came out, was able to make the users believe they were talking to a real human (Shum et al., 2018).

There were high expectations for the development of AI in the subsequent years, which led to overly ambitious promises that failed to materialize, leading to disillusionment not only for the AI community and its supporters but also for the organizations that were funding the research on the field. For that reason, the 1970's is marked by the first "AI winter", when the enthusiasm and funding for AI projects declined. The lack of computational power and limited datasets played a significant role on the reasons why the programs were not able to perform as effectively as initially anticipated and promised, contributing to this AI winter (Mijwil, 2015).

In the 1980s, expert systems emerged as a significant development in the field, which helped in bringing again more hope and attention to AI. These programs were designed to capture and apply specialized knowledge of human experts in specific domains in a form of "if-then", following a conditional logic (Miao et al., 2021). Its ability to make complex decisions and provide solutions within areas of expertise such as medical diagnosis, finance, and manufacturing, helped non-experts to make decisions on specific problems (Anyoha, 2017).

Another key step for the evolution of AI was the appearance of the internet, which played a pivotal role in advancing machine learning, a subfield of artificial intelligence. Its importance lies in its ability to collect, store, and access an abundant amount of data, transforming into a data-driven discipline. This unprecedent capacity to access a wealth of available information allowed the data-driven machine learning programs to train models, make future predictions based on historical data, find patterns, and draw insights, driving the AI evolution to new heights (Brown, 2021).

Nowadays, the integration of AI into our daily lives is undeniable, a transformation that began in the early 21st century, when deep learning gained significant relevance. This subfield of machine learning focuses on the training of artificial neural networks (ANN), that are inspired on the structure and functioning of the human brain, and thus can be seen as an AI function that imitates the human's brain processing of data (Sarker, 2021). These networks are designed to autonomously learn and extract meaningful features from data without the need for explicit programming, thereby saving substantial time and resources (Tyagi & Rekha, 2020). The refinement of training algorithms, the advancements in computational power and the accessibility of extensive datasets are the key drivers for this exponential growth of AI programs in our everyday life.

Today, deep learning forms the basis of different applications in various fields such as image and speech recognition algorithms, healthcare diagnostics tools, robotics, natural language processing, cybersecurity, sentiment analysis, and many more (Sarker, 2021).

Consequently, AI has become a transformative force, significantly enhancing efficiency and convenience in our daily routines.

2.1.3 Risks and Ethical considerations of Artificial Intelligence

In recent years, the rapid progress of AI has introduced the need for urgent attention to its ethical implications and potential risks. As technologies and systems advance at an unprecedented rate, the development of intelligent machines often outpaces the establishment of ethical guidelines and regulatory frameworks. It is crucial to recognize and confront ethical considerations to ensure that the benefits of AI are maximized while concurrently minimizing the risks associated.

Isaac Asimov (1942) stands as the pioneer who recognized the necessity of regulating the creation of intelligent machines. Consequently, he formulated three ethical laws for the creation of robots (Buttazzo, 2023):

1. *A robot may not injure a human being or, through inaction, allow a human being to come to harm.*
2. *A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.*
3. *A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.*

Later on, after acknowledging certain ambiguities in the initial laws, he introduced another principle, stating that *"A robot may not harm humanity, or, by inaction, allow humanity to come to harm."*

In contemporary discussions, the risks associated with AI remain a focal point for various theorists and researchers. According to D'Antonoli (2020), one prominent concern is the potential for AI algorithms to perpetuate human biases, resulting in a lack of transparency in decision-making. This arises from the algorithms being trained on data that may inherently carry biases or errors. This problem is enhanced since it may be challenging to understand how AI systems make their decisions, leading to a lack of transparency (Božić, 2023).

An additional concern arise from the extensive utilization of AI is the rise in unemployment, as robots may have the capability to replace human labor. While some researchers argue that AI shares similarities with past disruptive technologies that did not lead to widespread unemployment, others state that AI, being capable of cognitive work, represents a distinct technological class, hence needing unique considerations in this context (Frank et al., 2023).

Jeff Robins (2016) underscores the trend of humans delegating tasks to AI, performing actions we prefer not to engage in. This raises concerns about the potential impact on human brains and bodies when the reliance on technology eliminates the need for attention, memory, and physical movement. The shift towards dependency on AI extends to decision-making processes, where AI technologies are replacing human roles in strategic decisions. Consequently, there is a diminishing application of intuitive analysis, critical thinking, and creative problem-solving, leading to a decline in human cognitive capabilities (Ahmad et al., 2023).

In response to these identified risks, the European Commission has established the AI HLEG (Artificial Intelligence High-Level Expert Group) to support the responsible implementation of AI in Europe. This group has articulated four ethical principles:

I.   Respect for human autonomy,
II.   Prevention of harm,
III. Fairness,
IV.   Explicability.

Alongside these four ethical principles, and with a focus on reinforcing them, particularly in preventing harm, AI HLEG has formulated a set of requirements that must be followed during the development of an Artificial Intelligence application (Matu,2020):

1.   Human involvement and surveillance,

2. Technical robustness and safety,

3. Respect for privacy and data governance,

4. Transparency,

5. Accountability,

6. The well-being of society and the environment,

7. Diversity, non-discrimination, and equity.

The evolution of AI holds significant potential for improving diverse facets of human existence, spanning healthcare, education, and beyond. Nevertheless, it is crucial to prioritize the well-being of humanity in its development. Achieving a balance between innovation and ethical considerations is essential to exploit the advantages of AI without compromising the core principles of our civilization. The emphasis should be on utilizing AI as a tool for positive transformation, ensuring that its utility contributes to benefit rather than harm humankind.

2.2 Artificial Intelligence applied in Data Analysis

Over the past years, the importance of analyzing data in businesses has increased exponentially.

Data analysis is a process that starts with getting data from various sources and then analyzing it with the objective of extracting beneficial information (Smallcombe, 2021). Extracting meaning from data, of any shape or form, has the goal of helping businesses refining their strategies and enable a more effective decision making.

Although the ultimate objective is to extract value from data, there are several preliminary steps that are essential before reaching that stage. According to Wing (2019), the entire data life cycle is comprised of seven distinct steps. The initial step is the generation of data, which happens in a variety of activities such as clicking on a link or commenting on a post. Subsequently, the data goes through the stages of collection, processing (which includes the cleaning and formatting the data), and management. Following these stages, the focus goes to the analysis of data, a key step that will be explored in detail in this dissertation, particularly in relation to the applications of Artificial Intelligence. The concluding phase of the data life cycle is the data visualization, presenting valuable insights in a comprehensible and simple manner.

In the first stage of the data life cycle, is mentioned the creation of data, which are generated from a wide range of sources. The substantial volume of information, is referred to as Big Data, surpasses the capacity of conventional relational databases and analytical techniques for storage and processing (Rahmani et. al, 2021). For that reason, AI tools, including machine learning, deep learning, and natural language processing play a crucial role in delivering quicker and more accurate insights from the data

and uncover hidden patterns. As outlined by Rahmani et. al (2021), the methods for deriving insights from Big Data encompass a few analytical approaches. These include "Descriptive analytics" which involves the examination of historical data to describe what occurred in the past; "Predictive analytics" which focuses on applying various statistical modeling and machine learning techniques to predict future possibilities; and "Prescriptive analytics", this latter integrating both descriptive and predictive analytics to suggest the most suitable actions to enhance business practices.

Descriptive analytics has the primary goal of identifying patterns in the data rather than predicting outcomes, it often operates without a target variable, thus classified as unsupervised learning. There are three distinct types of descriptive analytics: Association rule mining, Sequence rule mining, and Clustering/segmentation (Sahu, Dash & Kumar, 2017).

Association rule mining is a technique used to unveil hidden relationships among various variables in large datasets. An illustrative application is found in Market Basket Analysis, a method that explores clients' purchasing habits in order to find correlations between products (Saxena & Rajpoot, 2021). Sequence rule mining consists of the identification of significant subsequences in a set of sequences (Fournier-Viger et. al, 2017). In practical terms, this translates to discovering sequential patterns such as "If event A is followed by event B, then there is likelihood of event C occurring". Clustering/segmentation is considered to be the most important unsupervised learning challenge, focusing on grouping unlabeled data according to their similarities. The term similarity, in this context, quantifies the degree of likeness between the items (Sahu, Dash & Kumar, 2017). Clustering techniques serve diverse purposed, with customer segmentation being the most prevalent. The primary aim is to gain a deeper understanding of distinct groups of customers sharing similar characteristics, to get insights into their behavior, preferences, and needs.

Predictive analytics involves the analysis of both present and historical data to forecast future outcomes, employing methodologies used in statistics, data mining, machine learning, and artificial intelligence, using a target variable to reach conclusions on specific domains. This approach enables companies to adopt a proactive position, anticipating trends or behaviors and empowering them to build effective strategies for the future (Kumar & Garg, 2018). Predictive Analytics can be applied using two main models: Classification and Regression models (Reddy & Babu, 2018).

Classification models come into play when dealing with a categorical target variable, commonly used for tasks like determining whether an email falls into the spam or non-spam category or to conduct a sentiment analysis, to classify the sentiment expressed in a text, as positive, negative, or neutral. Within the classification models, various techniques are available for use, with the choice depending on the unique characteristics of the data and the specific problem being addressed. Example of those techniques include logistic regression, decision-trees, k-nearest neighbors (KNN), among others.

On the other hand, regression models are utilized when the target variable is continuous and numerical. These models establish a relationship between a dependent variable and one or more independent variables (Kumar & Garg, 2018). For instance, it can be used to predict an individual's salary based on factors like educational background, geographical location, and previous work experience. Linear regression, decision-trees (applicable to both regression and classification), and time series (predicting future variable values based on past intervals) are common techniques in regression models.

It's worth noting that in certain scenarios, predictive analytics tasks may need a combination of both regression and classification techniques, depending on the specific problem at hand.

Viewed as the next phase in advancing data analytics maturity, prescriptive analytics stands as a critical step towards achieving optimal decision-making for enhancing business performance. Its objective is to recommend the most advantageous decision options, capitalizing on anticipated future outcomes through the integration of description and predictive analytics methodologies (Lepenioti et al., 2020). It integrates the outcomes of predictive analytics and employs artificial intelligence, optimization algorithms, and expert systems within a probabilistic framework. The goal is to deliver decisions that are adaptive, automated, time-dependent, and optimized (Lepenioti et al., 2019). Poornima & Pushpalatha (2020) identify five key pillars that underpin prescriptive analytics. Firstly, "Adaptive Algorithms" are essential, given the growth in data volume, velocity, and variety. These technologies must recalibrate built-in algorithms and generate new protocols, demanding a capability of optimization. Secondly, the integration of predictions and prescriptions is crucial for effective prescriptive analytics. Thirdly, the capability to handle both structured and unstructured data makes "Hybrid Data" transformative in prescriptive analytics technology. "Prescriptions and Side Effects" involve providing diverse prescriptions while accounting for potential side effects. Lastly, the "Feedback Mechanism" aims to offer feedback when one or more actionable influencers suffer alterations. As outlined by Lee & Mangalaraj (2022), simulation and optimization emerge as widely utilized techniques in prescriptive analytics.

Text analysis offers an alternative methodology for data examination, focusing on the understanding of written language to derive meaningful insights. Text analytics is the process of analyzing unstructured text, extracting relevant information, and subsequently transforming it into structured data that can be utilized in diverse applications (Packiam & Janita, 2015). To perform text analysis, diverse techniques are employed, drawing from disciplines such as data mining, natural language processing, machine learning, and information retrieval (Feldman & Sanger, 2007).

To ensure the effective processing of text, Ranjad & Prasad (2021) propose a series of essential steps, particularly crucial given the prevalence of unstructured data origination from various sources such as documents, notes, emails, comments, and more. The authors outline the following key

procedures: Firstly, there is "Tokenization", involving the breakdown of text to identify keywords known as tokens. Subsequently, "Stop Word Removal", consisting of eliminating words with little meaning, such as "a", "an", "the", "it". The process of "Stemming" is then applied to convert words to their base forms, for instance "runner" and "running" are transformed to "run". Conducting a statistical method called TF-IDF involves counting the frequency of word occurrences and mapping their importance levels based on these frequencies. Another technique utilized is Latent Semantic Analysis (LSA), which efficiently analyzes text and uncovers hidden topics by understanding the context of the text.

Enterprises can leverage text analysis to examine social media comments, reviews, blogs, and similar content. This involves employing techniques such as topic modelling, which identifies the prevalent topics within a text corpus, and sentiment analysis, which assesses customer sentiments towards a product, service, or brand by categorizing comments as positive, negative, or neutral (Kumar et al., 2021).

2.3 Sales Strategies based on the Analyzed Data

In the rapidly evolving landscape of business, enterprises are consistently in pursuit of inventive methods to elevate their sales strategies and secure a competitive advantage. The wealth of available data presents organizations with a chance to use information for the development of new strategies, enhancing their overall business operations. The integration of artificial intelligence and machine learning is introducing innovative approaches to extract valuable insights though data analysis (Sheth & Kellstadt, 2021).

Sales teams adopting a data-driven approach use information to guide every aspect of their decision-making, ranging from the selection of products to the timing of customer outreach. The objective of this methodology is to enhance profitability by gaining a deeper understanding of customer needs, tailoring the customer journey, and identifying areas for improvement in sales strategies (Maayan, 2018). According to a research conducted by McKinsey & Company, companies that integrate data into their sales strategies experience 5-6% higher profitability compared to their competitors. Consequently, this integration allows companies to boost sales, reduce the waste of resources, and ultimately increase overall profits (Miller, 2022).

As enhanced by Grandhi et. al, (2020) due to the technological progress and effortless information access, today's consumers evolved into a more sophisticated and well-informed demographic, showing resistance to standardized approaches, hence, being increasingly important to have customer-centric processes, offering personalized experiences that directly address their unique needs.

Hence, companies have recognized the importance of analyzing customer and market data to ground their sales and marketing strategies. The primary aim of this data-driven methodology is to develop personalized content that connects with the audience, ensuring the message reaches the right prospects at the right time and location. This approach is designed to elevate customer engagement, improve conversion rates, and ultimately achieve the main goal of increasing revenue (Rosário & Dias, 2023).

Predictive Sales Analytics (PSA) stand as valuable tools for enhancing the decision-making process of sales professionals. They present essential information, derived statistically from existing data, to empower sales teams with insights they may not have otherwise. PSA helps companies improving customer relationships and boosting revenue through its ability to forecast lead conversion probabilities, identify opportunities for cross-selling and upselling, and anticipate customer churn – the proportion of paying customers who stop purchasing within a specified timeframe (Habel et al., 2021).

As per Miller (2022), the optimal algorithm for sales forecasting through predictive analytics is Random Forests. This model processes data across numerous decision trees and consolidates the outcomes, producing highly reliable insights. The Random Forests algorithm has several advantages, including reduced variance and bias compared to a single decision tree. Moreover, it excels in handling large datasets, minimizing prediction errors, and maintaining accuracy even when confronted with incomplete data sets.

Accurately predicting demand is vital for any company, particularly in the industrial sector where demand for products fluctuates. Utilizing a variety of machine learning techniques is crucial for precise forecasting. Organizations need to minimize forecast errors to ensure optimal alignment of production with demand. Inaccurate forecasts can impede inventory optimization, resulting in unnecessary holding costs for the company (Kosinovsky et al., 2019).

Traditional sales forecasting methods like time series and regression analysis face challenges coping with the vast volumes of available data. Recent advancements in AI and Machine Learning have opened up new possibilities to enhance sales forecasting. These innovations showcase new potential applications, excelling in handling non-linear patterns, and offer improved insights into consumer behavior, enhancing predictive performance (Li & Yu, 2023).

In the sales process, the most significant performance boost is observed in specific tasks, such as generating leads, qualifying leads, and converting leads – when adopting a data-driven approach. Analytics serves as a valuable tool to substitute human skills in generating and qualifying leads, particularly benefiting lower-performing sales employees at these stages. In the lead conversion phase, analytics complements human skills and aids in converting inactive accounts, providing crucial information for dealing with relatively challenging prospects. Consequently, high-performing sales

agents derive greater benefits from a data-driven approach at this stage. In essence, both low-performing and high-performing sales agents experience advantages from a data-driven approach, but in different ways and stages of lead conversion (Sun et al., 2021).

Another part of sales strategies that can be optimized with the help of data is the pricing strategy. In modern data-driven sales strategies, dynamic pricing is pivotal in the way businesses approach pricing models. Empowered by AI and machine learning algorithms, dynamic pricing is reshaping industries spanning from transportation to e-commerce, aiming to optimize revenue streams and elevate customer experiences. While it has numerous advantages, it also encompasses notable challenges, including ethical considerations, implementations costs, and the potential for customer dissatisfaction (Kopalle et, al. 2023). This dynamic approach involves adjusting prices in real-time, based on various factors such as product demand, market structure, customer behavior and its characteristics, the consumer feeling of fair prices, the prospects perception of the product value, and the seasonality (Deksnyte & Lydeka, 2012).

Chapter 3: Methodology

Now, after a comprehensive review of the existing literature on Artificial Intelligence (AI), analysis of data, and its potential impact on sales strategies, this chapter outlines the methodology employed to delve into the practical applications of AI within various industries. Building upon the theoretical foundations established in the literature review, this section elucidates the research design, data collection procedures, and analytical methods deployed to address the research questions.

Given the exploratory nature of the research questions and the constantly evolving environment of AI, a qualitative research design has been selected to gain a rich and profound understanding of the ways in which AI is currently utilized and how it is being used to enhance sales strategies. This research approach allows for in-depth exploration of the experiences, practices, and challenges faced by companies and experts on the field across diverse sectors.

The participants in this study consist of representatives from Worten, Glovo, and a professional from the business and sales operations at Microsoft. Purposeful sample was employed to ensure a diverse range of perspectives, experiences, and applications of AI in sales strategies. The inclusion criteria prioritized companies actively utilizing AI for analyzing data and grounding their sales strategies on the insights derived from it.

These companies were specifically selected because they are large enterprises with the necessary budget and resources to implement advanced AI technologies. This financial capability ensures that the companies can adopt and integrate sophisticated AI tools and strategies, providing rich insights into the potential of AI when leveraged.

Additionally, the chosen companies are recognized for their advanced technology adoption. Worten, Glovo, and Microsoft are all known for being at the forefront of technological innovation within their respective industries.

The primary method of data collection is both semi-structured and structured interviews, when it was not possible to conduct semi-structured interviews. Using semi-structured interviews allows for a bigger flexibility than fully structured interviews, since it gives the option to explore the participants' different insights while ensuring consistency across all interviews. The interviews protocol is designed to address the two main research questions and also to explore some new valuable insights that the participants might want to share.

• In what ways can AI be utilized to analyze data?

For Research Question 1, interviews delved into the ways AI is currently being employed for data analysis. Participants were asked on the methodologies they use, the advantages they feel on using the latest tools and challenged to compare traditional approaches to AI-driven methods. Questions were designed to obtain responses that allow for a comprehensive assessment and qualitative interpretation of the perceived effectiveness of these approaches.

Participants were encouraged to share their experiences, challenges, and successes related to AI integration in their sales strategies. This qualitative data will be crucial in understanding the relationship between AI utilization and the effectiveness of analyzing accurate data to increase the company's sales.

• How can Sales Strategies be adjusted to be more effective using insights derived from the analysis of data?

Interviews addressing Research Question 2 are focused on how sales strategies are adjusted based on insights derived from data. Specific questions were tailored to explore the decision-making processes behind adjustments, the factors influencing these changes, and the perceived impact on sales strategy effectiveness.

Participants will be challenged to provide details of specific adjustments made, linking these adjustments to specific insights gained through the use of AI. By collecting rich qualitative data, the study aims to uncover how AI-informed adjustments impact the overall effectiveness of sales strategies.

To analyze the qualitative data, a thematic analysis will be conducted to identify recurring patterns and trends in the interview responses. This analysis contains a six-steps process: 1- Become familiar with the data; 2- Generate initial codes; 3- Search for themes; 4- Review themes; 5- Define themes; 6- Create the report (Braun & Clarke, 2006).

Additionally, a cross-case analysis will be used to compare and contrast findings across different companies and industries. This method helps identify similarities and differences, providing a more comprehensive understanding of the overall impact of AI-driven sales strategies.

Ethical considerations will be given priority throughout the research process. Participants will be informed about the study's objectives. Informed consent will be obtained from all participants, ensuring confidentiality and anonymity, if needed.

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While qualitative research provides valuable insights from experts in the field, it is essential to acknowledge potential limitations. The findings may not be generalized to all industries, and the subjective nature of qualitative data may introduce bias.

In summary, the methodology was designed to gather detailed, context-rich data from industry-leading companies renowned for their technological advancements. This approach ensures that the findings are grounded in real-world applications and provide meaningful insights into the transformative impact of AI on sales strategies. The next chapter will elaborate on these findings, presenting the key themes and discussing their implications in light of the initial research hypotheses.

Chapter 4: Results Presentation and Discussion

This chapter presents the findings and answers given from interviews conducted with industry professionals to explore the integration of artificial intelligence (AI) into sales strategies. The empirical phase of this research involved engaging with companies at the forefront of AI adoption in sales to gain insights into their experiences, challenges, and successes.

4.1 Interviews

4.1.1 Worten Interview

The first company interviewed as part of this research was Worten, a leading retailer known for its innovative approach to sales and customer service. Founded in 1996, Worten has established itself as a prominent player in the eletronic retail sector, with a strong presence both online and through physical stores across Portugal and Spain. Recognizing the importance of embracing cutting-edge technologies to maintain competitiveness, Worten has been proactive in leveraging AI-driven sales strategies, leveraging high quality data and enhancing customer engagement.

Through a semi-structured interview process, a key representative from Worten's AI department shared their perspectives on the integration of AI into sales strategies, providing valuable insights into the company's approach and its impact on sales performance and customer satisfaction.

Worten's commitment to innovation is evident in its early adoption of artificial intelligence technology to enhance various aspects of its operations, particularly in the realm of sales strategies. By leveraging AI-driven data analysis, Worten aims to optimize sales performance, personalize customer interactions, and improve overall efficiency across its sales channels.

The interview with Worten's artificial intelligence department representative covered a range of topics related to the integration of AI technology into sales strategies. The following questions were the ground to gain a comprehensive understanding of Worten's approach to AI-driven sales strategies and its impact on sales performance and customer engagement:

1. Starting with the beginning of all this artificial intelligence innovation, when did Worten begin to realize that, in order to remain competitive, it would need to start embracing this type of revolutionary technology?
2. At a time when customers increasingly value personalized and individual service, what inputs, what customer information do you use to achieve greater personalization in your offer?

3. What kind of strategies do you apply using this customer information for on the website? Is it only used to adapt the products shown on the main landing page or is it used for something else?

4. With regard to discounts on the website, such as "Deal of the day," is any artificial intelligence technology used to decide which products should be discounted?

5. How is Worten using Artificial Intelligence in CRM techniques, whether in chatbots or communications with customers via e-mail, etc.?

6. Is there any use of artificial intelligence in the physical store? Used by employees, for example.

7. Imagine that you are buying a certain product to put on sale in the store. Is there any AI technology that helps you predict how many units of the product will be sold, supporting the prediction of future demand, in order to optimize your stock?

8. How does Worten ensure that its team is effectively trained and equipped to take advantage of Artificial Intelligence technologies?

9. How has the integration of Artificial Intelligence impacted on sales performance and customer engagement with Worten?

10. Related to ethical considerations and customer privacy concerns, how do you ensure the privacy and security of your customers?

11. Finally, what are Worten's plans and aspirations with regard to further integrating Artificial Intelligence into sales strategies?

As the interview followed a semi-structured format, additional questions emerged organically during the course of the discussion to gain deeper insights into the responses provided by Worten's representative. The following section will delve into the insights and perspectives shared by Worten regarding the integration of AI-driven sales strategies, addressing their responses in detail.

1. **Starting with the beginning of all this artificial intelligence innovation, when did Worten begin to realize that, in order to remain competitive, it would need to start embracing this type of revolutionary technology?**

Worten's journey towards embracing AI technology as a supportive tecnology of its operations reflects a strategic shift driven by the imperative to remain competitive in an increasingly dynamic market landscape. The representative highlighted that Worten embarked on a major systems migration, placing a significant emphasis on prioritizing AI integration into its processes. This pivotal decision was underscored by the recognition that AI has the potential to revolutionize traditional sales strategies and unlock new avenues for growth and innovation.

The prioritization of AI technologies began to gain traction within Worten's strategy in late spring of 2023, signifying a new strategic approach to embrace this transformative technology. This marked a turning point for Worten, as it embarked on a journey towards leveraging AI-driven solutions to optimize various aspects of its sales operations.

Moreover, Worten emphasized its current focus on generative AI and the utilization of bots, indicating a strategic alignment with emerging AI trends and technologies. By investing in generative AI and bots, Worten demonstrates a forward-thinking approach to leveraging AI capabilities to enhance customer experience and optimize daily operations.

2. **At a time when customers increasingly value personalized and individual service, what inputs, what customer information do you use to achieve greater personalization in your offer?**

Worten's commitment to delivering personalized and individualized service reflects a strategic focus on meeting the evolving needs and preferences of its customers. Central to this approach is the utilization of AI technologies to leverage customer data and insights, enabling the delivery of tailored recommendations and experiences across various touchpoints.

One key aspect highlighted by Worten's representatives is the centralization of customer data in a unified platform, leveraging AI algorithms to analyze and interpret this data effectively. By aggregating customer information from multiple sources, including website interactions and sales history, Worten can gain a holistic understanding of each customer's preferences, behaviors, and purchase patterns.

In practice, Worten utilizes AI-driven recommendation engines to personalize product offerings both in their newsletters and on their website. These recommendation engines leverage sophisticated algorithms to analyze customer behavior, such as browsing history, cart activity, and past purchases, to deliver relevant and targeted product suggestions tailored to each individual customer's interests and preferences.

Furthermore, Worten emphasizes the importance of capturing customer interest in-store through a register of interest system. When customers express interest in a particular product to store employees and provide their contact details, Worten can leverage this information to notify customers when the desired product becomes available in-store, thereby enhancing the customer experience and fostering a sense of personalized service.

Overall, Worten's strategic approach is to achieve greater personalization in its offers underscoring its commitment to meeting the evolving expectations of today's customers. By harnessing advanced data analytics and AI-driven insights, Worten is able to deliver tailored recommendations and experiences that resonate with each individual customer, driving engagement, loyalty, and ultimately, business success.

2.1 So Worten already collect customer data from both physical stores and from the website?

They enhanced that the customer data collection extends beyond the online sphere to encompass its physical stores as well.

Additionally, Worten emphasized its strategic focus on enhancing customer communication and building closer relationships with its customer base. In response to the competitive threat posed by e-commerce giants like Amazon, Worten has intensified its efforts to deliver more personalized and individualized communication to its customers. This strategic shift has been accompanied by significant investments in customer communication initiatives, aimed at fostering stronger connections and driving engagement with the brand. As a result of these investments, Worten has experienced a remarkable 1000% increase in revenue from customer communications compared to the previous year. This substantial growth underscores the effectiveness of Worten's approach in leveraging customer data and personalized communication strategies to drive tangible business outcomes, further solidifying its position in the competitive retail landscape.

3. What kind of strategies does Worten apply using this customer information for on the website? Is it only used to adapt the products shown on the main landing page or is it used for something else?

The representative stated that first and foremost, Worten utilizes customer data for targeted communication through newsletters. By analyzing customer preferences and behaviors, Worten tailors its newsletters to deliver relevant and timely content, including product recommendations, promotions, and personalized offers, aimed at driving engagement and conversions.

Moreover, Worten harnesses customer data to personalize the product offerings on its website's main landing page. Utilizing sophisticated AI algorithms, Worten dynamically adjusts the products displayed to each customer based on their browsing history, purchase patterns, and preferences. This personalized approach ensures that each customer is presented with relevant and appealing product recommendations tailored to their individual interests and needs, thereby enhancing the overall shopping experience.

In addition to adapting product recommendations, Worten leverages customer information for push and pull notifications. By proactively reaching out to customers with relevant updates, promotions, and reminders, Worten maximizes engagement and encourages repeat visits to its website, fostering a deeper connection with its customer base.

Overall, Worten's strategic use of customer information on its website demonstrates its commitment to delivering personalized, valuable, and relevant experiences to its customers.

4. **With regard to discounts on the website, such as "Deal of the day," is any artificial intelligence technology used to decide which products should be discounted?**

The approach to determining discounts on its website, such as the "Deal of the Day," reflects the complexities involved in pricing strategies and supplier negotiations. The representative clarified that Worten does not currently utilize artificial intelligence technology for this purpose, citing various factors that influence their discounting decisions.

Central to Worten's rationale is the nature of its commercial operations, which necessitates extensive negotiations with suppliers to secure favorable margins. As a result, Worten's discounting strategies cannot be solely driven by customer demand or AI algorithms. Instead, Worten engages in proactive negotiations with suppliers, leveraging the prospect of running promotional campaigns like the "Deal of the Day" to negotiate lower purchase prices for products.

By committing to increased purchase volumes during promotional periods, Worten strengthens its bargaining position with suppliers, enabling them to secure more competitive pricing for the products featured in these promotions. This approach enables Worten's to focus on optimizing margins and driving profitability while simultaneously offering attractive discounts to customers.

5. **How is Worten using Artificial Intelligence in CRM techniques, whether in chatbots or communications with customers via e-mail, etc.?**

The adoption of AI in customer relationship management (CRM) techniques reflects a strategic commitment to enhancing customer service, improving operational efficiency, and driving sales growth across various touchpoints.

Worten is leveraging AI-powered bots in its call center operations. These bots serve as frontline support for customer inquiries, handling triage and resolution of issues, with the goal of eventually handling 100% of calls by the summer. This initiative not only enhances customer support capabilities but also enables cost savings by optimizing call center resources and reallocating manpower to other value-added tasks that drive sales and customer satisfaction.

Furthermore, Worten employs personalized communication strategies via email and SMS, utilizing AI technologies to tailor the messages and offers to individual customers. By delivering targeted communications based on customer preferences and behaviors, Worten aimed to increase engagement and conversion rates, particularly among high-value customers.

Beyond customer-facing initiatives, Worten is also leveraging AI to support sellers on its Marketplace platform. The implementation of a dedicated call center for sellers demonstrates Worten's commitment to fostering strong partnerships and providing robust support services to enhance seller satisfaction and drive sales growth on the Marketplace.

For those reasons, Worten's strategic adoption of AI in CRM techniques underscores its dedication to delivering an exceptional customer experience, optimizing operational processes, and driving business growth.

5.1 So this bot would always be available to answer the questions that the sellers on your marketplace have, especially the most basic ones?

Providing comprehensive support to sellers on Worten's Marketplace extends beyond addressing basic inquiries to encompass more complex procedures and technical aspects of selling on the platform.

While the bot serves as a valuable resource for addressing fundamental questions, such as account setup or general inquiries, it also plays a crucial role in assisting sellers with more difficult procedures, such as listing new products on the Marketplace.

One example cited by Worten's representative is the complexity involved in placing a new product on the Marketplace. Despite appearing as a basic question, the procedure requires various technical characteristics of the product and specifications to ensure compliance with platform guidelines. In response to this challenge, Worten's bot serves as a knowledgeable resource, providing guidance and assistance to sellers throughout the listing process.

By leveraging AI technology to support sellers with both basic and complex inquiries, Worten aims to simplify operations, enhancing the sellers satisfaction and engagement, and drive sales growth on its Marketplace platform. By providing robust support services and fostering strong partnerships with sellers, ultimately it will contribute to the success and sustainability of the Marketplace ecosystem since it fosters sellers loyalty and satisfaction.

6. Is there any use of artificial intelligence in the physical store? Used by employees, for example.

A notable application of AI is the implementation of chatbots to support employees in-store, with a primary focus on reducing costs and enhancing service effectiveness.

The introduction of chatbots in specific stores serves as a strategic initiative to help simplifying employee workflows and optimize customer interactions. This chatbot function as a knowledge resource, providing instant assistance to employees on various customer inquiries and procedures, such as returns or product information. By leveraging AI-driven chatbots, employees can access timely guidance and support, thereby minimizing the need to consult colleagues or reference manuals, and ultimately saving valuable time in customer service interactions.

Worten's pilot test of chatbots in three stores shows its proactive approach to innovation and optimization also for physical stores, with plans for full implementation across all stores by the summer of 2024. This reflects a commitment to ensure seamless integration and maximizing the benefits of AI technology in its physical retail environment.

Furthermore, beyond cost reduction, the deployment of chatbots aligns with Worten's broader strategic objectives of enhancing sales effectiveness and customer satisfaction, since by enabling employees to focus more on providing personalized customer service rather than administrative tasks or procedural inquiries, it will elevate the overall customer experience and drive sales growth.

7. **Imagine that you are buying a certain product to put on sale in the store. Is there any AI technology that helps you predict how many units of the product will be sold, supporting the prediction of future demand, in order to optimize your stock?**

Worten is already leveraging artificial intelligence extensively in its stock purchasing management, underscoring its commitment to data-driven decision-making and operational efficiency. The integration of AI to anticipate future demand for products, helps optimizing inventory levels, and ensure timely availability of goods to meet customer needs.

Central to Worten's approach is the recognition of the importance of pricing and promotional activities in the competitive electronic retail landscape. Given the nature of products and the prevalence of similar offerings among competitors, pricing strategies and promotional campaigns play a pivotal role in influencing customer purchasing decisions. Consequently, Worten's AI models incorporate not only past sales data but also pricing and promotional variables to forecast demand accurately and inform stock purchasing decisions.

The AI-driven stock forecasting model employed by Worten operates as a support tool for stock operators, providing data-driven insights and even recommendations to guide decision-making. While the model is not fully automated, it serves as a valuable resource for stock operators, suggesting optimal stocking levels based on existing data and variables. In practice, stock operators evaluate the model's recommendations and decide on whether accepting or refining them, depending on the product's importance and market dynamics.

In instances where the product's relevance is lower, stock operators typically accept the AI model recommendation, acknowledging its ability to analyze vast amounts of data and generate informed predictions. However, for high-impact products, stock operators conduct a more detailed analysis to complement the AI model's suggestions, ensuring strategic alignment with business objectives and market realities.

8. **How does Worten ensure that its team is effectively trained and equipped to take advantage of Artificial Intelligence technologies?**

A strong emphasis is placed on ensuring its team is well-trained and equipped to leverage AI technologies effectively, recognizing the critical role of talent and knowledge in driving innovation and

success in this domain. The company's approach to training and development encompasses several key strategies aimed at cultivating a culture of AI proficiency and expertise among its workforce.

Central to Worten's training strategy is a robust data infrastructure and governance framework, which forms the foundation for AI implementation. By implementing a unified database accessible to all departments, Worten ensures consistent access to high-quality data, a crucial requirement for effective AI model development and deployment. Moreover, Worten emphasizes the importance of data quality and governance, recognizing that AI models are only as effective as the data on which they are trained. As such, the company invests significantly in maintaining data integrity and having the best practices in data management.

In addition to cultivating a strong data culture, Worten prioritizes recruiting individuals with relevant qualifications and expertise in AI and related fields. By seeking out candidates with advanced degrees and specialized knowledge in AI, Worten ensures that its teams possess the foundational understanding and skills necessary to excel in leveraging AI technologies.

Furthermore, Worten invests in ongoing training and development initiatives to keep its team updated of the latest advancements in AI. The company holds regular meetings with service providers such as Databricks and Microsoft, providing employees with opportunities to receive training and guidance from industry experts. These sessions enable employees to deepen their understanding of AI concepts, address any questions or challenges they may encounter, and stay informed about emerging trends and best practices in the field.

In summary, Worten's approach to training and equipping its team for AI adoption encompasses a multifaceted strategy that combines investment in data infrastructure, recruitment of skilled talent, and ongoing training and development initiatives.

9. **How has the integration of Artificial Intelligence impacted sales performance and customer engagement with Worten?**

The integration of Artificial Intelligence has had a significant impact on sales performance and customer engagement at Worten, driving tangible benefits across various aspects of its operations.

The main area where AI has made a considerable impact is in CRM, with Worten reporting a significant increase in sales due to personalized interactions facilitated by AI technologies. By leveraging AI algorithms to analyze customer data and preferences, Worten has been able to deliver targeted recommendations, promotions, and offers tailored to individual customers, thereby enhancing customer satisfaction.

Moreover, Worten highlights the cost-effectiveness of AI development in relation to CRM initiatives, noting that the benefits derived from increased sales and customer engagement are sufficient to offset the investment costs. The relatively low development costs associated with AI

implementation in CRM proves a favorable return on investment and the strategic value of AI in driving business outcomes.

Additionally, Worten anticipates further financial benefits from AI adoption in other areas, such as call centers, where automation of processes can lead to cost savings and operational efficiency. By automating a significant portion of call center interactions, Worten expects to feel financial gains that will offset the costs associated with AI implementation in this domain.

For those reasons, Worten's position is that AI technologies have brought positive results in terms of sales performance and customer engagement.

10. Related to ethical considerations and customer privacy concerns, how do you ensure the privacy and security of your customers?

Worten demonstrated a strong commitment to compliance in this critical area. The company's approach to safeguarding customer privacy and data security is characterized by strict protocols and practices aimed at complying with ethical standards and maintaining customer trust.

The strategy applied is the implementation of robust data protection measures to safeguard customer information at every stage of its lifecycle. One key aspect highlighted by Worten's representatives is the anonymization of customer data across all systems, ensuring that personal information remains confidential and inaccessible to unauthorized parties. By encrypting customer data and limiting access even within internal teams, Worten mitigates the risk of data breaches and unauthorized access, thereby enhancing overall data security and privacy protection.

Moreover, Worten emphasizes its compliance with relevant regulatory requirements and industry standards governing data privacy and security. By adhering to established guidelines and best practices, Worten ensures that its data management processes align with legal and ethical principles.

10.1 So there is only one department that can access it? How does it work?

There is a limited access to authorized personnel who require it for specific operational purposes. The company's approach to data access is characterized by encryption measures and controlled permissions aimed at minimizing the risk of unauthorized access and protecting sensitive customer information.

All customer data within Worten's systems is encrypted, with access granted only to individuals who have a legitimate need to interact with customer information as part of their job responsibilities. For example, employees who need to make phone calls to customers may have access to customer phone numbers, but operational staff members do not have visibility into specific customer details such as phone numbers.

Key to Worten's data access framework is a structured infrastructure administered by the technological team, who serve as guardions of the decryption key. These infrastructure administrators are responsible for managing access permissions and granting access to specific data sets based on employee justifications and operational needs. Access to sensitive customer data is tightly controlled, with employees required to provide concrete reasons for accessing specific data, and access granted only on a need-to-know basis.

11. Finally, what are Worten's plans and aspirations with regard to further integrating Artificial Intelligence into sales strategies?

Worten's vision for the future involves striking a balance between technological innovation and human interaction, positioning itself as a digital company with physical stores that prioritizes the human touch in customer relationships. While recognizing the transformative potential of Artificial Intelligence in enhancing operational efficiency and driving sales, Worten remains consistent in the commitment of preserving the personal connection with its clients.

The principal approach is the recognition of the human element as a key differentiator in its competitive landscape. In contrast to competitors like Amazon, which may possess greater technological capabilities, Worten places significant value on the personalized service and human touch it offers to customers. This emphasis on human interaction is integral to Worten's identity, distinguishing it from purely digital competitors, thus fostering customer loyalty.

However, while Worten remains committed to preserving the human touch, it also recognizes the strategic value of AI in optimizing processes and enhancing service delivery. Moving forward, Worten intends to leverage AI technologies selectively, particularly in areas such as service optimization. By using AI in these targeted areas, Worten aims to improve operational efficiency, reduce costs, and free up resources to focus on enhancing the customer experience.

In essence, Worten's strategy for further integrating AI into sales strategies revolves around maximizing the benefits of technology while maintaining the human-centric approach that defines its brand. By investing in AI-driven solutions that complement rather than replace human interaction, Worten seeks to strike a balance between innovation and tradition, ensuring that the customer remains at the forefront of its business priorities.

After analyzing Worten's responses to the interview questions regarding the integration of artificial intelligence and data analysis in sales strategies, several key themes and insights have emerged. Worten's emphasis on leveraging AI to optimize operational efficiency while preserving the human touch underscores a delicate balance required in implementing AI-driven initiatives within the retail sector. Their commitment to personalized customer interactions and the strategic use of AI in

enhancing service delivery highlight important considerations for theory and practice in the field of AI-driven sales strategies.

It's essential to acknowledge the limitations of the interview methodology employed in this study. While the interview with Worten provided valuable qualitative data, it represents only one perspective within the retail sector. Potential biases in the responses provided by Worten's representative may have influenced the interpretation of findings. Additionally, the scope of the interview may have limited the depth of exploration into certain topics. Future research could address these limitations by employing a mixed-methods approach, incorporating quantitative data analysis and multiple case studies.

4.1.2 Glovo Interview

The second company interviewed as part of this research was Glovo, a delivery service company known for its innovative approach to logistics. Founded in 2015 in Barcelona, Glovo established itself as a leader in the global delivery market, already offering its services acrosss multiple countries and continents. By focusing on developing cutting-edge technologies, Glovo was able to create the capacity to provide fast and reliable delivery of food, groceries, and many other items. Through a structured interview, a representative from the sales department in Portugal shared their perspectives on the integration of AI into their operational and sales strategies. This interview provided insights on the impact of AI on their efficiency, partners engagement, and overall business performance.

The following section will explore the answers and perspectives given to the respective questions. The questions were planned in order to gain a comprehensive understanding of how Glovo is integrating AI to boost their sales performance:

1. **Starting with the beginning of all this AI innovation, when did Glovo begin to realize that in order to remain competitive it would need to start embracing this kind of revolutionary technology?**

Eventhough the representative couldn't specify an exact date, as the research in the headquarters in Barcelona must have started before the implementation of AI in Portugal, she highlighted that Glovo felt a global need to provide tools and automate various functions across different countries. This necessity drove the company to develop numerous market intelligence tools leveraging AI. These tools are crucial to create reports and performing web scraping, which involves extracting data from websites and converting it into structured information for later analysis. This scraping process helps Glovo identify potential leads they can contact.

Additionaly, she mentioned that Glovo utilizes the "TOQAN" platform, which operates similarly to ChatGPT. This platform allows employees to interact through conversations to perform various tasks,

such as creating complex Excel formulas, generate code, and drafting documents for external communication and marketing purposes.

2. **Nowadays customers increasingly value a personalized and individual offer for their tastes and needs, especially on a platform like Glovo, how are you approaching this issue? For example by adapting the stores and restaurants that appear first on the display? And what customer information do you use to achieve greater personalization in this offer?**

Glovo representative stated that, at this moment in time, Artificial Intelligence is not being used to determine the order of restaurants and adapting the display for each final customer. The reason for that is that Glovo is heavily monetizing its platform by allowing restaurants to pay for highlighted positions. These highlighted positions are subject to a ranking variation based on several metrics such as the number of orders, customer reviews, ratings, and other relevant factors.

Thus, Glovo relies on more mechanical and manual metrics rather than AI to determine the order in which restaurants appear to different type of customers. This approach allows Glovo to have a different revenue stream other than its main activity and emphasizes the importance of commercial relationships and customer feedback over automated personalization algorithms.

3. **How is Glovo using Artificial Intelligence in CRM techniques, whether in chatbots or communications with partners via e-mail, etc.?**

The strategy employed by Glovo is of mass-approaching potential partners by leveraging AI to create sequences of emails. This AI-driven approach ensures that the content of each email and the timing of its delivery follow a specific logic designed to maximize engagement and effectiveness, both in the recruitment of new partners and on keeping great relationships with the already existing partners.

Additionally, Glovo is exploring the possibility of implementing a mechanism to send automated messages via WhatsApp to its partners. This potential use of AI aims to simplify communications and provide timely, relevant information to partners, enhancing their overall experience and fostering stronger business relationships, as its partners would receive important informations in a more detailed and timely manner so they could adapt their operations to the new guidances.

4. **How has the integration of Artificial Intelligence impacted the sales performance and customer engagement with Glovo?**

As this question was asked, the sales representative of Glovo promptly answered that the integration of AI on sales performance have been huge. The main reason for that is because Glovo is using AI in a lead scoring tool, with the objective of qualifying and prioritizing potential both new customers and partners. This tool incorporates several variables, such as the partner's location, their rating on other

delivery platforms like Uber Eats, and the segment they work in (e.g., sushi, barbecue, mexican food, etc.). By analyzing, these factors, AI is helping Glovo efficiently proritizing leads, making the process of attracting potential successful partners more automated and precise.

The implemention of this AI-driven lead scoring tool has significantly impacted performance since previously, there was a large margin of error in their lead qualification process. With the introduction of AI, this margin for error has decreased substantially, resulting in greater efficency in their approaches. She even highlighted that almost everyday she uses AI tools to perform her daily tasks.

Other metric that was influenced by the integration of this AI tool for lead scoring was the KPI (Key Performance Metric) called "GMV" (Gross Margin Value), which is calculated by multiplying the average price of orders by the number of orders from a given restaurant. This AI powered lead scoring tool has enabled Glovo to increase the average GMV per partner by focusing on more qualified partners, thus boosting overall sales performance and customer engagement, leading to higher revenues.

5. Finally, what are Glovo's plans and aspirations with regard to further integrating Artificial Intelligence into sales strategies?

The main aim for Glovo is to achieve greater efficiency in its processes by leveraging AI to automate day-to-day repetitive tasks that are currently being performed mannually. By doing so, they plan to reallocate human resources to tasks that add more value and are less monotonous, enhancing overall productivity and employee satisfaction.

An example of this approach was implemented in Poland, where they identified a recurring issue with sales employees addressing an incorrect topic during phone calls. To resolve this, they downloaded all the calls and used AI to search for specific keywords and phrases to identify the calls where the incorrect topic was addressed. This allowed them to quickly correct the information with the relevant partners. By using AI, they saved many hours that would have been spent listening to calls, enabling faster error correction and improving the efficiency on their sales processes.

The interview with Glovo provided valuable insights into the integration of AI into their sales strategies and operations. Glovo's approach to AI-driven sales strategies encompasses various aspects, including lead-scoring, communication automation, and process optimization. By leveraging AI tools and technologies, Glovo aims to enhance efficiency, productivity, and customer engagement across its platform.

One of the key conclusions from the interview is Glovo's emphasis on utilizing AI to automate repetitive tasks and streamline processes, allowing human resources to focus on more value-added

activities. This strategic use of AI has led to tangible improvements in sales performance, as evidenced by the increased efficiency in lead qualification and the optimization of partner communications.

4.1.3 Professional from the Business and Sales department at Microsoft Interview

Following the valuable insights gained from the interview with Glovo, the next and final phase of this research, in order to get a comprehensive understanding of how companies can increase their revenues by leveraging artificial intelligence in their sales strategies and operations, is an in-depth interview with a professional from the business and sales operations department at Microsoft.

As Microsoft offers a wide range of artificial intelligence tools to companies through B2B businesses, a professional from the business and sales operations department is the right option to finish this chapter, providing a comprehensive overview by giving his insights in this topic. This interview delved into various aspects of AI application, from customer relationship management to sales performance optimization, providing valuable perspectives that complement the findings from Worten and Glovo, by offering a comparative view of AI integration in different organizational contexts.

The conversation started by him highlighting that there are significant differences between using AI in B2B (business-to-business) and B2C (business-to-consumer) contexts. The professional emphasized that AI is currently more extensively applied in B2C sales due to the massive scale and the ability to model and segment the target audience effectively. In the B2C domain, AI facilitates the personalization of customer interactions and optimizes marketing efforts by leveraging large volumes of consumer data to understand and predict customer behavior. Conversely, the application of AI in B2B sales is in a relatively emerging stage. B2B sales primarily revolve around building and maintaining relationships, as purchasing decisions are often made by procurement teams representing organizations rather than individual final consumers. This dynamic introduces a mix of personal and institutional relationships that AI still has a long way to go. Despite its potential, the role of AI in B2B sales is still developing, focusing more on supporting relationship management rather than direct customer engagement. This distinction between the usage of AI in B2B and B2C highlights the need for tailored AI strategies that align with the unique demands of each sales environment.

After these highlighted valuable concepts, the interview followed a structured approach.

1. **At a time when customers increasingly value personalized and individual offers, how can AI help to offer more personalized and targeted products for each type of customer? Can you**

give some examples of strategies to increase sales, due to a deeper knowledge of the customers, based on models created by AI?

Following the initial discussion on the distinctions between AI applications in B2B and B2C sales, the interview delved into the specifics of how AI can enhance personalization and targeted offerings. The first question asked to the Microsoft professional focused on the ways in which AI can help offer more personalized and targeted products to customers, along with examples of strategies to increase sales through a deeper understanding of customer behavior.

The professional started by stating that AI has both reactive and predictive capabilities. Reactive AI involves analyzing historical data using machine learning to guide sales based on past behaviors. For instance, sales strategies increasingly rely on AI algorithms to suggest products based on customers' purchase histories and browsing behaviors. This reactive approach enables businesses to offer complementary or superior products through cross-selling and up-selling techniques, thereby increasing their revenues and enhancing the overall customer experience.

On the other hand, predictive AI goes a step further by focusing on future needs, attempting to anticipate what the customer will require. This forward-looking approach helps in optimizing stock levels and tailoring marketing campaigns to more efficiently meet demand. An example of this would be predicting product demand to ensure optimal inventory levels, thereby preventing stockouts or overstock situations.

The professional also highlighted several specific AI-driven strategies:

- Real-time Price Adjustment: AI algorithms adjust prices in real time based on various factors, a practice commonly seen in the airline and hotel industries.
- Discount Offers: By analyzing purchase history, AI can identify opportunities for up-selling and cross-selling, offering discounts to increase conversions.
- Personalized Web Experience: AI personalizes the customer's experience on a website by changing the products displayed based on the customer navigation patterns, thus enhancing engagement and increasing the likelihood of a sale.

These strategies illustrate how reactive and predictive sides can work together to create a more personalized and efficient sales process, driving higher sales and better customer satisfaction.

The next inquiry focused on the pivotal role of Customer Relationship Management (CRM) systems and the segmentation of customers to optimize sales strategies.

2. **How can Artificial Intelligence be used for CRM techniques?**

The professional from Microsoft explained that the basis of CRM is a database of existing customers, sales, and relationships. From this database, AI is able to analyze behavior patterns and segment

customers so that it can recommend different strategies for different types of customers. Based on history, segment or industry, a company's sales strategies can be defined. This varies depending on the company's activity, for example if a company that gets paid for the website traffic and advertising, such as YouTube, must have completely different techniques from companies that sell products or services, such as Worten and Glovo.

He elaborated that AI's ability to analyze extensive datasets within CRM systems allow it to uncover hidden behavior patterns and preferences among customers. By segmenting customers into various groups (clusters) based on these patterns, businesses can tailor their sales strategies to better address the specific needs and tendencies of each segment. This segmentation leads to a more personalized and effective marketing and sales efforts, ultimately driving higher engagement and conversion rates.

Additionally, the professional highlighted the diversity in AI application across different types of businesses. For instance, companies like YouTube, which rely on website traffic and advertising revenue, utilize AI to maximize advertisement placements and optimize viewer engagement. In contrast, businesses like Worten and Glovo, which focus on selling products or services, leverage AI to enhance product recommendations, manage inventory, and optimize their marketing campaigns. This differentiation shows the versatility of AI in adapting to various business models and objectives.

3. **Do you think that artificial intelligence can be used to discover future trends in the market, so that a company can position itself in advance to have a competitive advantage when that trend arrives?**

The specialist highlighted both the potential and limitations of AI in predicting future market trends. "Yes and no", he began. Initially, yes, because the AI-based predictive models that already exist are already able to predict future trends. No, because in the future, when this same technology enters a mature phase, assuming that it is so usual in companies to have AI technology available, the accuracy of predictive algorithms will all give similar results and then, there will no longer be a competitive advantage.

He elaborated that while AI can currently provide a competitive edge by identifying emerging trends, this advantage may diminish as AI technology becomes more universal and sophisticated. Once AI predictive models become more and more accurate, the differentiation among companies will fall on the quality of their AI algorithms. In addition, the human expertise in leveraging AI-derived insights will prevail, as it is important to know how to leverage the information and insights given by those technologies. That is where the human power will still have a big importance and will continue to be the decisive factor for competitive advantage.

In summary, while AI holds a promise for anticipating market trends and enabling companies to position themselves for the future, the ultimate competitive edge will depend on the continuous improvement of AI algorithms and the strategic application of the insights they generate. Human power and strategic thinking will remain critical in maximizing the benefits of AI technology in the competitive world of businesses.

4. What impact can the integration of Artificial Intelligence have on a company's sales performance and customer engagement?

The interviewee highlighted the transformative potential of AI in enhancing both sales performance and customer engagement, particularly when sales are relationship-based. He stated that AI can significantly enhance the understanding of customer preferences and behaviors, enabling the delivery of a personalized experience that surpasses the human capacity.

He said that AI have the capacity to completely transform the customer's journey through a personalized experience, due to tailored interactions and recommendations based on individual customer data, leading to a more satisfying experience. A key point emphasized was the impact on customer loyalty. By leveraging AI, companies can create detailed customer profiles in order to anticipate and meet future customer needs. With a predictive capability, there is the capacity to enhance customer satisfaction by aligning offers with customer needs while optimizing resource allocation, reducing the retention costs through advanced data analysis and predictive modeling.

5. What do you think the future will hold in terms of greater integration of AI into sales strategies ?

A forward-looking perspective on the future of integration of AI into sales strategies was given, predicting a scenario where AI technology will be extensively utilized by both sellers and customers.

He highlighted that as AI continues to evolve, its presence will become usable both in the buying and selling process. This interesting response comes from his hope of the development of AI technology for customers to use, aiding in the purchasing process. This dual-sided AI interaction implies that customers will employ AI tools to navigate and potentially counter the sales strategies developed by companies. He provided a specific example involving dynamic pricing in the airline industry, where currently, sellers use AI to adjust prices based on customer behavior on their websites. In the future customers could use their own AI to influence these pricing algorithms to their advantage. This AI could guide the customer on how to interact with the website to trigger lower prices, essentially helping the buyer to combat the seller's AI.

Moreover, he suggested that AI could also assist customers in finding better deals across different platforms. For instance, if the dynamic pricing on one site raised the price of a plane ticket, the customer's AI could recommend an alternative site offering the same ticket at a lower price.

Basically, his prediction to the future is that we will se a sophisticated interaction of AI technologies on both sides of the market, with buyers and sellers each leveraging AI to optimize their own outcomes. This evolving landscape will still need innovative strategies and tools to achieve a competitive edge between companies, showing that even in the future, the human power will continue to be decisive in order to obtain great results.

With the objective of reaching conclusions of all the interviews, an individual thematic analysis for each interview will now be conducted, to identify themes and patterns, in order to be able to answer the research questions.

4.2 Results Analysis

4.2.1 Thematic Analysis

Worten

- Theme 1: Artificial Intelligence technology to predict future sales

Worten uses AI to manage stock purchasing by predicting the number of sales of products based on many variables, such as past sales, pricing, and marketing campaigns. The AI model supports stock operators by suggesting decisions, which is accepted for most of the products, but depending on the importance of the product, it can be overruled.

- Theme 2: Training and providing the right equipment to the team

The recruitment team focuses on individuals with advanced degrees in relevant fields, then providing them with weekly meetings with partners like Microsoft and annual AI training to keep the staff updated on the latest technologies and methodologies. There is a significant investment in data quality and data governance, as accurate data is crucial for effective AI models.

- Theme 3: Impact on sales and customer engagement

AI-driven personalization in CRM, such as in pop-up notifications and tailored e-mail messages to different clusters of clients, have led to a significant increase in sales. Optimizing the products shown in the website for each client based on their interests and needs, have increased the retention time in the website and led to increased sales.

- Theme 4: Customer privacy and security

Strict measures to anonymize customer data in all systems, ensuring that even data teams don't have access to decrypted data. Only infrastructure administrators have the decryption key and the specific information given to other departments is only granted in case of suitable justification.

- Theme 5: Future AI integration plans

Worten aims to balance human touch and technology, by maintaining the human aspect in customer interactions, differentiating them from competitors like Amazon. While keeping this human touch, Worten still aims to continue developing technology, using AI to automate processes and reduce costs, reallocating resources to enhance customer relationships and satisfaction.

Glovo

- Theme 1: AI technology for Market Intelligence

Glovo uses AI to create market intelligence tools that automate data extraction and generates reports on its own. They use a platform called TOQAN, which helps in various functions, such as creating complex Excel formulas, generating code, and creating documents for external communication and marketing campaigns.

- Theme 2: Personalization and customer preferences

At the moment the highlighted restaurant positions are monetized, with rankings based on orders, reviews, and ratings rather than personalized AI-driven algorithms. The current method relies more on mechanical metrics than on AI algorithms, leading to less customer display relevance.

- Theme 3: AI in CRM techniques

AI is being used to create e-mail sequences for potential partners and clients, optimizing contents and timing for better engagement and results. The exploration of automated WhatsApp messaging is being developed to improve communication efficiency with active partners.

- Theme 4: Impact on sales performance

It was highlighted that AI has had a very big impact on sales performance. The AI-based lead scoring tool prioritizes potential partners based on location, ratings, and business segment. This lead scoring tool allowed improved efficiency in partner acquisition, leading to higher gross margin value (GMV) per partner.

- Theme 5: Future AI integration plans

Glovo aims to automate manual repetitive tasks to free up human resources for more value-added activities. They also plan to use AI for quality control in partner communciations, saving time and improving accuracy in addressing possible issues.

Microsoft Business and Sales professional

- Theme 1: Differences in AI usage for B2B and B2C

The sales in B2B relies more on relationship management, with AI still in its early stages for this sector, thus human power is still crucial. In B2C, AI is already being extensively used for customer segmentation, targeting, and personalized marketing campaigns.

- Theme 2: Personalized offers and targeted products

There are two types of AI. The reactive AI analyzes historical data to guide sales based on past behaviors. Predictive AI forecasts future customer needs, helping in proactive sales strategies.

There are many sales strategies that AI can help building. Examples were given such as, suggesting cross-selling and up-selling products, and dynamic pricing based on purchase history and browsing behavior. Real-time price adjustments and personalized website experiences to enhance customer satisfaction and increase sales.

- Theme 3: AI-based sales strategies

AI analyzed CRM databases to identify behavior patterns and segment customers in clusters. Then, the sales teams tailor their strategies based on customer history, industry, and segment, differing strategies for companies based on website traffic and advertising versus those selling products or services.

- Theme 4: Predicting future trends

There is the possibility to predict future trends, providing a competitive edge. As AI matures, the quality of algorithms will determine competitive advantages among companies.

- Theme 5: Impact on sales performance and customer engagement

AI has the capacity to enhance customer journeys by offering personalized experiences, increasing satisfaction and loyalty. It helps reducing the customer retention costs by predicting and addressing future needs based on past interactions.

- Theme 6: Future integration of AI in sales strategies

There will be AI for both sellers and buyers. Buyer-focused AI could help navigate dynamic pricing and suggest optimal puchase strategies, balancing the influence of seller's AI algorithms

This individual thematic analysis for each interview allows for a detailed understanding of how each company uses AI in their sales strategies and how any company can use it. The next step is to perform a cross-case analysis, comparing and contrasting findings, which will help identifying similarities and differences, providing a more comprehensive understanding and giving the possibility to further answer the research questions with more clarity.

4.2.2 Cross-Case Analysis:

In this cross-case analysis, a comparison and contrast of the thematic insights from the interviews with representatives from Worten, Glovo, and Microsoft will be conducted. The objective is to identify commonalities and differences in their approaches to AI-driven sales strategies, and how these strategies impact their sales performance and customer engagement. This analysis will also help in addressing the research questions on the utilization of AI to analyze data and adjust sales strategies effectively.

Commonalities:

Theme 1: AI Technology for Predicting Sales and Market Trends

- Worten: Uses AI for stock management by predicting sales based on historical data, promotions, and pricing.
- Glovo: Implements AI tools for market intelligence, data scraping, and lead generation.
- Microsoft: Emphasizes the predictive aspect of AI in anticipating customer needs and future trends.

Common Insight: All three companies leverage AI for predictive analytics, but the applications vary. Worten focuses on stock management and leverage AI for purchasing certain products, Glovo on market intelligence and lead scoring, and Microsoft focuses more on providing technologies of predictive models for companies.

Theme 2: Personalization and Customer Preferences

- Worten: Personalizes CRM through AI-driven insights to increase sales and customer satisfaction creating personalized messages and push notifications.
- Glovo: Relies on monetized positions rather than AI for personalization, but uses AI in CRM to create a more personalized and tailored communication with current and potential partners.
- Microsoft: Highlights the importance of personalized offers through both reactive and predictive AI models.

Common Insight: Both in the perspectives of Worten and Microsoft, personalization is crucial, eventhough the extent and the methods of AI integration differ. These two companies emphasize more the importance of AI-driven personalization than Glovo.

Theme 3: Training and Equipping Teams with AI Knowledge

- Worten: Invests in continuous training through internal seminars and meetings with AI technology providers, such as Microsoft, and has a unified data strategy to support AI initiatives.
- Glovo: Uses the TOQAN platform for various AI-driven functions and ensures employees are equipped with all the necessary tools and online training programs.
- Microsoft: Did not explicitly mention training, but implies a strong understanding of companies integrating AI in sales, highlighting the importance of providing strong and coherent training to its employees.

Common Insight: Both Worten and Glovo place a strong emphasis on training their teams to effectively use AI technologies. Worten was the only company who recognized the importance of recruiting skilled personnel to avoid extra costs in initial training.

Theme 4: Impact on Sales Performance and Customer Engagement

- Worten: Reports significant sales increases through AI-enhanced CRM and personalized customer engagement.
- Glovo: Uses AI for lead scoring, improving efficiency and increasing GMV (Gross Margin Value) per partner.
- Microsoft: Believes AI can transform customer journeys by offering personalized experiences and improving customer loyalty.

Common Insight: All three companies acknowledge the positive impact of AI on sales performance and customer engagement, emphasizing AI's role in personalizing customer interactions and improving efficiency.

Theme 5: Future Integration of AI in Sales Strategies

- Worten: Aims to balance AI with human touch, using AI to focus on cost reduction and enhancing customer relationships.
- Glovo: Seeks to automate manual tasks with AI, improving process efficiency.
- Microsoft: Predicts widespread AI use, with future competition focusing on the quality of AI algorithms and leveraging human insights.

Common Insight: Future plans of AI integration focus on increasing efficiency and enhancing customer relationships. All three companies see AI as a tool for automating tasks and providing better insights, but also recognize the ongoing importance of human involvement.

Differences:

Worten vs Glovo:
- Focus Areas: Worten emphasizes AI for stock management and CRM, while Glovo focuses on market intelligence and lead generation.
- Personalization: Worten integrates AI more deeply into personalization compared to Glovo, which relies more on monetized positions for restaurant rankings.

Worten vs Microsoft:
- Predictive AI: Both emphasize predictive models, but Microsoft highlights the broader application of AI in B2B, while Worten, naturally, emphasized more in B2C contexts.
- Customer Engagement: Worten invests heavily on CRM, whereas Microsoft discusses the broader impact of AI on organic customer journeys.

Glovo vs Microsoft:
- Lead Generation vs Customer Engagement: Glovo's AI usage is more focused towards lead generation and partner communication, while Microsoft emphasizes AI's role in transforming customer journeys.
- Predictive AI: Microsoft provides a more detailed view of predictive AI's future, including potential customer-side AI to counter seller strategies.

This cross-case analysis highlights the diverse applications and impacts of AI-driven sales strategies across Worten, Glovo, and Microsoft. While each company leverages AI differently based on their specific needs and industry contexts, common themes such as the importance of predictive analytics, personalization, and the future role of AI in enhancing efficiency and customer relationships are evident.

These insights provide a comprehensive understanding of how AI can be utilized to analyze data and adjust sales strategies, even in different areas of those sales strategies, as seen previously. These insights contribute with valuable knowledge to the field of AI-driven sales strategies.

Chapter 5: Conclusion

In this last chapter we will delve into the main conclusions of the study carried through interviews, with the objective of being able to respond to the two main research questions: (1) "In what ways can AI be utilized to analyze data?"; (2)" How can Sales Strategies be adjusted to be more effective using insights derived from the analysis of data?".

In this chapter, research limitations and suggestions for future studies will also be covered.

5.1 Final Considerations

The introduction of Artificial Intelligence and Machine Learning brought new opportunities and challenges to the world of business, with companies incorporating innovative approaches to extract valuable insights from past experiences, with the intent of improving their strategies (Sheth & Kellstadt, 2021).

Through semi-structured interviews, we gained insights into how Worten, Glovo and Microsoft leverage AI to enhance sales performance, personalize customer engagement, and improve operational efficiency.

As Rahmani et. al (2021) enhanced, descriptive analytics, predictive analytics and prescriptive analytics are already being used by companies. Worten stated that by leveraging predictive models, they are able to make data-driven decisions that enhance inventory control and align their strategies with anticipated consumer behavior, reducing both overstock and stockouts.

Both Worten and Glovo are already using personalized content, through push and pull notifications, and Glovo is also using AI to contact potential clients with tailored messages, which ends up improving conversion rates, leading to increased revenues (Rosário & Dias, 2023)

As the representative from Microsoft enhanced, dynamic pricing based on purchase history and browsing behavior is already being used by many companies in various industries, such as in airline companies or hotel bookings, which helps optimizing revenue streams (Kopalle et, al. 2023).

The importance of continuous training cannot be overstated, as Worten claimed. Effective implementation of AI technologies requires that employees are well-equipped to utilize AI tools to their full potential. A robust training program ensures that staff can navigate and leverage AI systems proficiently.

The impact of AI on sales performance is significant. By enhancing operational efficiency, reducing error margins, and improving customer satisfaction, AI integration boosts overall sales performance. Companies reported higher efficiency in sales processes and more accurate targeting of customer needs, leading to increased sales and stronger customer relationships.

Looking ahead, companies are focused on further integrating AI to automate repetitive tasks. This strategic move allows human resources to concentrate on more value-added activities, such as strategic planning and creative problem-solving. The competitive advantage in the future is likely to hinge on the quality of AI algorithms and the ability to leverage AI insights effectively, underscoring the importance of continuous innovation and improvement in AI capabilities.

These insights contribute to a deeper understanding of the role of AI in modern sales strategies, offering valuable perspectives for both practitioners and researchers. The experiences of Worten, Glovo, and Microsoft provide a blueprint for how AI can be used to drive sales excellence, highlighting the critical factors that contribute to successful AI integration in sales operations.

5.2 Research Limitations

Despite the insightful findings and being able to answer the research questions, this study has several limitations that should be considered when interpreting the results.

Firstly, the study is based on interviews with representatives from only three companies, which may not provide a comprehensive view of various industries. This small sample size limits the generalizability of the results. Another limitation is the scope of the study, which focuses primarily on large companies with significant resources to invest in AI. This emphasis may not capture the challenges faced by smaller companies, who might find distinct difficulties and benefits when integrating AI into their operations.

Additionally, the data is derived from subjective responses from the interviewees, which may introduce personal biases and affect the objectivity of the findings. The perspectives and experiences shared by the participants could be influenced by their individual viewpoints, potentially skewing the results.

Furthermore, due to the broad scope of the interviews, some aspects of AI integration and its impacts may not have been explored in sufficient depth. This limitation means that certain nuances and specific effects of AI adoption could be underrepresented, leaving gaps in the understanding of its comprehensive impact on various facets of a business.

Overall, while the study provides valuable insights and the newest trends into AI integration, these limitations suggest that further research with a larger, more diverse sample and a deeper exploration of specific issues is needed to fully understand the complexities and implications of AI in different business contexts.

5.3 Recommendations for Future Studies

For future studies, several recommendations can help address the research limitations identified in this study and enhance the understanding the impact of AI on sales strategies.

One important suggestion is to expand the sample size to include a more diverse range of companies across different industries and sizes. This broader sample would provide a more comprehensive understanding of AI's impact on sales strategies, capturing a wider array of experiences and practices.

In addition to expanding the sample size, future research should complement qualitative interviews with quantitative data analysis. By measuring the impact of AI on sales metrics more objectively, researchers can gain a clearer picture of AI's effectiveness. This could involve analyzing sales data before and after AI implementation to assess changes and trends.

Comparative studies are another valuable recommendation. By comparing the AI strategies of companies in different regions or markets, researchers can understand how cultural, economic, and most importantly, regulatory factors can influence AI adoption and effectiveness. This approach can highlight the variations in AI integration and provide insights into the best practices in diverse contexts.

A specific focus on small and medium-sized enterprises (SMEs) can also be interesting. Investigating the challenges and opportunities for SMEs in adopting AI-driven sales strategies can provide valuable insights for companies with limited resources. Understanding the unique hurdles and advantages faced by SMEs will contribute to more tailored and practical recommendations for these businesses.

Finally, exploring the ethical implications of AI in sales is crucial. Future studies should examine issues such as data privacy, customer consent, and the potential for bias in AI algorithms. Addressing these ethical considerations will ensure that AI-driven sales strategies are not only effective but also responsible and fair.

In terms of different content to be explored with the realm of AI in sales strategies, future studies could explore the long-term effects of AI integration in sales strategies, in order to understand its sustainability and effectiveness. Understanding the consumer trust and acceptance of AI in sales interactions is also a critical area for exploration.

By incorporating these recommendations, future research can build on the current study's findings and provide a deeper understanding of AI's role in transforming sales strategies across various contexts.

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