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Algorithmizing B2B Sales: Can AI Create a Sales Framework That Guarantees Predictable Results?

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Abstract: The article examines the impact of artificial intelligence on B2B sales processes, in particular, its role in increasing efficiency and predicting customer behavior. The article analyses the use of such technologies as natural language processing [NLP], machine learning [ML], computer vision, and chatbots. Particular attention is paid to the practical case of the American company Dell, which has achieved an increase in the conversion rate and optimization of the sales department with the help of Lattice Engines analytics.

The study demonstrates that AI integration allows branding agencies to create more accurate customer profiles, automate routine tasks, and increase the level of interaction personalization. It is concluded that further development of predictive models and integration of AI with customer relationship management [CRM] systems are essential for achieving predictable results and enhancing companies' competitiveness. The study's novelty highlights the practical benefits of integrating AI into the B2B sales process, particularly its role in improving sales efficiency, personalization, and lead generation.

However, the research is limited to analyzing existing AI applications and does not cover the potential risks associated with data privacy and ethical concerns. Future studies should address these challenges to ensure the responsible use of AI. The practical implications of this research include increased productivity, improved customer targeting, and enhanced decision-making processes. Social implications involve the transformation of the labor market, as AI automates routine tasks, necessitating workforce reskilling and adaptation to new roles. Thus, AI not only optimizes sales processes but also drives broader societal changes, highlighting the need for balanced technological adoption.

Keywords: B2B sales, machine learning, natural language processing, predictive analytics, branding agencies, automation, personalization, customer experience, sales managers.

Introduction: One of the most discussed topics in modern sales management today is digitalization. It affects the process of buying and selling things by companies, customer interaction, and changes in B2B sales [Mattila et al.].

After analyzing J. Hunter's research, several conclusions were drawn:

1] the use of AI in business automates about 40% of sales tasks [Hunter, p. 203]; 2] artificial intelligence can be added to every stage of the sales process. There have been changes in the value system that will reorganize sales in the technical sector. According to J. Hunter, this affects the usual business that salespeople currently do [Hunter, p. 205].

However, many companies still don't know how to use digital innovations correctly and properly integrate into sales process. So, the question arises: how can AI help boost sales in B2B commerce? A thorough analysis of B2B sales research in this area was conducted to answer this question.

This research is aimed at the B2B trade community and brand agencies. It is hypothesized that AI integration increases conversion rates, improves customer profiling, and boosts sales team productivity. By analyzing big data and predicting customer behavior, the use of AI will normalize and optimize the customer acquisition process by increasing conversion rates. Branding agencies can become more competitive, create distinctive offers, and establish long-term customer partnerships.

Intelligent operational information systems based on collected data are called artificial intelligence. Its purpose is to identify the best or most expected solution. The behavior of artificial intelligence does not necessarily mimic human intelligence; instead, it achieves ideal efficiency, which is called rationality [Paschen et al., p. 1413].

There are two types of definitions of AI:

1] narrow intelligence – the ability to process and analyze data and perform specific tasks; 2] general intelligence, the potential of which can be compared to the human brain. Today, AI is used in the field of narrow intelligence, in particular, by applying machine learning technologies, human speech processing, and educational purposes [Jarek and Mazurek, p. 48]. According to the AI Index 2021, artificial intelligence research is increasingly gaining attention. Between 2010 and 2022, the total number of such publications almost tripled, rising from around 88,000 in 2010 to over 240,000 in 2022.

In terms of geographical distribution, in 2022, China was the leader in the number of patents granted in the field of artificial intelligence, accounting for 61.1% of the total, while the US accounted for 20.9% [The AI index report].

In business, the main impact of AI is to improve process efficiency, generate analytical insights, and transform business processes. Artificial intelligence is used to automate routine tasks and enhance cognitive capabilities by integrating it with human experience [Enholm et al.].

As early as 2020, artificial intelligence became the second largest area in sales after automated customer service agents [Mehta], [Senn-Kalb].

In the United States, artificial intelligence is actively transforming businesses in the areas of branding and marketing. The integration of artificial intelligence in partner relations [AI-PRM] increases the efficiency of operations and trade values through better partner coverage and personalized services [Cotter et al. Artificial intelligence provides for sales features by analyzing customer behavior data and dynamic pricing [Fischer et al.]

In marketing, AI provides personalization through recommended agents and chatbots that provide round-the-clock support [Paschen et al., p. 1417]. Despite the benefits, successful AI implementation requires data security and staff training. Human and artificial intelligence are constantly interacting to maintain long-term customer relationships.

MATERIALS AND METHODS.

This study employed a qualitative research design, focusing on analyzing secondary data from reputable sources, including academic journals, industry reports, and case studies. The research explored the practical applications of artificial intelligence [AI] in B2B sales, particularly its role in increasing efficiency, enhancing customer profiling, and improving conversion rates. The case study of Dell’s use of Lattice Engines analytics was selected to illustrate the real-world impact of AI on sales processes.

The research was conducted over a six-month period, during which relevant literature and industry reports were systematically reviewed to identify key AI technologies, such as natural language processing (NLP), machine learning (ML), computer vision, and chatbots.

Inclusion criteria focused on studies and reports published within the last decade that provided empirical evidence of AI's impact on B2B sales. Sources that lacked clear methodologies or measurable outcomes were excluded to maintain the reliability of the findings.

Data analysis involved synthesizing information from multiple sources to identify common patterns and trends in AI adoption. The primary focus was on understanding how AI influences different stages of the sales cycle, from prospecting to after-sales service. Additionally, the study examined the integration of AI with customer relationship management (CRM) systems and its role in predictive analytics.

While quantitative data from Dell's case study, such as conversion rates and return on assets, provided measurable evidence of AI's effectiveness, qualitative insights from literature reviews helped contextualize these findings within broader industry trends. Ethical considerations were acknowledged, particularly regarding data privacy and the responsible use of AI in sales.

RESULTS.

Artificial intelligence turns large amounts of data into information to improve customer understanding and knowledge management during sales process. Branding agencies are participating in digital change as they use artificial intelligence to optimize sales cycles and increase engagement with potential customers [Paschen et al., p. 1416]. Branding agencies use the following AI technologies to improve their sales:

Natural language processing [NLP]. NLP analyses textual data: emails, social media posts, and customer reviews. In this way, NLP identifies keywords and customer sentiment, creates accurate profiles of potential customers, and predicts their needs [Syam & Sharma, p. 137].

- Machine learning [ML]. ML is used to analyze the behavioral data of potential customers and identify the most promising leads. Algorithms are able to detect patterns and predict the likelihood of a purchase based on historical data [Syam & Sharma, p. 139].

- Computer vision. Computer vision technology allows analysing visual content, such as images and videos. This is especially important for branding agencies, which use this tool to analyze customers' visual preferences and improve the design of branded materials [Forsyth & Ponce].

- Chatbots and digital agents. Chatbots are capable of performing routine tasks, including answering common questions and making the first contact with a customer [Paschen et al., p. 408]. - Predictive analytics. Predictive analytics predicts customer behavior based on the analysis of their past actions. It allows branding agencies to determine the best time to interact with a customer and adjust their marketing campaigns to increase conversion [Syam & Sharma, p. 1410]. Artificial intelligence at different stages of the sales cycle increases the efficiency of the process and minimizes the human factor:

1. Prospecting. AI is able to analyze large amounts of data to create a list of potential customers and assess their likelihood of making a purchase.

2. Customer approach. AI personalizes communication with customers based on the analysis of their behavior and interests. ServiceMax uses ML to recommend web pages to its website visitors, which has reduced the bounce rate by 70% and doubled the time spent on the site.

3. Presentation. At the presentation stage, AI helps to create product prototypes and adapt presentation materials. Airbnb uses algorithms to transform design sketches into program code, which significantly speeds up the prototyping process.

4. Dealing with objections and closing the deal. AI provides up-to-date information about competitors using Klue's AI-enabled battlecards, which helps sales managers answer customers' questions effectively. Dynamic pricing algorithms offer individualized prices depending on customer characteristics.

5. After-sales service. AI automates order processing and communication with customers using chatbots. Analysis of purchase data reveals opportunities for cross-selling and upselling. For example, Hyatt Hotels Group increased upselling revenue by 60% by using ML to predict guest needs [Forsyth, Ponce], [Paschen].

In a case study of the impact of AI on B2B sales algorithmisation, the American representative office of Dell was identified. The company's use of artificial intelligence demonstrates a significant impact on conversion rates, lead quality, and overall sales performance. To increase the productivity of its sales team, Dell turned to cloud analytics from Lattice Engines. This software is specially designed to help sales managers close more deals and identify potential customers who are most likely to buy Dell products.

The program works by analyzing the behavioral patterns of companies that already buy Dell products. It tracks events and behavior of potential customers, such as the opening of a new office, which is usually accompanied by the need for new computers and equipment. Using predictive

analytics algorithms, Lattice Engines matches these trigger events with external data, such as LinkedIn ads, information on websites, and public statements by potential candidates. Additionally, the company's internal data and purchase history are taken into account. Customers who have bought Dell products before receive a higher priority when generating a list of potential leads [King].

Integration of social networks, including LinkedIn, creates a complete portrait of the client. In today's market, where buyers are better informed and more demanding of a personalized approach, the ability to understand customer needs in advance significantly increases the chances of a successful sale. Lattice Engines helps managers use this information more effectively to target potential customers, reducing the time spent searching for data on the Internet and increasing the number of productive contacts.

The impact on conversion rates has been significant. For example, Dell's marketing department in Europe reduced the number of leads coming into the sales department by 50% by focusing on only the most promising candidates. This allowed them to almost double their productivity, efficiency, and revenue. This approach allows sales managers to spend time only on those customers who really need Dell products at a particular time [King].

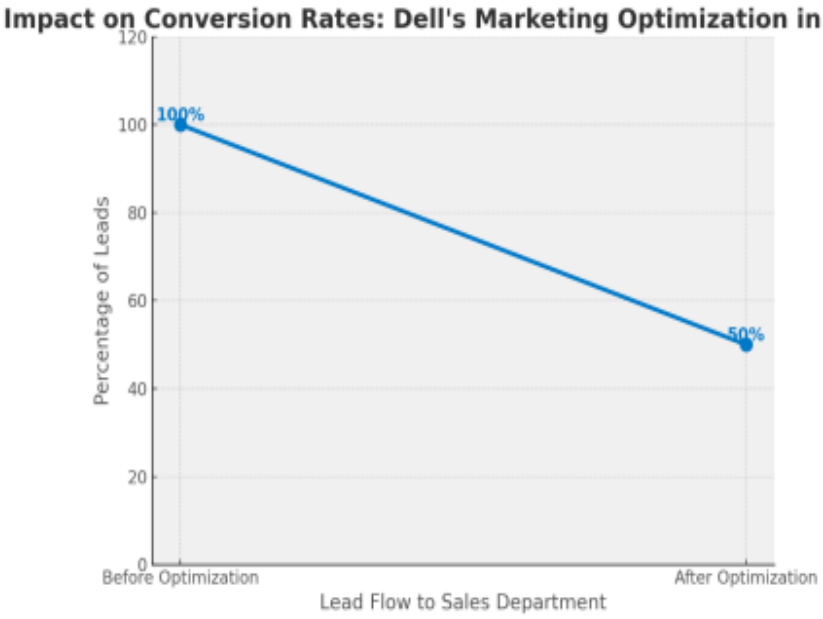

Figure 1. The impact of AI implementation on the number of leads in the Dell sales department [King]

In general, using Lattice Engines analytics allowed Dell to increase the efficiency of its resources and improve profitability. Despite the general decline in demand for personal computers and an 11% decline in quarterly profits, the company achieved a return on assets of 6%, which is significantly higher than the average competitor's rate of 3.2% [King].

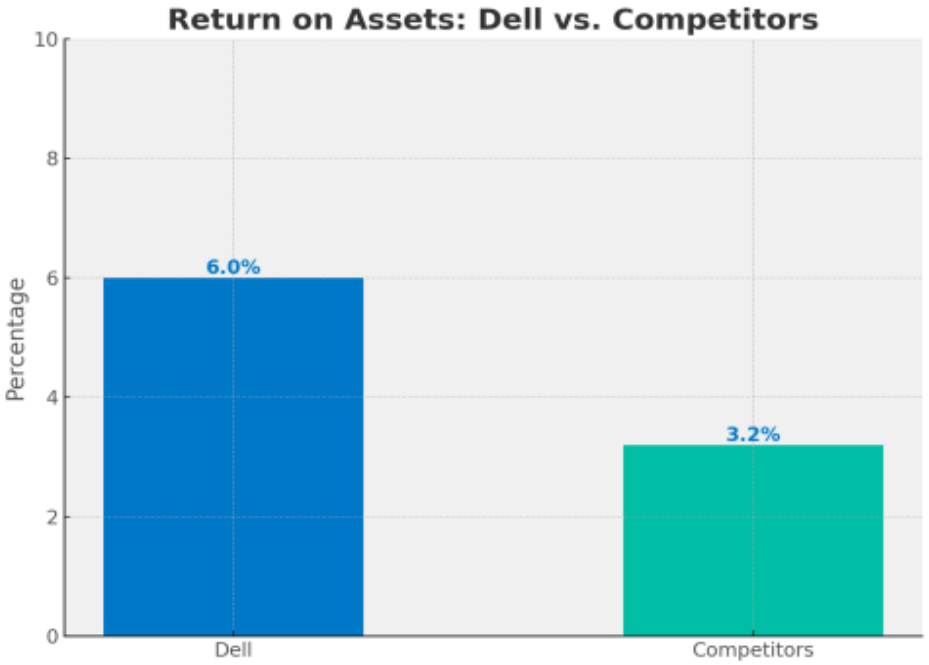

Figure 2. Comparison of return on assets of Dell and its competitors [King]

Thus, the study showed that Dell was able to use its assets more efficiently due to the introduction of AI in the sales process.

Discussion. The results highlight the practical benefits of AI in B2B sales, supporting the hypothesis that AI integration increases conversion rates, improves customer profiling, and enhances sales team productivity. Dell's success demonstrates how predictive analytics can help companies identify high-potential leads and focus their efforts more effectively. By analyzing behavioral patterns and external data, AI enables sales managers to anticipate customer needs and offer personalized solutions, reducing the time spent on unqualified leads.

The findings align with existing research, which emphasizes the role of AI in automating routine tasks and enhancing decision-making processes. For example, previous studies have shown that AI can automate up to 40% of sales tasks, allowing sales teams to allocate more time to strategic activities. The use of NLP and ML further enhances customer engagement by providing insights into customer behavior and preferences. However, the study is limited to the analysis of existing AI applications and does not address potential challenges related to data privacy and ethical considerations.

Overall, the study demonstrates that AI can significantly improve B2B sales performance by enhancing customer profiling, optimizing resource allocation, and automating routine tasks. Future

research should explore the integration of AI with customer relationship management [CRM] systems and examine the long-term impact of AI on customer satisfaction and sales performance. Conclusion. The introduction of artificial intelligence in sales processes between companies demonstrates the potential of this technology to optimize and normalize commercial processes. According to research, AI automates about 40% of sales tasks, which significantly increases business efficiency.

Brand agencies predict customer behavior, create personalized incentives, and analyze large amounts of data using AI. As customers receive more relevant and timely offers, it increases conversion rates. Integrating AI into partner relationship management [AI-PRM] helps to improve performance by understanding more about customer needs and the ability to set dynamic, ready-to-buy pricing.

Dell is a great example of using AI to improve sales efficiency. The company used Lattice Engines' cloud-based analytics to reduce the number of sales leads by focusing on only the best candidates. The company's return on assets reached 6%, which is significantly higher than its competitors' 3.2%.

The benefits of AI for branding agencies include the ability to create more accurate profiles of potential clients with natural language processing services, predict the likelihood of closing deals with machine learning, and automate routine tasks with chatbots.

Future research and development in this area should focus on further improving predictive models and increasing the accuracy of customer behavioral data

analysis. Particular attention should be paid to the integration of AI with customer relationship management [CRM] tools, which will create better-personalised offers and increase customer satisfaction. In addition, an important area of research is ensuring transparency and ethical use of AI in sales in the context of personal data processing.

Thus, the introduction of artificial intelligence in B2B sales in branding agencies opens up new opportunities to increase the efficiency of business processes, improve customer interaction, and achieve predictable results. Combined with human expertise, AI creates a significant competitive advantage in the current US market and ensures sustainable growth for companies in the long term.

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