

Unveiling Novel AI Use-Cases in Marketing: Bridging the Gap between AI Innovations and Marketing Core Processes for Effective Communication with Marketing Professionals

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ABSTRACT,

Artificial Intelligence (AI) has revolutionized our lifestyles and work environments, bringing forth a plethora of transformative technologies. These advancements have empowered organisations to amplify their operational effectiveness, reduce costs, and gain a competitive advantage. However, despite the myriad advantages offered by these cutting-edge technologies, numerous professionals continue to grapple with comprehending their value and harnessing them effectively to attain their goals. While extensive research has been conducted on these AI use-cases, particularly in recent years, existing studies often present these concepts in technical and complex language. In contrast, this research aims to provide practical explanations that can be easily understood and applied by marketing professionals. The aim of this research is to showcase the novel use-cases of AI, explore which marketing core processes they can be applied to and how to best explain these use-cases to marketing professionals. A systematic literature review is conducted to develop an up-to-date overview of the use-cases of AI for marketing purpose. These use cases are then linked to the core marketing processes and transformed into a qualitative questionnaire. The questionnaire explores how to effectively communicate these use-cases to marketing professionals in a manner they can understand. The study will aid researchers in communicating AI technology with managers and companies. This study discovered a plethora of use-cases that have applications across four core marketing processes. Furthermore, this study found that linking these use-cases to the core processes and explaining them in simple terms is an effective communication for managers to understand. However, many managers expressed that more visual and hands on approaches would be beneficial for them, and this would aid in them gaining a deeper understanding.

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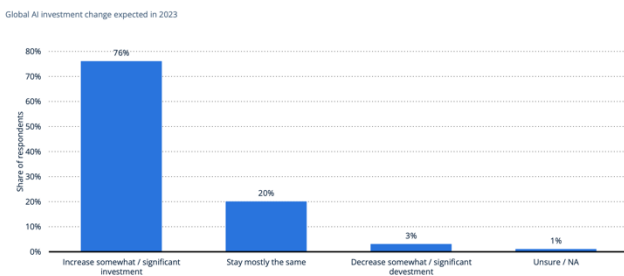
Keywords

Marketing, Innovation, Artificial Intelligence (AI), Data Science, Core Processes, Business Functions, Literature Review

INTRODUCTION

Artificial Intelligence (AI) is rapidly entering the business domain and already offers a multitude of applications and uses. Defining AI is a complicated issue, and many different professionals have different definitions for it. What better way to define AI would there be than to ask AI to define it for you? 'OpenAI's ChatGPT, 2021' defines AI as "the usage of computer systems to simulate human cognitive abilities, such as learning, reasoning, problem-solving, perception, and language understanding." In simpler terms, AI refers to the use of computer systems to mimic or replicate human cognitive abilities, including learning, logical thinking, problem-solving, perception, and understanding language. Mustak et al. (2021) includes forms of AI with terms such as "machine learning, service robots, automation, big data, neural network, natural language processing, and the Internet of things (IoT) to refer to AI" (Mustak et al. 2021). To stress the importance and relevance of AI to marketers, a study from Deloitte (2023) found that 76% of companies worldwide had a somewhat or significant increase in AI related investments in the fiscal year 2023 (See Figure 1).

Figure 1: Change in AI Investments worldwide 2023.



(Deloitte 2022)

Furthermore, on average, companies have seen an AI adoption rate increase from 20% in 2017 to 50% in 2022 (McKinsey & Company, 2022). While 42% mention the adoption to be only in a limited capacity and 23% widespread adoption in 2022, it is expected that by 2025 that limited adoption will reduce to only 18% and that proportion will be replaced widespread adoption with an increase to 46% (Insider Intelligence, 2022) (See Figure 2).

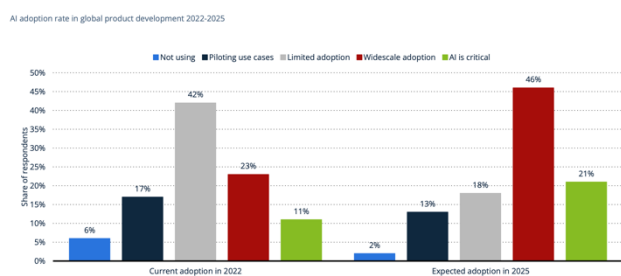


Figure 2: Current and Future AI Adoption Rates (Insider Intelligence 2022)

This all means that companies are seeing the potential value and are already making large steps to adopt these practices into their businesses to help them grow and improve in this rapidly changing space. For marketing specifically AI has a multitude of applications including 'automatically identify and profile customer and market potentials', optimise media planning, optimisation of product recommendations, optimal pricing derivatisation, content creation, improvements to customer communication and satisfaction, optimisation, and automation of customer journey on webpages, optimise market research and more (Gentsch, P, 2018). However, the problem managers today are experiencing is that there is too much information fragmented

into many different sources and they are not able to gain a wholistic understanding of how AI can assist them into each of their core marketing processes. Furthermore, there is also a language issue, as a lot of the current research about AI can be too technical and complex and the average manager to be able to understand and utilise. Therefore, a tool to simplify and explain these AI technologies and explain what use cases they have for each core marketing process would be a vital tool to assist these managers. With a tool like this, managers would be able to easily assess the current AI opportunities and see directly to which of their marketing processes they can be adapted to and improve.

1.1. Research Objective

According to Broadhurst's study in 2022, marketers are encountering difficulties in capitalizing on the potential benefits offered by marketing AI technology. These challenges arise primarily from a lack of knowledge within the marketing profession itself, hindering marketers from fully harnessing the power of AI in their strategies. Therefore, it is important for researchers to find better ways to inform managers about these potential benefits. The objective of this paper is to advise the marketing managers of today about the contemporary forms of AI they can implement to assist them in their operations.

Therefore, first off, this paper will outline what the core marketing processes and current forms of AI are. From there the explanations of AI need to be adjusted so that they are in a format that the managers can easily digest and understand. This is why a questionnaire will be created where simple yet detailed enough explanations are given of the forms of AI and group them into their core process to assist with this objective. Additionally, real marketing professionals will offer feedback on the presentation and explanations to assist researchers in understanding how to best present this information to these managers in the future. This process enables researchers to delve deeper into the specific information that managers seek and in what format is most helpful, gaining valuable insights into their preferences and needs.

1.2. Research Questions

To achieve the goals of the research question above, this research is looking to find the answers to the questions posed below:

- (i) What are the current AI innovations available to marketing professionals which can assist them in achieving the goals of the selected core marketing processes?
- (ii) How can researchers best inform marketing professionals about the possibilities of AI in their field?
- (iii) To what extent are AI technologies, which facilitate the achievement of marketing core processes, currently being adopted?
- (iv) To what extent are companies demonstrating a willingness to adopt AI in their marketing core processes?

1.3. Academic Relevance

This paper will offer academic relevance because the current research about AI for marketing is very fragmented. This study will be able to combine the knowledge from multiple sources to create a wholistic look at how AI can be implemented in marketing activities and how to best present this information to marketing professionals. This will be done by combing the information about the core marketing processes, with the information about the different types of AI and the different use cases. Furthermore, as mentioned in the introduction, there is a

massive growth of AI being utilised in businesses globally, and therefore this research will be able to create a more up to date overview, in simpler terms that a wider audience can understand, that may have more relevance to researchers today.

1.4. Practical Relevance

The practical relevance of this paper is that it gives companies a tool, that can assist them in understanding the current applications and prevalence of AI for marketing in businesses in a language they can understand. Furthermore, this tool can help them understand which processes AI can assist in improving and give marketers a greater ability to prepare for the rising growth of AI in their domain. Furthermore, it gives the managers a platform to express their needs and desires when it comes to learning about AI.

2. LITERATURE REVIEW

2.1 Core Marketing Processes

The main goal of marketing is to facilitate the flow of products and services from producers to consumers (Grayson et al., 2023). This can be achieved by focusing on the core marketing processes laid out by Grayson et al, 2023, which consist of the four elements:

- (i) Strategic marketing analysis
- (ii) Marketing-mix planning
- (iii) Market implementation
- (iv) Marketing control

Strategic marketing analysis is the process of analysing and defining what, where and to whom the company markets their goods or services to fit their business strategy (Grayson et al., 2023). In other words, this entails defining the companies market segments. This is important because market segments outline which consumer needs the company wishes to meet. Furthermore, it outlines which demographic of consumers they plan on targeting. Traditional means of strategic marketing analysis are the SWOT analysis, Michael Porter's industry structure analysis model and product positioning matrices (D'Cruz & Ports, 2004). These segments can then be further divided into market niches, which describes a small target group that often has special requirements. In some cases, companies focus their market on the individual, where they adapt their offer on a case-by-case basis to meet the individual's consumer needs. Lastly, companies can further meet the needs of their consumer groups by positioning in relation to their competitors. Positioning is where a company creates a perceptual message to consumers in which they establish the best competencies of their organisation, product, or service in relation to competitors.

The marketing mix, also known as the Four P's, looks at how the company can interact with its consumers on four different domains: product, price, place, and promotion (Grayson et al., 2023). A study by Woehler and Ernst (2022) discovered that identifying customer orientation through the marketing mix plan has positive effects on new venture performance and increases the overall likelihood of survival. Product, the first P is about creating an offering, either good or service, that meet the needs of consumers. In product development, the marketer's role is guiding the engineers to assist in creating a product that can fit the needs of consumers. Furthermore, this type of guidance is also applicable for a service-based company. The second P, Price focuses on which price the offering must have to optimise the profitability of the product. The third P, Place where the product is made available to consumers. For instance, which platforms

the consumer can go to purchase this product. The final P, Promotion details the methods in which marketers communicate and influence consumers. Furthermore, promotion is commonly done through advertising, sales force, sales promotions, and public relations.

The third key process to marketing is market implementation. In more detail, this is the process of coordinating all the elements of the marketing mix to bring to life one coherent and consistent message to consumers (Grayson et al., 2023). Previously, the marketing mix was defined, which is the planning of how to market your offering. Whereas the market implementation is about executing on that plan. Through effectively executing the marketing plan consumers have a clearer understanding about the business and the value of the products or services they have on offer. Dobni and Luffman (2003) outline that successful collaboration between the marketing mix planning and implementation allows the company to remain robust against environmental factors.

The final core marketing process is marketing control. Ortiz-Rendon et al. (2022) explain that marketing control mechanisms are designed to ensure desired outcomes are accomplished and their critical role in effectively implementing business strategies. In simple terms marketing control is the process of setting and managing the KPI's the company wishes to focus on for the betterment of the company. There are four main types of marketing control which are: strategic control, annual-plan control, profitability control and efficiency control (Grayson et al., 2023). These four types of marketing control are all complementary to one and another as can be seen in Figure 3. Strategic control evaluates the company's marketing performance and direction from a long-term perspective. This is done by examining whether the company is pursuing its best opportunities regarding which markets they serve and which products (or services) they have on offer. Annual-plan control is a managerial control focused on monthly or quarterly results. Is designed to guide the marketing department to meet managerial objectives, such as sales and profitability. Profitability control allows the marketing controller to closely monitor the profitability of the of the company. Moreover, this is done by monitoring the sales, expenditures, and profits amongst two main parameters, the product lines, and the customer lines. Through analysis of these lines, companies can find which products and customers are the most profitable to allow the company to better allocate resources to those lines to achieve better profitability. The final type of marketing control is efficiency control. This involves a in depth analysis of elements the marketing-mix to improve the expenditure efficiency of the marketing department.

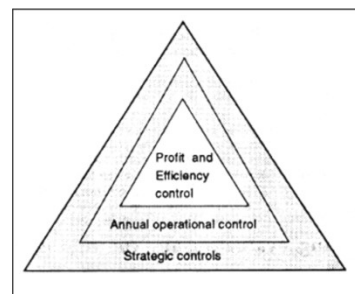


Figure 3: Marketing Control (Crawford & Nations, 1997)

2.2 Artificial Intelligence Categories

A literature review was conducted to assess and define the current forms of AI and what use cases they have within the marketing domain. Given the rapid and exponential growth that

artificial intelligence across all fields, this literature review focused only on articles published in the last two years to gather the most up-to-date and relevant information about the topic. Chen et al. (2021) best describes the most up-to-date categories of AI and their use cases for marketing. The decision to choose Chen et al.'s categorisation of AI is because they categorise the different forms of AI into five simple but broad categories which will be easy for managers to understand, and from there they go into further detail about the use cases relevant for marketing. The five categories described by Chen et al (2021) are;

1. Decision Support System (DSS)
2. Machine Learning
3. Intelligent Agent
4. Recommendation System
5. Expert System

A decision support system (DSS) is a form of AI that uses objective data to derive the best possible solution depending on the desired outcome Chen et al. (2021). In more detail, Baffo et al. (2023) further explains that DSSs are designed to address unstructured and complex problems characterised by conflicting objectives, uncertain measures and limited availability of relevant data and information. For example, a DSS can determine the most efficient task sequence for maximising efficiency. However, DSSs are limited in their ability to make subjective or instinctive decisions when the data is not objective. Nonetheless, the extensive study of DSSs within the marketing domain, as highlighted by Chen et al., underscores their relevance and impact in the field today.

Machine learning is a computational strategy that enables computers to automatically determine optimal solutions to problems by learning from practice data sets, rather than relying on pre-programmed instructions (Dwyer et al., 2018, as cited in Mariana et al., 2022). It is a sub-process of AI which computers learn through supervised or unsupervised methods, enabling them to perform tasks without human intervention. By identifying patterns in the data, the computer creates its own algorithms that can often outperform those created by humans. Examples of machine learning in everyday life include facial recognition software and email spam filtering.

Intelligent agents are autonomous software-based systems capable of recognising opportunities, responding to their environment, interacting with other agents, and learning from experience (Bradshaw, 1997, as cited in Chen et al., 2021). They are computer programs like Siri or Alexa and often employ natural language processing technology to understand human requests and search the internet for answers. ChatGPT represents an advancement in intelligent agents, as it possesses greater conversational depth and is trained on a broader range of internet data compared to Siri or Alexa, which are limited to specific and narrower data sources.

Recommendation systems are software applications that suggest items of interest, such as products or services, to users based on their explicit or implicit preferences (Manouselis and Costopoulou, 2007, as cited in Chen et al., 2021). These systems are commonly used in e-commerce and recommend products or services based on user preferences, as well as similarities with other users or items. By analysing clickthrough and conversion data, recommendation systems learn users' preferences and find the best matches. Linden et al. (2003) have conducted research in this area.

Expert systems are a form of AI that focuses on highly specific and narrowly defined fields, performing complex reasoning that would typically require human expertise, such as in the medical or legal domains. These systems often require regular manual

input from users to enhance machine learning and update the knowledge databases they access (Chen et al., 2021).

2.3 Purpose of Research

One of the purposes of this research is to find a method to best explain to marketing managers about the possibilities of AI, as outlined as a need by Broadhurst (2022). Throughout the literature review it was apparent that there is a lack of research about connecting the core marketing process to the AI, for example, Chen et al (2021) focuses on connecting the category of AI with the use-cases and Gentsch (2018), outlines the use cases but does not link them directly to core processes. This would be a novel approach that may assist in teaching managers about the possibilities of AI.

3. METHODOLOGY

3.1 Research Design

The research design is to create a tool for marketers to use to better their understanding of the current AI opportunities that exist for to assist with the marketing process, and to better understand to what extent they are taking advantage of these tools. This tool will take the form of a qualitative open answer questionnaire for marketers within companies to fill out. The questions within the questionnaire will provide examples of available forms of AI for marketing and detail how they can assist with the core marketing processes outlined. The questionnaire then asks the respondent whether the company is currently utilising them ask whether they want to use them and why or why not they want to use them. Furthermore, extra questions will be added to the questionnaire in order to assess the success of the questionnaire and assess how the questionnaire could be improved. This way, researchers can gain a greater understanding about what the optimal level of technical information and complexity should be given to the managers. In the questionnaire, the idea is to use the examples of AI use cases found during the literature review but simplify the explanations to the point where they are easily digestible for managers in their position to understand without having a deep history in computer logistics and AI. In this paper, the research done will be purposive sampling in the form a qualitative cross-sectional questionnaire to a marketing authority within 2-5 chosen companies. Through analysis of the answers to these questions, a conclusion can be made to assess the success of the overall questionnaire format to inform managers about the forms of AI, and whether the combination of the marketing processes and AI technologies assists in explaining the technologies to the managers. Furthermore, researchers can gain a greater understanding about the current knowledge base marketing managers have about AI and their use cases to marketing processes.

3.2 Participants

The participants of this research are marketing figure heads from within four selected companies. These participants have a managerial knowledge of the marketing processes from within the company they represent, to ensure that the feedback they give entailed the most knowledge and value available on the issue. Their participation was through a qualitative questionnaire.

3.3 Procedures & Data Analysis

To create the questionnaire, first a complete and up to date overview of the current AI opportunities exist for marketers. These AI opportunities will then have to be connected to their respected marketing process that they assist with and information about the type of AI that powers it. This is important as it can help the researcher learn if this connection of the AI use case to

the marketing core process is an effective method of teaching marketing professionals about the opportunities of AI. Depending on the results and how the AI opportunities are formatted after the literature review, a hierarchy will be created to outline the top 5 opportunities. From this shortened list, these are the opportunities that will be presented and explained in a simplified form in the questionnaire. This way, the marketers can learn about the top 5 most relevant and impactful uses of AI and learn about where they can be implemented and how they work. From the managers answers to these questions, insights can be made to assess whether explaining the AI opportunities in this simplified format can prove useful to the managers. Furthermore, we can find whether the companies are already using these technologies and whether they have now an interest in implementing them.

Following the literature review, it has been determined that a good way to show examples of a few of the AI opportunities in a way that is easy and simple for the managers to understand, is to choose the top 5 opportunities from one of the five AI categories (Such as machine learning, DSS, Intelligent agents, etc) as described by Chen et al. (2021). This is because, it is easier for the prototype of the questionnaire to only explain of the five AI categories to avoid too much information being present and the questionnaire becoming too large and time consuming. Therefore, machine learning was chosen because it had a plethora of useful AI opportunities, that also spread out across many of the core marketing processes. This way, managers can find AI opportunities that can be relevant to multiple different activities and processes.

The formation of the questionnaire, was to first, confirm that the participants give consent and are aware of their rights (See Appendix 1). Next, the questionnaire gathers some basic information about the individual and the company, this is important, so we can determine whether they are indeed the correct individual for the questionnaire, based on qualifications, but also to find out what level of experience they have with AI and computers to determine, whether the explanations are too technical or complex or not technical and complex enough (See Appendix 2). Following this, the AI categorisation of machine learning is very briefly and simply explained, and some follow up questions are given to find whether this explanation is helpful in this form or whether certain information is too much or not given that they would find especially relevant (See Appendix 3). After machine learning is explained, the five different AI use cases are separated into their own sections. In these sections the AI use cases chosen are market segmentation, pricing optimisation, content creation, lead prediction & profiling and fraud detection. For each of these use cases, first a simple explanation of how machine learning aids this process, followed by the benefits of this as opposed to the traditional method and finally a small summary to simplify and string it all together (See Appendix 4). Once the user has read this, they are posed with three questions (See Appendix 5). These questions were chosen because they help the researcher determine prior knowledge about the technology, how much information they were able to gather from this small text and whether this information was helpful in the aspect that they are now interested in the technology enough to invest in it. Following, the five sections about the AI use cases comes a feedback section (See Appendix 6). This section is very important as it helps the researcher determine whether the overall wording and choice of information given was successful in achieving the goals of the questionnaire. Therefore, the first feedback question in this section or question 23 in the entire questionnaire asks; *'are the explanations given detailed enough to understand how machine learning technology works and how it can help you with your marketing activities?'*

This question first checks whether the explanations were helpful enough to understand what machine learning is and also whether they can now see how it can be helpful for marketing purposes specifically. Question 24 then asks; *'Is the wording in the explanations too complex to understand for a person in your position?'*. The response to this is also very helpful as it informs the researcher about how the user felt about the complexity of the explanations of the technologies. From this information the researcher can then assess whether they could have included more complex language to better explain the technologies or if it was already too complex and the users had some trouble understanding certain things. Question 25 then asks the user whether they would have preferred to have more technical information given to them. This is similar to question 24, however the difference is that this question looks more at the content of the explanations whereas question 24 more looks at the wording of the explanations. Question 26 then asks the user; *'Is this format helpful for you to learn about the possibilities of machine learning for marketing activities?'* the response to this question is very relevant because it looks at whether the format of a questionnaire is the optimal solution or if there are any better alternatives.

4. RESULTS

4.1 Systematic Literature Review

In this section a systematic literature review is made to explore the most novel and current use-cases of AI and explain them in a fashion that would be understandable managers to understand. Avoiding complex and technical language where possible. After this, a connection of these use cases is made with the category of AI which powers it and what core marketing process it can be applied to. It is important to understand and explain the three aspects below of which core marketing process is affected, which technology is powering it and what is the actual way the technology is used. This is because this is how we can effectively advise the managers about all components relevant to them and put it in a context they can understand.

4.1.1 Artificial Intelligence Use Cases

A large proportion of the AI use cases for marketing has been outlined by Gentsch (2018) as seen in figure 4 below. However, as part of the systematic literature, these use cases have been backed up and further examples given in the text below as found other researchers.

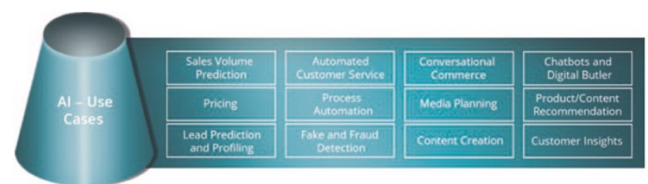


Figure 4: AI-use Cases (Gentsch, 2018)

Gentsch (2018) outlines a lot of the more common use cases seen for marketing (See Figure 4). These use cases

- Automated Customer Service / Chatbots / Conversational Commerce

Automated customer service can improve customer experience and significantly increase the efficiency of the customer service department of a company (Van Doorn et al., 2016). Using chat bots, you can help users by answering frequently asked questions, resolving basic issues, providing general information, routing inquiries, collecting feedback, assisting with self-service and more. Furthermore, Chatbots possess the ability to

learn and mimic the users writing styles to create a more humanistic conversation experience (Huang & Rust, 2018). Conversational commerce and chatbots allows customers to make orders conversationally with AI, which can be very helpful for many consumers who are less technologically savvy, but also assist customers who may prefer to make their orders vocally (Gentsch, 2018). Furthermore, Sidlauskiene et al. (2023) found that the conversational AI had the ability to impact the willingness of customers to pay a higher price. Rungvithu and Kerdvibulvech (2018) found that conversational commerce was on par with traditional commerce methods in terms of customer satisfaction, however it saw improved scores for 'brand image' and 'keeping the customer in touch'. Through automation, this process will require no human interaction. However, in more complex situations humans may be required to provide more personalised assistance.

- Content Creation

Content creation is also a task that can now be automated through the utilization of AI. Through analysing data, AI algorithms can generate marketing content such as blog articles, social media posts, product descriptions, email campaigns, and more. The generated content can be tailored to specific audiences and marketing objectives. Rix et al. (2022) discovered in their study that consumers were more inclined to like AI created content as opposed to human made content. This can result in better customer experience and increased efficiencies of the marketing department.

- Customer Insights

Marketers now have access to customer insights through much easier and more efficient methods through AI compared to the traditional methods (surveys, focus groups, etc) (Gentsch, 2018). AI can now do this by collecting data through the internet on forums such as customer reviews and ratings, as well as social media data. Through natural language processing and sentiment analyses, marketers easily see how the consumer feels about their products or services, without needing to go through the lengthy and costly traditional means. Through utilising AI to access and understand customer insights marketers stand to gain improvements on customer targeting, customer engagement, customer experience and customer loyalty (Zulaikha et al., 2020).

- Customer Relationship Management (CRM)

AI revolutionises customer relationship management by leveraging its predictive capabilities to anticipate customer behaviour, needs, and churn (Liu, 2020 as cited by Chen et al., 2021). Armed with this invaluable knowledge, marketers can develop optimized and highly effective CRM strategies. By harnessing AI's predictive power, organizations can proactively engage with customers, personalize experiences, and implement targeted retention initiatives, ultimately fostering stronger customer relationships and driving business growth (Zulaikha et al., 2020).

- Fake and Fraud Detection

Cirqueira et al. (2021) identify fake and fraud a growing problem especially in the domains of retail and finance. Thankfully, AI now possesses the ability detect fake and fraudulent activity and managers can use this information for decision support. It helps marketers detect and mitigate fraudulent behaviour such as click fraud, bot traffic, or fake user accounts. It can do this by analysing vast amounts of data to identify patterns indicative of fraudulent behaviour (Gentsch, 2018). A simple use case of this technology would be to monitor ad campaigns and social media pages. The benefits of this would be to detect any fraudulent

activity early, improving targeting of fraudulent activity, campaign performance, brand image, and cost savings.

- Lead Prediction and Profiling

Lead Prediction and Profiling is a way to use AI technology to find potential customers and understand what they like (Gentsch, 2018). Lead prediction helps marketers predict which people or businesses are more likely to become customers based on things like their behaviour or demographics. This helps marketers focus their attention on the leads that are most likely to become actual customers. Lead profiling means creating detailed profiles of these potential customers. AI technology can gather information about their preferences, what they've bought before, and other important details. This helps marketers understand their target audience better and allows them to create marketing strategies that are tailored to their needs.

- Market Segmentation

AI assists in market segmentation by analysing large volumes of data, identifying patterns and correlations, and automatically clustering customers into segments (Sánchez-Hernández et al., 2013 as cited by Chen et al., 2021). It enables real-time segmentation, micro-segmentation, and predictive modelling to understand customer behaviours and preferences. AI-powered market segmentation facilitates personalised marketing strategies tailored to specific segments, resulting in improved customer engagement and more effective campaigns. Additionally, marketers can also gain insights into potential market sizes to assist in their decision-making process. Furthermore, this technology can give marketers greater agility and adaptability through the real time segmentation power of the AI. Furthermore, Yum et al. (2022) found there are practical implications to using AI assisted market segmentation in for companies that use AI driven customer relationship management.

- Marketing Strategy

AI enables the streamlined optimization of marketing strategies by leveraging process automation technology to access, collect, and analyse data. Through this approach, AI generates valuable insights that assist managers in making informed decisions to optimize their marketing strategies. By automating data-related tasks and harnessing AI's analytical capabilities, managers can unlock valuable insights that empower them to make data-driven decisions for strategic marketing optimization (Kumar, 2021).

- Media Planning

Media planning is a process that can be automated and improved through AI. These technologies can create and optimise a media plan which includes when and what to post, to have the most success in reaching customers (Tahoun & Taher, 2022). Artificial intelligence enables transparent and efficient media planning through algorithm-based technology platforms. (Gentsch, 2018)

- Merchandise Management

AI revolutionizes merchandise management by automating processes such as merchandise selection, ordering, and distribution (Park and Park, 2003 as cited in Chen et al 2021). Beyond automation, AI's exceptional capability to identify patterns in extensive data enables it to optimize merchandise management beyond human capacity. This results in streamlining the entire process, enhancing efficiency, and maximizing outcomes.

- Personalised Advertising

AI powers personalised advertising through the collection and analysis of customer data, leveraging predictive data analysis for

generating dynamic ad content and campaign optimisation. This enables the delivery of targeted and customised advertisements that resonate with individual customers, resulting in enhanced engagement and increased conversion rates. A study by Tran et al. (2023) found that personalized advertising through AI methods can significantly improve the customers brand attachment and brand experience.

- Pricing Optimisation

Pricing optimisation is another example of AI that can continuously analyse thousands of data points. This can be used to gain a better estimate on what customers are willing to pay for a product, to assist the user in setting the price. Furthermore, the AI can predict what pricing strategies such as incentives, discounts and contract terms, will achieve the highest profitability for the company (Rainsberger, 2022).

- Process Automation

Process automation is not an entirely novel use case of AI as it has been implemented extensively since the 1990's (Gentsch, 2018). However, thanks to increased computing power and improved algorithms this process has evolved and drastically enhanced the capabilities in this field. As part of its regular operations, this tool can automatically handle tasks like data extraction and preparation which can be used for reports and analysis.

- Product/ Content Recommendation

Product / content recommendation systems as mentioned by Chen et al. (2021) for customers on web-shops have seen transformative growth through AI. Products and content that the algorithm believes is relevant is recommended to consumers based on the clickthrough and conversion data collected online. These product recommendations can improve the conversion rate on webstores and improve overall customer experience (Habil et al., 2023). Companies such as Google and Amazon are large investors in this area and have open-source frameworks which companies can use for their own product recommendations (Gentsch, 2018).

- Sales Volume Prediction (ML) / Seasonal Volume Prediction (DSS)

AI offers significant improvements in sales volume prediction compared to traditional forecasting methods. Marketers often rely on limited data for their predictions, resulting in inaccuracies (Gentsch, 2018). However, AI overcomes this limitation by incorporating a wide range of data points and uncovering patterns and insights that human analysis may overlook. By leveraging AI's computational power and ability to process vast amounts of data, businesses can enhance the accuracy and reliability of their sales volume predictions. Moreover, the utilization of this technology has also enabled the identification of solutions for managing seasonal demands (Chen et al. 2021).

- Transaction Negotiation / Differentiated Pricing

Lee and Kwon (2008) propose an innovative system that harnesses the power of AI to enhance transaction negotiation through advanced reasoning logic. This is done by; analysing large volumes of data, including market trends and customer preferences, predicting outcomes of different negotiation scenarios, and adaptive learning technology. These capabilities enhance the decision-making, optimise outcomes, and streamline the negotiation process.

4.1.2 Connection of Use Case, AI Category and Core Process

The different use cases presented above are now grouped into which marketing core processes they can be applied to and the category of AI which powers it is explained. This way marketing managers can see more clearly at what stages of their marketing processes they can utilise AI, and what technology powers it.

(i) Strategic marketing analysis

Under strategic marketing analysis there are three novel use-cases applicable. Firstly, market segmentation through utilising machine learning technology can facilitate marketers to create enhanced segmentation by accessing and utilising more data, personalise marketing to different segments, and give marketers greater agility and adaptability through real time segmentation. The information used for this process includes demographic, geographic, psychographic, behavioural, and transactional data. This data can be sourced from multiple locations, such as survey and questionnaires, CRM systems, website analytics, social media data, third-party data providers, purchase history, customer feedback and data partnerships. This data is then used for training the machine learning algorithm, to the point where the algorithm can become independent and work autonomously. Secondly, is the customer insights use-case. This use-case is powered by machine learning technology to collect and analyse more data than would be possible through conventional methods. This enables the user to ascertain insights into customer preferences and needs.

Finally, through utilising machine learning technology, lead prediction and profiling can be implemented in the strategic marketing analysis. Machine learning enables this by analysing the vast amounts of data on the internet and finding trends between customers and potential customers. Allowing marketers to find the groups specifically which they intend to market to.

(ii) Marketing-mix planning

In this phase of the marketing process, a lot of the AI-use cases shown above can be applied. The first use-case for the pricing aspect of the marketing mix is pricing optimisation. Using the data the machine learning algorithm has access, to such as competitors pricing, customer purchase history and the companies own pricing, sales and promotional data, the algorithm can determine best pricing to offer to customers on an individual level and on a wide scale level (Rainsberger, 2022). This is another example of machine learning being used. In this instance, the algorithm can determine a more accurate estimate on what customers are willing to pay to assist the manager in setting the price. Moreover, by knowing the price customers are willing to pay, grants businesses even more control and information to what quantity they want to produce as well, to optimise pricing even further for greater profitability.

Furthermore, another use-case to assist with the price setting component of the marketing mix is transaction negotiation and differentiated pricing. This uses DSSs or intelligent agents' natural language processing to guide marketers and salespeople in negotiations in real time.

Media planning is the first use-case relevant the promotional aspect of the marketing-mix planning and takes advantage of machine learning and intelligent agent AI technology. As mentioned above these technologies can create and optimise a media plan which includes when and what to post, to have the most success in reaching customers.

Furthermore, through Intelligent agent technology, personalised advertising is a process that can be implemented. Personalised advertising is empowered through intelligent agents as they collect data and analysis and generate customised advertising

experiences that resonate with individual customers. This leads to higher engagement and conversion rate.

Additionally, another use case for the promotion step is the product / content recommendation systems on web-shops. These recommendation systems utilise machine learning AI technology. This is done by creating an algorithm that the computer can automatically analyse the customers preferences and recommend products based on this knowledge.

Another use-case relevant for the promotion aspect of the marketing-mix plan is content creation. Machine learning can automate the generation of dynamic and customized content in real-time. By analysing user interactions and contextual information, such as location, time, or user demographics, machine learning algorithms can create content that adapts to individual preferences or situational factors.

Some relevant use-cases for the place aspect of the marketing mix are automated customer service, chatbots and conversational commerce. These use the intelligent agent AI category by utilising their natural language processing power and vast knowledge data base to interact seamlessly with customers online. Providing companies with a whole market to sell their products or services to.

(iii) Market implementation

The market implementation has four noteworthy use-cases. Firstly, is customer relationship management. This technology can be powered by both machine learning technology and DSSs (Chen et al., 2021). As mentioned above DSSs and machine learning AI leverage their predictive capabilities to anticipate customer behaviour, needs and churn (Liu, 2020 as cited by Chen et al., 2021). This uses internal as well as widely available external data to gain deeper insights into what your customers are thinking, to predict matters such as customer churn as well as identifying customers which partnerships would be beneficial. Secondly, is fake and fraud detection. As mentioned above machine learning technology can analyse vast amounts of data to identify patterns indicative of fraudulent behaviour (Gentsch, 2018). This gives marketers greater ability to ensure and watch over the success of the marketing mix plan, by ensuring the promotion aspect can run uninterrupted.

Thirdly, is merchandise management. Through utilising intelligent agents or an expert system. This process can be automated into a streamlined optimised process. This again assists in the market implementation process by ensuring that the customers will receive the correct good in a timely fashion.

Finally, is sales and seasonal volume prediction. This process is enabled through DSSs, as they are designed to address unstructured problems with conflicting objectives as mentioned above. With this information on hand, managers have a lot more decision-making power and control to adjust marketing strategies as necessary. Moreover, in seasonally affected markets, this can be especially useful as it can identify solutions for managing seasonal demands.

(iv) Marketing control

For marketing control process automation is a feature that AI can improve for marketers. Through the utilisation of Expert Systems, this process can improve the efficiency and effectiveness of this process. These systems can support the user for computing sales forecasts and creating marketing strategy. As mentioned above, expert systems are a form of AI that focuses on highly specific and narrowly defined fields. They are very good at certain specific tasks and can facilitate process automation to a point where the AI can perform the task better than humans could. This technology can automate extracting data that can be helpful for annual-plan control and strategic control,

taking into account a greater range of data points, and creating more detailed analyses for managers to utilise. Also, this can be done in real time to assist in extracting data on monthly, quarterly, or annual bases. Through automating this process managers can save a lot of time and resources that would otherwise be wasted.

Another use case for marketing control is marketing strategy. This use-case is a DSS technology that can assist managers and give support by suggesting good strategies to follow and explore.

4.2 Questionnaire

For the questionnaire, it is best to breakdown the four main sections: the participants identity, the explanation of machine learning, the explanations of the different use cases, and the feedback section.

In the identity section, half of participants indicated that they do not have much experience using AI, while one participant indicated they have experience using it and the final participant indicated they have experience using AI, but not within the workplace. This is important to acknowledge because, a user's prior experience will affect the level of technical complexity they can understand. For a manager that has a lot of experience with AI, they will already have a good understanding about how the technology works and have some experience using AI, either inside or outside of the workplace. However, for the managers that do not have experience with AI, they may require simpler explanations to not only explain how the technology works, but also how they can be implemented into their marketing processes.

For the machine learning section all respondents found the explanation to effectively explain what machine learning is and does. Considering that there was a 50/50 split for these managers using AI, this is a good sign. This therefore explains that the explanations are simple enough for unexperienced managers to understand, but not too simple for experienced ones. Furthermore, the questionnaire explores the complexity of the explanation. One manager indicated there was too much complexity in the explanation, however another indicated that it was simplified enough. Another participant indicated a slight lean towards the explanation being not complex enough. Finally, the last respondent indicated that the explanation was perfectly balanced in terms of complexity. Overall, these responses are mixed, some users would like more complex language while some other users would prefer less complex language. This relates back to an earlier question, where the participants indicated they had mixed experience with AI and as mentioned, therefore this means they may require different levels of complexity in the explanations. To conclude this section, all managers noted they already knew that machine learning had applications for marketing.

For the next section, explaining the use-cases to the managers, the managers indicated that they already knew that the use cases; market segmentation, pricing optimisation, content creation and lead prediction and profiling existed. Therefore, there is limited data to analyse from these sections as the purpose is to explain it to them for the first time. However, for the fraud detection section one manager indicated they were not aware of this use case. They also indicated that they now have a good understanding of how this could be useful in their business and expressed that they would now be interested in investing in this technology for their business.

The feedback section gives the researcher a whole overview of the success of the questionnaire and enables the respondents to give feedback about how effective this format is. Firstly, the questionnaire asked if the explanations were detailed enough to understand how machine learning technology works and how it

can assist with marketing activities. Out of the respondents who decided to answer the question, all three said that the explanations effectively explain what machine learning is, and the examples given show how they could be used for marketing activities. This is a good sign as, it shows that the respondents have connected the use cases with their marketing processes and understand the underlying technology behind them. This effectively shows that the first two research questions have been successfully fulfilled.

The second feedback question asks the respondents about the complexity of the wording in the explanations. 50% of the respondents indicated that they thought the wording was simple and easy to follow. This feedback suggests that the technique of simplifying the explanations by separating as much technical information from the use-case section and having the machine learning explanation be in a completely unique section was successful. This way the managers can learn about machine learning in a basic form first, and then move on to learning about the use cases and how they can be implemented into the core processes, without the information being too overwhelming. In contrast, one respondent indicated that they would imagine some of their colleagues who have less computer literacy and experience in the digital space, struggling to understand some of the technical terms used. This response suggests that some terms are not too technical for themselves, rather that they imagine their peers would struggle with them. Therefore, it may be worthwhile to invest more time into simplifying technical words where possible to communicate with these managers more effectively. Alternatively, a glossary section may be a good solution, where if a user is confused by a word, they can easily find a simplified explanation that would better suit their needs.

The third feedback question asks the respondent if they would like to have more technical information in the explanations. The responses for this section were split, one manager indicated no. This suggests that they may have been overwhelmed with the technical information and potentially would have troubles understanding it. Alternatively, another respondent indicated they would like more technical information. Therefore, there may also be merit to adding this. A good method for this could also be to have another section, like a glossary, where they can learn deeper more technical information. The final respondent to this question indicated that more technical information is not the answer, but 'more information in general'. They continue by mentioning that *"It is a new and difficult topic for many people to get their head around so while technical information is good, I think there needs to be longer explanations of the information for less technically minded marketers"*. This is helpful feedback for researchers as it indicates that there are 'less technically minded marketers' out there who do have an interest in learning about the possibilities of AI in their domain. Therefore, researchers should look to add more 'general' information to assist in explaining the topic.

The fourth feedback questions asks if the respondents found the format to be helpful to learn about the possibilities of machine learning for marketing activities. Two respondents indicated that yes it was helpful for them, that it is a good basis to investigate further. However, one respondent gave a detailed response saying; *"It is interesting to see the possibilities listed as while I have known that AI technology can be used for an endless amount of applications, I had not actively thought about some of those listed. Personally, I found that reading about AI technology was confusing for me until I actually used it, saw others using it and saw examples online of how it is used. It is hard to make the connection from written explanations to outcomes so a format which is more visual and potentially allows the reader to use AI technology or see real examples of how others use it could be*

very beneficial to the reader embracing the technology." This is very insightful feedback and suggests that visual examples or a format which lets the user 'try out' the technology would be more beneficial. Finding ways to visually show how these AI technologies work is something worth investigating further. Additionally, creating a space where managers can try out these software's with practice data sets could be very beneficial. This way the managers can get 'hands-on' with the AI and see how the AI works, and powerful it can be.

The final feedback questionnaire asks the respondent what other information they would like to see. All four responses to this section are valuable and perceptive, exhibiting a consistent theme that emphasizes the need for additional real-life examples of the technologies in practice. Firstly, one respondent wrote "Some specific examples of it in practice for each example would be highly beneficial". This is something worth researching further, examples of the AI in practice could be similar-to what the fourth respondent wrote for the fourth feedback question, where they asked for practical, hands-on examples of the AI. The second respondent for this question also expressed similar interests in, representing the information in a different format than just text. Therefore, visual representations or hands on experiences with the AI would be beneficial. The third responder indicated that a diagram specifically of the technical process would be helpful extra information. This follows the theme of visually representing the data and therefore should be done in the future. The final respondent indicated that a glossary of terms would be useful, similar to what was mentioned in the second feedback question. Furthermore, they recommended more anecdotal examples of people using the technology would be helpful. This is an interesting approach and could be quite helpful for managers to further learn about the possibilities of AI without needing to understand all the technical information.

5. CONCLUSION

This paper focused on creating a up to date overview of all the use-cases available for marketing purposes, and creating a method of explaining them to marketing professionals in a form that would be easiest for them to understand, by connecting them with the core marketing processes. Then this method was tested in the form of a questionnaire, where real marketing professionals gave feedback and valuable insights into what types of information and form the information would be most valuable to them.

Artificial intelligence has a multitude of different applications and can be linked directly to the marketing core processes outlined in this paper. This kind of connection shows promise to researchers as managers found this useful. Furthermore, by delving deeper into the AI that drives these use-cases, managers can gain a clearer understanding of what process is being undertaken. However, managers indicated that they would like to have more visual and anecdotal examples, as this would help them understand the technologies easier. Through feedback from the questionnaires, insights were gained into the depth of knowledge managers have, and to what extent they would like to invest in these technologies now they have been informed about them and their possibilities.

Limitations to this research include a small sample size of companies and financial barriers preventing the researchers from accessing all relevant articles. Many articles discovered seemed very promising whilst undertaking the systematic literature review but had unfortunate paywalls inhibiting access. With a larger sample size of respondents, deeper insights could be made to further answer the question regarding the current level of adoption of AI technologies in the marketing domain.

Future researchers could utilise the insights gained from the questionnaire and could attempt to recreate this experiment with more visual explanations or 'hands-on' to allow the participants to experience how the AI works first hand. Many participants gave feedback indicating that this would be useful and could help them gain an easier understanding of the capabilities of AI and their practical uses for marketing. Furthermore, future researchers could look to receive larger sample sizes for their research and gain further insights into other questions such as overall adoption rates of each technology and barriers preventing these companies from using these technologies.

The process of researching this topic was very fulfilling. I learnt a lot about how AI works and the practical applications it has in the marketing domain. The method for identifying and categorising use-cases by marketing process was rewarding and effective. First use cases were discovered throughout the literature review, and with each new use-case discovered a rabbit-hole opened where more and more use cases could be identified through similar literature. This enabled me to thoroughly assess the contemporary literature on the subject and create a detailed framework of the novel AI use-cases for marketing purposes. In retrospect, I would have liked to start recruiting companies for the questionnaire earlier to have more responses to evaluate. Furthermore, as mentioned in the future research recommendations it would have been beneficial to create more visual and anecdotal examples of the AI technologies in use. This would have been an interesting addition to the research.

This paper has fulfilled its objectives in terms of the research questions outlined in section 1.2. The current AI innovations are outlined and linked directly to the core marketing processes. The 'best' method for informing marketing professionals may not have been found, however there is good reason to believe that connecting the use-case with the core marketing promise is an effective method. The objective, of finding the current adoption rate, shows that managers are currently already using various forms of AI to assist in their processes, and that some show an interest in investing in the ones they are not already.

In conclusion, deep insights have been gained to further understand how to teach marketing professionals about the possibilities of AI. All managers, responded positively towards the questionnaire and indicated it to be helpful. However, they expressed that including more visual examples and creating a more 'hands-on' experience would be highly beneficial. This is quite significant because a lot of other researchers have only tried to create up to date lists of AI use cases for marketing, whereas this paper delves into asking, how can this information be delivered to the marketing professionals in the most beneficial way.

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8. APPENDIX

8.1 Questionnaire Questions

AI usage for Marketing in Business

This questionnaire is designed to inform marketers about the new and upcoming opportunities utilising artificial intelligence. This is a trial, focused on specifically the machine learning domain of artificial intelligence.

* Indicates required question

1. Form of Consent *

Thank you for your interest in participating in our research study. Before you proceed with the questionnaire, we would like to ensure that you fully understand the purpose of the study and the measures we have in place to protect your confidentiality. Your privacy and confidentiality are of utmost importance to us. We assure you that all information collected during this questionnaire will be kept strictly confidential. Your responses will be reported in aggregate form and will not be linked to your personally identifiable information. Your participation in this study is entirely voluntary. You have the right to refuse to answer any question or withdraw from the study at any time without providing a reason. If you choose to withdraw from the study, any data you have provided up to that point will be excluded from the analysis.

Click 'Confirm' below if you wish to continue.

Mark only one oval.

- Confirm Skip to question 2
- Decline

Company Information

This information will remain completely confidential and will not be used in the results.

2. What is the name of your company? *

3. Do you have much experience using AI? *

Mark only one oval.

- Yes
- No
- Other: _____

4. What is your role within the company? *

Machine Learning

Machine learning is form of artificial intelligence (AI). It is a way for computers to figure things out autonomously by learning from examples instead of being told what to do step by step. They do this by looking for patterns in the information they receive and use that knowledge to make decisions or do tasks autonomously. These technologies improves their own algorithms over time as they learns from their own self-gathered data or data from the internet. Examples of machine learning in everyday life include facial recognition software and email spam filtering.

5. Does this effectively explain to you what machine learning technology is and does? *

Mark only one oval.

- Yes
- No
- Other: _____

6. Is the wording in this text too complex or not complex enough for you to get a real understanding of what machine learning is? *

Mark only one oval.

Too Complex

1

2

3

4

5

Not Complex Enough

7. Is this something you were aware had applications for marketing? *

Mark only one oval.

Yes

No

Other: _____

Market Segmentation

Machine learning can assist with the market segmentation process. By analysing customer insights, the computer can find patterns and trends that people might miss. This helps managers make better predictions about customers needs and customise their marketing activities to suit them. The computer is able to learn and improve its predictions over time, making it even more accurate. Ultimately, this helps companies understand their customers better and create marketing strategies that exploit this knowledge.

8. Were you aware that machine learning can be used for market segmentation? *

Mark only one oval.

Yes

No

Other: _____

9. Do you now understand how implementing this technology can be useful in your business? *

If no, please specify what information would be helpful in the 'other' section.

Mark only one oval.

Yes

No

I already did

Other: _____

10. Would you be interested in investing in this technology now that you have heard about it? *

Mark only one oval.

Yes

No

Our company already does.

Other: _____

Pricing Optimisation

Pricing optimisation is when computers use machine learning to figure out the best price for a product. They do this by analysing a lot of data, such as what customers are willing to pay. This helps the user decide on the optimal price for their product or service. To find the perfect balance between supply and demand the computer looks at thousands of data points, either from local sources or the internet. This information helps managers make decisions on the quantity to produce and help make design specification decisions, so they can make the most profit. By knowing what price customers are willing to pay, businesses have more control and can make smarter pricing choices.

11. Were you aware that machine learning can be used for pricing optimisation? *

Mark only one oval.

- Yes
 No
 Other: _____

12. Do you now understand how implementing this technology can be useful in your business? *
If no, please specify what information would be helpful in the 'other' section.

Mark only one oval.

- Yes
 No
 I already did
 Other: _____

13. Would you be interested in investing in this technology now that you have heard about it? *

Mark only one oval.

- Yes
 No
 Our company already does.
 Other: _____

Content Creation

Machine learning technology can generate images and videos based on a few user given prompts. This is helpful for marketers who may lack creativity, resources or time. It allows them to create content quickly, easily and with surprisingly good results. Additionally, when this technology is combined with other forms of AI, it can recommend what content to create based on information gathered from the internet. This makes the process even more efficient and effective. An example use case of this technology would be for the creation of social media posts, the AI is able to create exactly what you need at the click of a button.

14. Were you aware that machine learning can be used for content creation? *

Mark only one oval.

- Yes
 No
 Other: _____

15. Do you now understand how implementing this technology can be useful in your business? *
If no, please specify what information would be helpful in the 'other' section.

Mark only one oval.

- Yes
 No
 I already did
 Other: _____

16. Would you be interested in investing in this technology now that you have heard about it? *

Mark only one oval.

- Yes
 No
 Our company already does.
 Other: _____

Lead Prediction and Profiling

Lead Prediction and Profiling is a way to use machine learning technology to find potential customers and understand what they like. This technology can assist with the marketing-mix planning process.

Lead prediction helps marketers predict which people or businesses are more likely to become customers based on things like their behaviour or demographics. This helps marketers focus their attention on the leads that are most likely to become actual customers.

Lead profiling means creating detailed profiles of these potential customers. Machine learning technology can gather information about their preferences, what they've bought before, and other important details. This helps marketers understand their target audience better and allows them to create marketing strategies that are tailored to their needs.

17. Were you aware that machine learning can be used for lead prediction and profiling? *

Mark only one oval.

- Yes
 No
 Other: _____

18. Do you now understand how implementing this technology can be useful in your business? *

If no, please specify what information would be helpful in the 'other' section.

Mark only one oval.

- Yes
 No
 I already did
 Other: _____

19. Would you be interested in investing in this technology now that you have heard about it? *

Mark only one oval.

- Yes
 No
 Our company already does.
 Other: _____

Fraud Detection

Machine learning AI can now detect and stop fake and fraudulent activity. It helps marketers detect and mitigate fraudulent behaviour such as click fraud, bot traffic, or fake user accounts. It can do this by analysing vast amounts of data to identify patterns indicative of fraudulent behaviour. A simple use case of this technology would be to monitor ad campaigns and social media pages. The benefits of this would be to detect any fraudulent activity early, improving targeting of fraudulent activity, campaign performance, brand image, and cost savings.

20. Were you aware that machine learning can be used for fraud detection? *

Mark only one oval.

- Yes
 No
 Other: _____

21. Do you now understand how implementing this technology can be useful in your business? *

If no, please specify what information would be helpful in the 'other' section.

Mark only one oval.

- Yes
 No
 I already did
 Other: _____

22. Would you be interested in investing in this technology now that you have heard about it? *

Mark only one oval.

Yes

No

Our company already does.

Other: _____

Feedback

Please provide below some short feedback about the questionnaire in general.

23. Are the explanations given detailed enough to understand how machine learning technology works and how it can help you with your marketing activities? *

24. Is the wording in the explanations too complex to understand for a person in your position? *

25. Would you have liked more technical information? *

Mark only one oval.

Yes

No

Other: _____

26. Is this format helpful for you to learn about the possibilities of machine learning for marketing activities? *

27. What other kind of information would be useful in this format? *

Finish

8.2 Questionnaire Responses

AI usage for Marketing in Business

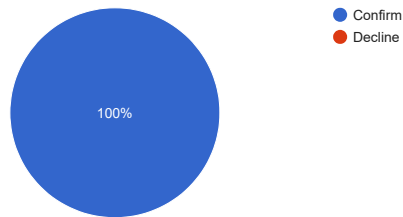
4 responses

[Publish analytics](#)

Form of Consent

[Copy](#)

4 responses



Company Information

What is the name of your company?

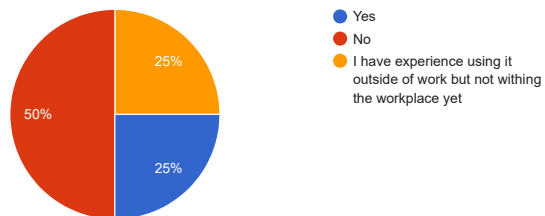
4 responses

XXXXXXXXXX
XXXX
XXXXXXXXXX
XXXXXXXXXXXXXXXXXX

Do you have much experience using AI?

[Copy](#)

4 responses



What is your role within the company?

4 responses

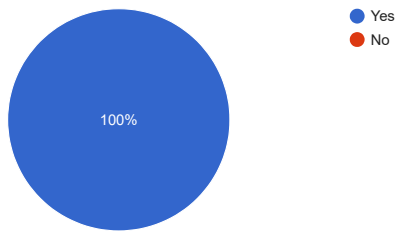
Head of Sales & Marketing
co founder
Entrepreneur
Product Specialist

Machine Learning



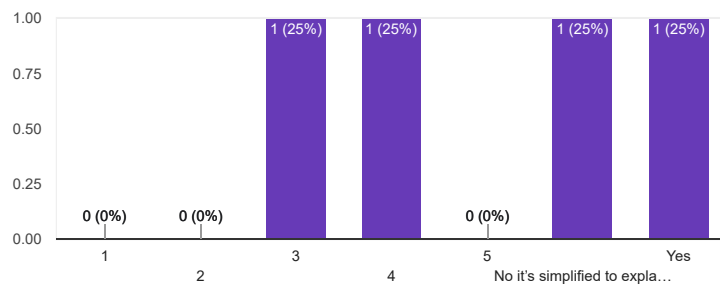
Does this effectively explain to you what machine learning technology is and does? [Copy](#)

4 responses



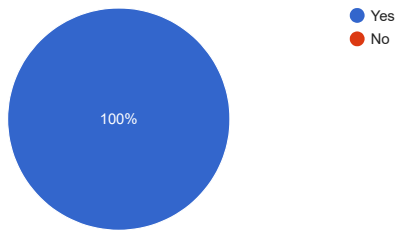
Is the wording in this text too complex or not complex enough for you to get a real understanding of what machine learning is? [Copy](#)

4 responses



Is this something you were aware had applications for marketing? [Copy](#)

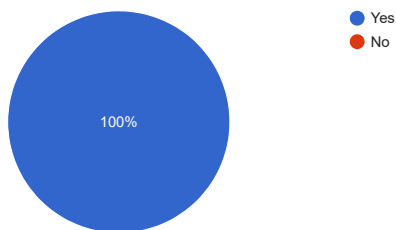
4 responses



Market Segmentation

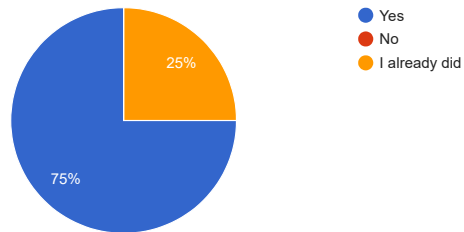
Were you aware that machine learning can be used for market segmentation? [Copy](#)

4 responses



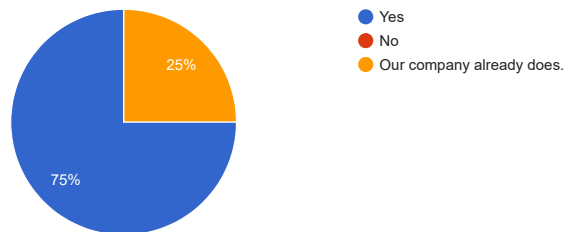
Do you now understand how implementing this technology can be useful in your business? [Copy](#)

4 responses



Would you be interested in investing in this technology now that you have heard about it? [Copy](#)

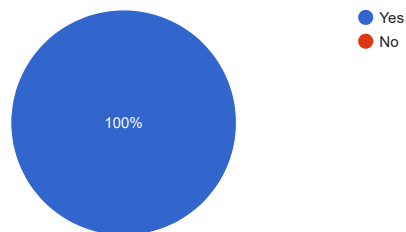
4 responses



Pricing Optimisation

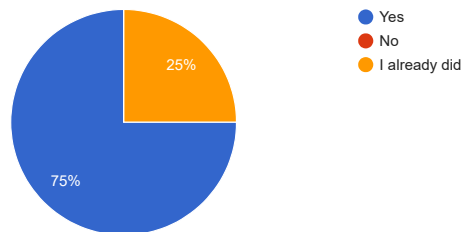
Were you aware that machine learning can be used for pricing optimisation? [Copy](#)

4 responses



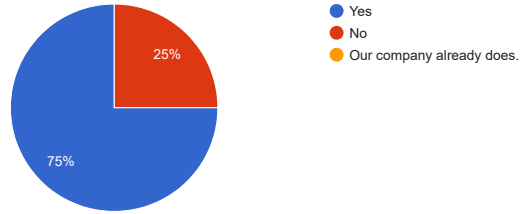
Do you now understand how implementing this technology can be useful in your business? [Copy](#)

4 responses



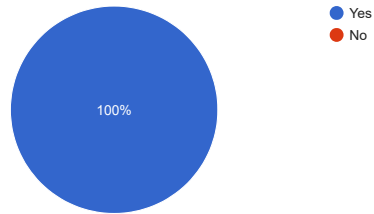
Would you be interested in investing in this technology now that you have heard about it? [Copy](#)

4 responses



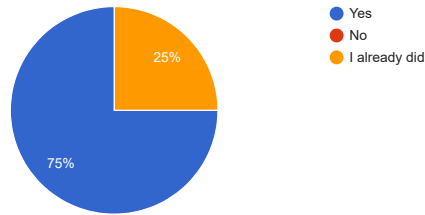
Were you aware that machine learning can be used for content creation? [Copy](#)

4 responses



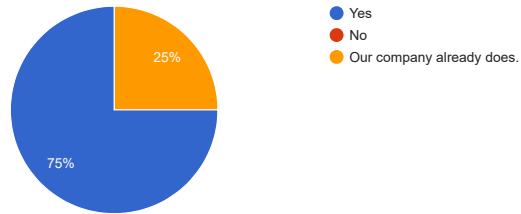
Do you now understand how implementing this technology can be useful in your business? [Copy](#)

4 responses



Would you be interested in investing in this technology now that you have heard about it? [Copy](#)

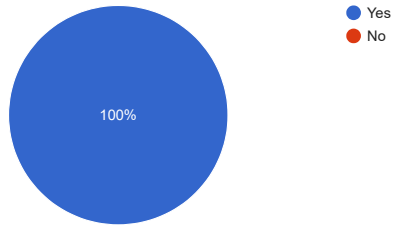
4 responses



Were you aware that machine learning can be used for lead prediction and profiling?

[Copy](#)

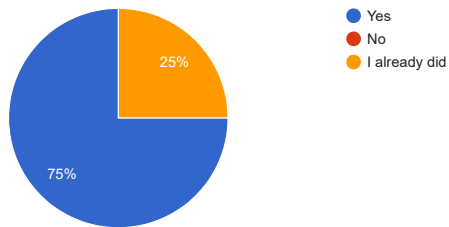
4 responses



Do you now understand how implementing this technology can be useful in your business?

[Copy](#)

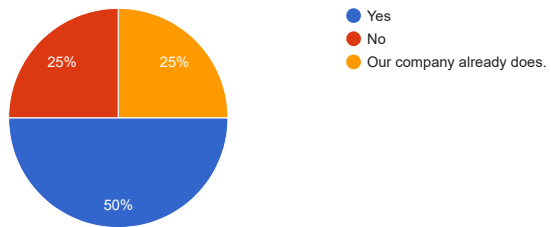
4 responses



Would you be interested in investing in this technology now that you have heard about it?

[Copy](#)

4 responses

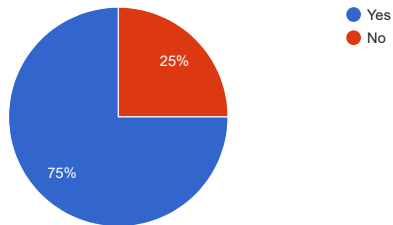


Fraud Detection

Were you aware that machine learning can be used for fraud detection?

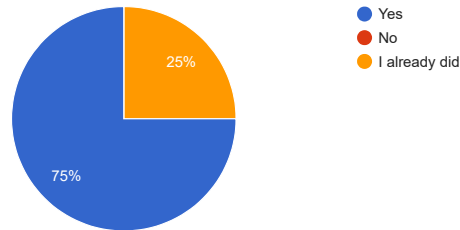
[Copy](#)

4 responses



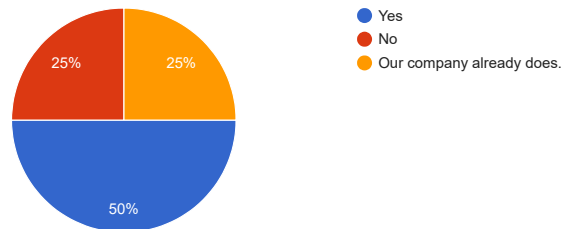
Do you now understand how implementing this technology can be useful in your business? [Copy](#)

4 responses



Would you be interested in investing in this technology now that you have heard about it? [Copy](#)

4 responses



Feedback

Are the explanations given detailed enough to understand how machine learning technology works and how it can help you with your marketing activities?

4 responses

Yes it was easily explained in each segment

-

Yes, they are sufficiently detailed to get an idea of what it is about

The explanations help the reader to understand the basis of Machine learning and do provide many examples of how it could be used to help with marketing activities

Is the wording in the explanations too complex to understand for a person in your position?

4 responses

The words are simplified and easy to follow.

-

Nope

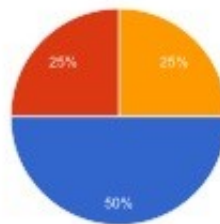
I would say that the explanations would be hard for some people in my division to understand if they had not used or learnt about AI technology before. My colleagues who do less work in the digital space or have less computer literacy would not understand some of the technical terms used



Would you have liked more technical information?

Copy

4 responses



● Yes
● No
● Maybe not more technical information but more information in general. It is a new and difficult topic for many people to get their head around so while technical information is good I think there needs to be longer explanations of the information for less technical...

Is this format helpful for you to learn about the possibilities of machine learning for marketing activities?

4 responses

It's a good basis to investigate further.

-

Yes

It is interesting to see the possibilities listed as while i have known that AI technology can be used for an endless amount of applications, i had not actively thought about some of those listed. Personally, i found that reading about AI technology was confusing for me until i actually used it, saw others using it and saw examples online of how it is used. It is hard to make the connection from written explanations to outcomes so a format which is more visual and potentially allows the reader to use AI technology or see real examples of how others use it could be very beneficial to the reader embracing the technology.

What other kind of information would be useful in this format?

4 responses

Some specific examples of it in practice for each example would be highly beneficial

- make it easy to understand. No-one is going to read an essay

Diagram of the technological process

In this format, potentially a glossary of terms as terms like "click fraud" would not be widely known in my work place. Maybe more anecdotal examples of people using the technology

Finish