Use of Artificial Intelligence in Analyzing Brand Engagement and Customer Experience to Support Sustainability

Hamidah Tussifah[1]*, Gina Atikah Hasni[2], Adzimatinoor Nabila Rahmadania[3]

[1,2,3] Department of Management, University of Darussalam Gontor, Indonesia

*Corresponding author: hamidatussyifa@unida.gontor.ac.id
Contributing authors: hamidatussyifa@unida.gontor.ac.id, ginaatikahhasni01@gmal.com, adzimatinoor8004@mhs.unida.gontor.ac.id

Abstract

Artificial intelligence is highly influential in the economic development of the millennial generation. Brand engagement is strategic in brand building, and as customer expectations continue to rise, improving customer experience has become a challenge for businesses. In this rapid development, businesses must continue to innovate in order to improve their business. The utilization of AI in various aspects of business requires various business strategies in its development. This article aims to analyze the benefits of AI in the context of brand engagement and customer experience to support sustainability. We present a comprehensive literature review on this topic. The results of this study show that Artificial Intelligent has an effect on analyzing brand engagement and customer experience to support sustainability.

Keywords: *Artificial Intelligent (AI), Analytics, Brand Engagement, Costumer Experience, Supporting Sustainability*

Introduction

The millennial generation is a generation that already understands technology. Therefore, Artificial Intelligence has a big influence on the economic development of the millennial generation. In very rapid development, business actors must continue to innovate in order to improve their business and also to dominate the global market, so that Artificial Intelligence provides tools to optimize business processes and accelerate the development of new products, thus providing huge competitive advantages. Apart from that, by understanding Artificial Intelligence we can prepare and predict how technology will affect the economy and support sustainability (Ulfa et al. 2023).

The potential for AI to evaluate, predict, and mitigate the impacts of climate change is enormous. With its ability to collect, analyze and complete vast and complex data sets on emissions and climate impacts, AI offers better solutions for making informed decisions. Considering Artificial Intelligence in driving sustainability, this special section aims to explain the role of AI in driving sustainable development. AI can play a role in achieving the 134 SDGs goals, which cover social, economic and environmental issues (Artificial Intelligence for sustainability: what is the role of AI in advancing targets for sustainability 2023).

The presence of Artificial Intelligence is changing the economic cycle in the world. Stiglitz believes that the incidence of increasing unemployment is caused by the replacement of shareholders and personnel managers with appropriate and innovative actions (Rachmadana, Putra, and Difinubun 2022). AI is widely considered to be a driver of productivity and growth. It can process and analyze large amounts of data, potentially increasing business efficiency. This event began when people's purchasing power began to

decline due to deflation and inflation. Many people who lost their jobs were unable to save and stopped shopping (Akbar and Kurniawan 2023). AI can also make a positive contribution to society, the economy and the environment, this is to support the achievement of the Sustainable Development Goals (SDGs) (Artificial Intelligence for Sustainability: What Is the Role of AI in Advancing Targets for Sustainability" 2023).

Brand engagement is strategic in brand formation because it can change consumer behavior in forming a brand and can provide value for the company and customers. With the development of technology in the current era, the concept of brand engagement has changed a lot for online brands, now many online brands are seen popping up on social media, from ordinary brands to well-known brands, this is to facilitate consumer interaction with business people (Ayu Eka Putri, nd). like The Body Shop is a company founded by Dame Anita Roddick in 1976 in Brighton, Southern England. This company has goals and principles that it adheres to firmly. The Body Shop's vision is to become a beauty brand known for its environmental and ethical concerns, as well as offering a variety of natural and effective products with the best customer service. This strategy can make consumers interested and become attached to the brand because it has set environmentally friendly goals to support sustainability (Rheina Febriane 2022).

As customer expectations continue to rise, improving customer experience has become a challenge for businesses. Businesses looking to gain a competitive edge in customer service need to think about more than just delivering content through the right channels at the right time. Therefore, AI opens up opportunities in business, especially in the marketing sector. Businesses can experience better customer experiences through highly personalized customer service and on-demand customer support while reducing timely and costly processes. With artificial intelligence capabilities, it makes it easier for business actors to analyze data and provide useful insights, and helps business actors to use social media as a tool to view customer experience. Many people in this world interact using social media for various content, social media artificial intelligence will have a bright future in the business realm. Because artificial intelligence makes it easier for marketers to interact with consumers, and also makes it easier to target or group their target markets (Pangkey, Furkan, and Mulyono 2019).

Therefore, to create a well-integrated message is to use Artificial Intelligence and its derivative fields of science. Technically, the use of Artificial Intelligence can be applied and many things can be made automatic and more efficient, including in terms of brand engagement and customer experience (Wardani, Herdiansyah, and Fauzi 2023). Artificial Intelligence can also help business actors or brands in branding their brands so that they can help direct the right market segmentation, AI can also be used to predict sustainability trends, because this is the Company's needs in order to continue to grow in its business. For marketers, the role of artificial intelligence is very important, because at the operational level, artificial intelligence also offers opportunities for automation and optimization of marketing processes, especially in the context of work effectiveness and efficiency (Vely and Sia 2023).

Literature Review
Artificial Intelligence

The initial definition of AI was a machine that could act like a human. This definition emerged because there is no universally accepted definition of intelligence. Later, a new

definition was developed based on the Turing Test, which states that a machine is considered intelligent if it is indistinguishable from a human in conversation. Over the years, more structured and detailed definitions of AI have emerged (Tang et al. 2022). Artificial intelligence, the creation of machines capable of carrying out complex tasks, has become a significant area of development. Instead of instructing a machine to perform the task, the task is performed by an individual. AI effectively relies on external patterns and algorithms to complete certain tasks. Traditionally, these decisions require a more deliberative process (Daqar and Smoudy 2019).

Artificial Intelligence is a branch of computer science that focuses on developing computer systems that are capable of thinking, learning, solving problems, and performing tasks in a manner similar to human capabilities (Azizah and Siagian 2023). There are four main indicators in Artificial Intelligence, namely acting like humans, thinking like humans, thinking rationally, and acting rationally (Setiawan 2022). The application of Artificial Intelligence has expanded to various sectors of life, including industry, business, education and daily activities. One example of an Artificial Intelligence application that is commonly found in the business sector is: 1). spam filters, 2). smart email categorization, 3). voice to text feature, 4). intelligent personal assistants, such as Siri, Cortana, and Google Now, 5). autoresponders and online customer support, 6). process automation, 7). sales and business forecasting, 8). security supervision, 9). smart devices that adapt to behavior, and many other types of AI ("Examples of Artificial Intelligence Use in Business Nibusinessinfo. Co. Uk," nd).

Brand Engagement

Brand Engagement is an individual's emotional and cognitive activities, as well as behavior that connects the individual with the brand through positive interactions. further explains that based on relationship marketing theory, customer brand engagement includes customer involvement, customer experience, and various promotions from the brand. Another assumption states that customer brand engagement is formed through ongoing interactions between customers and a brand (Daqar and Smoudy 2019).

Brand engagement refers to the cognitive, emotional, and behavioral activities that revolve around a consumer's focus on and interaction with a brand (Wulandari, Saidani, and P 2022) engagement includes the process of fostering reciprocal interactions between consumers and brands, facilitating dynamic exchanges. This indicates a deeper level of connection, playing a critical role in understanding customer outcomes, especially those related to loyalty (Chairy 2020).

The essence of a brand lies in its actions, because a promise will lose its integrity if it is not upheld. The key is to encourage behavior that enhances long-term sustainability and positive growth for the most of society, rather than offering temporary solutions that only benefit a few (Buckingham 2008). The indicators for brand engagement consist of 5 indicators. 1). Consumers will not move, 2). Consumers feel lost if the brand no longer exists, 3). Consumers always try new products offered by this brand, 4). Consumers will continue to buy this brand's products even if there is bad news about the brand, 5). Consumers feel incomplete if they do not buy or use the brand (Adzimaturrahmah, Wibowo, and Lisnawati 2019).

Customer Experience

Definition of Customer Experience as a structure with various dimensions that reflect consumers cognitive, emotional, behavioral, sensory and social responses to company products or services during the customer purchasing process. Customer Experience has been

designed to help marketers identify various forms of experience. Schmitt indicated that there are five types of Customer Experience which are the basis for analyzing the overall marketing experience (Wibowo et al. 2021).

The definition of customer experience can be said to be a phenomenon that leads to the achievement of expectations, feelings and satisfaction. The results of the collection of experiences experienced after using a product or service can produce transformation, including changes in the level of customer trust, satisfaction and loyalty towards the product or service (Wardaya 2017). Customer Experience is an internal and subjective response from customers when interacting with a company, either through direct or indirect contact. (Santoso, nd) there are several indicators of customer experience, namely: feeling, feeling, thinking, acting and relating (Influence of Customer Experience and Trust, nd).

The experiences encountered by customers can include pleasant experiences, such as receiving effective and efficient maintenance services. On the other hand, negative experiences may also occur, such as deliberate acts of fraud or cheating by some individuals in the workshop, which are increasing and becoming more sophisticated. Both types of experience are believed to have a positive influence on the level of customer satisfaction. This could suggest that customer satisfaction can be considered as one of the results of customer experience (Wardaya 2017).

Sustainability (Social, Economic and Environmental)

Hart and Milstein state that the concept of sustainability refers to efforts to improve current social and environmental performance, while still paying attention to the ability of future generations to meet their social and environmental needs (Solechah and Sugito 2023). To build sustainable infrastructure, it is important to involve stakeholders and communities in participatory and inclusive decision-making and planning processes (Saragi 2023).

The concept of sustainable development raises three basic principles: (a) prioritizing long-term value both now and in the future, (b) recognizing the contribution of environmental assets to economic prosperity, and (c) recognizing the challenges arising from sustainable development. Impact of environmental assets (Solechah and Sugito 2023). Sustainability can be described as a state of balance, where the balance remains constant, even though fluctuations sometimes occur. Additionally, sustainability can also refer to dynamic balance, which includes two different interpretations (Sari and Khomsiyah 2023).

Sustainability intentions are realized as the potential for someone to take sustainable steps. Motivation for Sustainability (MOTV) reflects the extent to which commitment to sustainability is reflected in the mission, vision, values and business strategy (Nurfahmi and Anis 2022, 2016–20). The indicators that can support sustainability are economic, social and environmental ("Artificial Intelligence for Sustainability: What Is the Role of AI in Advancing Targets for Sustainability" 2023).

Research Method

This research is a systematic literature review conducted to investigate how to support sustainability. And also what is the response to the use of artificial intelligence technology in that era and analyzed by looking at brand engagement customer experience. This research methodology involves the stages of searching, selecting and analyzing related articles from various sources. Article searches were carried out based on scientific journals such as Google and Google Scholar. Keywords: Artificial Intelligence (AI), Analysis, Brand Engagement,

Customer Experience, Supporting Sustainability. Relevant articles typically published within a specific period, for example the last five years, were selected for inclusion in this literature review. After going through a selection process involving quality and relevance assessments, a number of articles that were appropriate to the aims of this research were selected. These articles were then analyzed in depth to extract the main findings regarding the Use of Artificial Intelligence in Analyzing Brand Engagement and Customer Experience to Support Sustainability. Apart from that, researchers also took data from BPS regarding Artificial Intelligence. Data from these articles are used to support and develop the theoretical framework in this journal.

Result and Discussion
Definition of Artificial Intelligence (AI) Technology

Artificial Intelligence emerged in the 4.0 era and has begun to be widely used in business aspects in Indonesia. Artificial intelligence can help lighten the human workload, for example in making decisions, searching for information more accurately or making computers easier to use with displays that are easier to understand. The way AI technology works is to receive input, then process it and then produce output in the form of decisions (Fidiyanti et al. 2023). Artificial Intelligence is the ability of machines to replicate various aspects of human intelligence, such as the process of learning from experience, problem solving, and information-based decision making. The application of AI has expanded to various economic and social sectors, including the manufacturing industry, financial services, and the health and education sectors. Despite the great potential offered by AI, concerns are emerging regarding its deeper impacts, especially related to the issue of unemployment (Akbar and Kurniawan 2023).

Artificial Intelligence is a branch of computer science that focuses on creating machines that can carry out roles like humans, such as solving problems, making decisions and adapting to new situations. Artificial intelligence technology has many benefits for individuals and organizations, such as making work easier and more efficient, speeding up business processes (Nur'adila 2023). In the business world, the use of Artificial Intelligence (AI) technology has an increasingly important role in facing various challenges and opportunities. One important aspect of using AI for business people is that AI can be used to analyze consumer behavior, trend patterns and user preferences, so that business people can produce more relevant and effective campaigns. Overall, AI users for businesses offer a lot of potential and opportunities to increase efficiency, relevance and creativity (Makmur and Alijoyo 2023).

The use of AI in various aspects of business requires various business strategies in its development. Business strategy is a series of integrated and coordinated actions that are used as the main basis for thinking in creating strategies to gain competitive advantage. Business strategies include geographic expansion, diversification, acquisitions, product development, and predicting future trends (Fidiyanti et al. 2023). AI can provide information and encourage responsible business behavior by aligning funding decisions with sustainable development. AI can improve resource, energy and material efficiency and impact supply and value chains through Industry 4.0 solutions such as process automation and data integration along the value chain ("Artificial Intelligence for Sustainability: What Is the Role of AI in Advancing Targets for Sustainability" 2023).

Artificial Intelligence (AI) Technology in Brand Experience and Customer Experience Analysis

Artificial Intelligence (AI) or artificial intelligence technology has become one of the biggest advances in technology that is changing business patterns for both small companies and large companies (Fidiyanti et al. 2023). The role of artificial intelligence (AI) in shaping the future of the energy sector lies in providing innovative solutions to improve operational efficiency, control and automation of energy systems. This is a key factor in driving the transformation of the energy sector, emphasizing the urgency of using AI to support the circular economy, and creating a future that provides positive benefits for society and the environment (Danish and Senjyu 2023).

In response to advances in AI technology, an increasing number of recent studies have investigated the antecedents of AI acceptance and creation or expansion, Various acceptance frameworks. User acceptance can be defined as behavioral intention or willingness to use, purchase, or try a good or service (Kelly, Kaye, and Oviedo-Trespalacios 2023). To understand the overall current state of AI in Brand Engagement, we have to dig deeper and look at the latest results from around the world to identify the various AI applications these systems are targeting (Tang et al. 2022).

The application of Artificial Intelligence and chatboots in marketing strategies has been confirmed to increase brand engagement, customer satisfaction, customer experience and personalization, while providing benefits in the form of cost efficiency and availability. The advantages of chatbots in the realm of AI marketing include cost efficiency, increased customer engagement and personalization, and the potential for increased sales and additional offers (Krisprimandoyo 2024).

The existence of artificial intelligence (AI) has brought significant changes in brand engagement. AI can help brands gain a deeper understanding of their customers, while providing customized experiences ("Best Examples of AI in Marketing," nd). The application of AI to increase customer engagement can be done in various ways, including:

1. Holistic data analysis: AI can analyze large amounts of customer data, including web analytics, app behavior, purchase history, and preferences, to gain insight into customer behavior and predict outcomes.
2. Contextual personalization: AI can help brands customize customer experiences by understanding and meeting their needs and preferences contextually.
3. Process automation: AI is able to automate routine tasks, such as customer service, which in turn frees up time for employees to focus on more complex tasks.
4. Predictive analytics: through AI, brands can predict customer behavior and identify trends, giving them an edge over the competition.

By leveraging artificial intelligence, brands can foster more meaningful relationships with customers, increase engagement levels, and ultimately, grow their business ("The Impact of Artificial Intelligence on Customer Retention in 2023" 2023).

The advent of Artificial Intelligence (AI) has been a revolutionary change in the domain of customer experience analysis. AI can help companies gain a deeper understanding of their customers and provide personalized experiences (Daqar and Smoudy 2019). According to, the application of AI can be done through the following methods to improve customer experience:

1. Deep data analysis: AI can analyze large amounts of customer data, including web analytics, in-app behavior, purchase transactions, and preferences, to gain deep insights into customer behavior and predict outcomes (Holmlund et al. 2020).
2. Contextual personalization: AI can help companies to align customer experiences by understanding and meeting their needs and preferences contextually.
3. Process automation: AI can automate repetitive tasks, such as customer service, freeing up employee time to focus on more complex tasks.
4. Predictive analytics: through leveraging AI, companies can project customer behavior and identify trends, giving them an edge over the competition.

By harnessing the potential of AI, companies can foster more meaningful relationships with customers, explore deeper engagement, and ultimately, grow their businesses (Krisprimandoyo 2024).

Artificial Intelligence Trend Predictions to support Sustainability

Emerging trends can be exemplified by the collection of very large data or big data and artificial intelligence. Which makes it easier for companies to make better adjustments, based on consumer behavior patterns. Technology has caused the relationship between producers and consumers from being vertical to becoming horizontal. Consumers can no longer be treated as passive objects, but they must be actively involved and included by companies or producers (Shabrina 2019).

In this developing era, it will make it easier for marketers to predict future trends to support sustainability, because with the many technologies that are developing in this increasingly advanced era, companies can easily analyze them with artificial intelligence technology or what is usually called Artificial Intelligence (AI). Because this feature will provide an idea of what consumers need (Loucks et al. 2023).

Big data is emerging as an important element for businesses to maintain success in their journey towards digitalization. By studying consumer behavior using big data, deep learning can help companies understand future market trends, predict product demand, or optimize marketing advertising to support sustainability (Wardani, Herdiansyah, and Fauzi 2023).

Predicting future trends with artificial intelligence can be predicted with artificial super intelligence (ASI). this is a hypothetical AI that is outside the human brain because ASI has unlimited neurons. So this application makes it easier for marketers to analyze consumers for sustainability (Taufik and Kurniawan 2023).

From a business perspective, there are six factors that encourage the implementation of sustainable development practices in Indonesia, namely:

1. Sustainable financial plan: A financial plan that provides extra support to an organization to develop sustainable practices more broadly.
2. Indonesia's involvement in global business initiatives.
3. Involvement in the Global Reporting Initiative (GRI) which measures organizational sustainability practices.
4. Integrated reporting: reporting on organizational governance that is globally recognized, also helps increase global awareness of companies in Indonesia towards improving governance in sustainability practices.
5. Support from investors.
6. Involvement in Sri Kehati Stock Index (pijarstaging 2022).

Trend forecasting is a technique used to predict future trends in the long term (Team 2022). The use of AI allows machines to analyze images, understand speech, interact naturally, and make predictions using data. The use of AI allows companies to easily analyze and process more in-depth data, thereby identifying patterns, trends and insights that can be used to make the right business decisions and also support sustainability (Fidiyanti et al. 2023).

By utilizing trend forecasting it will be useful in several ways, namely:

1. Helps in timely business planning because it makes it easier for companies to predict trends to support sustainability.
2. Determine the right marketing strategy and ensure the Company can follow marketing trends
3. Helps in making investment decisions, because trend forecasting helps investors understand trends to support sustainability and makes it easier to make investment decisions
4. Helps in predicting industry trends for sustainability and assists companies in making good decisions.

But we must remember that Artificial Intelligence in trend forecasting does not always provide good or accurate results. Therefore, we cannot always rely on artificial intelligence, but we can combine it with other analyzes seen in an appropriate and broader context. Because now many consumers are always interacting with the latest trends, because many of the current generation have fomo, namely the fear of missing out, that is, the current generation doesn't want to be left behind. So marketing trends are very necessary in the business world to support sustainability (Team 2022).

The benefit of analyzing trends is to measure company performance and also support sustainability, here the company can make decisions to adapt in the future and can take the necessary steps. And also so you can compare with other competitors (Medina 2022). the existence of artificial intelligence helps marketers to provide more effective promotions. Because it makes it easier for business people to reach consumers, it is also easy because social media makes it easier for marketers to interact with consumers to see customer experience and brand engagement (Pusparini 2023).

Challenges Faced with the Use of Artificial Intelligence Technology

There are several challenges that companies face in developing AI-assisted marketing capabilities, such as lack of resources and lack of understanding of AI concepts. Apart from that, marketing using AI also has other challenges because AI requires quality data to work effectively, and not all companies have sufficient data to analyze, implementing AI technology requires quite high technical skills, and not all marketing staff may have the skills. This, as well as the ethical issues that must be addressed in the use of AI in marketing including customer privacy and algorithmic bias (Octavio 2023).

AI is still expensive so there are some companies or businesses that are still relatively small and cannot use it. Due to the results of data science and big data, artificial intelligence continues to improve. This is what makes business actors unable to access it. Especially in cyber threats because our data and privacy are currently very vulnerable to hacker attacks. They can easily track our location and hack our data if we don't take action (Nur'adila 2023).

By using artificial intelligence there are also challenges, namely:

1. Limited quality data
   The implementation of artificial intelligence requires high quality data to obtain accurate results. But sometimes this is difficult to obtain.
2. Reliance on historical data
   The use of artificial intelligence often relies on historical data to analyze trends. However, for companies that are just starting a business and do not have sufficient historical data, this is an obstacle. Without sufficient data, artificial intelligence (AI) technology may not provide relevant or accurate results.
3. Cultural change
   Adopting AI marketing often requires significant cultural change and transformation within the company. Companies must ensure that they have resources that understand the concepts of artificial intelligence in depth. Therefore, training and developing internal capabilities is a must. Apart from that, budget and resource constraints are also challenges that need to be overcome in AI implementation.
4. Measurement and evaluation
   Assessing and evaluating the success of artificial intelligence is a challenging task because it involves complex processes. Companies need to design appropriate metrics, monitor trends, and engage in in-depth analysis to understand the true impact of applying artificial intelligence in marketing (Pusparini 2023).

Benefits of Using Artificial Intelligence in Predicting Trends to Support Sustinability

Artificial intelligence has a very important role in the corporate world. Artificial intelligence has changed the way companies interact with their customers in customer experience and brand engagement. And by combining machine intelligence and data analysis, companies can increase targets and provide the best experience for customers and also good results to support sustainability for the company they run (Wardani, Herdiansyah, and Fauzi 2023).

There are several benefits to using artificial intelligence, one of which is influencer marketing. AI smart technology can be used for social media influencer discovery effectively (S. Kom., M.Kom 2020). One of the huge benefits of artificial intelligence (AI) in marketing is the ability to predict consumer behavior. By analyzing data from social media, search engines and other online sources. This means that business people can create targets that are relevant to the interests and needs of their market share so that they can help in consumer engagement with the company to support sustainability (Taufik and Kurniawan 2023).

The integration of artificial intelligence (AI) into products represents the potential to improve the environmental sustainability of these products. In doing so, it can increase consumer purchasing interest and attract new consumer segments that are less interested in the usual environmental sustainability. Therefore, environmental sustainability powered by AI can help companies build new competitive advantages and package their offerings more effectively to consumers (Frank 2021).

All technologies for analyzing trends use cyberspace as a medium to make their actions successful. The term cyber security refers to the processes, systems and human behavior that support protecting electronic resources. Security threats such as hacking, malware and data theft can cause many losses, one of which is quite large financial and reputational losses. So,

artificial intelligence can help and prevent security threats faster and more effectively than manual methods (Nur'adila 2023).

By following trends to support sustainability, companies will gain several benefits, namely:

1. More cost effective
   Until now, content is still a successful tool for attracting consumer attention to a brand. By understanding developing trends, companies can minimize production time and costs more efficiently. This is due to our understanding of the channels that need to be improved and the types of content that consumers like most.

2. Making it easier for companies to connect with consumers
   As society experiences changes in content consumption preferences, a company's inability to understand emerging trends can cause companies to lose connections with potential customers (Miko 2021).

3. Customer experience analysis
   Artificial intelligence helps companies not have to bother analyzing comments or customer experience. For example, when a customer submits a comment or complaint, artificial intelligence will help him by detecting it quickly. This makes it easier for the Company to evaluate and improve the quality of products and services according to customer needs (Wibowo et al. 2021).

4. Helps to predict trends to support sustainability
   This makes it easier for companies to analyze brand engagement and customer experience to support sustainability. Because AI has many types to be used in analysis in the business sector (Azizah and Siagian 2023).

There are other benefits in using AI, namely that using AI will provide good content, because we can see other competitors using content trends that are currently hype, and can also analyze future trends by using artificial intelligence to understand consumer behavior. Artificial intelligence also helps lead to proper market segmentation. With this, a company will be able to achieve the goals and targets they have designed more quickly (Makmur and Alijoyo 2023).

Artificial intelligence reflects the truth that engaging customers through communication and experiences can deliver value beyond simply providing a product. The rapid growth in modern information technology provides the necessary technical support for customers to engage in value creation, expanding the channels for them to participate in business channels that use artificial intelligence services. (Gerber 2020) Building consumer engagement with a brand or company will provide added value to the company, so it is not wrong for companies to use artificial intelligence (AI) in the business strategies they carry out (Zelvi Gustiana, 2023).

Artificial intelligence makes it easier for marketers to collect and store customer data in certain storage places. Artificial intelligence can provide input data from websites, sales, analytical reports and social media and process it to produce optimal insights for marketers. Machine learning allows marketers to access and analyze large amounts of data and then extract it into relevant data so that it is easy to determine strategies that marketers will create to support sustainability (vely and Sia 2023).

Through artificial intelligence, businesses will be able to easily identify Customer Experience. And businesses will also be able to share positive comments, which helps build

their online reputation to form brand engagement. Algorithms will also make it easier for marketers to create content and create new trends so that customers don't get bored with the same content model.

Another benefit is knowing future market demand and adjusting production or stock of goods according to that demand. Apart from that, it improves consumer decision making, which can support trend sustainability. Thus, it can be said that the method of predicting future trends is very important. For companies to reduce uncertainty, increase efficiency, adjust production to market demand, and make better decisions (Ramadani and Pide 2023).

Conclusion

Artificial intelligence technology has many benefits for individuals and organizations, such as making work easier and more efficient, speeding up business processes. The use of AI in various aspects of business requires various business strategies in its development. Business strategy is a series of integrated and coordinated actions that are used as the main basis for thinking in creating strategies to gain competitive advantage. Business strategies include geographic expansion, diversification, acquisitions, product development, and predicting trends for sustainability.

The application of Artificial Intelligence and chatboots in marketing strategies has been confirmed to increase brand engagement, customer satisfaction, customer experience and personalization, while providing benefits in the form of cost efficiency and availability. The advantages of chatbots in the realm of AI marketing include cost efficiency, increased customer engagement and personalization, and the potential for increased sales and additional offers. The advent of Artificial Intelligence (AI) has been a revolutionary change in the domain of customer experience analysis. AI can help companies gain a deeper understanding of their customers and provide personalized experiences.

There are ways to predict trends with Artificial Intelligence to support sustainability by using several types of AI such as Chatboot, Artificial Intelligent Super (ASI), deep learning, fore casting, and several other methods. The benefit of analyzing trends is to measure company performance and also support sustainability, here the company can make decisions to adapt in the future and can take the necessary steps.

But using AI has its challenges and benefits. The challenges of using AI itself are limited quality data, reliance on historical data, cultural changes, and also measurement and evaluation. Meanwhile, the benefits themselves are more cost effective, makes it easier for companies to connect with consumers, helps analyze customer experience. And to support sustainability there are several factors including social, economic and environmental. If these three are very strong then this can make it easier for the company to support sustainability.

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