IN THE ERA OF DIGITALIZATION, CONSUMER BEHAVIOUR AND ARTIFICIAL INTELLIGENCE

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ABSTRACT

The world we live in is continuously changing, and one aspect that it has the potential to have a big influence on is consumer purchasing behaviour is artificial intelligence (AI). Businesses may use AI-based technologies like machine learning, natural language processing, and predictive analytics to analyse customer data and learn more about consumer preferences, routines, and behaviour. This data may be utilised to personalise marketing initiatives and deals, enhance customer service, and boost revenue. This article discusses the different ways that businesses are utilising AI to comprehend and affect customer behaviour as it relates to the impact of AI on consumer purchasing behaviour. The article also looks at the possible ways of employing AI for consumer marketing and sales.

Keywords: *Artificial Intelligence, Consumer Buying Behaviour, Marketing.*

Introduction

The role of artificial intelligence (AI) in our economy is growing. Productivity and economic growth may both be increased by artificial intelligence. It has the ability to create new products and services, markets, and industries while also enhancing the effectiveness and calibre of decision-making procedures. The consumer experience is getting harder and harder to understand. Customers express their requirements, desires, attitudes, and perspectives through a range of channels, including searches, comments, blogs, Tweets, "likes," videos, and dialogues (web, mobile, and face-to-face; Court, Elzinga, Mulder, and Vetvik, 2009).This endless flow of user-curated content is growing in volume, speed, diversity, and authenticity. Artificial intelligence (AI) is being used by many marketers to transform this massive volume of data into useful consumer information. There are issues, as shown by Cambridge Analytica's prior use of millions of Facebook accounts for political purposes (Solon and Laughland, 2018). To achieve compliance with the most recent privacy regulations, marketers must modernise their AI systems. The same risks offer opportunities for marketers and advertisers to engage with customers and enhance their understanding of them at various stages of the consumer journey, though (Petro, 2018). To make sense of enormous amounts of data, AI uses two types of incoming input:

Structured data: Data are common, standardised datasets like purchase history, fundamental consumer data, or web browsing habits. AI uses vast quantities of this kind of structured data to perform complex calculations that usually produce results instantly.

Unstructured data: Nearly 80% of the daily 2.5 billion gigabytes of user-generated data are unstructured, and they include written texts, spoken words, and photographs, according to Rizkallah (2017). The ability of artificial intelligence (AI) to quickly assess vast quantities of this type of data sets it apart from traditional computer systems.

Unstructured inputs are pre-processed by AI to prepare them for additional calculations or building pieces. The outcomes of these building blocks much surpass our intrinsic wisdom, which benefits advertising.

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Artificial Intelligence (AI)

Examples of how computers can think and act more efficiently than humans include image recognition, speech recognition, decision-making, and language translation (CXPA, 2018). Sterne (2017) asserts that AI is capable of performing the "three Ds" of detection, determination, and development. The ability of AI to identify a subject's most typical and expected characteristics is referred to as "detect." AI may choose which traits are significant and which are not. The ability of an AI to "decide" refers to its capability to decide after carefully weighing a variety of criteria and choosing the most important one. Develop is the capacity of AI to teach itself by considering new information, doing research, and weighing each factor before changing its perspective. A computerised system called artificial intelligence (AI) uses data to carry out activities that are comparable to those carried out by people and have the highest likelihood of success. Big Data, in particular, makes up the majority of AI. Big Data refers to the analytical methods and tools that businesses use to compile information from their worldwide internet interactions with customers. Due to its large volume, speed, and diversity, big data sets itself apart from other historical material gathered via the internet (Chaffey & Ellis-Chadwick, 2019). Both organised and unstructured massive volumes of data can be managed by AI. Examples of arranged conventional datasets include demographic information, transaction history, and online browsing patterns.AI may analyse these datasets since it is capable of complex calculations and real-time, accurate findings (Kietzmann, 2018). Even though unstructured data makes up the majority of the consumer information gathered on a daily basis, it is more complex and needs to be treated in order to provide outcomes that cannot be seen in spreadsheets (Sponder& Khan, 2018). A group of technologies known as artificial intelligence (AI) were created at three different levels to carry out tasks in computers in a way similar to that of humans. We are most likely to come with Artificial Narrow Intelligence (ANI) in our daily lives. The computer can carry out certain duties since it has prior training. Mental skills like customer segmentation, image identification, and predictive analysis are required for these operations. For instance, Zalando recommends new orders to customers based on their past purchases. Artificial general intelligence (AGI) in its second level is capable of outperforming human intelligence in many areas. Issues can be resolved by AI on its own. Robotics, intelligent computers, speech recognition, language processing, and visual recognition are a few examples of AGI.The third level of AI, artificial superintelligence (ASI), uses creative and scientific reasoning to perform better than human intelligence in every manner, however it does not yet exist since we do not fully comprehend the human brain and nature. Since it has the power to destroy entire communities, no one could have foreseen the consequences of this level when it initially occurred (Sterne 2017; Kaplan & Haenlein 2019).

Artificial intelligence (AI) is divided into five subfields, per Jarek and Mazurek (2019). Decision-making, image recognition, text recognition, and voice recognition are a few of the popular subfields in marketing. In industry, autonomous robots and vehicles are often used. The technology underlying voice recognition, which will revolutionise how customers interact with businesses, is a basic neural network programming. The integrated voice recognition technology may be able to understand what the user says and intends (Dash, 2015). Customers could buy products simply by speaking to the Amazon Echo after Alexa, a speech AI for e-commerce, was incorporated into the gadget. As a result, Amazon came to dominate the smart speaker market, with a 70% market share (Avinaash, 2018). Like Alpine AI, the mall's virtual assistant, text recognition uses interactive AI. By studying videos and photographs posted to social media, image recognition helps marketers better understand client behaviours. According to Forsyth and Ponce (2011), marketers may gain insight on consumers' buying habits by reading comments left on product images. Albert AI and Harley Davidson both have the capability of managing internet marketing campaigns throughout the decision-making stage. Following the launch of the campaign, both programmes analyse the data gathered and offer campaign-related recommendations. Jarek and Mazurek (2019) claim that autonomous robots like Schnuck may scan shelves in stores to verify product placement and inventory before giving this information to customer service representatives so they can do their responsibilities.

Artificial Intelligence (AI), Machine Learning (ML), And Deep Learning (DL)

Artificial intelligence, or AI, is a subset that is frequently applied in marketing. Machine learning systems are trained to extract the desired output from a given input, and they constantly get better as additional data is processed by computer programmes or algorithms. Adopting correctly trained machine learning algorithms may be advantageous for businesses. These algorithms are less costly and more dependable than employing marketing experts since they can perform tasks that people can. Sterne (2017) claims that supervised learning, unsupervised learning, semi-supervised learning, and

reinforcement learning are the most often used algorithms for teaching MLS. Machine learning is therefore essential for AI. Any automated system, including AI, must be able to explore the world and learn like humans in order to exist in a changing environment (Alpaydin, 2016). It is part of the machine learning (ML) subfield known as deep learning. Successful unsupervised learning strategies rely on neural networks that mimic human brains to examine data nonlinearly. As computer power increases, especially as graphics processing units (GPUs) get stronger, deep learning is becoming more practical (Sterne, 2017). AI strategies including task augmentation, automation, profiling, and personalisation have the potential to be improved by deep learning. These technologies offer a variety of alternatives for consumer and brand participation and are based on big data analytics data. For better work assignment and scheduling, deep learning in retail enterprises, for instance, uses the results of profiling and data mining (Daugherty & Wilson, 2018). This enables more effective staff management and customer satisfaction. Artificial intelligence (AI) will indeed rule the marketing sector as a result of developments in machine learning, deep learning, and natural language processing (Avinaash, 2018).

The Impact of Artificial Intelligence (AI) on Marketing

Both B2C and B2B marketing utilise AI to a large extent. According to KRC Research, artificial intelligence (AI) will let businesses use Chabot to personalise interactions with clients and has a greater impact on marketing than social networking. Additionally, according to 79% of the 717 marketers surveyed by Emarsys Forrester, AI makes workflow more strategic than it was in the past (Avinaash, 2018). Jarek and Mazurek (2019) assert that AI has a major impact on marketing operations. The retail industry is where AI's advantages are most apparent since it requires frequent customer contact and creates a large amount of data on consumer characteristics and transactions. AI analyses this data and provides users with tailored recommendations right away. Natural language processing (NLP), predictive analytics, and algorithms are all used to great effect in Quill to extract user context from brand data (Avinaash, 2018). Since AI will alter how businesses sell to clients and how they behave, marketers will employ it (Davenport et al., 2020). Customers now enjoy a number of advantages thanks to AI, including more productive processes like automatic payments, improved search engine quality, and round-the-clock customer service. Through automated product recommendations, pertinent product suggestions, individualised customer care, and post-purchase assistance, AI offers the consumer a novel experience.AI improves consumer-brand relationships while also enabling online product reviews for consumers. In reality, the majority of consumers think AI will make their lives better by solving complex problems, while others think AI would make it more difficult for them to obtain employment (PwC, 2017).

Artificial Intelligence and Consumers

We analyse how AI may alter consumer excess and behaviour in this Section while addressing potential algorithmic distortions because user data is a crucial component of AI systems. I systems are being utilised more frequently to arrange and choose important information. Examples include how search results are organised, what news internet users read, what multimedia they access, and recommendations for forthcoming purchases. This function could result in better matching and cheaper search costs since robots are more efficient and objective than humans at recognising pertinent and high-quality information. Customers gain significantly from it. Algorithms can help to address the issue of information overload by controlling information processing. Customers can dramatically alter how decisions are made when they give algorithms control over their purchasing decisions, giving birth to the idea of the "algorithmic consumer" (Gal & Elkin-Koren, 2017). Customers may be helped by algorithms to overcome cognitive and behavioural biases to make more rational judgements and avoid misleading marketing techniques.

How Artificial Intelligence has Influenced Consumer Behaviour

Programming computers to do cognitive tasks including thinking, learning, problem-solving, and perception is known as artificial intelligence. More organisations are adapting to AI as it is used in competitive tactics more regularly. The voice-activated Google Assistants, Siri, and Alexa, which use Natural Language Processing to translate your query into a response, the launch of Tesla's smart cars, and YouTube's presentation of data-driven results based on your browsing history and interests are just a few examples of the many applications for artificial intelligence that are currently available. When marketing teams create marketing strategies that take artificial intelligence discoveries into account, consumers react favourably. This section looks at the impact of artificial intelligence on consumer behaviour.

- **Increase customers spending:** Consumer spending will undoubtedly increase as machine learning, one of the key components of AI, enables teams to decode massive data accumulation and narrow the information in a way that allows them to identify target audiences, what customers are looking for, conduct trend analysis, and then create funnels that are more user-focused, saving time and ultimately converting prospects into conversions. Customers are more likely to spend more since marketing teams may alter their promotional strategies once they have identified their target market. They are aware of the best times to start email marketing campaigns to acquire the highest email opening rates. Businesses are paying more attention to what they provide and who they offer it to as a result of greater competition. Consider someone who is interested in starting a business and is knowledgeable about the most recent trends that the general public is following. To better understand the interests of the young women and girls who are being targeted, artificial intelligence may be applied. They may launch a conventional clothing line and a cosmetics store. They could possess trustworthy knowledge, and by focusing their strategies on it, they can improve their profits.

- **Individualised Customer Experience:** Information about consumers is driven by artificial intelligence, including how often a person visits specific websites, what they search for, their geolocation, and the devices they use to log in. The firm can now provide its clients with a more individualised experience thanks to predictive personalization. Customers are no longer need to reserve time to go to a store just to buy a certain item. Businesses will come up with strategies to enhance the customer experience using the data at their disposal. Virtual shopping is getting more and more common, when a product is sent to a customer's house before they make a purchase so they may try it on and decide whether they want it. Customers will believe that they are the only ones who gain from this effort or experience. Personalization is the key to converting your prospects into customers.

- **Increasing customer loyalty:** Customers are more likely to switch their loyalty to a certain brand when firms can offer more individualised customer experiences. 97% of customers believe that a company's customer service is a key determining factor, according to Microsoft. Better customer service is now feasible thanks to artificial intelligence. Since chat bots can handle several enquiries at once and are accessible twenty-four hours a day, seven days a week, customers receive rapid replies. It is straightforward to match customer tastes and propose the precise good or service they're looking for by employing clustering and data collected about them. By attending to these small particulars, you may convert a one-time customer into a loyal follower.

- **Great customer convenience:** There is little doubt that customers have profited from artificial intelligence. They are accustomed to feeling cosy. Who would have thought that you could make a reservation, purchase online, and check on the security of your property with just one click? The ability of AI to distinguish between faces and fingerprints is one of its accomplishments. More importantly, time has been saved by technology because it doesn't need human brains to work. Think about how much more time we could spend on other activities if we weren't required to complete tasks that machines could manage. Artificial intelligence's rise has created new opportunities.

- **The movement of consumers to speech technology**: Several of the largest retail and financial firms will switch over to voice technology as a result of clients' increased familiarity with it. Customers prefer voice searchers over text-based ones because they are simpler to use and produce superior results. Your use of a digital assistant in daily life demonstrates your openness to voice-over technology. Since the first barrier has been broken through, people now prefer conversing to texting.

- **The reconciliation of customization and privacy:** Customers clearly expect enterprises to safeguard their data, and businesses should consistently prioritise customer privacy. As a result, research is essential before creating an AI-based security plan. When customers are pleased with the company's policies and feel they are getting a lot of benefits, their faith in corporate brands increases. The results that users of AI tools and methods have found are fascinating. The application of AI tools will increase consumer confidence in various market companies.

- **The Verdict:** Artificial intelligence is without a doubt a significant factor in many aspects of life, notably in the retail industry. Because AI can provide businesses a competitive advantage, they are now generating more money. AI is the technology of the future, but the general public has to be made aware of its uses.

The Impact of Artificial Intelligence (AI) on Consumer Purchase Behavior

Consumer purchase behaviour includes customers' choices and actions to obtain, use, and discard goods and services that satisfy their needs and preferences. Analysing such a process can assist in forecasting future behaviour (Qazzafi, 2019). Customers' pre-purchase activities are reflected in the five stages of the consumer buy decision-making process: needs identification, information search, alternative appraisal, purchase choice, and post-purchase behaviour. One or more phases may be skipped by the customer. What people think is important (Kotler et al., 2017). Understanding consumer purchasing behaviour is challenging since it includes the human mind. However, it is possible in the context of a digital platform since AI can help with client purchase behaviour analysis and predictions. Customers express their needs, desires, and opinions via a range of channels on the digital platform, including search, comments, blogs, Tweets, likes, videos, and in-person conversations (Court et al., 2009). As a result, consumer data is more readily available than ever before in terms of quantity, speed, diversity, and accuracy. AI may be used to transform such a data flow into valuable client information (Kietzmann, 2018). These statistics serve as the foundation for the choices made by marketers as they determine their marketing strategy and predict revenues. This information is used by AI to advise retailers on product classification and presentation (Avinaash, 2018). At different points along the customer experience, artificial intelligence (AI) may help marketers gain a better knowledge of the consumer journey (Kietzmann, 2018). The critical function that artificial intelligence (AI) may play at each stage of the customer experience must be understood in order to understand how it affects consumer purchasing behaviour.

Figure: Consumer Decision-Making Process Model
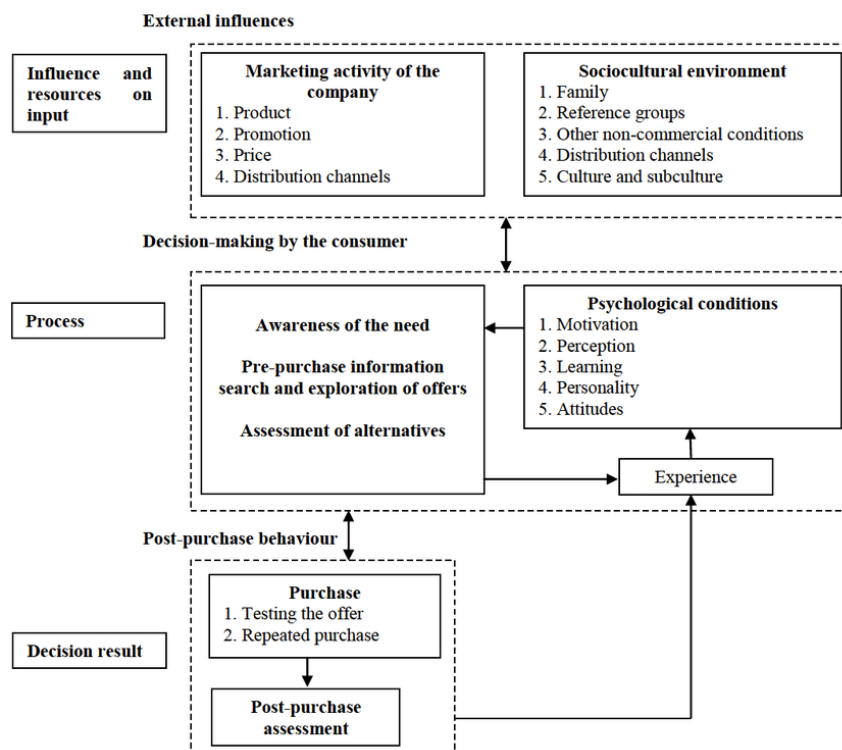
Source: Łodziana-Grabowska 2015a: 20.

- **Need and Want Recognition:** It has been challenging to track the moment at which a demand is generated since it begins at the category level rather than the brand level (Batra and Keller, 2016). Advertisers have employed market research, online analytics, and data mining to comprehend and shape consumer preferences. AI makes it possible to quickly create profiles with more information and to comprehend how customers' needs and preferences change as they express themselves online in real time. Media company Astro uses Azure, Microsoft's AI platform, to profile customers. The technology quickly analyses billions of data points for each

user. The online material on Astro's platform is then swiftly tailored to these consumers' preferences. These profiles are routinely updated by machine learning when a customer's digital footprints alter as a result of adjustments to their social network status, their online comments and postings, or their purchase behaviours. AI may be used by marketers to "manifest" the needs and preferences of their target audience. From photos uploaded to the service, Pinterest employs picture recognition to determine each user's specific preferences. The website then shows more images relevant to the user's preferences, making it simpler to pinpoint needs or preferences. According to Kotler et al. (2017), businesses should recognise that the first stage of the customer journey is need awareness. According to Batra and Keller (2016), needs lead to categories rather than brands. As a result, it could be challenging to remember everyone's requirements and objectives. AI can understand the requirements and desires of customers when they communicate online. Marketers will be able to develop more thorough client profiles in real time thanks to AI. Customers' online behaviours, such as social media status updates, online purchases, comments, and postings, create their digital footprints, which machine learning then uses to automatically update customer profiles. For instance, by analysing billions of data points, instantly identifying users' wants, and then tailoring online content to match users' preferences, Microsoft's AI platform Azure helped the media company Astr create consumer profiles.AI also helps in identifying the preferences and needs of the client. For instance, Pinterest uses image recognition to determine people' distinct fashion preferences based on the pictures they pin to the site, and then the website makes the relevant pictures available to users (Kietzmann, 2018). Additionally, the tailored modelling function of the AI-powered Adobe Audience Manager made it easier to find future consumers who had the same traits and interests as current users (Michael, 2010). Internet companies think AI can properly foresee their customers' needs and wants, according to Davenport et al. (2020). Numerous online retailers have switched to a shipping-then-shopping business model, relying on AI to detect customer preferences and send these items without a formal request from customers (Agrawal et al., 2018). This is because customers have the option to buy, return, or exchange things they no longer need. After receiving the delivered goods, customers place orders and can subsequently make more purchases. Since it delivers the merchandise to the closest delivery facility, Amazon is the best example of anticipating consumer wants (Avinaash, 2018). The new business model may change consumer behaviours and retail marketing strategies. As a result, AI can recognise changing client needs and wants at the need recognition stage and then present the right options when it comes to online shopping.

- **Initial Consideration:** As buyers begin to consider potential items that meet their requirements or aspirations, including the brand in their assessment sets (Batra and Keller, 2016). In order to increase brand familiarity, advertising must also highlight important consideration aspects. Through techniques like search engine optimisation, paid search advertisements, organic search, or ad retargeting, advertisers may succeed in achieving this goal. Advertisers may identify, rank, and show the results that are most likely to satisfy the consumer's information needs at that particular time using AI-powered search. For better targeting, Google Adwords helps businesses to distinguish between qualified and unqualified leads. In addition to keywords, Google also considers context words and phrases, customer activity information, and other crucial data when analysing search query data. Google uses this information to develop user categories that might be profitable and to improve targeting. After using AI to generate more thorough consumer profiles and using those profiles to target Facebook advertising, Zendesk, a provider of customer support software, noticed an improvement in the quality and quantity of leads. The next phase of the consumer experience is the search for information. When consumers become conscious of their needs, it starts. They then start to think about prospective products that could satisfy their needs and wants. It is the duty of marketers to get their brands on consumers' shopping lists. Therefore, via search engine optimisation, paid search advertising, and organic search advertisement retargeting, marketers use advertising to increase the visibility of their businesses and communicate crucial consideration aspects (Batra and Keller, 2016). Early adopters of AI will likely prosper as it serves as the impetus for a new industrial revolution. A research from Gartner (Avinaash, 2018) states that by 2021, digital commerce revenue on websites with voice and visual search capabilities and AI adaptations would increase by at least 30%.By identifying, ranking, and displaying the results that users were looking for, AI-powered search may help marketers give pertinent results to consumers in

real-time. Because Rich Relevance, an AI-powered website search engine, and personalization were implemented, The Works, the leading discount store, had a 37% increase in e-commerce sales in 2017. Furthermore, according to Avinaash (2018), Google's most recent technology can anticipate the information needs of users. Deep learning is able to analyse consumer behaviour, predict user trends, and serve advertisements via a recommendation engine. For instance, "CHINESE GOOGLE" makes a lot of money by targeting adverts with AI.AI and machine learning improve the probability that a customer will click on a product when retargeting or tailoring ad material to a certain demographic (Avinaash, 2018). Since AI can help trend marketers in a number of ways, including more successfully targeting clients and providing them with customised communications, it has become essential (Avinaash, 2018). For better targeting, Google Adwords, for instance, offers marketers high-quality leads. Google employs AI to analyse search query data in terms of keywords, phrases, context words, consumer activity data, and many other vast data sources in order to identify the most valuable subset of consumers. By building more detailed consumer profiles and showing Facebook users advertising that are relevant to those profiles, AI helped Zendesk, a company that makes customer care software, to generate a high-quality number of leads (Batra and Keller, 2016). In a competitive market, firms who are unable to generate and secure new leads may find it difficult to maintain their position. With the aid of an effective machine learning integration, it is possible to identify the leads who are most likely to convert. By combining AI with a precise search engine, it will be simpler to evaluate unstructured material and find potential leads. For instance, Cien, a platform for improving sales efficiency, utilises AI to improve lead scoring and reduce sales cycles (Avinaash, 2018). Another illustration is Salesforce Einstein, which has some additional features that can suggest tracking the initial lead score. Data is automatically gathered when calendar and email data are synced with a record (Jason, 2017). AI may provide clients with the knowledge they need during the information search stage of online shopping, and then offer them with acceptable items that will satisfy their needs and preferences.

- **Active Evaluation:** The customer journey's third phase is alternative analysis. Getting knowledge about the product that purchasers wish to buy is the first step. To decide which brand is the best, consumers evaluate and contrast each one (Kotler et al., 2017). When consumers decide which businesses are most likely to win their business, marketers use pertinent information to persuade people to trust their products and make them the best choice (Batra and Keller, 2016). The capacity to tailor content is one benefit of embracing AI. Based on prospect data, AI is a system for producing and distributing meaningful information. The tastes and interests of these possibilities are catered for in this information. Actually, any company may use this inventiveness to produce blog content. Personalising websites is another benefit of adding AI. One-to-one marketing is described as facilitating online purchases by offering more pertinent and individualised content, improving the usability and entertainment value of websites, and enticing user interaction. Algorithms that use machine learning and AI could offer incentives to website visitors. A good example of how these incentives could boost the possibility that people would convert is the AI platform Personal (Avinaash, 2018The study of customer browsing and purchase behaviour, including social network likes, follower counts, patterns of website clicks, and product review trends, is done to personalise information. Data collection may provide marketers with recommendations for content production based on client preferences for images, colours, and other features (Sterne, 2017). Additionally, marketers may customise Facebook posts and emails to each customer's preferences. As a consequence, skilled marketers may achieve their marketing objectives by developing intelligent content with AI-powered content production (Chaffey & Ellis-Chadwick, 2019). Additionally, producing content for varied businesses and services is expensive and time-consuming, but AI can provide tailored content at a reasonable cost. For instance, a more affordable, personalised marketing campaign was made possible by the ecosystem of open-source and cloud-based APIs (Avinaash, 2018). You can quickly determine the best kind of content to engage prospects by using lead scoring. Avinaash (2018) claims that Rocco is an AI-powered tool that might provide new content to engage a brand's social media followers. Because of this, artificial intelligence (AI) may help marketers with specific tasks during the evaluation stage, such as recognising customers with high buy intentions and giving them reliable and compelling information. AI may also provide real-time customised suggestions and inform customers about a range of relevant products.

Advertising is to increase consumer trust in the product and persuade customers that they are making informed decisions while deciding between several brand options (Batra and Keller, 2016). One tactic is to give customers with strong buying intent reliable and persuasive information. These professions benefit from AI in three important ways:

Marketing experts can predict customers' purchase intentions with accuracy thanks to machine learning's predictive lead scoring. A machine-learning system creates effective lead profiles for marketers by integrating additional external data on consumer behaviours and interests after scanning a database of validated current customer data for trends and patterns.

Thanks to machine learning, picture, audio, and natural language generation, advertisers may choose content while adapting it in real time based on customer behaviour. Online clothes retailer ASOS in the UK uses Microsoft Azure to assess product relevancy and the likelihood that a website user would see, bookmark, add to their cart, and ultimately buy a product. Similar products are automatically suggested when users browse product listings.

Marketers employ emotion AI to decipher what consumers are saying and how they are feeling about their brands in open forums like blogs, videos, or reviews as well as to pre-test advertisements. Using the emotion AI engine from Affectiva, Kellogg's developed a marketing campaign for its Crunchy Nut cereal, deleting ad executions as soon as viewers' interest wained after watching the video several times.

- **Purchase:** When consumers are deciding how much their favourite brand is worth and how much they are willing to spend, advertising aims to influence them to take action by demonstrating its value in relation to the competitors (Batra and Keller, 2016). Advertisers could highlight convenience and offer details on where to buy, supported by warranties, guarantees, or return policies, or they might offer incentives to buy. Artificial intelligence has the power to fundamentally alter how individuals make purchases. This was accomplished by Staples by turning their "Easy" button into a "intelligent" ordering system that enables business clients to place orders by voice commands, SMS, or email. Marketers can also select a price "sweet spot". Real-time price adjustments based on information from demand, additional consumer behaviour characteristics, seasonality, and rival activities are included in dynamic pricing. On Black Friday 2017, Amazon employed AI-enabled dynamic pricing to change the cost of 28% of their products at least once every day. The fourth step in the customer process is making a purchase. Consumers rate the brands they considered before deciding which brand to purchase; they then decide what and where to purchase the highest-ranked brand. On the other hand, the environment may have an impact on a consumer's choice to make a purchase (Kotler et al., 2017).Customers are more likely to spend when they start to question if their brands are the best. By emphasising the brand's advantages over rivals, marketers can convince consumers to make a purchase (Batra and Keller, 2016). Examples include providing coupons, instructions on how to make simple purchases, guarantees, or return policies. By enabling customers to make purchases through voice commands, text messages, or emails, Staples makes it simple for them to do so (Avinaash, 2018). Businesses who used AI noticed an increase in user leads. AI may therefore fundamentally alter the purchase process.AI is gaining ground in the business sector, even in fields where people have historically dominated the workforce, like sales. Utilising AI analytics to perform their function more effectively and intelligently may be advantageous for these departments. One example of successful AI-driven sales software is Nudge, which enables salespeople to interact with each potential customer. Another tool for capturing and transcribed talks is Chorus. When a lead is prepared for sales, Conversica, an intelligent email assistant, alerts them. Additionally, InsideSales helps them go above and beyond their quota. Tact, an AI-driven programme, allows them to concentrate on sales rather than administrative tasks. By analysing previous data and identifying prospects who are likely to convert, AI really provides salespeople with accurate projections and Intelligent Recommendations (Avinaash, 2018).Based on the customer's requirements, AI may suggest the optimal solution throughout the purchasing decision-making process. Thanks to artificial intelligence, customers may now place orders by sending texts, emails, or voice commands. The chance of coming to a consensus can be increased by AI.

- **Post-purchase:** Customers evaluate their degree of satisfaction at this time and choose whether or not to make another purchase, maybe recommending the product. In their own right, advertisers make an effort to attract customers by highlighting instances in which the brand

goes above and beyond expectations or by addressing potential problem areas (Kietzmann and Canhoto, 2013). Advertising may contact clients using "chatbots" powered by AI after a transaction. Autodesk uses a virtual assistant to respond to customer complaints right away. By identifying and extrapolating the purpose, context, and meaning of inquiries, the resolution time for questions is cut from 1.5 days to an average of five minutes. Additionally, marketers may identify who their most important clients are. Propensity modelling is an AI technique that evaluates enormous amounts of data to forecast churn, reengagement, and other important performance measures. In order to promote the desired conduct, advertisers that are aware of these factors may use personalised communication as part of a customer-relationship management campaign. Depending on the customer's response, they may then alter the communication while the campaign is ongoing. Post-purchase behaviours, or the fifth stage of the consumer journey, is focused on how consumers behave after purchasing and using the brands or products they have selected. For businesses to make wise judgements, they must understand what customers think of their products. On the other side, if consumers aren't happy, issues will arise. Customers that are happy will stay longer and refer more people to the business, which will boost sales (Kotler et al., 2017). Customers often share their satisfaction or dissatisfaction with a product, as well as their readiness to buy it, through word of mouth. Marketers must thus address any issues that develop and address any queries from leads (Kietzmann and Canhoto, 2013). AI can help companies reply to each lead inquiry. Marketers may interact with customers after a sale thanks to "chatbots" that are AI-enabled. The business Autodesk developed the programme. All customer inquiries must be responded to by a virtual agent in five minutes or less, 24/7. Machine learning principles underlie chatbot technology. It may adapt services based on client behaviour thanks to deep learning, giving marketers new methods to interact with consumers (Daugherty & Wilson, 2018). Chatbots can serve a million clients at once since they can deliver a tonne of information in a matter of seconds. We have so arrived to the post-purchase behaviour stage. AI can identify any signs of dissatisfaction and respond properly to reassure its customers. In conclusion, AI greatly improves every phase of the consumer experience. At the requirement identification stage, AI may help marketers create customer profiles more quickly, accurately, and often. Then, by identifying the best leads for better targeting, the best product recommendations for consumers, and the best content style to suit their preferences, AI may help marketers in the information search stage. AI may provide information to consumers while they are still considering that will persuade them to make a purchase. Through streamlining the process and dynamically alerting pricing at different phases of the transaction, AI may provide customers smarter buy options. Finally, AI can delight consumers and analyse their value throughout the post-purchase process. Throughout the buying process, AI assists in the prediction and change of customer behaviour.

Conclusion

The way advertising understands and targets consumers has evolved as a result of AI. New user-generated data mining technologies will be used to drive future consumer insights, with AI acting as the privacy standard. Advertisers will be able to gather consumer data from many sources, combine it, and use machine learning to mine it for up-to-date consumer insights. Using these information, advertising may then actively connect with consumers. Google CEO Sundar Pichai provided a glimpse into the not-too-distant future of artificial intelligence in May 2018 when he unveiled the digital assistant Google Duplex. Duplex, a chatbot that utilises natural language generation (NLG) to book dining reservations, hair appointments, and shop holiday hours, sounded eerily human, prompting immediate worries about the development of AI and the requirement that chatbots clearly identify themselves as such (Cipriani, 2018). With all of its advantages and disadvantages, AI may someday become so ingrained in traditional advertising that it will be hard to tell it apart given these increasing capabilities. If retail businesses are to compete in shifting markets, they must go through a digital transformation. One of these technologies that helps marketers better understand and target consumers is artificial intelligence (AI). How customers interact with businesses and how marketing is done are both significantly impacted by AI. Marketers need to prepare for the changes that the age of artificial intelligence will bring as a result. They need a solid understanding of how artificial intelligence (AI) may be used in marketing campaigns to predict and influence consumer behaviour. In order to determine how much customers heed the advice of AI systems deployed in retailers' storefronts, this study aims to provide light on the impact of artificial intelligence on consumer purchasing behaviour in the online retailing sector. The research therefore provides an overview of the concept of artificial intelligence, as

well as its many levels and applications. There are explanations for Deep Learning, Machine Learning, and the application of AI in marketing. A thorough discussion of each step of the customer journey is provided, covering the need identification, information search, evaluation, and purchase decision-making processes, as well as how AI affects consumer purchasing behaviour.

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