

ARTIFICIAL INTELLIGENCE IN MARKETING – AN OVERVIEW

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ABSTRACT

Artificial Intelligence in Marketing is a quickly up-and-coming plain that is transforming the way businesses move toward their marketing plan. It involves the use of Artificial Intelligence (AI), Machine Learning (ML), and other highly developed technologies to automate and optimize various marketing processes. With the sudden increase of data and the increasing complication of customer behavior, businesses need to influence these tools to stay competitive. This article investigates the concept of Artificial Intelligence in Marketing, its role in modern marketing, its benefits and challenges, best practices for implementation, and moral considerations. It will also look into the future of Artificial Intelligence in Marketing and its potential impact on the marketing landscape.

INTRODUCTION

Artificial Intelligence (AI) will become an essential part of every profit-making body across the globe in the long term. The new trends in AI-driven automation reflect extensive changes in the AI landscape. It is obvious in the form of reconfigured ideas, interests, and investments in the field of AI adoption by the Endeavour. This technology is complicated adequate to recognize faces and objects, which has massive allusion for various business applications. For security purposes, facial identification can differentiate individuals; On the other hand, object recognition can be used to distinguish and analyze images. AI treats human images like cookies, allowing for more personalized services based on customers' preference. Some businesses are experimenting with facial recognition to diagnose their customers' moods and, as a result, make appropriate product recommendations. AI is primarily Concerned with user retention and lead conversion in digital marketing. It can guide a user in the direction that make parallel with the business's goals by using perceptive AI catboats, intelligent email marketing, interactive web design, and other digital marketing services. Several factors determine the impact of AI on digital marketing. ML, a subset of AI, is concerned with computer programmes that access data and use it to learn independently. It compiles data from various places, including social media accounts, menus, online reviews, and websites. AI then uses the information to produce and deliver content relevant to the audience. AI software enables in-depth online analysis of restaurants and their customers.

DEFINITION OF AI:

Artificial intelligence (AI) refers to computer systems capable of performing complex tasks that historically only a human could do, such as reasoning, making decisions, or solving Problems.

AI MARKETING

AI marketing is the process of using AI capabilities like data collection, data-driven analysis, natural language processing (NLP) and machine learning (ML) to deliver customer insights and automate critical marketing decisions. Today, AI technologies are being used more widely than ever to generate content, improve customer experiences and deliver more accurate results. Before choosing an AI tool, organizations should fully explore the different types of AI marketing applications available and look at how they're being used by other businesses.

AI in Marketing



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USES OF AI IN MARKETING

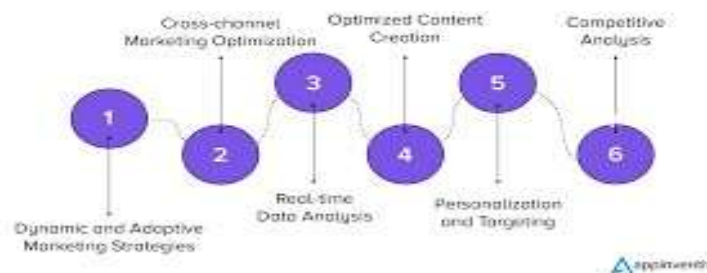
Examples of AI in marketing abound as more and more organizations look to it to help them improve everything from their social media posts to their email marketing and content marketing efforts. Here are some examples of ways enterprises are increasing their use of AI to help them achieve marketing goals.

- **Content generation:** The recent launch of OpenAI's generative AI platform ChatGPT in November of 2022 has prompted a flood of new use cases for AI. AI used for content generation can save marketing teams time and money by creating blogs, marketing messages, copywriting materials, emails, subject lines, subtitles for videos, website copy and many other kinds of content aimed at a target audience.
- **Audience segmentation:** AI helps businesses intelligently and efficiently divide up their customers by various traits, interests and behaviors, leading to enhanced targeting and more effective marketing campaigns that result in stronger customer engagement and improved ROI.
- **Customer service chatbots:** Increasingly, marketers are exploring the possibilities of enabling AI chatbots to enhance certain aspects of customer service. Once trained, these bots can interact with customers no matter where they are on their customer journey, help resolve tickets quickly and effectively and increase customer satisfaction.
- **Programmatic advertising:** Programmatic advertising is the automation of the purchasing and placement of ads on websites and applications. AI has significantly enhanced organizations' abilities to conduct programmatic advertising using customer history, preferences and context to deliver more relevant ads with higher conversion rates.
- **Search engine optimization (SEO):** Deploying an AI solution to enhance search engine optimization (SEO) helps marketers increase page rankings and develop more sound strategies. AI can help marketers create and optimize content to meet the new standards.
- **E-commerce:** AI is helping businesses improve their e-commerce programs and digital marketing capabilities by giving them a more nuanced understanding of their customer's needs and buying habits, automating tasks and simplifying workflows.

The benefits and challenges of using AI in marketing

As with other new technologies, there are both benefits and challenges to using AI for marketing purposes. From maintaining the quality of the large data sets needed to train AI to complying with the field's ever-expanding privacy laws, organizations that haven't used AI before are understandably cautious. But enterprises who have made the investment and identified an AI marketing solution tailored to their needs are enjoying many advantages.

AI in Marketing: Transformative Advantages Unveiled



BENEFITS OF AI IN MARKETING

- **Faster, smarter decision-making:** Marketing teams equipped with cutting-edge AI tools can see the impact of their marketing efforts in near real-time and adjust their tactics accordingly. AI marketing platforms can create AI marketing strategies and analyze data faster than humans using ML algorithms and recommend actions informed by sentiment analysis from historical customer data.
- **Improved return on investment (ROI) on marketing initiatives:** AI marketing tools can help marketers identify actionable insights from data generated by a campaign in near real-time. Additionally, the same tools can help identify the right channels for a media buy and even the optimal placement of an ad based on customer behavior. Modern AI marketing solutions help stakeholders ensure that they are getting the most out of their investment in a campaign.
- **More accurate measurement of KPIs:** Digital campaigns generate more data than humans can keep up with, which can make measuring the success of marketing initiatives difficult. AI-enhanced dashboards help marketers link the success of their efforts to specific tactics they've deployed, helping them better understand what's working and what could be improved.
- **Enhanced customer relationship management (CRM) capabilities:** AI technologies help marketing teams improve their customer relationship management (CRM) programs by automating routine tasks like the preparation of customer data. They can also reduce the likelihood of human error, deliver more personalized customer messages and identify at-risk customers.
- **More meaningful insights from customer data:** Today, many marketers struggle with the sheer amount of data available to them when they're planning a campaign. AI can help by performing predictive analytics on customer data, analyzing huge amounts in seconds using fast, efficient machine learning (ML) algorithms. It uses the data to generate insights about future customer behavior, suggest more personalized content and spot patterns in large data sets for marketers to act on.



CHALLENGES OF AI IN MARKETING

- **Training AI solutions:** Just like humans, AI requires significant training to learn a new task. For example, if you want an AI solution that will talk to your customers in an engaging way, you'll need to invest the time and resources necessary to teach it. To build an application like this, you will need

a large amount of data about customers' preferences and, potentially, data scientists who specialize in this kind of training.

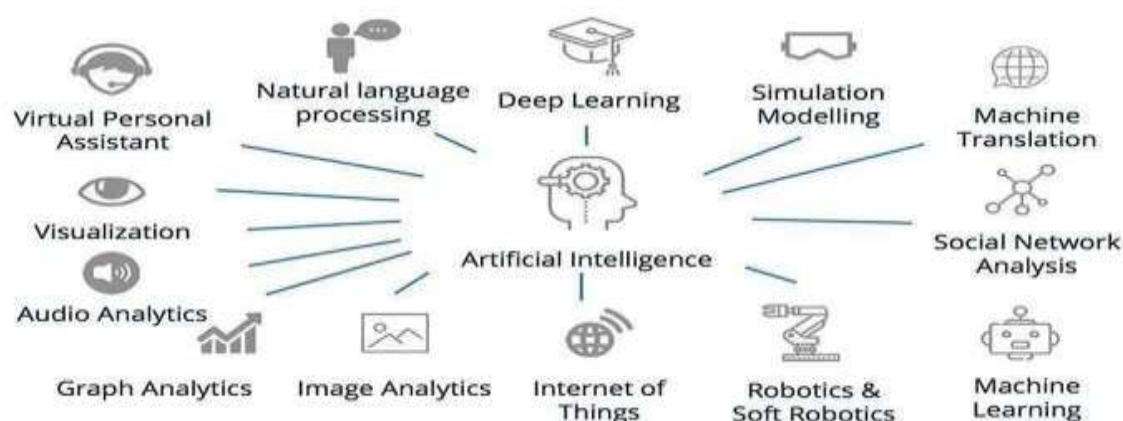
- **Ensuring the quality and accuracy of data:** AI solutions are only as strong as the quality of the data they are trained on. This is true no matter how technically advanced a tool is—if the data it's been trained on isn't accurate and representative, the answers and decisions it generates will be low quality and ineffective.
- **Complying with privacy laws:** Because AI is trained on personal customer information, the laws surrounding what can be used must be strictly followed. Companies who deploy AI for marketing purposes need to be able to adhere to consumer data regulations or they risk incurring heavy fines and reputational damage. According to HFS Research (link resides outside ibm.com), reputational damage from errant AI deployments appearing in the media has increased the pressure in both Europe and North America for greater regulation.

APPLICATIONS OF AI IN MARKETING

1. AI generated content

This is a really interesting area for AI. AI can't write a political opinion column or a blog post on industry-specific best practice advice, but there are certain areas where AI generated content can be useful and help draw visitors to your site. For certain functions AI content writing programs are able to pick elements from a dataset and structure a 'human sounding' article. An AI writing program called 'Wordsmith' produced 1.5 billion pieces of content in 2016, and is expected to grow further in popularity in the coming years. AI writers are useful for reporting on regular, data-focused events. Examples include quarterly earnings reports, sports matches, and market data. If you operate in a relevant niche such as financial services, then AI generated content could form a useful component of your content marketing strategy. The good news is that automated insights, the firm behind Wordsmith, has announced a free beta version of its AI writing application, so you can try out the technology and see if it could be useful to your brand.

Possible applications for Artificial Intelligence



2. Smart Content Curation

AI powered content curation allows you to better engage visitors on your site by showing them content relevant to them. This technique is most commonly found in the 'customers who bought X also bought Y' section on many sites, but can also be applied to blog content and personalizing site messaging more widely. It's also a great technique for subscription businesses, where the more someone uses the service, more data the machine learning algorithm has to use and the better the recommendations of content become. Think of Netflix's recommendation system being able to consistently recommend you shows you'd be interested in.

3. Voice search

Voice search is another AI technology, but when it comes to using it for marketing, it's about utilizing the technology developed by the major players (Google, Amazon, Apple) rather than developing your own capability. Voice search will change future SEO strategies, and brands need to keep up. A brand

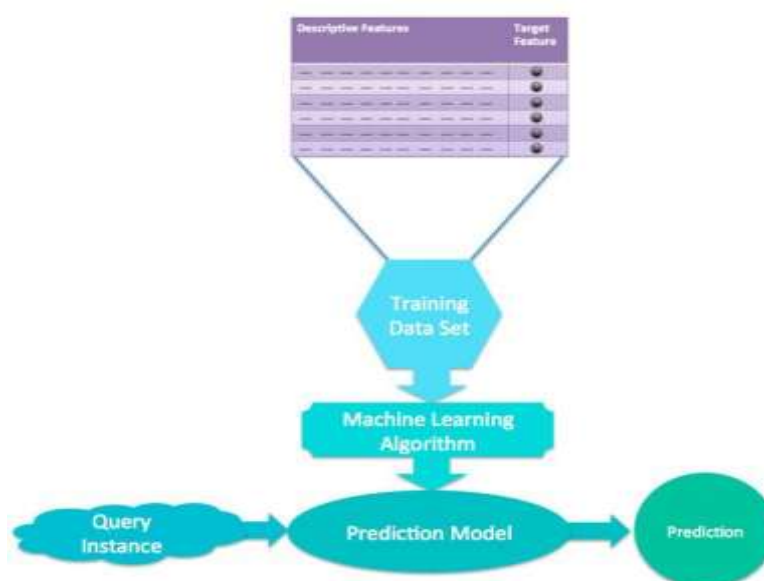
that nails voice search can leverage big gains in organic traffic with high purchase intent thanks to increased voice search traffic due to AI driven virtual personal assistants.

4. Programmatic Media Buying

Programmatic Media buying can use propensity models generated by machine learning algorithms to more effectively target ads at the most relevant customers. Programmatic ads need to get smarter in the wake of Google's recent brand safety scandal. It was revealed ads placed programmatically through Google's ad network were appearing on terrorist's websites. AI can help here by recognizing questionable sites and removing them from the list of sites ad's can be placed on.

5. Propensity modeling

As already mentioned, propensity modeling is the goal of a machine learning project. The machine learning algorithm is fed large amounts of historical data, and it uses this data to create a propensity model which (in theory) is able to make accurate predictions about the real world. The simple diagram below shows the stages of this process.



6. Predictive analytics

Propensity modeling can be applied to a number of different areas, such as predicting the likely hood of a given customer to convert, predicting what price a customer is likely to convert at, or what customers are most likely to make repeat purchases. This application is called predictive analytics, because it uses analytics data to make predictions about how customers behave. The key thing to remember is that a propensity model is only as good as the data provided to create it, so if there are errors in your data or a high level of randomness, it will be unable to make accurate predictions.

7. Lead scoring

Propensity models generated by machine learning can be trained to score leads based on certain criteria so that your sales team can establish how 'hot' a given lead is, and if they are worth devoting time to. This can be particularly important in B2B businesses with consultative sales processes, where each sale takes a considerable amount of time on the part of the sales team. By contacting the most relevant leads, the sales team can save time and concentrate their energy where it is most effective. The insights into a leads propensity to buy can also be used to target sales and discounts where they are most effective.



8. Ad targeting

Machine learning algorithms can run through vast amounts of historical data to establish which ads perform best on which people and at what stage in the buying process. Using this data they can serve them with the most effective content at the right time. By using machine learning to constantly optimize thousands of variables you can achieve more effective ad placement and content than traditional methods. However, you'll still need humans to do the creative parts!

9. Dynamic pricing

All marketers know that sales are effective at shifting more product. Discounts are extremely powerful, but they can also hurt your bottom line. If you make twice as many sales with a two-thirds smaller margin, you've made less profit than you would have if you didn't have a sale.

Sales are so effective because they get people to buy your product that previously wouldn't have considered themselves able to justify the cost of the purchase. But they also mean people that would have paid the higher price pay less than they would have.

Dynamic pricing can avoid this problem, by targeting only special offers only at those likely to need them in order to convert. Machine learning can build a propensity model of which traits show a customer is likely to need an offer to convert, and which are likely to convert without the need for an offer. This means you can increase sales whilst not reducing your profit margins by much, thus maximizing profits.

10. Web & App Personalisation

Using a propensity model to predict a customer's stage in the buyer's journey can let you serve that customer, either on an app or on a web page, with the most relevant content. If someone is still new to a site, content that informs them and keeps them interested will be most effective, whilst if they have visited many times and are clearly interested in the product then more in-depth content about a product's benefits will perform better.

11. Chatbots

Chatbots mimic human intelligence by being able to interpret consumer's queries and complete orders for them. You might think chatbots are extremely difficult to develop and only huge brands with massive budgets will be able to develop them. But actually, using open chatbot development platforms, it's relatively easy to create your own chatbot without a big team of developers.

Facebook is interested in facilitating the development of chatbots for brands. It wants to make its Messenger app the go-to place for people to have conversations with brand's virtual ambassadors. The good news for brands is that this means they can use some of Facebook's powerful bot development tools. Using the lessons they've learned from the beta tests of 'M' (Facebook Messenger's own chatbot), Facebook has created the wit.ai bot engine which allows you to train bots with sample conversations and have your bots continually learn from interacting with customers. If you are

interested in building a chatbot for your brand within the Messenger platform Facebook has created useful instructions for how to do so, which you can find on their Facebook for developers site.

12. Re-targeting

Much like with ad targeting, machine learning can be used to establish what content is most likely to bring customers back to the site based on historical data. My building an accurate prediction model of what content works best to win back different types of customers, machine learning can be used to optimize your retargeting ads to make them as effective as possible.

13. Predictive customer service

It's far easier to make repeat sales to your existing customer base than it is to attract new customers. So keeping your existing customers happy is key to your bottom line. This is particularly true in subscription-based business, where a high churn rate can be extremely costly. Predictive analytics can be used to work out which customers are most likely to unsubscribe from a service, by assessing what features are most common in customers who do unsubscribe. It's then possible to reach out to these customers with offers, prompts or assistance to prevent them from churning.

14. Marketing automation

Marketing automation techniques generally involve a series of rules, which when triggered initiate interactions with the customer. But who decided these rules? Generally, a marketer who's basically guessing what will be most effective. Machine learning can run through billions of points of customer data and establish when are the most effective times to make contact, what words in subject lines are most effective and much more. These insights can then be applied to boost the effectiveness of your marketing automation efforts.

15. 1:1 dynamic emails

In a similar fashion to marketing automation, applying insights generated from machine learning can create extremely effective 1:1 dynamic emails. Predictive analytics using a propensity model can establish a subscribers propensity to buy certain categories, sizes and colors through their previous behavior and displays the most relevant products in newsletters. The product stock, deals, pricing is all correct at the time of opening the email.

CHALLENGES AND RISKS

Implementing even the simplest AI applications can present difficulties. Stand-alone task-automation AI, despite its lower technical sophistication, can still be hard to configure for specific workflows and requires companies to acquire suitable AI skills. Bringing any kind of AI into a workflow demands careful integration of human and machine tasks so that the AI augments people's skills and isn't deployed in ways that create problems. For instance, while many organizations use rule-based chatbots to automate customer service, less-capable bots can irritate customers. It may be better to have such bots assist human agents or advisers rather than interact with customers.

As companies adopt more-sophisticated and integrated applications, other considerations arise. Incorporating AI into third-party platforms, in particular, can be tricky. A case in point is offered by Procter & Gamble's Olay Skin Advisor, which uses deep learning to analyze selfies that customers have taken, assess their age and skin type, and recommend appropriate products. It is integrated into an e-commerce and loyalty platform, Olay.com, and has improved conversion rates, bounce rates, and average basket sizes in some geographies. However, it has been harder to integrate it with retail stores and Amazon, third parties that account for a high percentage of Olay's sales. The Skin Advisor is not available on Olay's extensive store site on Amazon, hampering the brand's ability to deliver a seamless, AI-assisted customer experience there.

Finally, companies must keep customers' interests top of mind. The smarter and more integrated AI applications are, the more worries customers may have about privacy, security, and data ownership. Customers may be skittish about apps that capture and share location data without their knowledge or about smart speakers that may be eavesdropping on them. In general, consumers have shown a willingness (even eagerness) to swap some personal data and privacy in exchange for the value that innovative apps can provide. Concerns about AI applications like Alexa seem to be dwarfed by appreciation of their benefits. Thus the key for marketers as they expand the intelligence and reach

of their AI is to ensure that its privacy and security controls are transparent, that customers have some say over how their data is collected and used, and that they get fair value from the firm in exchange. To guarantee those protections and maintain customers' trust, CMOs should establish ethics and privacy review boards—with both marketing and legal experts—to vet AI projects, particularly those that involve customer data or algorithms that may be prone to bias, such as credit scoring.

CONCLUSION

AI is an important tool in marketing. Artificial intelligence has been divided into two sections, mainly symbolic and instinctual. AI has been linked with the help of reducing human errors hence increasing efficiency. AI has been used in marketing as a recommendation tool; many applications have been developed which recommend products to customers in regard to their shopping behavior. AI has also played an important role in personalization, such that it helps the marketers to know the people in terms of classifying them with the type of products that they could be interested in. Sending many marketing messages to different people without knowing their interests could be wasteful if all the people who receive a certain message do not have the interest. AI has, however, provided a solution for this as it has come along with tools that help to know who is likely to be interested in what. Furthermore, AI has also helped in making a more advanced communication channel among marketers and consumers.

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