

Transforming Digital Marketing with Artificial Intelligence

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Abstract: - The last decade has shown rapid development in the information technology and its application. This has helped changed the way we look at the world as well as the way business is conducted. Both business and trade have gained under the wave of information technology with improvement in efficiency, productivity and bottom line. Productivity improvement has facilitated speedy and accurate production in large volumes. Today's emergent "third-platform" technologies, such as data analytics, mobile devices, automation, and artificial intelligence (AI), are changing the way society and individuals interact on a fundamental level. One has to look no further than the use of marketing to find a microcosm of how new software solutions, machine learning, and big-data analytics are changing the game.

The present discusses the changing scenario of marketing specially digital marketing. The paper goes on discussing the possible sectors in digital marketing where artificial intelligence has made its presence felt.

Keywords: - Machine Language, Real – Time Data, Marketing

I. INTRODUCTION

Artificial Intelligence is an increasingly popular term that lacks a unified, concrete definition. It is that activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment. Technically speaking, Artificial intelligence is an integration process in between cloud computing, network devices, robots, computer, and digital content production and in various business processes, systems, and daily life operations. Artificial intelligence computing was in past, today and will be in future. Embracing the increase and development of Artificial Intelligence is crucial to future marketing efforts. Every day, companies are using artificial intelligence software to optimize their own processes, reduce overhead, decrease turnaround time, and improve output. Technology is evolving at an unprecedented rate, and teams already making the move to marketing AI software are at a distinct advantage to jump on the next innovation.

II. ROLE OF ARTIFICIAL INTELLIGENCE IN BUSINESS

Artificial Intelligence (AI) is rapidly becoming more central to the day-to-day digital world, and the marketing and advertising world is no exception. From sarcastic and brilliant Siri to

Tesla's self-driving cars to Google AI that can learn video games in mere hours, Artificial Intelligence is revolutionizing industries one by one.

The applications of Artificial Intelligence range from detecting trends in data to mitigate market risks, enhancing customer service through virtual personal assistants, or even analysing millions of documents across a company's servers to find compliance failures. But it is only recently that companies have been able to anticipate and envision the possibilities that Artificial Intelligence and robotics can bring to the future of the business world.

Artificial Intelligence leverages self-learning systems by using tools like data mining, pattern recognition and natural language processing. So, in terms of its key business advantages over human intelligence, Artificial Intelligence is highly scalable, resulting in phenomenal cost savings. Besides, Artificial Intelligence's consistency and rule-based programs allow enterprises to minimize their errors. Its longevity, coupled with continuous improvements and its ability to document processes, translates into rewarding business opportunities.

III. HOW AI WORKS IN RECENT BUSINESS TRANSACTIONS?

When someone use internet through browser and apps in that time his data is collected and manipulated with computer programs (application or apps) to create and send recommendations based on his interest and behaviors that are programmed in an application. This is the way machine learns. Another example when in someone's mobile, the data pack is finished it automatically starts sending you the notification and various offers to recharge again. In business, it's customer retention process.

Companies have to focus on their values, brand position in market, goals and customer experience while trying to implement Artificial Intelligence in their business process and system. Artificial Intelligence applications and programs create different process and system of works with high speed and accuracy. They need proper inputs (programs, code, class, function, and loops) from its users before performing any action.

AI is also changing customer relationship management (CRM) systems. Many latest Softwares like Sales force or Zoho require a heavy amount of human intervention to remain up to date and accurate. But by applying AI to these sorts of platforms, a normal CRM system is transformed into a self-updating, auto-correcting system that stays on top of your relationship management for you.

Thanks to social media outreach and tons of data left behind knowingly and unknowingly during internet surfing, Artificial Intelligence holds a huge potential in the field of digital marketing. Using Artificial Intelligence in providing better customer experience, predictive analytics and targeted marketing will surely provide a great Returns On Investment to businesses.

IV. CHANGING SCENARIO OF MARKETING

Change is the dominant fact of life in every business today. And the ability to master and exploit change has become one of the most sought-after management skills. Current global and competitive business environment constantly asks for innovation, existing knowledge base is getting obsolete, continuously thriving for advancement in process improvement. The learning curve is always put to test, and every company is striving to remain ahead of the curve. Due to this shift in the way business is getting conducted has thrown out new reality of ever shortening product and service life cycle. More and more companies are coming out with customized products and finding ways to differentiate from competition.

In marketing, the very tempo of change is constantly quickening. The major change in marketing environment is the emergence of electronic data-processing equipment as a major tool of scientific marketing not only for reporting data but also, more importantly, for planning and control by management. Most companies are taking advantage of electronic data-processing analyses, online communications, and information-retrieval systems as tools to help make marketing more efficient. This has led to the emergence of real – time marketing.

Real-time marketing involves creating a marketing strategy focused on up-to-date events. Marketers are making use of current trends and customer feedback, while working to connect consumers with products and services they could use. Real-time marketing is growing in popularity with the rise of social media because it provides businesses with access to real-time information on target audiences; marketers were able to tap into that information and transform it into messages and products that they thought the customer might like. Real-time marketing now makes use of all kinds of customer data to help companies understand exactly how customers behave. Done correctly, real time personalization ensures that you are always serving relevant and timely content to your website visitors, and it can make your website

visitors feel like your entire website experience has been crafted specifically for them. That level of personalized attention makes any prospect feel valued, and valued consumers are far more likely to develop brand loyalty than those who feel like they're simply one more lead.

Today, there's real-time, always-available access to the data and tools that enable rapid analysis. This has propelled Artificial Intelligence and machine learning and allowed the transition to a data-first approach. In the past, AI's growth was stunted due to limited data sets, representative samples of data rather than real-time, real-life data and the inability to analyze massive amounts of data in seconds.

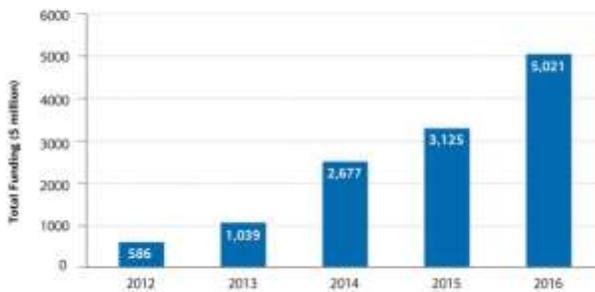
V. THE RELATIONSHIP BETWEEN ARTIFICIAL INTELLIGENCE AND DIGITAL MARKETING

Artificial intelligence is a hot topic in marketing. It is considered as the next frontier of marketing. Artificial Intelligence is a broad term which has covered a wide range of different technologies. The concept of Artificial Intelligence refers to technology that is seeking to mimic human intelligence. Artificial Intelligence includes a broad variety of capabilities such as voice, image recognition, machine learning and semantic searching. Marketers like to wax lyrical about new exciting updated technologies. They bang on Artificial Intelligence for image recognition and speech recognition. It also prevents data leaks in marketing and helps in targeting drones at remote communities. Traditional marketing or outbound marketing campaigns are far less efficient in winning and retaining a customer than once they were. Artificial Intelligence is important to gain sustainable competitive advantage in this always connected, real time world where marketers are required to deliver continuous, customized, insight driven interactions with customers on an individual basis. Brands that have understood the significance of Artificial Intelligence and putting the right system in place to scale are successful in creating a competitive advantage which is very difficult to replicate. Because artificial intelligence is not about technology, it is about delivering the perfect combination of content with context.

Today, there are numerous applications of artificial intelligence in the consumer and business spaces, from Apple's Siri to Google's DeepMind. Siri, for example, uses natural language processing (NLP) to interpret voice commands and respond accordingly. Google's DeepMind, on the other hand, uses deep learning. It is capable of making connections and reaching meanings without relying on predefined behavioural algorithms, instead learning from experience and using raw data as its inputs. In fact, by applying findings from DeepMind, Google was able to improve the efficiency of its own power centres, reducing the energy used for cooling by 40%. The graph below depicts clear picture of the way artificial intelligence has made slow but steady progress in global markets.

EXHIBIT 1: AI CAPITAL CONTINUES TO CLIMB

Total funding for artificial intelligence startups from venture capitalists.



Source: CB Insights, 2016.

Artificial Intelligence has evolved into that “can’t do without” technology in the modern business landscape. Small to large enterprises are leveraging this technology to improve the efficiency of business processes and deliver smarter, more specialized customer experiences.

During previous years, marketers were hesitant to incorporate artificial intelligence into their strategies. But last year has witnessed considerable confidence amongst marketers with regards to its application. It is because of the reduced ambiguity regarding results as more and more sectors have already reaped significant benefits.

There are copious amounts of data available everywhere, which is, in fact, making the processes more cumbersome, if done manually. This makes human behavior to abandon data and go by intuition. This is the kind of scenario where Artificial Intelligence emerges as a powered tool as intuition won’t lead one to astute results.

A digital marketer constantly goes through these questions – Who should I reach out to? What should I send? When should I schedule my posts? Over what channel will my posts have greater reach? Comprehensive answers to these questions are looked with an aim to create engagement amongst customers and further lead to growth, fostering sales and finally build a brand.

Artificial intelligence is bringing transformation to every aspect of our day to day professions. This will change the way marketers carry out their campaigns to the way the campaigns themselves are measured and run. Artificial intelligence will define how digital marketing will be conducted now and in the future. The following are the ways that has transformed artificial intelligence technology in changing the world of digital marketing.

1. Marketing Increasingly Focused on Consumer Behavior

Artificial intelligence is all about data-driven approaches to marketing and decision making and to this extent is being used to integrate data from different platforms. Users leave

crumbs of personal data when they interact online. Whether they shop, post or browse, data is collected at every step. Now, Artificial intelligence applications are crunching these vast numbers and learning ‘online behavior’ and ‘digital identity’ of the users. Platforms collect and store all kinds of analytics these days as a part of analyzing customer patterns in order to develop automated systems and customer profiles to target certain markets. It looks like, in the near future, computers will be able to analyze behavior and customer profiles even more closely, thus being able to essentially perform their “own” outreach strategy, building copy that meets the voice of the customers who they are observing online.

2. Predictive Marketing

Social media plays a vital role in gathering more personal information about the potential customer, which in makes it easy for marketers to have a focused campaign. With each click whenever a user is browsing the internet, new data is being generated and compiled for the Artificial intelligence analysis. This data is valuable for the marketer to optimize the information and provide the most relevant information.

3. Lead Generation

Artificial intelligence actually sift through piles of data to find the ideal customers, clients and even colleagues based on information that it already has and the program that it’s using. Even more fascinating, it can also predict or rate how hot a given lead is. So, for B2B or even recruiting purposes, this can save a lot of time and energy on just basic searching, leaving the marketer more time for things like pitching and sales calls.

4. Chatbots

Chatbots are Artificial intelligence -driven programs that interact with users in a natural-language environment. These programs are rapidly becoming a major area of interest for marketers, as an increasing amount of social media traffic takes place on private messaging services like WhatsApp and Facebook Messenger. That’s an engagement opportunity that’s hard to ignore. Most digital marketers see chatbots as a way to provide personalized customer service at scale – which is tangentially related to marketing, but not directly a marketing function. However, chatbots also help guide users through a customer journey to a sale.

5. Automated Content Creation

Many brands are using Artificial Intelligence to automate content creation. Thanks to this technology, content creation is quicker, and easier. For example, global beverage major Coca Cola uses Artificial Intelligence to automate its advertising narratives. Creation of logos and music scripts is done in tandem with the context automatically.

6. Refining Advertisements

Artificial Intelligence is also used to refine ads and their delivery. According to marketing experts, Google and Facebook control over 60 percent of all PPC campaigns in the United States. Artificial intelligence can help advertisers find new advertising channels for their PPC campaigns. These channels may not be used by competitors and thus Artificial intelligence offers a competitive advantage to advertisers.

7. Image recognition

One of the most exciting and possibly most important developments in Artificial intelligence is image recognition. If someone want machines to be able to 'think' like us and mimic our ability to respond to our environment, such as in the case of self-driving cars, it is of vital importance that they are also able to 'see' like us. Computers are now able to identify and recognize simple objects and scenarios. Although these abilities are negligible compared to human vision and perception, these building blocks of computer vision have enabled some important technological developments, and continue to do so. Image Recognition helps marketers to find visuals on social media, even if they are not accompanied by the relevant caption.

8. Email Marketing

Artificial intelligence is making email marketing even better, both for the marketer and their customer. Personalization at scale is every marketer's dream – and Artificial intelligence makes it possible. Artificial intelligence can use data to create personalized emails to every one of the company subscribers, based on their previous interactions with the brand. It can customize based on what content they've consumed, what's on their wish list, what pages they have spent the most time on, and more. For example, if one user always visits links to product pages in the company's email, but another skips those links and goes straight for content, the Artificial intelligence can send different messaging with the most relevant links for each user.

9. Augmented Reality

One another aspect of the Artificial intelligence which has the potential to provide better customer satisfaction is Augmented Reality (AR). AR can provide the customer with the option of seeing and feeling the production before the online purchase, one example of this technology of course on its initial stage is Lenskart's 3D trial, which allows customers to try the frame they are interested in buying through their webcams sitting at home. Incorporation of such technology can definitely stimulate better and faster response from the customer which ultimately will reflect in the revenues.

VI. CONCLUSION

Technological advancements have always helped businesses by creating new opportunities for reaching customers. One of greatest technologies of our time is Artificial Intelligence (AI)

which is creating quite the buzz in the digital space. Given its potential for storytelling and marketing, Artificial Intelligence in B2B sales and marketing is here to transform the way people interact with brands, information and services. The world of B2B marketing and its future is poised to be touched by Artificial Intelligence. A good handful of enterprise giants dread the idea of full automation of marketing movements through smart Artificial intelligence technology, however, measuring the effect of AI-powered robots in many customer service industries, one can affirm that understanding customer nuance will not be entirely manual or managed by human power alone. Artificial intelligence made its presence felt this year through its supplementary processes such as big data, Internet of Things and Machine Learning. But these are only components that will eventually contribute towards unleashing the full potential of AI. The coming years, especially 2018 would see visible changes and impact due to the application of AI.

Artificial intelligence is continually becoming an empowering tool for digital marketers and works on the tricks to get the information from an individual or the group of people to and make your brand a huge one. It is safe to say that Artificial intelligence is a secured investment, which is sure to get dividends.

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