INTELLIGENT (ARTIFICIAL) MARKETING: A DATA MINING PERSPECTIVE

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Abstract

Seamless and countless data switch over every second across the globe and even far away from globe for the betterment of human living style, Business ventures too are marching strongly towards infinity ruling digital domain. The traditional marketing in recent days getting superseded by online Marketing with a greater effect and impact.Along with it the boom towards e-commerce and innovative strategies of various companies the traditional business atmosphere is longer available here. The utilization or the implication of Artificial Intelligence (AI) & Data Mining has to given the credit for being the game changers in this domain.Intelligence seems no more to be inherited rather it is inculcated & embedded and a scope is always there for improvisation.

Keywords   :AI, online, marketing, data mining, e-commerce

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Introduction

According to Indi Brand Equity Foundation (IBEF)web infiltration in India rose from 4 percentin 2007 to 35.03 percent in 2017, enlisting a Compound Annual Growth Rate (CAGR) of 24.23 for each penny in the vicinity of 2007 and 2017.As of December 2017, web infiltration in India's urban zones remained at 64.84 percent and 20.26 percent in the rustic regions. The growth of this industry is tremendous and it continues to grow exponentially setting up a benchmark in web based business development in India.Online marketing is a set of tools and methodologies used for promoting goods and services through theinternet. Online marketing includes a wider range of marketing strategies and components than traditional business marketing due to the robust and dynamic mechanisms available on the internet.In other words Internet enabled marketing is the process of promoting a business or brand and its products or services over the internet using tools that helpsthe sales. An E-marketing strategy can also be called as a subset of an E-commerce;E-commerce is an online route for trading products or administration at sensible cost to the client straightforwardly with entryway step association. It is a medium to advance business online by means of social stage, email promoting, partner showcasing, content advertising and web-based social networking showcasing and subsequently we see that achieved business related items and services till the client.

Content Marketing Institutedefines marketing as:**"A strategic marketing approach focused on creating and distributing valuable, relevant, and consistent content to attract and retain a clearly defined audience — and, ultimately, to drive profitable customer action."**

Online Marketing & E-Commerce

Online marketing contributesbusiness domains in an enlarge manner by removing unfavorable contention s. It also ensures that there is Growth in potential, Reduction in expenditures,Elegant communications, Better controlled deals, Improved customer service and Competitive edge over the others.

Various E-commerce Strategies

There are various E-commerce strategies adapted and followed all over the world.Some of them are

1.   Pay-per-click advertising (PPC)

2.   Search engine marketing (SEM)

3.   Search engine optimization (SEO)

4.   Display advertising

5.   Affiliate marketing   and

6.   Email marketing

PPC and SEM are basically paid advertisement campaigns promoting the sales whereas SEO traffic generates unpaid, "organic" results across search engines like Google, Bing&Yahoo.Effective SEO joins adherence to best practices on an item level couple with content creation, inbound connections, online networking commitment and numerous different variables contemplated via search engine algorithms. Display advertising is more focused on visual advertisements that are presented over internet. Affiliate marketinguse item engaged referrals, for example, surveys, correlations and tributes, to direct people to an online retailer's site. Email marketing is done with the help of the web based tools like Google Analytics, Mail Chimp Hot jar etc.

Artificial Intelligence (AI)

Enterprise is by all means entering a transition period governed by information. What was previously labeled as sci-fi is now happening in real. AI in business knowledge is emerging into regular business as we probably are aware of it. Organizations are now depending and implementing machine learning algorithms to recognize patterns and bits of knowledge in huge reams of information and settle on speedier choices that conceivably position them to be focused continuously. The unrivaled nature of AI is basically derived from its speed, precision, and capacity of augmenting humankind. The business estimation of AI ventures increase meaning and can without much of a stretch the entertainment biz esteem through a range of results. AI can take charge of an Enterprise by predicting or forecasting results based on facts, emerging with an essential required business notification, suggestions for necessary actions to be taken, performing automation, preventing bad outcomes and creating awareness about the current scenario.

AI in Enterprises

At present scenario approximately 15% of enterprises are using AI and further 31% committed to implement AI which is on their main agenda for the next 12 months.Unsurprisingly, analysis of data is a key AI focus for businesses, with on-site personalization the second most commonly cited use case for AI.The Utilization of artificial intelligence / bots to drivecampaigns and experiences has gone up to 18% in the past three years.The top performingcompanies are more than twice as likely to beusing AI for marketing (28% vs. 12%)for gaining real time edge over their competitors(King, 2012**).**In a marketing trend analysis survey reportthe top three responses, which constituted to a total of 75% of all AI applications includingconsumer personalization (29%), AI (26%), and voice search (21.23%) demonstrating that AI is more pervasive and prominent than respondents realize (Betts, 2018). According to IDC FutureScapes 2017, by the year 2018, 75% of developer teams will include AI functionality in one or more applications or services.Sixty-one percent of those organizations who have excelled in innovation strategy claimed that they are using AI to explore opportunities .Only 22% without a strategy mentioned the same(Narrative Science, 2016).Introducing AI as a new factor of production, recently Accenture, in association with Frontier Economics, displayed the potential effect of AI for 12 created economies that together produce in excess of 50 percent of the world's monetary yield.The effect of AI advancements on business is anticipated to build work profitability by up to 40% and empower individuals to make more productive utilization of their opportunity(Purdy & Daugherty, 2016).

In a recent report released by Google Inc reported that 20% of its mobile queries were voice searches. According to Transparency Market Research that the need for predictive analysis software for Enterprises will be a major early development classification for machine learning applications.It's relied upon to reach $6.5 billion worldwide in 2019, up from $2 billion of every 2012. There is a great deal of potential understanding for advertisers to work with.By the end of the year 2020, predictive analytics of AI will yield 40% of the newinvestment made by enterprises. In a survey the study respondents who have deployed big data technologies about 95 percent who demonstrated that they are trained at utilizing big data to tackle business issues or produce bits of knowledge likewise utilize AI(Narrative Science, 2016).

Data Mining

Data Mining implies that programming utilizes some insight over straightforward gathering and apportioning of information to derive new data. There are two major components of Data Mining, they are

1.   Knowledge Discovery &

2.   Knowledge Prediction

Solid data gathered from the known information. Information you might not have known, but rather which is upheld by recorded certainties is referred to as Knowledge discovery and using known data to forecast future trends and events such as Stock market predictions is referred to as Knowledge Prediction. In terms of software and the marketing there of Data Mining is not similar or equal to Data Analysis. Regardless of whether Knowledge Discovery or Knowledge Prediction, data mining considers data that was once very hard to distinguish and exhibits it in an effortlessly justifiable organization (ie: graphical or statistical). Data mining Techniques involve sophisticated algorithms, including Decision Tree Classifications, Association detection, and Clustering.Various data mining applications in the field of online marketing and e-commerce are developed in combination of AI/Machine Learning .some of them are mentioned below,

1.   Business Strategies

2.   Market Basket Analysis

3.   Identify customer demographics, preferences, and purchasing patterns.

4.   Risk Analysis

5.   Product Defect Analysis

6.   Analyze product defect rates for given plans and

7.   Predict possible complications down the line.

Data mining is nothing but information processing technology. Its fundamental component is that concentrate the key information which is helping the business choices through extracting, conversing, analyzing, modeling and processing a large number of business data in commercial databases (Hongjiu, 2013).

Conclusion

The technological advancement has led to the exponential growth of the online marketing and e-commerce industry. The rising of AI has defined new heights for Enterprises in their competitive ventures. Our data is already being mined, whether you like it or not.Many web services require that you allow access to your information [for data mining] in order to use the service. Huge potential gain minus privacy concerns conceals the entire story about data mining. The best organizations are joining a culture of open ideation with human ability and keen frameworks. While cultivating a situation where thoughts can be investigated uninhibitedly among groups is great, encouraging a domain where individuals and insightful

frameworks can investigate thoughts together is perfect. With man-machine associations, organizations will accomplish comes about that range past the aptitudes of either bunch alone.

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