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BIG DATA IN MARKETING ACTIVITY OF THE ENTERPRISE

The article is devoted to the role big data plays in marketing activities of enterprises.The author lists some examples of how enterprises make use of their own big data and then help themselves to improve their marketing activity.

Keywords: *big data,marketing,big data marketing,enterprise*

Digital marketing offers wide opportunities for a business to grow and reach out to a larger audience with comparatively less effort and expense. This is possible only when digital marketing use full potential – IT-marketing technologies and tools, including Big Data and Artificial Intelligence.

Big data refers to large, complex data sets that are too massive and heterogeneous to be processed by traditional data processing systems. Big data typically includes a variety of data types, including structured, semi-structured, and unstructured data, that are generated at high velocity, volume, and variety.

Big data is often analyzed using advanced data analytics techniques, such as machine learning, natural language processing, and data mining, to extract insights and value from the data. The insights generated from big data can be used to improve decision-making, optimize business processes, and gain a competitive advantage in various industries such as healthcare, finance, retail, and marketing.

How do we define 'marketing activity'? Marketing activity refers to any action or campaign undertaken by a business or organization to promote its products, services, or brand to its target audience.

Marketing activities can take many forms and can be executed across various channels, including traditional media (e.g., TV, radio, print), digital media (e.g. email, social media, and search engines), events and sponsorships, direct mail, public relations, and sales promotions.

Some examples of marketing activities may include [2–4].

Product development: this involves designing, creating, and refining a product to meet the needs and wants of customers.

Pricing strategies: this involves determining the optimal price for a product or service, taking into account factors such as production costs, market demand, and competition.

Advertising: this involves creating and disseminating a message about a product or service to a target audience, using various media such as print, radio, television, and online.

Sales promotion: this involves offering incentives or special deals to customers to encourage them to buy a product or service, such as discounts, coupons, and contests.

Personal selling: this involves one-on-one interactions between sales representatives and potential customers, in which the sales representative can provide personalized information about a product or service.

Public relations: this involves managing the image and reputation of a company or product through various channels, such as media relations, community outreach, and events.

Direct marketing: this involves reaching out to customers directly through mail, email, or other means, in order to promote a product or service and encourage sales.

Digital marketing: this involves using digital channels such as social media, search engines, and websites to promote a product or service and engage with customers.

Marketing activities are essential for businesses to reach and engage with their target audience, increase brand awareness, and drive sales. A well-designed and executed marketing strategy can help businesses achieve their marketing goals and stay competitive in their industry.

The role big data plays in marketing activity of the enterprise. Big data plays a crucial role in the marketing activities of an enterprise. It provides businesses with valuable insights into customer behavior, preferences, and trends, which can help make more informed marketing decisions and improve overall marketing effectiveness.

Here are some ways in which big data can impact marketing activity [4–6]:

Customer segmentation: Big data can be used to segment customers based on their demographics, behaviors, preferences, and other factors. This allows businesses to tailor their marketing messages and campaigns to specific customer groups and improve their targeting and relevance.

Personalization: Big data can help businesses personalize their marketing messages and offers based on individual customer data. Personalized marketing can increase customer engagement, loyalty, and conversion rates.

Content optimization: Big data can help businesses optimize their content to make it more engaging and relevant to their target audience. By analyzing data on customer behavior, preferences, and interactions with content, businesses can identify which content types, formats, and topics resonate with their audience.

Campaign optimization: Big data can help businesses optimize their marketing campaigns by tracking and analyzing campaign performance data in real-time. This allows them to make adjustments to their campaigns and allocate resources more effectively to maximize their ROI.

Predictive analytics: Big data can be used to predict customer behavior, trends, and preferences, which can help businesses, anticipate market changes and adjust their marketing strategies accordingly.

The essence of big data marketing is to influence the psychological path of target consumers before shopping, which is mainly applied to three aspects: big data channel optimization, precision marketing information push, and connection between online and offline marketing. Before consumers shop, we directly intervene in their information gathering and decision-making process through various means, and this intervention is based on the analysis of large amounts of user data online and offline. Compared to traditional blast or wait-and-see marketing, big data marketing has significant advantages in both initiative and precision. It is currently the main application field of big data.

Big data marketing not only finds target customers through big data and sends them promotional information, but it can also achieve:

Channel optimization. Big data optimization for marketing channel uses a user's internet footprint to identify which source has the most customers and which customers actually bought products to evaluate whether a customer is a target. Then it adjusts the marketing resource investment in each channel. For example, Dongfeng Nissan uses customer source tracking to improve the resource investment in each network channel such as portals, search engines, and microblogging.

Precision marketing information push. This is based on the analysis of the behavior of large numbers of consumers. Consumer web browsing, search behavior is left online, offline purchases and viewing behavior can be recorded by store POS machines and video surveillance, as well as their identity information during the purchase and registration process. This creates an ocean of consumer information in front of businesses. Some companies collect large amounts of consumer information and use big data modeling technology to target consumer attributes (such as geographical location, gender) and interests, purchasing behavior and other dimensions, then segment consumers. After that, these businesses will send marketing information to individual consumers. For example, Maternity brand October Mommy uses big data analysis on its Weibo fan comments to find fans with "like" related keywords, then tags them and sends marketing information. JD.com Deputy General Manager Li Xi said: "Using big data to find different customer needs groups and then implementing corresponding marketing is what JD is currently doing." Xiao Yeshang plans to use its website as a radar to collect consumer information, then recommend corresponding skin solutions to different consumers. He hopes that in the future, big data marketing can replace the website's role and truly become the front-end facing customers.

Opening up online and offline marketing. Some enterprises combine the behavior trace data of internet with offline purchase data to achieve the coordination between online and offline marketing. Dongfeng Nissan's online and offline integrated marketing approach is that its portals website generates order leads, then through these leads, service personnel call back customers to promote offline transactions. In this process, Dongfeng Nissan records the data of consumers entering, browsing, clicking, registering, telephone callbacks and purchases at every step, realizing an open loop marketing channel that constantly optimizes marketing effectiveness with big data analysis support. China's interactive search vendor Guo Shuang Technology measures the effectiveness of offline promotional activities by the search volume for promotional content from a region on the internet. Some companies encourage offline customers to use devices such as Wi-Fi and WeChat that can track consumer behavior and preferences to open up online and offline data flow. Intai Department Store plans to lay Wi-Fi to encourage customers to use it inside the mall then find this customer through Wi-Fi accounts then explore this customer's historical internet traces with big data analysis to understand their needs types.

In conclusion, big data is an essential tool for modern marketing activity. By leveraging the insights and data provided by big data analytics, businesses can make more informed marketing decisions, improve their targeting and relevance, and ultimately drive better business results.

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