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## INTERNET MARKETING BASED ON A DATA ECOSYSTEM

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### ABSTRACT

This report examines the first step towards the implementation of Marketing 5.0, namely the use of data sets for informed decision-making by business organizations. The goal is to be able to predict the type of next product that their users will be interested in purchasing. Geographic, demographic, psychographic and behavioral segmentation methods are applied to build a picture of the next buyer and what they will buy. Based on the analysis, guidelines are prepared for what and how to offer, ideas for new products and services are highlighted, user experience is personalized, a reasonable price for new products is calculated through dynamic pricing. The problem facing modern marketers of management and effective use of the analyzed data is considered, and for this purpose one must start with narrowly defined goals and use only the data relevant to their achievement.

**Key words:** internet marketing, marketing 5.0, databases, product personalization, user experience

### INTRODUCTION

Using small data for Internet marketing purposes can still be effective and provide valuable insights. While big data offers extensive analysis capabilities, small data focuses on more specific and localized information. Also, small data may not provide the same scale as big data, it can still yield valuable insights when analyzed effectively. Combine small data with your broader marketing strategy to create more targeted and personalized campaigns that resonate with your audience.

### CHARACTERIZATION OF SMALL

"Small data" refers to datasets that are relatively small in size, typically containing a limited number of observations or variables compared to large-scale datasets. The exact definition of small data can vary depending on the context and field of study. Unlike big data, which involves handling massive volumes of data that require specialized tools and infrastructure for

storage and analysis, small data can be managed and analyzed using traditional data analysis techniques and software. (1)

Small data is often characterized by its high quality and richness in terms of detailed information. It is typically more structured and well-curated compared to big data. Small data sets are commonly used in fields such as social sciences, market research, and experimental studies, where researchers focus on in-depth analysis of specific samples or cases. One advantage of small data is that it is often easier to interpret and understand due to its manageable size. It allows researchers to dive deeper into individual observations, explore relationships, and derive meaningful insights. However, small data may have limitations in terms of generalizability and statistical power, as findings may not be representative of larger populations or applicable to broader contexts. Overall, small data plays a valuable role in research and analysis, complementing the use of big data and providing a foundation for hypothesis generation, exploratory analysis, and targeted investigations. (2)

### INTERNET MARKETING - TRENDS AND DEVELOPMENTS

Internet marketing, also known as online marketing or digital marketing, refers to the

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strategies and techniques used by businesses and organizations to promote their products, services, or brand on the internet. It encompasses a wide range of marketing activities that leverage digital channels to reach and engage with target audiences. Like all other technological sectors, Internet marketing is developing at an accelerated pace, and some of its recent improvements can be listed: Personalization, Influencer Marketing, Video Marketing, Voice Search Optimization, Social Commerce, Chatbots and AI, User-Generated Content, Augmented Reality and Virtual Reality, Data Privacy and Security, Sustainability and Social Responsibility. (3)

Internet marketing has shifted towards personalized experiences for consumers. Businesses are leveraging data and technologies to tailor their marketing messages, offers, and recommendations to individual customers, increasing relevance and engagement. Collaborating with influencers and content creators has become a popular strategy for businesses. Influencer marketing allows companies to tap into the influencer's existing audience and leverage their credibility and influence to promote products or services. Video content continues to gain traction as a powerful marketing tool. Businesses are creating engaging video content for platforms like YouTube, Instagram, and TikTok to communicate their brand messages, showcase products, and connect with their target audience. (3, 13)

With the rise of voice assistants like Siri, Alexa, and Google Assistant, optimizing content for voice search has become important. Businesses are adapting their SEO strategies to include long-tail keywords and conversational language that align with how people search using voice commands. Social media platforms have evolved beyond just brand awareness and engagement channels. Businesses are now leveraging social commerce features, such as Instagram Shopping and Facebook Marketplace, to sell products directly on social media platforms. Artificial Intelligence (AI) technologies, including chatbots, are being used by businesses to enhance customer service and improve user experiences. Chatbots provide instant responses to customer queries, assist with product recommendations, and facilitate transactions. (4)

Businesses are increasingly leveraging user-generated content (UGC) as part of their marketing strategies. UGC, such as customer reviews, testimonials, and social media posts, helps build trust, authenticity, and social proof around products or services. AR and VR technologies are being utilized to create immersive and interactive experiences for customers. Businesses are incorporating AR/VR in product demos, virtual showrooms, and interactive ads to enhance engagement and provide unique experiences. (4, 12)

With growing concerns about data privacy, businesses are placing greater emphasis on securing customer data and complying with regulations like the General Data Protection Regulation (GDPR). Transparency and data protection measures are key to building trust with customers. Consumers are increasingly conscious of a company's environmental and social impact. Businesses are incorporating sustainability and social responsibility initiatives into their marketing strategies, emphasizing ethical practices, eco-friendly products, and social causes. (5)

Internet marketing allows businesses to reach a global audience, target specific demographics, and measure marketing effectiveness with greater precision compared to traditional marketing channels. By leveraging the power of the internet, businesses can connect with customers, build brand awareness, drive sales, and foster long-term customer relationships. (5)

## **PERSONALIZATION OF THE INTERNET EXPERIENCE**

Transparent relationships and respect for customer privacy should not be forgotten when implementing personalization strategies. Obtaining consent for data collection and use and ensuring compliance with data protection regulations are mandatory. Furthermore, by creating personalized experiences, higher customer satisfaction is achieved and stronger relationships are built, increasing customer loyalty and engagement. Creating a personalized experience for consumers through internet marketing involves tailoring marketing strategies and messages to individual customers based on their preferences, behaviors, and needs. Here are some key steps to achieve a personalized experience (6, 7, 14):

- *Data Collection and Analysis:* Collect relevant data about your customers through

various channels, such as website analytics, social media insights, customer surveys, and purchase history. Analyze this data to identify patterns, preferences, and behaviors that can inform your personalization efforts.

- *Segmentation and Targeting:* Divide your customer base into segments based on common characteristics or behaviors. This segmentation can be done using factors like demographics, purchase history, browsing behavior, or engagement levels. Develop targeted marketing campaigns for each segment to deliver more relevant messages and offers.

- *Dynamic Website Personalization:* Utilize website personalization techniques to deliver customized experiences to individual visitors. This can include dynamically changing website content, product recommendations, or personalized landing pages based on a visitor's browsing history, location, or previous interactions.

- *Email Marketing Personalization:* Leverage the data you have collected to create personalized email campaigns. Address recipients by their names, send tailored recommendations based on their purchase history or browsing behavior, and segment your email list to deliver more relevant content.

- *Behavioral Remarketing:* Implement remarketing campaigns that target users who have previously visited your website or shown interest in your products or services. Display personalized ads to remind them of their previous interactions and encourage them to take the desired action.

- *Personalized Product Recommendations:* Use algorithms and customer data to provide personalized product recommendations. These can be displayed on your website, in email campaigns, or through personalized ads, enhancing the customer's shopping experience and increasing the likelihood of conversions.

- *Chatbots and Live Chat:* Implement AI-powered chatbots or live chat features on your website to provide real-time assistance and support. These tools can be programmed to recognize individual customer preferences, respond to queries, and offer personalized recommendations.

- *Social Media Personalization:* Leverage the data and insights from social media platforms to create personalized ad campaigns, deliver tailored content, and engage with customers individually. Use social

listening tools to understand customer sentiment and respond to individual inquiries or comments.

- *Mobile Personalization:* As mobile devices play a significant role in internet usage, optimize your mobile experiences by creating personalized mobile apps or mobile-friendly websites. Use location-based targeting and push notifications to deliver relevant offers or information to users based on their proximity or preferences.

- *Continuous Testing and Optimization:* Implement A/B testing and analyze the results to refine and improve your personalization strategies. Test different variations of personalized content, messages, and offers to identify the most effective approaches for different customer segments.

## SMALL DATA COLLECTION AND ANALYSIS TOOLS

The mass consumer use of new technologies, such as mobile devices, mobile internet, cloud services, and open-source software, has significantly impacted the way marketers build and execute their strategies. These technologies offer several opportunities for marketers to leverage computing power and analyze data sets effectively. Here's how these technologies have influenced marketing strategies (7, 8):

- *Mobile Devices and Mobile Internet:* With the widespread adoption of smartphones and tablets, marketers have gained access to a large audience through mobile marketing. They can optimize their websites and campaigns for mobile devices, create mobile apps, and leverage location-based services to deliver targeted and location-specific messages and offers to consumers on the go.

- *Cloud Services:* Cloud computing has revolutionized data storage and processing capabilities. Marketers can now store and access vast amounts of data in the cloud, enabling real-time collaboration, scalability, and cost-effective solutions. Cloud-based tools and platforms also provide marketers with advanced analytics, customer relationship management (CRM), and marketing automation capabilities.

- *Open Source Software:* Open-source software has opened up new avenues for marketers to access and utilize powerful tools and resources at lower costs. Marketers can leverage open-source software for content management systems, data analytics, customer

relationship management, and marketing automation. This empowers them to build customized solutions and adapt them to their specific needs.

- *Data Analysis and Insights:* The computing power of new-generation computer systems, coupled with advanced analytics tools, allows marketers to process and analyze large data sets in real-time. This enables them to gain valuable insights into customer behavior, preferences, and trends, facilitating data-driven decision-making and personalized marketing strategies.

- *Personalization and Targeting:* The availability of vast amounts of data and computing power allows marketers to segment their audience more effectively and deliver personalized experiences and targeted messages. They can use data analytics and machine learning algorithms to analyze consumer data and create personalized recommendations, content, and offers.

- *Real-Time Marketing:* With the computing power of new-generation systems, marketers can monitor and analyze real-time data, allowing them to react quickly to market trends, consumer behavior, and engagement metrics. This facilitates real-time marketing campaigns, instant feedback, and agile decision-making.

- *Marketing Automation:* The combination of cloud services, open-source software, and computing power has fueled the growth of marketing automation. Marketers can automate repetitive tasks, such as email campaigns, social media scheduling, lead nurturing, and customer segmentation, freeing up time for more strategic initiatives.

- *Collaboration and Integration:* New technologies enable marketers to collaborate seamlessly across teams and departments. Cloud-based platforms and open-source software facilitate integrated workflows, data sharing, and real-time collaboration between marketing, sales, and customer support teams, leading to more cohesive and aligned marketing strategies.

Overall, the advancements in technology, computing power, and data analysis have transformed the way marketers strategize, execute, and analyze their campaigns. These tools and capabilities provide marketers with greater agility, precision, and scalability, allowing them to tailor their strategies to meet

evolving consumer expectations and drive business growth. (8)

## **NEW TECHNOLOGIES FOR A BETTER USER EXPERIENCE**

Indeed, digitization and new technologies have significantly enhanced the user experience on the internet, particularly through the practice of "smart targeting" or personalized targeting. By leveraging user data and advanced algorithms, companies can deliver content and offers that align with the specific interests and preferences of individual users or customers. This personalized approach creates a more effective and engaging experience for users by Marketing 5.0 instruments. Here's how digitization and new technologies contribute to smart targeting and improved user engagement (9-11):

- *Data Collection and Analysis:* With the digitization of user interactions and transactions, companies can collect vast amounts of data on user behavior, preferences, and demographics. This data, when analyzed using advanced analytics techniques, provides valuable insights into individual user interests and enables companies to tailor their content and offers accordingly.

- *User Profiling and Segmentation:* By segmenting users based on their characteristics, behavior, and preferences, companies can create user profiles or personas. These profiles serve as a foundation for delivering personalized content and offers to different segments of their audience, increasing the relevance and resonance of their messaging.

- *Personalized Content Delivery:* Smart targeting enables companies to deliver content that is specifically tailored to the interests and needs of individual users. This can include personalized product recommendations, customized messaging, and targeted advertisements. By providing users with content that aligns with their preferences, companies can enhance user engagement and foster a stronger connection with their audience.

- *Behavioral Tracking and Retargeting:* Through the use of tracking technologies, such as cookies and pixel tags, companies can monitor user behavior across multiple touchpoints. This allows them to understand user interests, track their interactions with specific content or products, and subsequently retarget them with relevant offers or reminders. This personalized retargeting approach increases the chances of converting users into

customers by reminding them of products or services they have shown interest in.

▪ *Marketing Automation and AI:* Advanced technologies like marketing automation and artificial intelligence (AI) play a crucial role in smart targeting. Companies can leverage automation tools and AI algorithms to analyze user data in real-time, automate personalized messaging, and dynamically adjust content delivery based on user responses and behavior. This enables companies to deliver timely and relevant content to users, enhancing their overall engagement.

▪ *Multichannel Personalization:* Digitization allows companies to engage with users across various channels, including websites, social media platforms, email, mobile apps, and more. By implementing multichannel personalization strategies, companies can provide a consistent and personalized user experience across different touchpoints, reinforcing user engagement and increasing the likelihood of conversions.

Overall, through smart targeting, companies can create a more effective and engaging user experience on the internet. By delivering personalized content and offers that align with individual user interests, companies can enhance user engagement, build stronger relationships, and drive better business outcomes. However, it's important for companies to prioritize user privacy and ensure compliance with applicable data protection regulations while implementing smart targeting practices. (10, 11)

## CONCLUSION

Small data refers to relatively small sets of data that are more manageable and easily analyzed compared to big data. It typically includes customer demographic information, purchase history, website interactions, email open rates, and other similar data points. On the other hand, internet marketing encompasses various digital marketing techniques and channels, such as search engine optimization (SEO), social media marketing, email marketing, content marketing, and more. It's important to note that while small data provides valuable insights for internet marketing, it is often complemented by big data analytics techniques that involve analyzing large and complex datasets. Together, small and big data analysis can help marketers gain a comprehensive understanding of their target

audience and drive successful internet marketing campaigns.

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