



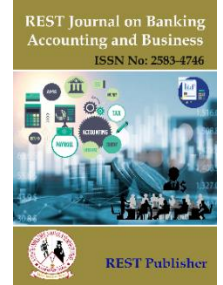
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# Digital Marketing Strategies and Millennial Consumer Behavior: A Multi-Criteria Decision Approach using VIKOR Method

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**Abstract:** Introduction: Millennials, or Generation Y, represent a key demographic segment in the development of online shopping. Their internet purchasing habits and brand engagement significantly influence digital marketing strategies. This paper explores millennial preferences and evaluates the effectiveness of key marketing techniques such as influencer marketing, email campaigns, and SEO using decision-making models such as VIKOR. As their purchasing power increases, understanding their motivations is critical for businesses seeking sustainable digital growth. Research significance: Understanding how digital strategies influence millennial behavior helps businesses create targeted, impactful campaigns. This research uses the VIKOR technique to evaluate marketing methods based on millennial preferences. It highlights how gender, social incentives, and media use influence purchasing decisions. As traditional motivators such as discounts decline in effectiveness, this study examines emerging consumer values, providing businesses with a decision-making model to better align with this generation's expectations and increase engagement. Methodology: Alternative: Social media marketing, Influencer marketing, Email marketing, Search engine optimization, Pay-per-click advertising, Brand Awareness Growth. Evaluation Preference: Business Fundamentals, Trailing Twelve Month (TTM), Active Customer Demographics, Business Acquisition Performance. Result: The results show that Influencer marketing has the highest ranking and Email marketing has the lowest ranking. Conclusion: Influencer marketing has the highest value for Digital Marketing Strategies according to the VIKOR approach.

**Key words:** Digital Marketing, Millennials, VIKOR Method, Consumer Behavior, E-Commerce.

## 1. INTRODUCTION

Commonly utilized in digital media to discern which entities are influential and which are not, this practice can be detrimental to marketers. This article focuses on millennial' preferences and the digital marketing strategies that impact their behavior. Also known as Generation Y, millennial is crucial to the expansion of e-commerce. Their socializing and shopping habits online will continue to drive the growth of e-commerce as their discretionary income increases. [1] The declining interest in It's a perplexing trend to get discounts, coupons, or perks for writing reviews. Throughout the first two years, these rewards were quite successful motivators. It's interesting to note that perceptions of these perks fluctuate significantly by gender. Offering a discount, coupon, or other incentive for completing an online review was more appealing to women encouraging than men did. [2] To precisely define We must first define the different phrases used in specialized literature and digital marketing online to describe this field. Some Terms are used by authors like "digital marketing," "internet marketing," "online marketing," "web marketing," "email marketing," "e-marketing," and "marketing 4.0." These terms are often interchangeable and largely synonymous, though they each carry different nuances. The primary distinction between them lies in the specific tools and marketing activities they emphasize. [3] These recruitment and loyalty programs exemplify the types of activities that should be integrated into any university organization's marketing efforts. However, all these functions are context-dependent in an offline setting. Beyond the offline system, digital

marketing strategies also come into play. For instance, banner ads on educational websites can serve as a recruitment mechanism, while newsletters can function as a loyalty tool. The former is an example of search engine marketing (SEM) tools, and the latter illustrates email marketing techniques. [4] During the pandemic, companies incorporated security messages into their digital communication to raise awareness about COVID-19-related safety guidelines. This demonstrated their sensitivity to the concerns of customers, employees, and other stakeholders, helping to build customer trust. For customers, "security" pertains to the safety measures in place when ordering online or visiting retail stores. Therefore, this element must be an integral part of a company's digital communication strategy. [5] Despite having different rationales than low-cost defenders, the ultimate effect on brand building is identical. Different custodians inherently safeguard the client's core values. However, we were surprised to find that this strategic preference did not result in a significantly higher response rate compared to their lower-cost competitors. [6] Various "actors" within the digital echo verse contribute in multiple ways. Owned media acts as "feedback" from customers, facilitating interactions with companies utilizing it, particularly on their websites following media investments. This engagement is driven by personalized content, direct interactions, and digital inbound marketing. Additionally, digital inbound marketing is crucial for B2B companies, highlighting the growing effectiveness and positive reception of these strategies in emerging economies. [7] Initially, companies viewed the Internet as merely a new channel to expand their presence. However, they soon began seeking ways to differentiate themselves through their sites and services. Today, online marketing communications are evolving into a critical component of operational marketing, establishing themselves as a distinct branch of marketing: digital marketing. [8] This paper examines the application of accurate marketing through digital analysis, focusing on three key aspects: customer segmentation, shopping basket positioning, and target customer marketing. It analyzes the applicability of a precise marketing strategy in retail sales. The findings demonstrate that under the new background, retail is evolving from traditional methods to data-driven techniques, implementing precise marketing strategies. This approach enables the accurate gathering of valuable, limited marketing resources and the establishment of a new marketing model. Emphasis is placed on achieving long-term sustainable development among retailers, suppliers, and customers [9].

## 2. MATERIALS AND METHOD

### Alternative:

**Social Media Marketing:** Using social media sites like Facebook, Instagram, and LinkedIn to advertise goods and services, establish a brand, and interact with a target market is known as social media marketing. Through content creation, advertising, and community interaction, businesses aim to increase website traffic, generate leads, and foster customer loyalty. It is a cost-effective digital marketing strategy that allows direct communication, real-time feedback, and data-driven insights for business growth and performance evaluation.

**Influencer Marketing:** Influencer marketing is a tactic where companies work with people who have a large following and a strong internet presence. These influencers promote products or services through social media, blogs, or videos, leveraging their credibility and trust with their audience. This form of marketing increases brand awareness, drives traffic, and can significantly impact consumer purchasing decisions, especially in niches like fashion, fitness, beauty, and technology.

**Email Marketing:** Sending newsletters, promotional materials, or customized communications to a specific list of subscribers is known as email marketing. It is an effective instrument for internet marketing for building relationships, nurturing leads, and encouraging repeat purchases. Businesses use it to share updates, offer discounts, and deliver value. With proper segmentation and automation, email marketing can deliver high ROI by reaching customers directly in their inbox with relevant, timely, and actionable content.

**Search Engine Optimization (SEO):** The practice of improving a website's exposure on search engines such as Google is known as search engine optimization, or SEO. To rank higher in organic search results, it entails optimizing the website's structure, metadata, content, and keywords. SEO increases website traffic, improves credibility, and helps attract potential customers actively searching for relevant information or services. Long-term SEO efforts can significantly impact online presence and drive consistent, cost-effective growth.

**Pay-Per-Click:** Advertising in the digital marketing approach known as pay-per-click (PPC) advertising, marketers are charged a fee each time their ad is clicked. Bing Ads and Google Ads are examples of common platforms. Businesses can use it to bid for ad placement on websites or in search engine results. PPC provides precise targeting options, quantifiable ROI, and instant exposure. Effective keyword research, persuasive ad text, and optimized landing pages are essential components of successful campaigns.

**Brand Awareness Growth:** Brand awareness growth refers to increasing public recognition and recall of a company, product, or service. It indicates how well consumers can identify a brand under different conditions. High brand awareness often leads to customer trust, competitive advantage, and higher market share. Strategies to boost awareness include consistent branding, advertising, content marketing, and partnerships. It's a key goal in early-stage marketing and long-term business development.

**Evaluation Preference:**

**Business Fundamentals:** Business fundamentals are the core principles that guide successful operations, including financial management, marketing, human resources, operations, and strategy. They form the foundation of a company's ability to generate profits, grow sustainably, and compete effectively. Mastery of these fundamentals helps businesses make informed decisions, manage resources efficiently, and adapt to market changes. Strong fundamentals are essential for attracting investors, achieving long-term stability, and scaling operations.

**Trailing Twelve Months:** Trailing Twelve Months is a financial measurement that reflects a company's performance over the past 12 consecutive months. It is used to analyze revenue, earnings, and profitability trends without being limited to a single fiscal year. TTM provides investors, analysts, and businesses with updated and relevant data, enabling accurate comparisons and forecasting. It's particularly useful in dynamic industries where quarterly or yearly results may fluctuate.

**Active Customer Demographics:** Active customer demographics describe the key characteristics such as age, gender, income, location, and behavior of currently engaged or purchasing customers. This information helps businesses understand who their audience is and tailor products, services, and marketing efforts accordingly. By analyzing demographic data, companies can segment customers, optimize messaging, and improve customer experience. It is a vital tool for effective targeting, personalization, and strategic planning in marketing.

**Business Acquisition Performance:** Business acquisition performance refers to the evaluation of how successfully one company integrates and benefits from acquiring another. Key performance indicators include revenue growth, cost savings, customer retention, and cultural alignment. Post-acquisition assessments help determine whether strategic goals—like expanding market share, entering new regions, or gaining new capabilities are achieved. Effective integration, leadership, and synergy realization are essential for positive outcomes and long-term success.

**Method:** VIKOR technique was created to make decisions based on multiple criteria approach aimed at tackling unique decision-making challenges involving conflicting and incompatible criteria. Its objective is to determine Reconcile solutions to issues with formulating contradictory standards and assisting decision-makers in coming to a conclusion choice by ranking and choosing from various options. A compromise solution is the being very close to the optimal solution, where compromise involves mutual compromises. Another perspective approach, TOPSIS, seeks a remedy that is far from the perfect response and away from the negative-perfect solution. VIKOR method serves as a valuable tool in decision-making based on a variety of factors, particularly when decision-makers are unable to declare their preferences clearly at the outset of the computer design process. [17] Once the material selection criteria have been established and a once a once a list of materials for a specific engineering application has been compiled, the optimal material may be as follows: ranked and selected using the recommended extended version of VIKOR. Originally developed to optimize multiple criteria in complex systems, the VIKOR method has gained widely recognized. It emphasizes ranking and selecting options with conflicting criteria that have various units. The compromise ranking in the VIKOR approach is determined by evaluating how close each alternative is to the best one, with "compromise" referring to a solution reached through mutual concessions. [18] The central concept of the VIKOR method involves identifying focus on ranking Ideal points in the solution space that are both positive and negative when choosing from a list of limited options, considering the contradiction and incompatible criteria (attributes with varying units). This method calculates multi-criteria ranking structure, proximity to the 'best' solution. By evaluating each alternative against each criterion, a compromise ranking is established by assessing the relative proximity to the most advantageous option. The compromise solution that emerged the most practical option, both The optimal solutions, both positive and negative, are the ones that are most similar to. In this situation, a compromise refers to an agreement reached through mutual concessions between alternatives. In addition to the traditional VIKOR method, there are many variations these include detailed VIKOR, vague VIKOR, regret theory-based VIKOR, and modified VIKOR. And gap VIKOR developed to address various challenges in decision-making and meet the unique needs of decision-makers. [19] The VIKOR This approach is predicated on the notion that determining optimum locations, both positive and negative within a solution space. It emphasizes evaluating and choosing from a small number of

options while accounting for contradictory and incompatible standards (attributes with different units). The method calculates a rating index with multiple criteria that is based on "closeness" to the optimal solution. By evaluating each alternative against each criterion, the compromise rating is calculated by comparing the relative distances to the ideal alternative. The compromise solution that results is the one that is most similar to the positive ideal solution and the one that is most removed from the negative ideal solution. In this instance, compromise refers to a compromise made between alternatives through mutual concessions. Beyond the standard VIKOR method, several variations have been developed to address various addressing the challenges in decision-making and the specific needs of decision-makers. [20] Initially, we provided a brief overview of the basic concepts of INNs. This approach combines evaluation information from all individual decision makers using the INNWA The operator then uses the traditional VIKOR method, which is suitable for MAGDM issues in combining INNs. Examples and comparisons are used to confirm the efficacy and stability of this method analyses, which demonstrated its advantages over existing methods. In the future, it will be necessary to further explore MAGDM, risk analysis, and other INN methods for various uncertain and ambiguous environments. [21] Despite considerable efforts to apply the VIKOR method, published results regarding its effectiveness as a decision-making tool medical and healthcare sectors fields are inconclusive. A comprehensive literature review has been conducted to classify, Examine and explain current studies on developments and applications of VIKOR. However, there is only a small amount of research specifically dedicated to the development application of the VIKOR method in medicine and health management. [22] Promoting sustainable economic development and environmental management protection, an increasing number of companies are implementing (GSC) practices for their products. Implementing these practices impacts the operational efficiency of businesses. As a result, companies must fully assess their performance when incorporating GSC initiatives. Evaluating these initiatives, it is a multifaceted process that requires consideration of various factors, for example inventory levels, supply reliability in procurement, and technological and innovation capabilities in production. This research introduces a new Probabilistic linguistics to support VIKOR method these assessments. Initially, to effectively identify probabilistic linguistic positive and negative ideal solutions, A new comparative approach to probabilistic linguistic term sets (PLTSs) introduced. [23] By using the Using the DEMATEL method, cause-and-effect relationships and correlations between different cotton fiber properties identified, which helps to accurately identify the most influential property (criterion) and its significant impact on other properties. A digraph is created to visualize the influence network in the cotton fiber selection and evaluation process. Additionally, the VIKOR method, a compromise ranking technique, evaluates and ranks 17 alternatives to cotton fibre, ranked from best to worst. In addition to ranking the available cotton fibres, this thorough multi-criteria approach allows spinning industry specialists to assess different cotton fibre qualities according to their influence. [24] This issue was resolved by applying Pareto optimality. The optimality principle serves as the basis for a multi-criteria analysis technique commonly used in scientific research, the VIKOR method. Because of its great degree of flexibility in comparison to other approaches and its capacity to reconcile contradicting facts, this study used the water quality monitoring system utilizing the VIKOR approach, with an emphasis on assessing the current system at TWRD, can point out areas that need attention more extensive monitoring. Monitoring stations in these areas should be properly maintained, and if none exist, new stations should be established. [25] Decision-making plays a vital role in daily life, especially in fields such as business, home management, employment, education, marketing, healthcare, engineering, social sciences, and economics. Therefore, making the right decisions is essential to maintain a comfortable and balanced lifestyle. Decision-making involves finding solutions to challenges by evaluating multiple options based on conflicting criteria. To address these key issues, this research presents a new technique predicated on the VIKOR technique. In the suggested method, the assigned jury and criteria is first evaluated using complex Fermatian fuzzy NSF ranked standards, which determine the normalized weights. Then, the individual perspectives of decision-makers are taken into account, and the collective complexity Fermatian fuzzy N-smooth weighted average operator is used to construct a combined complex Fermatian fuzzy N-smooth decision matrix. The inputs in this matrix are converted into clear data by a scoring function. After evaluating the rating measures are founded using the greatest and worst values. Lastly, the options are arranged in ascending order, and the optimal option is selected by testing both conditions. [26] Although some studies have attempted to select or rank performance appraisal methods (PAMs), none have specifically focused on evaluating PAMs based on rating errors or used the fuzzy VIKOR method, as this study does. While various factors contribute to the decline in the effectiveness of performance appraisals, this research focuses on rating errors made by raters and aims to rank PAMs based on their perceived effectiveness in reducing these errors. The study begins by reviewing the importance of employees' perceptions of fairness regarding PAMs and errors. It then describes the research methodology, including a brief description of the fuzzy VIKOR method, followed by a presentation of the findings and a discussion of managerial and educational implications. [27] In decision-making, it is necessary

to understand how to integrate both decision weights and attribute weights within the VIKOR method. To overcome these challenges, in this study, a modified VIKOR approach is presented, where the attribute values are represented as trapezoidal fuzzy integers and the decision makers' weights and attributes are entirely unknown. [28] The improved VIKOR method provides faster analysis, requires less memory, and provides more accurate results compared to other methods. It effectively addresses complex multi-criteria problems with unmeasured and conflicting Criteria. Furthermore, the decision-making mechanism's coefficient can be changed according to the decision-makers' individual preferences and the particular significance of the research. This flexibility allows for both group and individual benefits to be considered in balance, improving the operational flexibility and consistency the VIKOR method's data are utilized to develop a barrier size model for detecting WRCC, which provides a detailed analysis of the key factors affecting WRCC in the weighing city. [29] Gap Quantitative values and ambiguous language are frequently used in real-world situations. The modified VIKOR technique is frequently employed to precisely and reasonably estimate uncertainty factors for MADM problems. Despite the many advantages of the VIKOR method, it does not fully solve all real-world challenges. In such situations, the modified VIKOR method is used. Its main strength lies in its ability to process this involves not just precise values, as well as unclear numbers and unclear wording. This assessment code is addressed utilizing the suggested qualitative method; triangular fuzzy theory is employed to control the fuzzy language and gap numbers. Following the establishment of each code's significance for the modified VIKOR technique, the weights are computed using the entropy approach in conjunction with the AHP. This method combines expert knowledge, minimizing the effect of both subjective and objective elements in the weighting process. However, when selecting from a large set of land reclamation projects, many experts rely on techniques Methods such as extreme conditions approach, coding techniques, fuzzy mathematical models, artificial intelligence neural networks, extension methods, expert system design based on CLIPS language, and immune clone algorithm. [30] This method ranks alternatives from best to worst, taking into account a set of conflicting criteria, categorized into benefit and cost factors, which are used to prioritize alternatives in the VIKOR method. The aim of VIKOR is to increase using benefit attributes while reducing cost attributes. Typically, organizations seek to improve benefit factors and reduce cost factors. For example, factors such as quality, scope, and profitability should be increased as benefit factors, while factors such as risk, cost, and time should be reduced should be reduced as cost factors.

### 3. ANALYSIS AND DISCUSSION

TABLE 1. Digital Marketing Strategies

	Digital Marketing Strategies			
	Business Fundamentals	Trailing Twelve Month (TTM)	Active Customer Demographics	Business Acquisition Performance
Social media marketing	0.904	0.855	0.752	0.604
Influencer marketing	0.421	0.731	0.607	0.391
Email marketing	0.509	0.819	0.703	0.379
Search engine optimization	0.345	0.743	0.712	0.164
Pay-per-click advertising	0.847	0.826	0.826	0.526
Brand Awareness Growth	0.566	0.732	0.821	0.436
Best	0.345	0.855	0.826	0.164
worst	0.904	0.731	0.607	0.604

Table 1 presents a comparative analysis of key digital marketing strategies—such as social media marketing, influencer marketing, email marketing, SEO, pay-per-click (PPC) advertising, and brand awareness campaigns—against four critical business dimensions: fundamentals, trailing twelve-month (TTM) performance, active customer demographics, and acquisition performance. Among all strategies, social media marketing demonstrates the strongest performance in business fundamentals (0.904) and TTM (0.855), indicating its robust presence and effectiveness in sustaining business continuity. However, it shows relatively weaker performance in customer acquisition (0.604), suggesting room for improvement in converting engagement into tangible business outcomes. In contrast, pay-per-click advertising exhibits well-rounded strength across all four metrics, particularly excelling in customer demographics (0.826) and acquisition (0.526), making it a reliable choice for targeting and converting active users. Email marketing and SEO show moderate performance, with email marketing having strong TTM (0.819) and good demographic engagement (0.703), but lower acquisition impact (0.379). Interestingly, influencer marketing scores low in fundamentals (0.421) and acquisition (0.391), yet maintains a reasonable TTM value

(0.731), indicating brand visibility but limited business traction. The best values lie in demographics (0.826), whereas worst values are seen in fundamentals (0.345) and acquisition (0.164), reflecting strategic imbalances across methods.

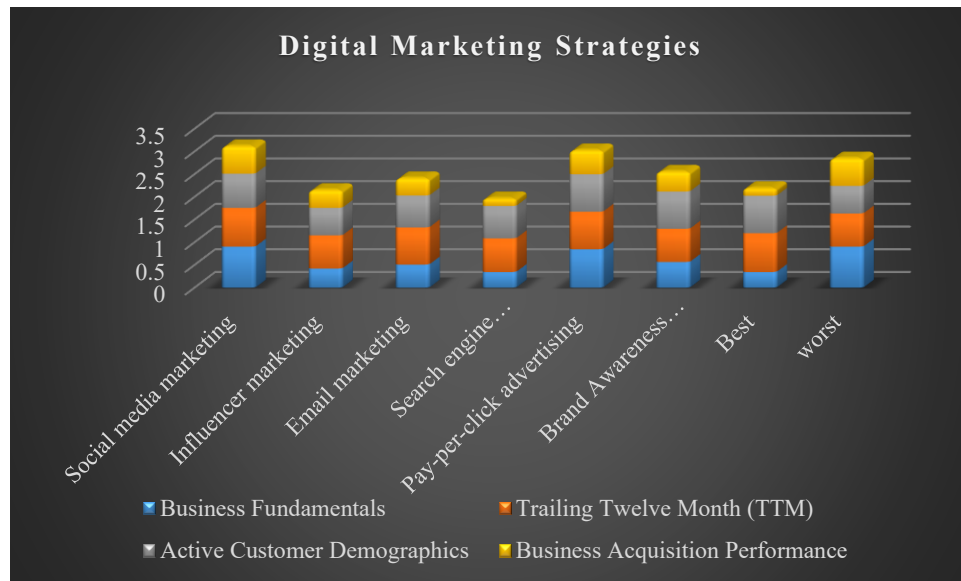


FIGURE 1. Digital Marketing Strategies

Figure 1 provides a multidimensional comparison of various digital marketing strategies based on four performance indicators: business fundamentals, trailing twelve-month (TTM) performance, active customer demographics, and business acquisition effectiveness. Among the strategies, social media marketing leads in both business fundamentals (0.904) and TTM performance (0.855), underscoring its strong foundational presence and sustained engagement over time. However, despite its strengths, it ranks lower in acquisition performance (0.604), indicating that while it builds brand presence, it may not directly translate into customer conversions. Pay-per-click (PPC) advertising stands out as a balanced strategy, demonstrating high performance across all dimensions—most notably in customer demographics (0.826) and acquisition (0.526). This suggests PPC’s strong targeting and conversion capabilities. Search engine optimization (SEO), although relatively low in fundamentals (0.345) and acquisition (0.164), shows decent engagement in TTM (0.743) and demographics (0.712), highlighting its role in long-term visibility rather than immediate results. Email marketing and influencer marketing show moderate performance across dimensions, with slightly better outcomes in TTM but limited acquisition impact. Brand awareness growth shows strong demographic engagement (0.821), but modest performance in acquisition (0.436).

TABLE 2. Calculation of  $S_j$  and  $R_j$

	Calculation $S_j$ and $R_j$			
	Business Fundamentals	Trailing Twelve Month (TTM)	Active Customer Demographics	Business Acquisition Performance
Social media marketing	0.25	0	0.0844749	0.25
Influencer marketing	0.033989267	0.25	0.25	0.1289773
Email marketing	0.073345259	0.0725806	0.140411	0.1221591
Search engine optimization	0	0.2258065	0.130137	0
Pay-per-click advertising	0.22450805	0.0584677	0	0.2056818
Brand Awareness Growth	0.098837209	0.2479839	0.0057078	0.1545455

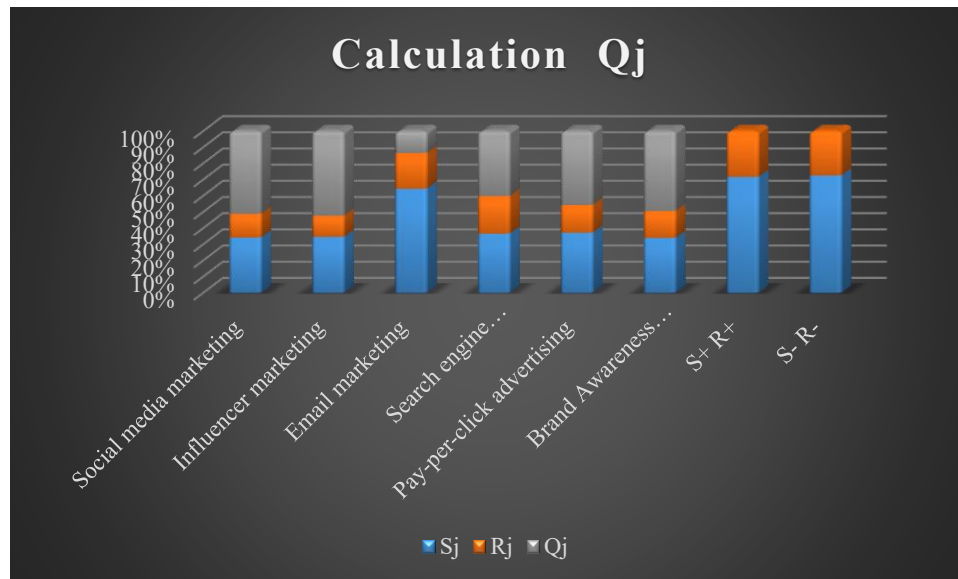
Table 2 presents the normalized values for the calculation of  $S_j$  and  $R_j$ , which are used in the VIKOR method to rank digital marketing strategies based on multiple criteria. These values indicate the relative closeness of each strategy to the ideal solution, with lower values reflecting better performance. Social media marketing scores the lowest in TTM (0), showing its optimal performance in this domain, but has the highest values in business

fundamentals (0.25) and business acquisition performance (0.25), indicating room for improvement in those areas. Search engine optimization (SEO) scores 0 in both business fundamentals and acquisition, making it the closest to the ideal in these criteria, but performs poorly in TTM (0.2258) and demographics (0.1301). Pay-per-click advertising shows balanced but varied performance with the lowest score in demographics (0) and near-optimal TTM (0.0584), but relatively high deviation in business fundamentals (0.2245) and acquisition (0.2057). Brand awareness growth demonstrates strong closeness in demographics (0.0057) but falls short in TTM (0.2479).

**TABLE 3.** Calculation Qj

	Calculation Qj		
	Sj	Rj	Qj
Social media marketing	0.5844749	0.25	0.872173
Influencer marketing	0.6629665	0.25	1
Email marketing	0.408496	0.140411	0.085584
Search engine optimization	0.3559434	0.2258065	0.3896169
Pay-per-click advertising	0.4886576	0.2245081	0.5998236
Brand Awareness Growth	0.5070743	0.2479839	0.7369244
S+ R+	0.3559434	0.140411	
S- R-	0.6629665	0.25	

Table 3 displays the calculated values of Qj, the final ranking index derived from the VIKOR method, based on the aggregated scores Sj (overall closeness to the ideal solution) and Rj (worst-case deviation). The Qj value reflects the compromise ranking of each digital marketing strategy, with lower values indicating better overall performance across all criteria. Among the strategies, Email marketing emerges as the most favorable option with the lowest Qj value of 0.0856, suggesting it achieves a strong balance between effectiveness and consistency across dimensions. Search engine optimization follows with a moderate Qj of 0.3896, indicating a reasonably effective strategy, especially in minimizing worst-case performance. In contrast, Influencer marketing ranks lowest with a Qj of 1, highlighting it as the least favorable choice due to its high deviation and relatively poor overall performance. Social media marketing and Pay-per-click advertising occupy mid-ranking positions, with Qj values of 0.8722 and 0.5998 respectively, indicating mixed outcomes. Brand Awareness Growth, although strong in certain areas, scores a Qj of 0.7369, suggesting it is a moderate strategy.



**FIGURE 2.** Calculation Qj

Figure 2 illustrates the final step of the VIKOR analysis, showcasing the values of Sj, Rj, and Qj for six digital marketing strategies. The Sj column reflects the overall deviation of each strategy from the ideal solution, while Rj captures the maximum individual criterion deviation. The Qj value synthesizes both, offering a compromise ranking that balances group utility and individual regret. Among the strategies, Email marketing ranks the best with the lowest Qj value of 0.0856, indicating its proximity to the ideal solution across all criteria. This

demonstrates its consistent and balanced performance, especially with a minimal  $R_j$  of 0.1404. Search engine optimization also performs reasonably well, achieving a  $Q_j$  of 0.3896, supported by the best  $S_j$  value of 0.3559. In contrast, Influencer marketing is ranked the lowest, with a maximum  $Q_j$  of 1, signifying the widest deviation from the ideal across the assessed dimensions. Social media marketing and Pay-per-click advertising fall in the mid-range, showing moderate effectiveness.

TABLE 4. Rank

	Rank
Social media marketing	2
Influencer marketing	1
Email marketing	6
Search engine optimization	5
Pay-per-click advertising	4
Brand Awareness Growth	3

Table 4 ranking highlights influencer marketing as the top-performing digital strategy, emphasizing its strong alignment with current consumer behavior and marketing goals. Social media marketing secures second place due to its widespread impact and consistent performance across key metrics. Brand Awareness Growth ranks third, showcasing its effectiveness in long-term visibility. Pay-per-click advertising and SEO follow, offering value but lacking uniform strength. Email marketing, despite moderate performance, ranks last, reflecting limited adaptability and impact compared to newer strategies.

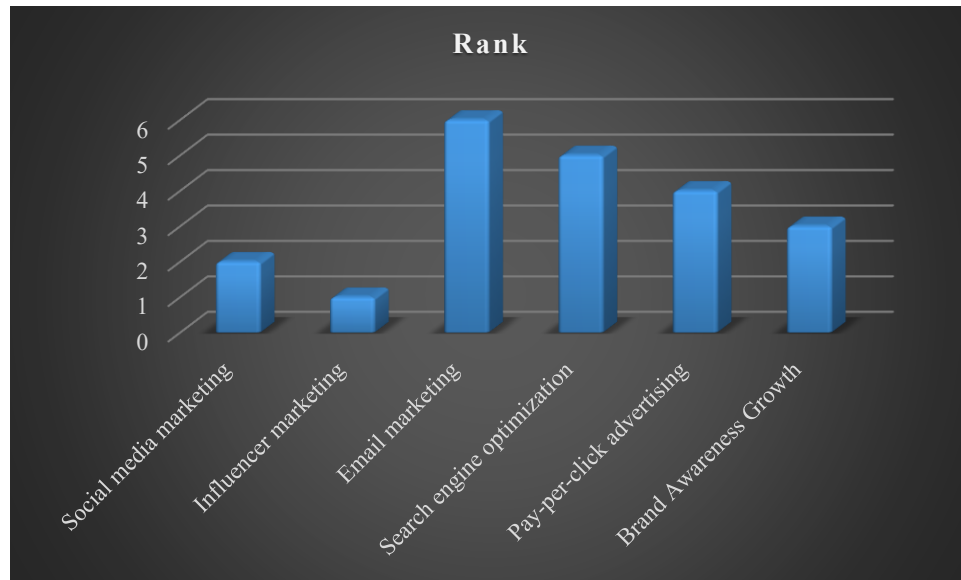


FIGURE 3. Rank

Figure 3 illustrates the final ranking of digital marketing strategies based on VIKOR analysis. Influencer marketing ranks first, indicating its superior effectiveness in reaching and engaging target audiences. Social media marketing follows closely, demonstrating its strong overall impact across business metrics. Brand Awareness Growth secures the third position, highlighting its role in long-term brand visibility. Pay-per-click advertising and search engine optimization rank fourth and fifth, respectively, reflecting moderate effectiveness. Email marketing ranks lowest, suggesting it is less competitive in the current digital landscape.

#### 4. CONCLUSION

The digital landscape continues to evolve, and millennials are playing a key role in shaping its trajectory. This study examined how marketing techniques including influencer collaborations, email marketing, social media marketing, and SEO are influencing millennials' purchasing behaviors. These digital natives desire personalized, authentic, and seamless experiences, which has prompted marketers to rethink traditional advertising tactics and embrace more dynamic, data-driven approaches. A key finding of this study is that there has been a significant

decline in millennials' interest in discounts, coupons, or rewards as motivators for engagement. While these incentives may have been effective in the past, their declining impact reflects a shift in values—toward transparency, social impact, and brand credibility. Interestingly, the research identified a gender difference in motivation, with women more receptive than men to rewards for writing reviews. This type of demographic insight is critical for personalizing future strategies. The use of the VIKOR technique provided a rigorous framework for evaluating the relative performance of various digital strategies based on conflicting criteria. By combining consumer preferences, marketing objectives, and performance metrics, this method allowed for a nuanced understanding of what drives millennial engagement. The compromise solutions VIKOR provides illustrate how brands can balance competing priorities—such as reach and depth, or personalization and automation—to improve outcomes. Furthermore, the study reinforces the importance of fundamental marketing concepts such as brand awareness, active customer demographics, and acquisition performance in driving long-term ecommerce success. As millennial consumers grow in financial strength and decision-making power, brands that modify their tactics to satisfy the changing demands of this generation will gain a distinct competitive advantage. Ultimately, marketers must adopt an adaptive, consumer-centric approach based on data analytics and multi-criteria decision-making. Techniques like VIKOR are not just educational tools, but practical means that can guide resource allocation, campaign development, and strategic planning. Future research should explore the integration of AI-driven personalization with VIKOR-based assessments to further refine marketing effectiveness in the digital age.

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