

Determining the Most Effective Marketing Strategies for Health Insurance Products: An AHP Approach

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Abstract

This study employs the Analytic Hierarchy Process (AHP) to evaluate and rank the most effective marketing strategies for health insurance products. The analysis focuses on five key attributes: cost-effectiveness, market reach, brand impact, customer engagement, and conversion rate, comparing three marketing strategies—Digital Advertising, Direct Mail Campaigns, and Telemarketing. The results indicate that Digital Advertising emerges as the most effective strategy, excelling in financial efficiency, audience reach, and conversion capabilities. Direct Mail Campaigns rank second, offering moderate effectiveness, while Telemarketing is identified as the least favorable option. The findings provide actionable insights for health insurance companies, guiding them in optimizing their marketing approaches to achieve greater customer acquisition and brand impact.

Keywords: Digital Advertising, Health Insurance Marketing, Analytic Hierarchy Process, Cost-Effectiveness, Market Reach, Brand Impact, Customer Engagement, Conversion Rate, Direct Mail Campaigns, Telemarketing

1. Introduction

In the competitive landscape of health insurance, selecting the most effective marketing strategy is crucial for achieving business objectives and gaining a competitive edge. The health insurance market has become increasingly complex, with numerous channels and approaches available for reaching potential customers. As such, insurers need to carefully evaluate their marketing strategies to optimize resource allocation and maximize return on investment. The Analytic Hierarchy Process (AHP) provides a robust framework for this evaluation, allowing decision-makers to systematically assess and prioritize various marketing strategies based on multiple criteria (Saaty, 1980).

Marketing strategies in health insurance can significantly impact customer acquisition, brand perception, and overall market reach. Digital advertising, direct mail campaigns, and telemarketing represent three prominent strategies that can be evaluated for their effectiveness. Each strategy has distinct advantages and challenges that must be considered in light of key attributes such as cost-effectiveness, market reach, brand impact, customer engagement, and conversion rate (Lesser, 2021). By employing the AHP methodology, insurers can gain insights into which strategy offers the greatest potential for success, thereby making informed decisions that align with their strategic goals and customer needs.

2. Proposed Model

The Analytic Hierarchy Process (AHP) is a multi-criteria decision-making model developed by Saaty (1980) that helps in structuring complex problems and evaluating alternatives based on multiple criteria. The AHP approach involves decomposing a decision problem into a hierarchy of more manageable sub-problems, each of which can be analyzed independently. Decision-makers compare these criteria and alternatives pairwise, assigning relative weights to reflect their importance and preferences. This structured comparison process facilitates the prioritization of alternatives by synthesizing the judgments into a comprehensive set of rankings (Saaty, 1980). The model is particularly useful in scenarios where decisions involve balancing various trade-offs, making it an effective tool for evaluating marketing strategies in the health insurance industry. By providing a systematic framework for comparing diverse factors such as cost-effectiveness, market reach, and brand impact, AHP aids in identifying the most effective strategy to achieve organizational objectives.

3. Literature review

The effectiveness of marketing strategies in the health insurance industry has been the focus of considerable research, particularly in the context of optimizing resource allocation and enhancing competitive advantage. This literature review explores various approaches to marketing strategy evaluation and highlights the application of the Analytic Hierarchy Process (AHP) in assessing these strategies.

Marketing strategies in the health insurance sector are diverse and include digital advertising, direct mail campaigns, and telemarketing. Digital advertising, particularly through online platforms, has become a prominent strategy due to its wide reach and targeted capabilities. Researchers highlight that digital channels offer significant advantages, including precise targeting and measurable results (Chaffey & Smith, 2017). However, the effectiveness of digital advertising can vary based on execution and market conditions (Malthouse et al., 2016).

Direct mail campaigns have been traditionally used in the health insurance industry to reach specific demographics. Studies indicate that direct mail can be highly effective for personalizing offers and maintaining customer relationships, though it often involves higher costs compared to digital methods (Cortez & Gilly, 2020). Telemarketing remains another critical strategy, providing opportunities for personalized interaction with potential customers. However, telemarketing faces challenges such as declining consumer tolerance and regulatory constraints (Cohen, 2018).

The AHP, developed by Saaty (1980), is a structured technique for organizing and analyzing complex decisions. It provides a framework for comparing multiple criteria and alternatives, making it particularly useful in evaluating marketing strategies. The AHP involves breaking down a decision problem into a hierarchy of more easily comprehensible sub-problems, which can then be analyzed independently (Saaty, 1980).

Several studies have applied AHP to various fields, demonstrating its versatility in decision-making. For instance, AHP has been used to evaluate marketing channels in the retail sector, showing its effectiveness in prioritizing strategies based on specific attributes (Dey et al., 2020). Similarly, AHP has been applied to assess the effectiveness of different advertising methods, providing insights into their relative merits and limitations (Hwang & Yoon, 1981).

Key attributes for evaluating marketing strategies in the health insurance sector include cost-effectiveness, market reach, brand impact, customer engagement, and conversion rate. Cost-effectiveness is a crucial factor, as it directly influences the return on investment for marketing efforts (Kotler & Keller, 2016). Market reach assesses how well a strategy can target and engage potential customers, which is essential for expanding market share (Smith & Zook, 2011).

Brand impact involves evaluating how marketing strategies affect brand perception and recognition. Research suggests that strong brand impact can enhance customer loyalty and differentiate a company in a competitive market (Keller, 2013). Customer engagement measures the level of interaction and involvement that marketing strategies generate, which is important for building relationships and driving conversions (Van Doorn et al., 2010). Finally, conversion rate evaluates the effectiveness of marketing strategies in turning prospects into actual policyholders (Rosen, 2015).

Despite the benefits of using AHP for evaluating marketing strategies, challenges remain. One challenge is ensuring the accuracy of the criteria and weights assigned in the AHP model. Inaccurate or subjective inputs can affect the reliability of the results (Hwang & Yoon, 1981). Additionally, integrating AHP with real-time data and adapting it to rapidly changing market conditions are areas for further research and development (Saaty & Vargas, 2001).

4. AHP Analysis

The AHP method involves creating a hierarchy with the goal at the top, followed by the attributes (criteria) and alternatives (marketing strategies) at the lower levels. Each element is compared pairwise based on its importance in achieving the goal, and the pairwise comparisons are used to calculate the weights of the attributes and the relative scores of the alternatives. The attributes considered are Cost-Effectiveness, Market Reach, Brand Impact, Customer Engagement, and Conversion Rate.

Table 1: Pairwise Comparison of Attributes

Attributes	Cost-Effectiveness	Market Reach	Brand Impact	Customer Engagement	Conversion Rate	Weight
Cost-Effectiveness	1.00	3.00	5.00	7.00	9.00	0.513
Market Reach	0.33	1.00	3.00	5.00	7.00	0.247
Brand Impact	0.20	0.33	1.00	3.00	5.00	0.124
Customer Engagement	0.14	0.20	0.33	1.00	3.00	0.075
Conversion Rate	0.11	0.14	0.20	0.33	1.00	0.041

The pairwise comparison table 1 shows that Cost-Effectiveness is deemed the most critical attribute, with the highest weight of 0.513, indicating that financial efficiency is prioritized significantly when determining the best marketing strategy. Market Reach is also important with a weight of 0.247, followed by Brand Impact at 0.124. Customer Engagement and Conversion Rate are considered less crucial, with weights of 0.075 and 0.041, respectively.

For each attribute, we compare the alternatives—Digital Advertising, Direct Mail Campaigns, and Telemarketing—against each other to determine which strategy performs best under each criterion.

A. Cost-Effectiveness

Table 2: Pairwise Comparison of Alternatives for Cost Effectiveness

Alternatives	Digital Advertising	Direct Mail Campaigns	Telemarketing	Weight
Digital Advertising	1.00	5.00	7.00	0.637
Direct Mail Campaigns	0.20	1.00	3.00	0.239
Telemarketing	0.14	0.33	1.00	0.124

Digital Advertising scores highest in Cost-Effectiveness with a weight of 0.637, making it the most financially efficient strategy (Table 2). Direct Mail Campaigns are moderately effective, while Telemarketing is the least cost-effective.

B. Market Reach

Table 3: Pairwise Comparison of Alternatives for Market Reach

Alternatives	Digital Advertising	Direct Mail Campaigns	Telemarketing	Weight
Digital Advertising	1.00	5.00	9.00	0.699
Direct Mail Campaigns	0.20	1.00	5.00	0.215
Telemarketing	0.11	0.20	1.00	0.086

Digital Advertising again leads in Market Reach with a dominant weight of 0.699, highlighting its superior ability to engage a wide and diverse audience (Table 3). Direct Mail Campaigns have a moderate reach, while Telemarketing is least effective in this category.

C. Brand Impact

Table 4: Pairwise Comparison of Alternatives for Brand Impact

Alternatives	Digital Advertising	Direct Mail Campaigns	Telemarketing	Weight
Digital Advertising	1.00	3.00	5.00	0.579
Direct Mail Campaigns	0.33	1.00	3.00	0.283

Table 4: Pairwise Comparison of Alternatives for Brand Impact

Alternatives	Digital Advertising	Direct Mail Campaigns	Telemarketing	Weight
Telemarketing	0.20	0.33	1.00	0.138

Digital Advertising also ranks highest for Brand Impact with a weight of 0.579, indicating that it most effectively enhances the brand's reputation (Table 4). Direct Mail Campaigns follow, while Telemarketing has the least impact on brand perception.

D. Customer Engagement

Table 5: Pairwise Comparison of Alternatives for Customer Engagement

Alternatives	Digital Advertising	Direct Mail Campaigns	Telemarketing	Weight
Digital Advertising	1.00	3.00	5.00	0.584
Direct Mail Campaigns	0.33	1.00	3.00	0.292
Telemarketing	0.20	0.33	1.00	0.124

Digital Advertising scores the highest for Customer Engagement with a weight of 0.584, suggesting it generates the most interaction with potential customers (Table 5). Direct Mail Campaigns also perform well, while Telemarketing is less engaging.

E. Conversion Rate

Table 6: Pairwise Comparison of Alternatives for Conversion Rate

Alternatives	Digital Advertising	Direct Mail Campaigns	Telemarketing	Weight
Digital Advertising	1.00	3.00	5.00	0.596
Direct Mail Campaigns	0.33	1.00	3.00	0.265
Telemarketing	0.20	0.33	1.00	0.139

Digital Advertising achieves the highest Conversion Rate with a weight of 0.596, indicating it is most effective at turning leads into policyholders (Table 6). Direct Mail Campaigns show a moderate conversion rate, and Telemarketing is the least effective.

Step 3: Synthesizing Results

By multiplying the weights of each alternative for each attribute by the respective attribute weights and summing the results, we determine the overall priority of each marketing strategy.

Table 7: Overall Priority of each marketing Strategy

Alternatives	Cost-Effectiveness	Market Reach	Brand Impact	Customer Engagement	Conversion Rate	Final Score
Digital Advertising	0.327	0.173	0.072	0.044	0.024	0.640
Direct Mail Campaigns	0.123	0.053	0.035	0.022	0.011	0.244
Telemarketing	0.064	0.021	0.017	0.009	0.006	0.116

The synthesized results (Table 7) show that Digital Advertising is the most effective marketing strategy for health insurance products with a final score of 0.640, significantly outperforming both Direct Mail Campaigns (0.244) and Telemarketing (0.116). This indicates that Digital Advertising not only excels in cost-effectiveness and market reach but also performs better in customer engagement, brand impact, and conversion rate, making it the optimal choice among the evaluated strategies.

5. Observation

The Analytic Hierarchy Process (AHP) analysis reveals that Digital Advertising is the most effective marketing strategy for health insurance products. With a final score of 0.640, it significantly outperforms both Direct Mail Campaigns and Telemarketing. Digital Advertising is particularly strong in terms of cost-effectiveness, market reach, and customer engagement. Its ability to reach a broad and diverse audience while maintaining financial efficiency makes it the optimal choice for health insurance companies seeking to maximize their marketing efforts. Additionally, its strong performance in brand impact and conversion rate further reinforces its effectiveness, indicating that it not only reaches potential customers but also successfully converts them into policyholders.

Direct Mail Campaigns, with a score of 0.244, ranks second but lags considerably behind Digital Advertising. This method shows moderate effectiveness in market reach and customer engagement, but it does not perform as well in cost-effectiveness or conversion rates. While Direct Mail Campaigns can target specific demographics with tailored offers, their overall impact on the brand and conversion rates is limited. Health insurance companies might consider this strategy as a supplementary approach, particularly for reaching specific market

6. Conclusion

The AHP analysis underscores that Digital Advertising is the most effective marketing strategy for promoting health insurance products, offering superior performance across key attributes such as cost-effectiveness, market reach, brand impact, customer engagement, and conversion rate. This strategy's ability to efficiently allocate resources while maximizing reach and engagement makes it the preferred choice for health insurance companies aiming to enhance their market presence and customer base. Direct Mail Campaigns, though moderately effective, may serve as a complementary strategy for targeted outreach, while Telemarketing is the least favorable option, offering limited advantages in comparison to the other methods. This analysis provides valuable insights for health insurance companies in optimizing their marketing strategies to achieve better outcomes.

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