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THE ROLE OF DIGITAL MARKETING STRATEGIES IN INCREASING THE BRAND CAPITAL OF TOURISM ENTERPRISES

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Abstract. It is widely acknowledged that digital marketing strategies can facilitate the enhancement of brand capital among tourism enterprises, particularly due to their growing exposure to the digital transformation environment compared with traditional marketing approaches. This study examines the effectiveness of multi-criteria decision analysis based on preference ranking in supporting tourism enterprises in brand development and digital campaign management.

The purpose of this paper is to identify the key challenges faced by tourism enterprises in applying appropriate digital marketing frameworks for brand positioning and competitive performance. Digital brand equity measurement is considered one of the important determinants shaping consumer-perceived value in tourism markets.

A total of 247 representatives of tourism enterprises participated in the study. The respondents were involved in three assessment formats: 1) strategy evaluation without digital tools; 2) strategy evaluation with PROMETHEE ranking support; and 3) integrated multi-criteria assessment. The responses obtained through structured questionnaires were analyzed according to their relevance to brand capital indicators, preference scores assigned to each decision criterion, and the identification of optimal digital marketing strategies.

The results show that, under both assessment conditions, most strategic priorities tend to combine social media engagement with content-driven brand communication. The findings also indicate that enterprises operating in digitally intensive environments outperform those with minimal digital marketing integration. The study demonstrates that the use of a structured decision-support framework can help tourism managers achieve more accurate brand capital enhancement outcomes compared with less systematic analytical approaches. In addition, tailored training programs focused on digital strategy formulation and multi-criteria evaluation techniques may help tourism enterprises strengthen their brand competitiveness before operating under real market conditions.

Keywords: digital marketing strategies, brand capital development, multi-criteria decision analysis, PROMETHEE, tourism enterprises, brand equity measurement, competitive positioning.

Аннотация. Общеизвестно, что стратегии цифрового маркетинга способны способствовать укреплению брендового капитала туристических предприятий благодаря их более высокой адаптации к условиям цифровой трансформации по сравнению с традиционными маркетинговыми подходами. В данном исследовании рассматривается эффективность многокритериального анализа принятия решений, основанного на концепции ранжирования предпочтений, при разработке бренда и управлении цифровыми маркетинговыми кампаниями в туристических предприятиях.

Цель исследования заключается в выявлении ключевых проблем, с которыми сталкиваются туристические предприятия при выборе и применении эффективных цифровых маркетинговых инструментов для позиционирования бренда и повышения конкурентоспособности. Измерение цифрового брендового капитала рассматривается как один из важнейших факторов формирования воспринимаемой потребителями ценности на туристическом рынке.

В исследовании приняли участие 247 представителей туристических предприятий. Участники были распределены по трём форматам оценки: 1) оценка стратегии без использования цифровых инструментов; 2) оценка стратегии с применением системы ранжирования PROMETHEE; 3) интегрированная многокритериальная оценка. Ответы, полученные с помощью структурированных

анкет, были проанализированы с точки зрения их соответствия показателям брендового капитала, предпочтительности по каждому критерию принятия решений и выбора оптимальных цифровых маркетинговых стратегий.

Результаты показывают, что в обоих вариантах оценки наиболее эффективные стратегические приоритеты основаны на сочетании активности в социальных сетях и контент-ориентированных коммуникаций бренда. Кроме того, предприятия, работающие в условиях высокой цифровой интеграции, демонстрируют более высокие показатели по сравнению с организациями, использующими цифровой маркетинг в ограниченной степени. Исследование подтверждает, что применение структурированной системы поддержки принятия решений способствует более точному достижению целей по развитию брендового капитала по сравнению с менее системными аналитическими подходами. Также установлено, что специализированные программы обучения по разработке цифровых стратегий и использованию методов многокритериальной оценки способны повысить конкурентоспособность туристических предприятий до выхода на реальные рыночные условия.

Ключевые слова: стратегии цифрового маркетинга, развитие брендового капитала, многокритериальный анализ принятия решений, PROMETHEE, туристические предприятия, оценка брендового капитала, конкурентное позиционирование.

INTRODUCTION

Digital marketing is a formal, data-driven strategic framework [1] that combines content creation, audience targeting, and platform integration to generate measurable brand value [2]. This approach emphasizes the active participation of students, their engagement in asking strategy-oriented questions, and, most importantly, their involvement in decision-making processes aimed at identifying optimal solutions to branding-related issues [3].

Brand equity refers to the perceived competitive advantage formed through the relationship between consumer expectations and enterprise performance. In the tourism sector, most studies have used structured questionnaires [5] to evaluate digital strategies developed by students [4]. However, previous studies have shown that students at various academic levels often face difficulties in adopting frameworks that improve their understanding of digital positioning [6] and in mastering multi-criteria evaluation techniques [7].

A considerable number of tourism enterprise representatives experience difficulties in strategic decision-making, particularly in developing brand capital strategies. The use of the PROMETHEE method remains relatively limited among expert practitioners, as its analytical framework is more complex for enterprise managers compared with conventional ranking tools. In particular, interpreting different forms of preference scores can be challenging for respondents, since the information presented in a decision matrix may not be easily translated into brand positioning outcomes.

Digital marketing research in tourism has gained considerable momentum over the past decade, with scholars examining how online platforms shape consumer perceptions and destination competitiveness. Apart from the studies by [8], [9], and Deb et al. [10], to the best of the researchers' knowledge, few studies have examined integrated multi-criteria brand assessment in tourism enterprises. Studies have also shown that students are often given limited opportunities to participate in digital strategy formulation in practice [11].

The conventional approach does not sufficiently focus on measuring brand equity from a multi-criteria perspective and often faces difficulties in differentiating between strategic elements such as content creation, social media engagement, audience targeting, and competitive positioning [12]. Furthermore, researchers in branding and destination marketing have emphasized the importance of a systematic approach [3]. However, while these studies investigated social media communication and brand equity, they did not examine PROMETHEE-based decision rankings in their data analysis.

Although considerable research has been conducted on digital marketing in tourism, there remains a lack of studies on the effectiveness of brand capital development by managers applying this approach. To the best of the researchers' knowledge, no previous studies have specifically investigated preference-ranking frameworks as tools for enhancing brand capital in tourism contexts. Therefore, this study proposes a model of digital marketing practices based on multi-criteria evaluation, offering structured guidance to digital strategy developers and tourism enterprise managers.

This paper presents the findings of a study conducted to investigate whether the introduction of PROMETHEE into the decision-making process can serve as a strategic support tool for helping managers

evaluate brand strategies more systematically. It was expected that enterprise representatives would be able to interpret preference rankings more effectively and read decision outcomes more accurately when strategies were presented within a structured framework using multi-criteria weighting, compared with an unstructured approach.

Brand capital development is emphasized in this study because it plays an important role in brand positioning and competitive performance. The findings are relevant for developers of digital campaigns and marketing training programs in the hospitality and tourism sectors, particularly in relation to the use of multi-criteria methods in brand capital management. Using the proposed framework, enterprise responses were analyzed based on brand capital indicators, preference scores assigned to each decision criterion, and the identification of optimal digital marketing strategies.

A comprehensive understanding of how the PROMETHEE method assists managers in brand capital development requires an examination of strategic priorities, as well as managers' capacity to formulate positioning outcomes before and after training on the decision framework. Despite the analytical complexity of the PROMETHEE framework compared with conventional tools, familiarity with the multi-criteria approach may help enterprise managers interpret brand indicators more effectively in a strategic context.

Therefore, this study proposes a new assessment framework consisting of three components: preference scoring, criterion weighting, and strategic ranking based on PROMETHEE [13], together with brand equity measurement and digital campaign integration derived from the integrated multi-criteria assessment approach [14].

LITERATURE REVIEW

Recent studies emphasize that digital marketing has become an important strategic tool for strengthening brand equity and competitiveness in tourism enterprises. Abbasi et al. [1] highlight the role of tourism-generated social media communication in shaping brand equity, satisfaction, and customer loyalty. Similarly, Huerta-Álvarez et al. [9] argue that social media communication and brand engagement significantly influence destination brand equity, particularly in emerging markets.

A number of scholars have examined digital marketing as a mechanism for improving tourism business performance. Afren [2] notes that social media platforms play a crucial role in promoting tourism services and attracting potential travelers. Deb et al. [7] also emphasize that digital marketing supports sustainable tourism business development in the post-pandemic environment. In addition, Kummitha [3] shows that digitalization contributes to sustainable branding in tourism destinations by improving visibility, communication, and customer interaction.

Other studies focus on the measurement of digital brand equity and the role of integrated digital communication. Chen and Kim [6] demonstrate that social media strengthens brand equity for historical tourism destinations, while Qi et al. [14] underline the importance of digital integrated marketing communication in building and maintaining destination brand equity. Nguyen et al. [11] further confirm the relationship between social media communication, brand equity, and customer satisfaction in tourism destinations.

Despite these contributions, existing studies mainly focus on social media communication, content marketing, and destination branding. There is still limited research on the use of multi-criteria decision-making methods, particularly PROMETHEE, in evaluating digital marketing strategies and brand capital development in tourism enterprises. Therefore, this study fills this gap by applying a structured multi-criteria decision-support framework to assess digital marketing strategy alternatives and their impact on brand capital indicators.

RESEARCH METHODOLOGY

This study involved tourism enterprise representatives who were participating for the first time in a structured digital marketing assessment. A total of 247 respondents representing tourism enterprises were included in the research. The participants consisted of mid-level managers and senior decision-makers from five different organizational contexts. They attended a workshop on digital marketing strategy and were asked to provide responses to structured questionnaires. The respondents were between 28 and 54 years old and were recruited through an open invitation distributed to several regional tourism enterprises.

Prior to the assessment session, each participant completed a screening questionnaire designed to evaluate prior experience and existing knowledge of interpreting preference rankings, both with and without

decision-support tools. All respondents were randomly assigned to assessment conditions. Participants involved in individual assessments worked independently, whereas those involved in group evaluations worked in groups of four. Participation was voluntary, no compensation was provided, and the purpose of the study was explained to all respondents. The average response time for reading structured items with a decision matrix ranged from 45 to 120 seconds. After seven orientation sessions on brand strategy, participants were randomly assigned to one of the evaluation conditions and completed the questionnaires within the allocated time frame.

The assessment instrument was developed in accordance with the brand equity framework and adapted from the multi-criteria model proposed by [15]. In this study, the PROMETHEE method, or Preference Ranking Organization Method for Enrichment Evaluations, was applied as an analytical ranking technique. Eighteen representative strategic terms were presented to the participants as practice trials using the PROMETHEE tool, which served as a structured decision-support system for brand evaluation and generated preference scores systematically. This framework was introduced to examine digital marketing strategy practices among tourism enterprise managers.

Before the experimental session, participants were informed that brand strategy statements presented in structured questionnaire format would be evaluated and ranked according to digital marketing options. After completing the individual assessments, participants discussed their responses with group members and collaborated to improve the accuracy of strategic rankings. The order of presentation was counterbalanced and randomized for tasks completed both with and without decision-support tools, with a different sequence used for each participant.

Response time in reading experiments provides information about processing difficulty; therefore, average response time was used as an indicator of the comprehensibility of the materials. The data were then systematically analyzed with a focus on specific brand capital indicators and strategic preference scores. The entire experimental session lasted approximately 90 minutes for each participant. According to [6] and [7], the obtained values indicated acceptable inter-observer reliability.

The first part of the experiment involved reading aloud strategic brand-related terms presented in two different formats. The first category of brand capital reflected perceived value from an enterprise perspective. The second part of the experiment involved the same strategic terms presented in the PROMETHEE ranking format. If a response demonstrated strategic misalignment, it was classified as a low-performing brand capital outcome. These responses were then manually categorized under strategic priority themes, ranked, and tabulated into three categories of brand capital indicators.

Based on the categories in the observation checklist of digital strategies, respondents were classified accordingly. The classification of responses was based on the criteria proposed by Deb et al. [2], where preference scores were assigned to all decision criteria, regardless of whether they showed a dominant ranking. Inter-coder reliability of the observed categories was then calculated.

The strategic terms were selected from the same pool of terms used in a previous study comparing differences in brand positioning outcomes with and without multi-criteria support tools. PROMETHEE was applied to test the consistency of qualitative observations. To assess enterprise managers' understanding of brand capital in the context of strategy formulation and competitive positioning, participants completed an evaluation task related to the concept of digital brand equity. This method has also been applied in other studies on destination marketing strategies [5].

The instrument was developed based on the brand equity framework and adapted from the multi-criteria model proposed by [9]. Each recorded response was reviewed systematically to determine the type of strategic decision made by managers and representatives before and after training. This part of the assessment lasted approximately 30 minutes for each participant.

ANALYSIS AND RESULTS

The data show that participants in the PROMETHEE-supported condition performed better than those in the unsupported evaluation condition. In terms of brand capital indicators, the distribution of strategic priorities—namely social media engagement, content-driven communication, audience targeting, and competitive positioning—demonstrated a dominant pattern in the context of digital marketing strategies among tourism enterprises (Figure 1).



Figure 1. PROMETHEE Rankings¹

As can be observed in Figure 1, participants were more accurate in reading preference rankings in the structured framework with multi-criteria weighting than without it ($p < .05$) (Figure 2).

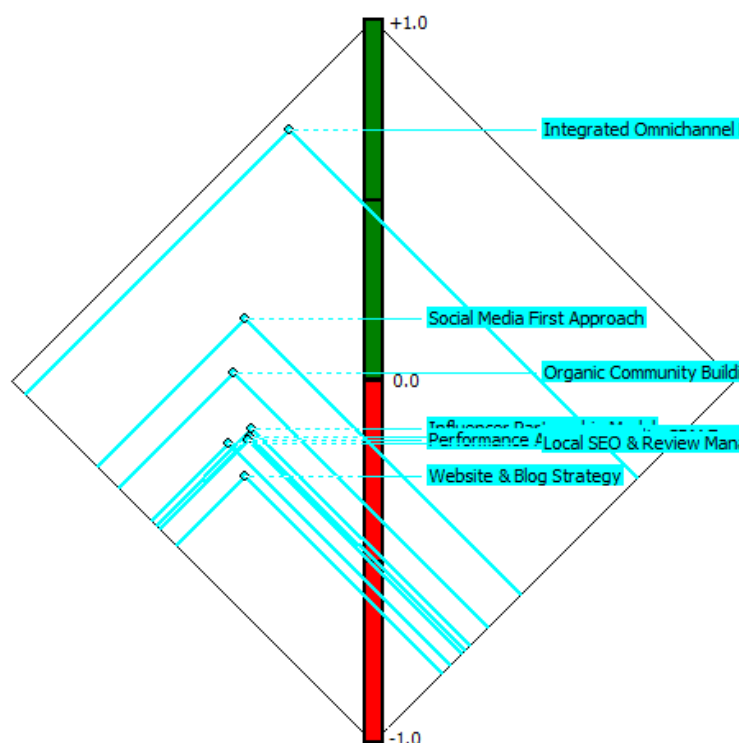


Figure 2. PROMETHEE Diamond²

¹ author's development
² author's development

This process has resulted in a deeper understanding of the brand capital indicators being studied and further increased the group's performance in strategic decision-making tasks (Figure 3).

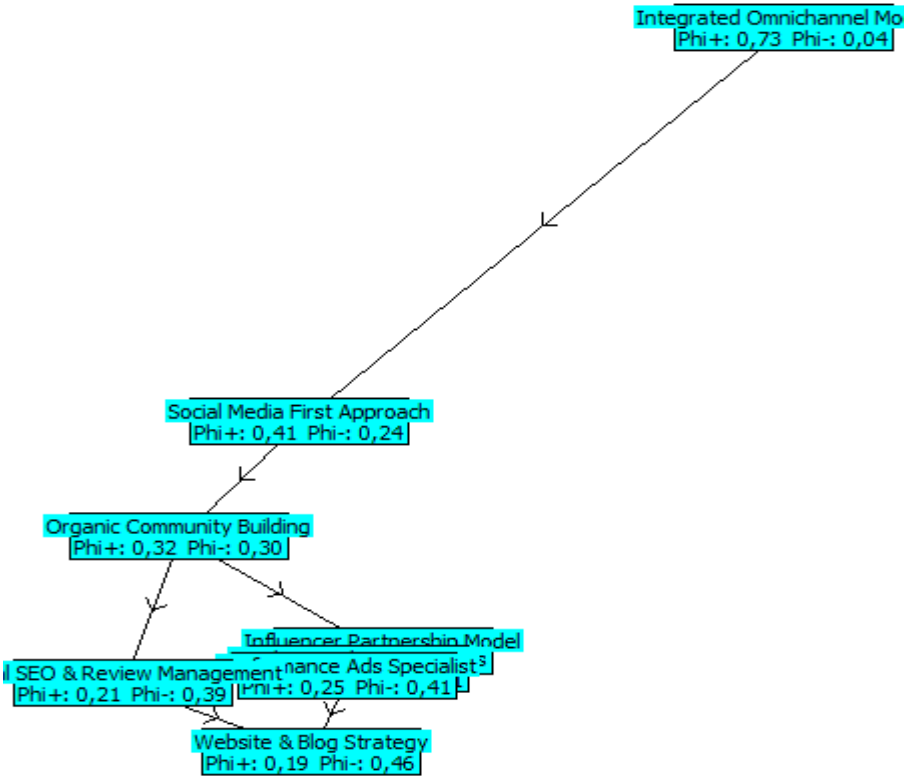


Figure 3. PROMETHEE Network³

It can be observed that the majority of correct brand capital outcomes were constructed by students involved in the PROMETHEE-supported condition and only a small proportion were constructed by students involved in the unsupported evaluation condition (Figure 4).

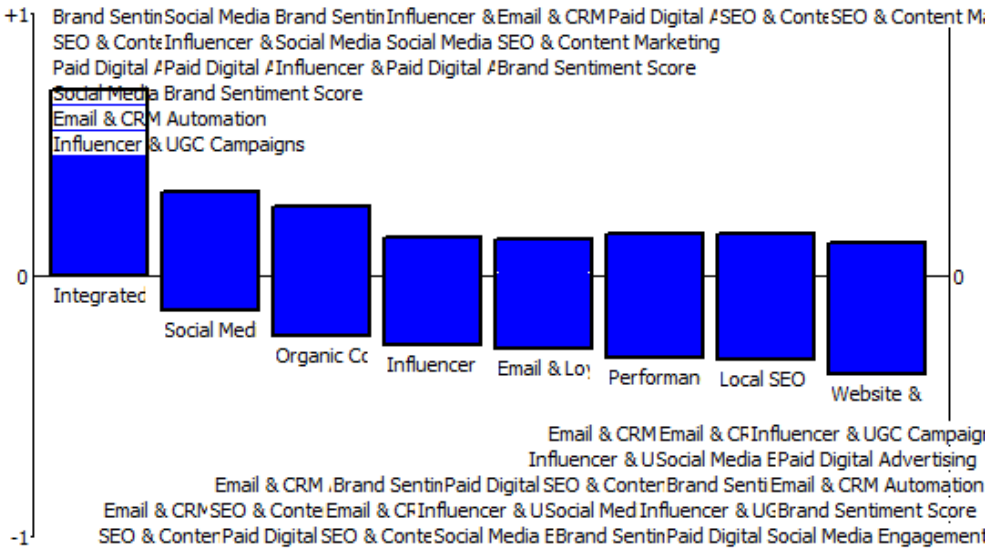


Figure 4. PROMETHEE Rainbow⁴

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Two instances of strategic misalignment after a student's question that showed low brand capital performance were incorrect answers recorded and other students answering partially as shown in Figure 5 below.

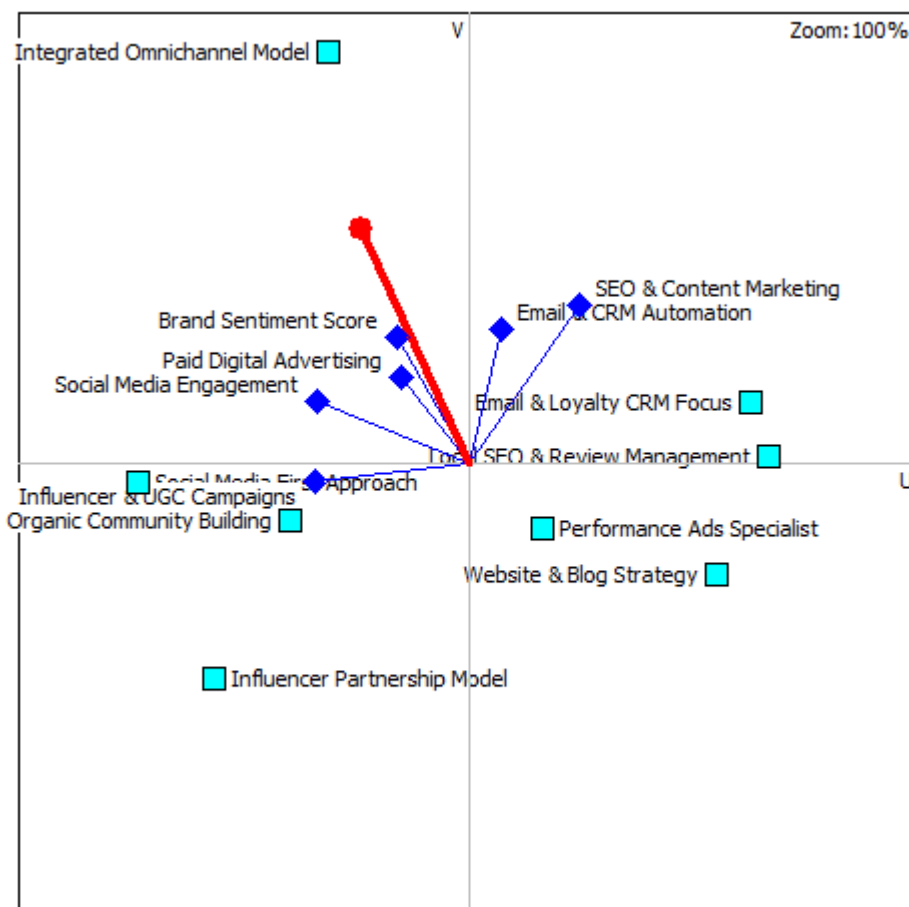


Figure 5. GAIA⁵

There was a significant effect of assessment condition ($p = .03$); however, there was no significant difference between individual performance and group performance ($p = .17$) (Figure 6).

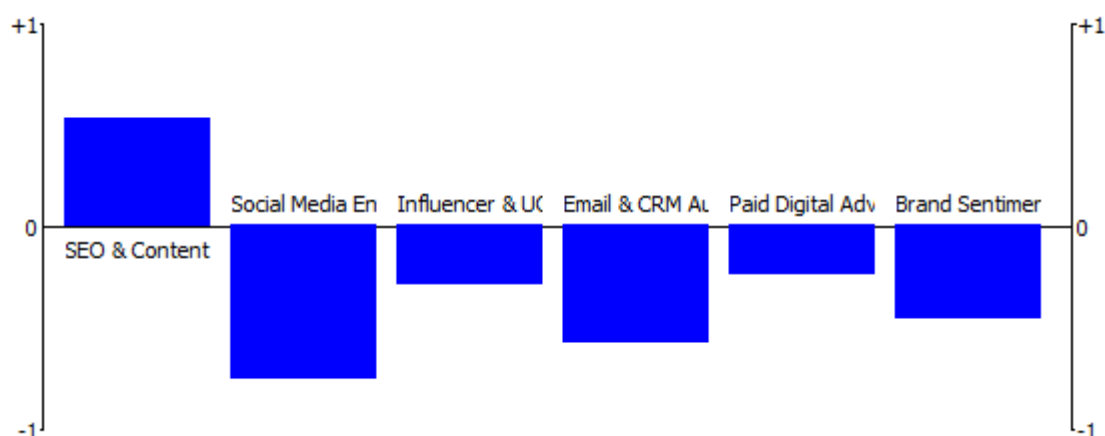


Figure 6. Action profile⁶

⁵ author's development

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Mean of overall group activity was 68% of total strategic responses that occurred during the workshop sessions observed. This indicates that multi-criteria decision-making activities enhance students' ability to present brand positioning outcomes (Figure 7).

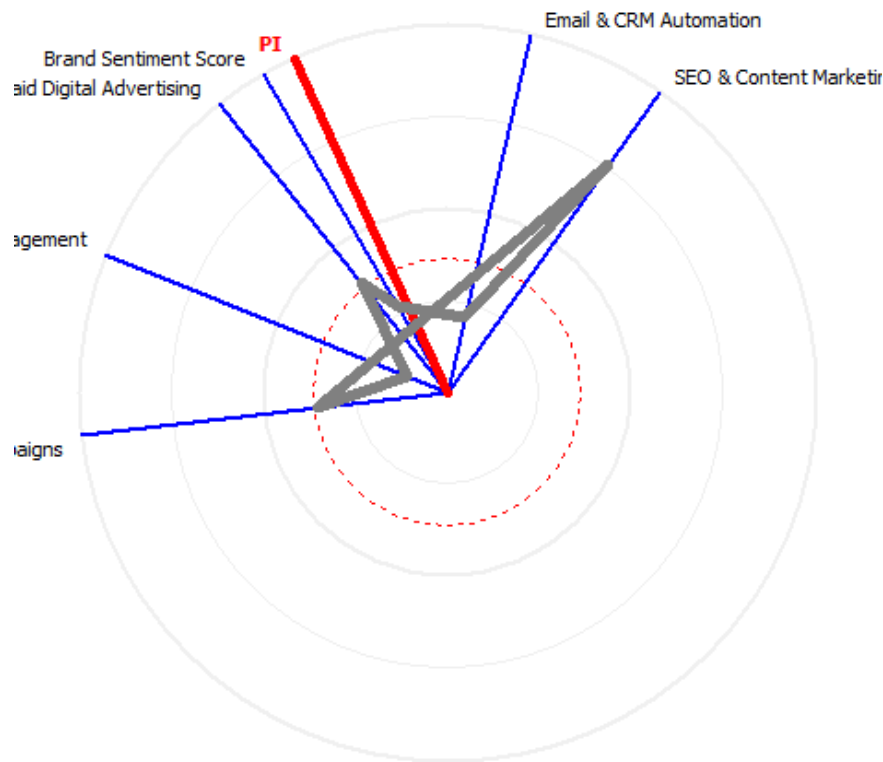


Figure 7. GAIA Web⁷

The managers' involvement in the structured evaluation sessions was to identify certain strategic priorities that could be considered by the enterprise representatives and to make the decisions in their written responses after the training in the digital marketing workshop (Figure 8).

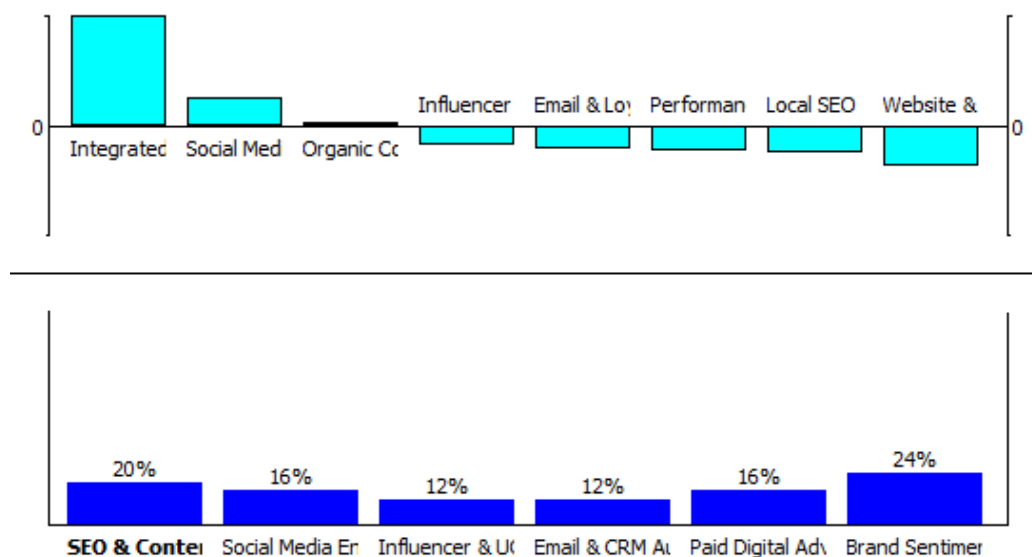


Figure 8. Walking Weights⁸

⁷ author's development

⁸ author's development

This may be due to the existence of prior knowledge gaps or the lack of sufficient knowledge about the decision framework being studied. This was due to most of the evaluation questions were of closed-ended questions which required brief responses, a word or two. In the unsupported evaluation condition, there were no correct responses at all for criteria related to competitive positioning indicators and audience targeting strategies (Figure 9).

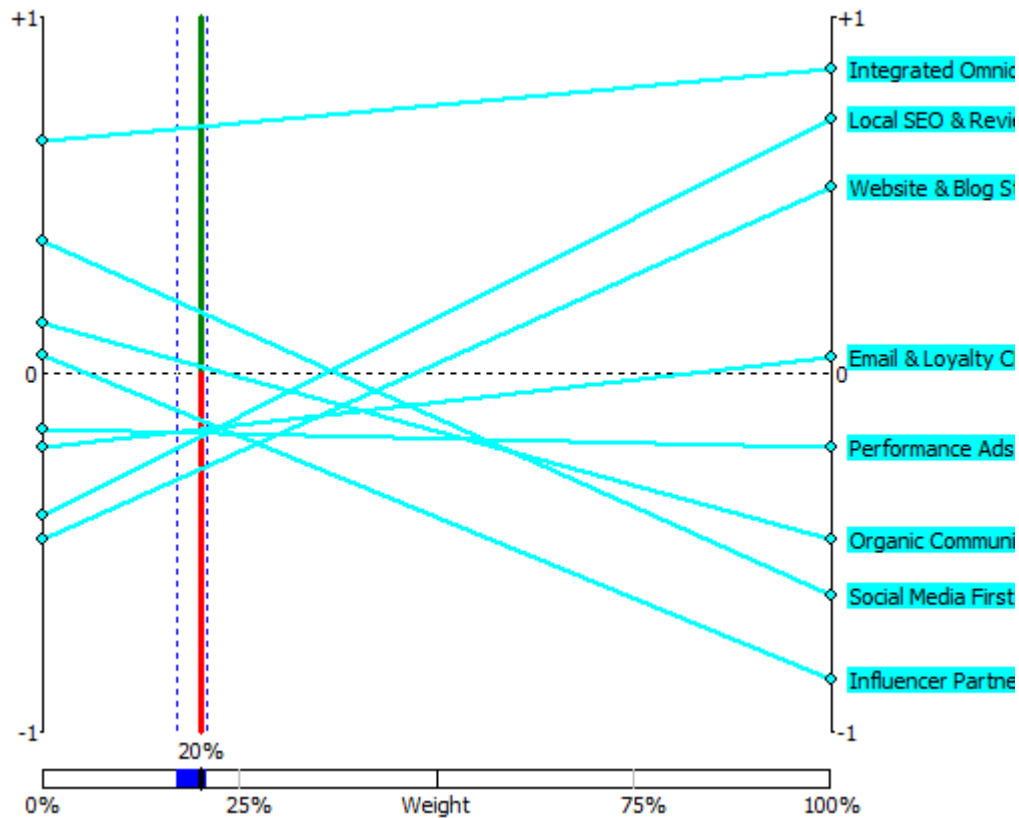


Figure 9. Visual Stability Intervals⁹

In the PROMETHEE-supported condition, there was only one instance for the criterion related to content creation among senior decision-makers. However, the difference between reading the decision matrix with multi-criteria weighting and the conventional ranking format was not significant ($p = .09$) (Table 1).

Table 1. Promethee Flow table¹⁰

Rank	action	Phi	Phi+	Phi-
1	Integrated Omnichannel Model	0,6942	0,7310	0,0368
2	Social Media First Approach	0,1730	0,4087	0,2357
3	Organic Community Building	0,0206	0,3171	0,2965
4	Influencer Partnership Model	-0,1305	0,2676	0,3981
5	Email & Loyalty CRM Focus	-0,1548	0,2523	0,4072
6	Performance Ads Specialist	-0,1637	0,2464	0,4100
7	Local SEO & Review Management	-0,1741	0,2126	0,3867
8	Website & Blog Strategy	-0,2646	0,1915	0,4561

⁹ author's development

¹⁰ author's development

Further analyses on the group evaluation results show that there is a higher proportion of students who constructed correct brand capital outcomes in digitally intensive environments, as shown in Table 1. However, the difference in the response time when reading the preference rankings without decision-support tools and structured format was not significant ($p = .12$) (Figure 10).

Scenario1	SEO_Content...	Social Media ...	Influencer_U...	Email_CRM A...	Paid Digital A...	Brand Senti...
Unit	score	%	score	score	%	score
Cluster/Group	◆	◆	◆	◆	◆	◆
Preferences						
Min/Max	max	max	max	max	max	max
Weight	2,50	2,00	1,50	1,50	2,00	3,00
Preference Fn.	Linear	Linear	Level	Level	Linear	Gaussian
Thresholds	absolute	absolute	absolute	absolute	absolute	absolute
- Q: Indifference	3,00	4,00	0,50	0,50	3,00	n/a
- P: Preference	15,00	18,00	1,50	2,00	14,00	n/a
- S: Gaussian	n/a	n/a	n/a	n/a	n/a	8,50
Statistics						
Minimum	38,00	38,00	2,00	2,00	28,00	58,00
Maximum	84,00	81,00	5,00	5,00	82,00	88,00
Average	60,25	59,88	3,50	3,13	50,00	70,75
Standard Dev.	15,41	15,53	1,12	0,93	18,88	9,02
Evaluations						
Website_Blog Str...	72,00	38,00	3,00	2,00	41,00	62,00
Social Media First...	45,00	81,00	5,00	3,00	58,00	74,00
Influencer Partn...	38,00	65,00	5,00	2,00	47,00	69,00
Email_Loyalty CR...	61,00	42,00	2,00	5,00	35,00	71,00
Performance Ads...	55,00	49,00	3,00	3,00	82,00	58,00
Integrated Omni...	84,00	74,00	4,00	4,00	76,00	88,00
Organic Commun...	49,00	77,00	4,00	3,00	28,00	79,00
Local SEO_Revie...	78,00	53,00	2,00	3,00	33,00	65,00

Figure 10. PROMETHEE-Based Multi-Criteria Evaluation Framework for Digital Marketing Strategy Performance in Tourism Enterprises¹¹

Overall, this study found that the mean rate of participants' ability to provide further explanations was relatively low, at 14%. This indicates that this category accounted for only a small proportion of the total strategic responses observed during the workshop sessions.

These findings suggest that interpreting strategic brand-related concepts through conventional ranking formats without multi-criteria decision-support tools remains a challenging task, even for senior decision-makers participating in structured assessments for the first time. Participants tended to process strategic terms before fully interpreting the outcomes presented in the decision matrices. Therefore, the findings provide valuable insights for digital marketing practitioners, highlighting several areas of brand capital development that require further strengthening.

The data also indicate that the highest proportion of correct responses was associated with social media engagement criteria, whereas the lowest proportion was related to competitive positioning criteria. Furthermore, no statistically significant difference was observed between first-time participants in the PROMETHEE-supported condition and those using conventional ranking formats with multi-criteria weighting in terms of overall performance.

The findings provide empirical support for the conclusions reported in [11], which emphasized that enterprises often face deficiencies in digital strategy development and brand positioning capabilities. Regarding the expectation that managers would process strategic information more efficiently when decision-support tools were available, the results demonstrated that managers in the PROMETHEE-supported condition interpreted strategic terms significantly more accurately than those working in unsupported evaluation environments or conventional formats without analytical support.

The results further suggest that enterprise managers require structured analytical support when formulating brand capital strategies. Such support may also be delivered through digital training programs that

¹¹ author's development

incorporate criterion weighting and preference-scoring guidance. Although managers were generally able to identify appropriate strategic priorities, many experienced difficulties in providing detailed explanations for their decisions.

Integrated approaches to brand strategy formulation and competitive positioning are essential for developing effective digital marketing practices. The findings indicate that decision-support tools help first-time participants interpret strategic information more accurately within a structured framework. At the same time, the complexity of the decision matrix may increase overall response time. The results also suggest that familiarity with multi-criteria methods is not the sole determinant of brand capital performance. This supports the argument that evaluations conducted without analytical support are considerably more demanding because they rely heavily on individual interpretation.

According to the strategic performance scores, managers can achieve effective positioning outcomes when they meet the required preference thresholds. In many cases, participants relied on their prior knowledge when formulating brand-positioning responses. Consequently, developers of digital marketing programs should consider introducing structured evaluation tasks similar to those used in PROMETHEE-based assessments in order to strengthen analytical and strategic competencies.

Notably, the PROMETHEE-supported group demonstrated significantly better performance in interpreting preference rankings than participants using conventional brand capital evaluation formats without decision-support tools. Although traditional ranking formats were familiar to respondents through their previous professional experience, the presence of multi-criteria weighting acted as a form of analytical scaffolding that improved interpretation accuracy, particularly when participants encountered unfamiliar evaluation criteria.

Therefore, the assessment framework proposed in this study represents a meaningful contribution to the digital marketing literature. Unlike previous studies, the evaluation instrument was developed directly from managers' responses collected during structured workshop sessions. This approach differs from our earlier research, which concluded that managers' understanding of brand equity indicators remained limited.

The findings also provide additional evidence supporting the conclusions reported in [6], which demonstrated that structured digital tools significantly influence brand perception outcomes in tourism contexts. However, the expectation that first-time participants would interpret rankings both more accurately and more quickly in the structured format was only partially confirmed. This study differs from the findings of Deb et al. [7], as the evaluation task focused specifically on multi-criteria ranking applications rather than general brand awareness. The differences between the expected and observed results may be explained by several contextual factors.

One possible explanation for the variation in performance is the complexity of the decision matrix itself. This may reflect insufficient familiarity with preference-ranking structures, as the orientation sessions did not provide extensive coverage of the underlying analytical framework. In addition, the limited number of evaluation criteria and assessment conditions may restrict the generalizability of the findings.

Despite these limitations, the results suggest that managers can achieve the required performance thresholds even without completing every stage of a multi-criteria evaluation process. Nevertheless, developers of digital marketing programs should carefully consider these findings, as brand capital development has a direct and measurable influence on organizational competitiveness, while managerial response quality and strategic competencies may ultimately affect future market performance.

CONCLUSION AND RECOMMENDATIONS

The findings of this study indicate that the use of structured multi-criteria evaluation tools can strengthen students' strategic decision-making skills and improve their knowledge of brand equity, thereby enhancing their competitive performance. Several important practical implications can be drawn for tourism enterprise learners and digital marketing practitioners in the context of brand capital development.

Developers of digital marketing programs can support learners by introducing multi-criteria evaluation tools that are easier to understand and apply, especially at the early stages of brand strategy formulation. Structured analytical activities, such as preference scoring, criterion weighting, social media engagement assessment, and competitive positioning exercises, can improve students' digital branding skills. Therefore, these activities should be given greater priority in the teaching and learning of digital marketing strategy.

The results also suggest that being experienced learners does not necessarily mean that participants require less structured guidance in becoming proficient users of the PROMETHEE-based decision framework. Even experienced learners may benefit from systematic support when interpreting preference rankings and applying multi-criteria analysis to brand capital development.

Since this study was conducted with a limited group of participants in a specific setting, further research should be carried out in different organizational contexts using larger samples. This would help improve the generalizability of the findings and examine their replicability across various tourism enterprises.

Finally, multi-criteria analytical competence remains essential for tourism enterprise managers, even though it is more commonly discussed in the context of professional development. Successful performance in strategic positioning tasks requires not only digital marketing knowledge but also broader skills in brand capital evaluation and decision-support analysis.

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