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Explaining the Integrated Model of Communication Messages in Branding the Aras Free Zone

ABSTRACT

The present study aimed to explain the integrated model of communication messages in branding the Aras Free Zone by identifying the causal and effect relationships among communication and branding components using the fuzzy DEMATEL approach. This research was applied in terms of purpose and descriptive-analytical in terms of methodology and was conducted using a mixed-methods approach. In the qualitative phase, the main communication and branding components were identified through reviewing theoretical foundations, document analysis, and expert interviews. In the quantitative phase, the fuzzy DEMATEL method was employed to analyze the causal relationships among the identified components. The statistical population consisted of experts in branding, communications, media, marketing, and free zone management, from which 20 experts were selected through purposive judgmental sampling. Data were collected using a fuzzy pairwise comparison questionnaire based on triangular fuzzy numbers. The identified components included brand visual identity, media and advertising strategies, social media and digital content, public relations and media interaction, events and exhibitions, and brand image and awareness. Data analysis involved normalization of the fuzzy direct-relation matrix, calculation of the total-relation matrix, and determination of D+R and D-R indices to identify causal and effect factors. The findings demonstrated that "Public Relations and Media Interaction," "Media and Advertising Strategies," and "Brand Visual Identity" were categorized as causal and driving factors within the integrated communication system of the Aras Free Zone brand. Among these, public relations exhibited the highest overall importance and impact power based on the D+R and D-R indices. In contrast, "Brand Image and Awareness," "Social Media and Digital Content," and "Events and Exhibitions" were identified as effect components with higher levels of dependence on other variables. The results further revealed that effective communication management, message consistency, and coordinated media strategies indirectly improve brand image and audience awareness through mediating communication channels. The extracted causal map confirmed the existence of a dynamic and networked structure among the communication components influencing place branding. The study concluded that successful branding of the Aras Free Zone requires integrated and systematic management of communication messages across all communication channels and platforms. The proposed model highlights the strategic role of visual identity, media policymaking, and proactive public relations in shaping a coherent and sustainable regional brand image.

Keywords: Free zone branding, integrated communication messages, place branding, fuzzy DEMATEL, media strategies, brand image, public relations, Aras Free Zone.

Introduction

In the contemporary competitive economy, branding has evolved far beyond the traditional boundaries of products and corporations and has become a strategic necessity for cities, regions, tourism destinations, and free trade-industrial zones. The growing intensity of global competition among regions for attracting investors, tourists, entrepreneurs, and international

partnerships has transformed branding into a multidimensional communication process aimed at creating a distinctive and sustainable image in the minds of stakeholders [1, 2]. In this context, place branding is no longer limited to logos or advertising campaigns; rather, it encompasses a comprehensive system of communication, identity construction, audience interaction, and experience management designed to shape positive mental associations and strengthen long-term competitiveness [3, 4].

The increasing complexity of communication systems and the emergence of digital technologies have fundamentally transformed the mechanisms through which brands interact with audiences. Modern branding strategies are increasingly dependent on integrated communication structures in which social media, public relations, digital content, advertising, events, and audience engagement operate synergistically to create coherent brand experiences [5, 6]. The rapid development of digital communication technologies has enabled organizations and regions to engage in real-time interactions with diverse stakeholders, while simultaneously increasing the risk of fragmented messaging and inconsistent brand perceptions. Consequently, the integration of communication messages has become a critical requirement for building and maintaining strong regional and organizational brands [7, 8].

The literature on branding emphasizes that communication consistency is one of the most influential determinants of brand equity and audience trust. Effective communication strategies align the organization's values, visual identity, media narratives, and stakeholder interactions within a unified framework that reinforces brand recognition and loyalty [9, 10]. In the absence of integrated communication management, organizations often experience fragmented audience perceptions, reduced credibility, and weakened market positioning. Therefore, communication integration is considered a central mechanism for reducing ambiguity and enhancing the effectiveness of branding efforts across different channels and audiences [11, 12].

Place branding has gained considerable importance in developing countries where economic regions and free zones seek to strengthen international competitiveness and attract foreign investment. Free trade-industrial zones play an important role in facilitating economic growth, export development, international trade, and technology transfer. However, their success depends not only on economic incentives and legal infrastructures but also on their ability to establish a favorable and trustworthy brand image among domestic and international stakeholders [13]. In this regard, communication and media strategies are increasingly recognized as strategic assets capable of shaping investors' perceptions regarding economic stability, transparency, opportunity, and competitiveness.

In Iran, free zones have been established to diversify economic revenues, reduce dependence on oil exports, promote regional development, and integrate the national economy into global trade networks. Nevertheless, many Iranian free zones continue to face challenges related to inconsistent communication policies, fragmented media representation, and weak branding strategies [14]. Despite possessing significant economic, geographical, and strategic advantages, several free zones have not yet succeeded in creating a distinctive and sustainable regional brand identity capable of competing effectively at the international level. This challenge demonstrates the necessity of designing integrated communication systems that coordinate all communication channels and deliver coherent brand messages to target audiences.

The Aras Free Zone is considered one of the most strategically important free trade-industrial zones in Iran due to its geographical position adjacent to the Republic of Azerbaijan and Armenia and its significant industrial, commercial, and tourism capacities. The zone has substantial potential for attracting domestic and foreign investment and functioning as an

economic gateway connecting Iran to regional and international markets. However, despite these advantages, the Aras Free Zone still faces considerable communication and branding challenges, particularly regarding message integration, audience perception management, and communication consistency across media channels. The lack of a comprehensive integrated communication model has contributed to fragmented branding activities and inconsistent stakeholder perceptions regarding the identity and strategic position of the zone [15].

Contemporary branding research increasingly emphasizes the role of communication ecosystems in shaping place brands and organizational identities. Social media platforms, digital storytelling, interactive content, and audience participation have transformed branding into a collaborative and multidimensional process in which audiences actively contribute to meaning creation and brand interpretation [16, 17]. In addition, branding strategies are becoming progressively interconnected with sustainability, innovation, and social responsibility dimensions, reflecting broader societal expectations regarding transparency, ethical communication, and long-term value creation [11, 12]. Consequently, successful branding requires not only external communication effectiveness but also internal communication alignment and organizational coherence.

Internal communication has emerged as an influential factor in strengthening stakeholder trust, employee engagement, and communication consistency within branding systems. Effective internal communication enhances organizational cohesion and ensures that all organizational actors contribute to delivering aligned and coherent brand messages [18, 19]. This issue is especially important in place branding and free zone management, where multiple actors, institutions, and communication channels interact simultaneously. Without coordinated communication structures, organizations risk generating contradictory narratives that weaken the overall brand image and reduce audience confidence.

Recent technological developments have also intensified the role of digital communication in branding strategies. Artificial intelligence, cloud computing, digital platforms, and data-driven communication systems are transforming how organizations manage interactions with stakeholders and personalize communication content [20, 21]. These technologies enable organizations to analyze audience behavior, tailor messages to specific target groups, and improve communication efficiency across various channels. At the same time, the increasing complexity of digital communication environments requires organizations to establish integrated frameworks capable of coordinating both traditional and digital communication tools [5, 22].

Research in the field of branding also demonstrates that audience loyalty and positive brand associations are directly influenced by the consistency and quality of communication experiences. Destination branding studies indicate that integrated communication strategies significantly contribute to strengthening destination loyalty, trust, and behavioral intentions among audiences [8, 10]. Likewise, place branding literature highlights that regional competitiveness increasingly depends on the ability of cities and regions to communicate their unique identities and strategic values effectively [1, 2]. These findings suggest that the branding success of free zones requires coordinated communication systems capable of integrating visual identity, public relations, digital media, and stakeholder engagement into a unified strategic framework.

In Iran, several studies have examined different aspects of place branding, communication strategies, and regional identity formation. Research on urban branding and tourism branding has highlighted the importance of media representation, public relations, and strategic communication in shaping public perceptions and strengthening place competitiveness [23, 24]. Other studies have emphasized the necessity of developing strategic branding models adapted to the cultural and economic context of Iranian organizations and regions [25, 26]. Furthermore, investigations into free zone branding have demonstrated that

integrated communication management is essential for reducing message inconsistency and enhancing regional brand identity [14, 15].

The literature on employer branding, corporate branding, and destination branding similarly emphasizes the multidimensional nature of communication processes and the necessity of integrating emotional, visual, social, and informational dimensions within branding systems [27, 28]. Branding effectiveness increasingly depends on organizations' ability to establish coherent narratives that align stakeholders' experiences with organizational values and communication messages. This perspective aligns with recent studies highlighting the strategic importance of communication management in digital and globalized environments [29, 30].

Despite the expansion of branding and communication research, there remains a significant gap regarding the integrated modeling of communication messages in the context of Iranian free zones. Existing studies have primarily focused on isolated communication tools or general branding concepts without systematically examining the causal relationships among communication components influencing regional branding outcomes [31, 32]. Furthermore, limited research has employed analytical methods capable of identifying the interdependencies and causal structures underlying integrated communication systems in place branding contexts.

The complexity of communication relationships in free zone branding requires analytical approaches capable of addressing uncertainty, multidimensional interactions, and causal dynamics among variables. The fuzzy DEMATEL method provides an appropriate analytical framework for examining these complex relationships by identifying both direct and indirect effects among communication components. Through this approach, it becomes possible to distinguish driving communication factors from outcome variables and to develop strategic communication models based on causal structures and influence networks.

Given the strategic importance of the Aras Free Zone and the growing necessity of integrated communication management in regional branding, the present study seeks to address the existing research gap by explaining the causal relationships among communication components affecting the branding of the zone. The study contributes theoretically to the literature on place branding and integrated communication systems while also providing practical insights for policymakers, branding managers, and communication professionals involved in free zone development and strategic media planning.

Therefore, the aim of the present study was to explain the integrated model of communication messages in branding the Aras Free Zone by identifying the causal and effect relationships among communication components using the fuzzy DEMATEL approach.

Methodology

The present study was applied in terms of purpose and descriptive–analytical in terms of methodology and implementation. The research was conducted using a mixed-methods approach combining qualitative and quantitative phases to explain the integrated model of communication messages in branding the Aras Free Zone. In the qualitative phase, the initial communication and branding components were identified through an extensive review of theoretical literature, document analysis, and expert interviews. Subsequently, in the quantitative phase, the fuzzy DEMATEL technique was employed to investigate the causal relationships among the identified communication components and to determine the degree of influence and dependence among variables. The fuzzy DEMATEL approach was selected because of its capability to analyze complex causal relationships under conditions of uncertainty and ambiguity in expert judgments.

The statistical population consisted of specialists and experts in the fields of branding, communication sciences, media management, marketing, public relations, and free zone administration who possessed sufficient familiarity with the branding and communication activities of the Aras Free Zone. Sampling was conducted using purposive and judgmental methods based on criteria such as academic specialization, managerial experience, professional expertise, and familiarity with regional branding and integrated communication systems. Ultimately, 20 experts participated in the study as the final sample. The participants included university faculty members in communication and management disciplines, senior media and public relations managers, branding and marketing specialists, and executive managers associated with the Aras Free Zone. Most participants possessed more than ten years of professional experience and held postgraduate academic degrees at the master's or doctoral level, which increased the scientific validity and reliability of the expert judgments used in the fuzzy DEMATEL analysis.

Data collection was performed using a researcher-developed fuzzy DEMATEL questionnaire designed based on the final extracted communication and branding components. Initially, the communication message components influencing the branding of the Aras Free Zone were identified through theoretical review, analysis of previous domestic and international studies, and examination of organizational and communication documents related to free zones. After extracting the preliminary indicators, expert opinions were obtained to refine and localize the components according to the specific context of the Aras Free Zone. The final questionnaire consisted of six major components, including Brand Visual Identity, Media and Advertising Strategies, Social Media and Digital Content, Public Relations and Media Interaction, Events and Exhibitions, and Brand Image and Awareness.

The fuzzy DEMATEL questionnaire was designed in the form of pairwise comparisons in which experts evaluated the degree of influence of each component on other components using linguistic variables. To account for uncertainty and ambiguity in human evaluations, triangular fuzzy numbers were utilized for quantifying linguistic judgments. The linguistic scale included "No Influence," "Very Low Influence," "Low Influence," "Medium Influence," "High Influence," and "Very High Influence," each represented by corresponding triangular fuzzy numbers. The questionnaire enabled the systematic assessment of direct and indirect relationships among communication components within the branding system of the Aras Free Zone.

The content validity of the questionnaire was confirmed through expert review by university professors and specialists in branding and communication sciences. Necessary revisions were implemented according to their feedback to ensure conceptual clarity and appropriateness of the items. The reliability and consistency of the instrument were also confirmed through logical examination of the fuzzy matrices and evaluation of the consistency of expert responses in the pairwise comparisons.

Data analysis was conducted using the fuzzy DEMATEL method to identify and analyze the causal relationships among the communication message components. First, the pairwise comparison responses provided by the experts were aggregated using the geometric mean method to form the fuzzy direct-relation matrix. The matrix elements were expressed as triangular fuzzy numbers representing the intensity of influence among variables. Subsequently, the fuzzy direct-relation matrix was normalized to prevent the dominance of large values and to prepare the data for further relational analysis.

After normalization, the fuzzy total-relation matrix was calculated to determine both direct and indirect effects among the components. The total-relation matrix provided a comprehensive representation of the interaction structure among the

variables and enabled the identification of communication chains within the integrated branding system. In the next stage, the D and R indices were calculated for each component. The D index represented the total influence exerted by a component on other variables, whereas the R index represented the total influence received from other components. Based on these indices, the D+R value was used to determine the overall prominence and importance of each component within the system, while the D–R value was utilized to distinguish causal components from effect components.

Components with positive D–R values were categorized as causal or driving factors, whereas variables with negative D–R values were identified as effect factors. Finally, a causal diagram was developed to visually represent the structure of relationships among the communication components influencing the branding of the Aras Free Zone. The analysis enabled the identification of the most influential communication drivers and the perceptual outcomes associated with integrated communication message management in the branding process.

Findings and Results

The findings of the present study were obtained through the fuzzy DEMATEL analysis with the aim of identifying the causal relationships among the integrated communication message components affecting the branding of the Aras Free Zone. The analysis process included the formation of the fuzzy direct-relation matrix, normalization of the matrix, calculation of the total-relation matrix, and determination of the D and R indices to classify the components into causal and effect groups. The results revealed that the communication structure of the Aras Free Zone brand is dynamic, interconnected, and multi-layered, in which some variables function as driving factors while others operate as outcome variables.

Table 1

Fuzzy DEMATEL Direct-Relation Matrix

Components	A1	A2	A3	A4	A5	A6
A1: Brand Visual Identity	(0,0,0)	(0.75,1,1.20)	(0.50,0.75,1.00)	(0.75,1,1.20)	(0.50,0.75,1.00)	(0.75,1,1.20)
A2: Media Strategies	(0.50,0.75,1.00)	(0,0,0)	(0.75,1,1.20)	(0.75,1,1.25)	(0.50,0.75,1.00)	(0.75,1,1.25)
A3: Social Media	(0.25,0.50,0.75)	(0.50,0.75,1.00)	(0,0,0)	(0.50,0.75,1.00)	(0.75,1,1.25)	(0.75,1,1.25)
A4: Public Relations	(0.75,1,1.25)	(0.75,1,1.25)	(0.50,0.75,1.00)	(0,0,0)	(0.75,1,1.25)	(1.00,1.25,1.50)
A5: Events	(0.25,0.50,0.75)	(0.50,0.75,1.00)	(0.75,1,1.25)	(0.50,0.75,1.00)	(0,0,0)	(0.75,1,1.25)
A6: Brand Image	(0.25,0.50,0.75)	(0.50,0.75,1.00)	(0.75,1,1.25)	(0.50,0.75,1.00)	(0.50,0.75,1.00)	(0,0,0)

The results presented in Table 1 indicate the intensity of direct influence among the communication components using triangular fuzzy numbers. Among the components, “Public Relations and Media Interaction” (A4) demonstrated the strongest direct influence on the other variables, particularly on “Brand Image and Awareness” (A6), with the highest fuzzy value of (1.00, 1.25, 1.50). Similarly, “Media and Advertising Strategies” (A2) and “Brand Visual Identity” (A1) showed considerable influence on other communication dimensions. In contrast, “Brand Image and Awareness” (A6) appeared more as a receiver of influence than an influencing factor, suggesting that audience perception and brand image are primarily shaped through communication and media strategies implemented by the organization.

Table 2*Values of D, R, D+R, and D-R Indices*

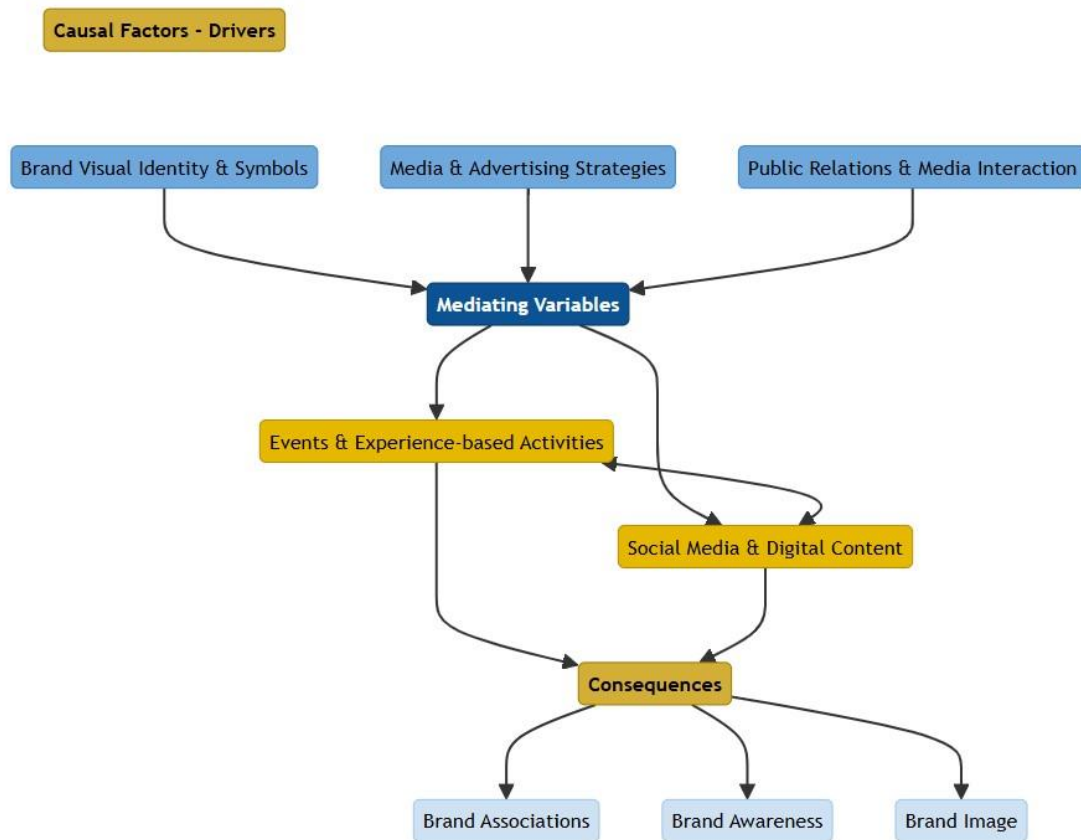
Components	D	R	D+R	D-R	Classification
A1: Brand Visual Identity	5.42	4.81	10.23	0.61	Cause
A2: Media Strategies	5.87	5.02	10.89	0.85	Cause
A3: Social Media	4.76	5.31	10.07	-0.55	Effect
A4: Public Relations	6.14	5.20	11.34	0.94	Cause
A5: Events	4.69	5.18	9.87	-0.49	Effect
A6: Brand Image	4.25	5.61	9.86	-1.36	Effect

The findings of Table 2 demonstrate that “Public Relations and Media Interaction” (A4) possessed the highest D value, indicating that this variable exerted the greatest influence on other communication components. Furthermore, this component achieved the highest D+R score, confirming its central and strategic role in the integrated communication system of the Aras Free Zone. “Media and Advertising Strategies” (A2) and “Brand Visual Identity” (A1) also exhibited positive D-R values, identifying them as causal and driving variables within the branding structure. Conversely, “Brand Image and Awareness” (A6), “Social Media and Digital Content” (A3), and “Events and Exhibitions” (A5) obtained negative D-R values, indicating that these components functioned primarily as effect variables influenced by the other communication factors.

Table 3*Classification of Communication Components into Causal and Effect Groups*

Group	Components	Interpretation
Causal Components	A1: Brand Visual Identity	Fundamental driver of message consistency and visual cohesion
	A2: Media and Advertising Strategies	Main communication policymaking and promotional driver
	A4: Public Relations and Media Interaction	Core influencing component in communication integration
Effect Components	A3: Social Media and Digital Content	Influenced by communication and branding strategies
	A5: Events and Exhibitions	Dependent on strategic communication planning
	A6: Brand Image and Awareness	Final perceptual outcome of integrated communications

The classification results shown in Table 3 reveal that the communication system of the Aras Free Zone brand follows a causal and hierarchical structure. The causal group consists of communication infrastructure variables that shape and direct the branding process, whereas the effect group includes variables associated with audience perception, digital engagement, and experiential interactions. The findings indicate that effective management of visual identity, media strategy, and public relations can indirectly improve social media performance, event effectiveness, and ultimately the brand image of the Aras Free Zone. Therefore, strengthening the causal components can significantly contribute to the development of a coherent and sustainable regional brand.

Figure 1*Integrated Brand Communications Model for the Aras Free Zone*

Discussion and Conclusion

The present study aimed to explain the integrated model of communication messages in branding the Aras Free Zone by identifying the causal relationships among communication and branding components using the fuzzy DEMATEL approach. The findings demonstrated that the communication structure underlying the branding process of the Aras Free Zone is a dynamic and interconnected system in which some communication dimensions function as causal drivers while others operate as dependent and outcome-oriented variables. Specifically, “Public Relations and Media Interaction,” “Media and Advertising Strategies,” and “Brand Visual Identity” were identified as the most influential and causal components within the integrated branding system, whereas “Brand Image and Awareness,” “Social Media and Digital Content,” and “Events and Exhibitions” were classified as effect variables that are significantly shaped by the quality and coherence of the communication infrastructure.

One of the most important findings of the study was the central role of public relations and media interaction as the strongest causal factor influencing the branding system of the Aras Free Zone. The results revealed that this component possessed the highest impact power and prominence among all communication variables. This finding suggests that effective public relations management acts as the communication backbone of regional branding and directly affects the quality, coherence, and consistency of brand messages across multiple channels. This result is consistent with previous studies emphasizing the strategic role of communication management and stakeholder interaction in successful branding processes.

[14, 19]. Modern branding theories increasingly recognize that organizations and regions are evaluated not merely based on their economic or physical attributes but according to the quality of their communication relationships with stakeholders, investors, media institutions, and audiences. In this regard, proactive public relations contribute to building trust, reducing uncertainty, strengthening transparency, and shaping favorable mental associations regarding the brand.

The significance of media and advertising strategies as a causal component also reflects the growing importance of strategic communication planning in place branding. The findings demonstrated that media strategies significantly influence social media performance, events, audience engagement, and ultimately brand image formation. This result aligns with studies indicating that communication consistency and strategic media integration are essential for building strong place brands and competitive regional identities [1, 2]. In competitive environments where audiences are continuously exposed to extensive media content and multiple regional narratives, communication fragmentation can weaken brand distinctiveness and reduce audience trust. Therefore, strategic media management enables regions such as the Aras Free Zone to establish coherent narratives that reinforce regional identity and competitive positioning.

The findings further demonstrated that brand visual identity plays a foundational role in the integrated communication structure of the Aras Free Zone. Visual identity elements such as logos, colors, slogans, and symbolic representations contribute significantly to message consistency and audience recognition. This result is consistent with branding literature emphasizing that visual cohesion facilitates memory retention, brand differentiation, and emotional attachment among stakeholders [7, 9]. In place branding contexts, visual identity is particularly important because it serves as a symbolic representation of the region's values, strategic positioning, and cultural identity. The effectiveness of visual identity becomes even more critical in digital communication environments where audiences often form rapid impressions through visual and symbolic interactions.

Another important finding of the study concerns the role of social media and digital content as effect variables influenced by communication strategies and public relations performance. Although social media platforms are often viewed as independent communication tools, the present findings indicate that their effectiveness largely depends on the coherence of underlying communication policies and branding strategies. This result supports the arguments proposed in digital communication and branding research suggesting that successful social media branding requires coordinated content production, strategic storytelling, and alignment with broader organizational communication objectives [5, 17]. Social media platforms function as amplifiers of communication messages rather than substitutes for integrated communication planning. Consequently, organizations that lack coherent communication frameworks may experience inconsistent digital branding outcomes despite active social media presence.

The results also revealed that events and exhibitions constitute dependent communication variables that reinforce audience experiences and support message dissemination when integrated with broader branding strategies. This finding is consistent with the experiential branding perspective, which argues that direct audience engagement and interactive experiences strengthen emotional connections and enhance place attachment [8, 10]. Events and exhibitions create opportunities for audiences to interact directly with the place brand and translate abstract communication messages into tangible experiences. However, the effectiveness of such activities depends heavily on their alignment with the overall communication identity and strategic narratives of the region.

One of the most significant outcomes of the study was the identification of “Brand Image and Awareness” as the primary effect variable within the communication system. The findings demonstrated that brand image is not created independently but emerges as the result of coordinated communication processes involving public relations, media strategies, visual identity, and stakeholder interactions. This result strongly supports the conceptual foundations of integrated branding theory, which emphasize that favorable brand perceptions develop gradually through coherent and repeated communication experiences [11, 12]. In the context of the Aras Free Zone, audience perceptions regarding investment attractiveness, economic stability, tourism potential, and regional competitiveness are significantly influenced by the quality and consistency of communication management.

The findings additionally highlight the importance of integrated communication approaches in regional economic development. Free zones increasingly compete not only through legal incentives or geographical advantages but also through symbolic value creation and communication effectiveness. This issue has become more significant in digitalized and globalized economies where investors and stakeholders often evaluate regions through mediated communication experiences rather than direct physical interaction. Previous studies have similarly emphasized that branding effectiveness in free zones depends on the ability to establish coherent communication systems capable of conveying strategic values and competitive advantages to multiple stakeholder groups [13, 33].

The present findings also align with contemporary research emphasizing the influence of digital transformation and technological innovation on communication systems. The increasing integration of digital communication technologies, artificial intelligence, cloud computing, and data-driven communication tools has transformed how organizations manage branding activities and audience interactions [20, 21]. The results of the present study suggest that such technologies can improve branding effectiveness only when they are incorporated into coherent communication frameworks rather than being used independently or sporadically. In other words, technology enhances communication efficiency only when supported by integrated communication governance and strategic coordination.

Another important implication of the findings concerns the multidimensional and interdisciplinary nature of place branding. Branding a free zone involves interactions among economic, cultural, social, technological, and communication factors, all of which contribute to shaping stakeholder perceptions and regional identity. This perspective is consistent with previous conceptual studies emphasizing that place branding requires the coordination of organizational values, communication narratives, public policies, and audience experiences within a unified strategic framework [3, 4]. The present study extends this perspective by empirically identifying the causal structure among communication components using the fuzzy DEMATEL method.

The findings further support studies highlighting the significance of internal communication and stakeholder alignment in branding effectiveness. Effective branding requires that all organizational actors communicate consistent messages and contribute to a coherent communication identity [18, 28]. In the case of the Aras Free Zone, communication fragmentation among organizational units, media channels, and communication actors may weaken overall branding effectiveness and create contradictory audience perceptions. Therefore, integrated communication management should include not only external media activities but also internal communication coordination and institutional alignment.

Furthermore, the results are consistent with studies emphasizing the strategic role of communication in modern economic ecosystems characterized by globalization and digital interconnectedness [6, 22]. Communication has become a strategic

organizational capability influencing competitiveness, stakeholder trust, and long-term sustainability. The ability of free zones to establish integrated communication systems may therefore significantly determine their success in attracting investment, enhancing tourism potential, and strengthening regional competitiveness.

The present study also contributes methodologically by applying the fuzzy DEMATEL technique to analyze communication relationships within place branding systems. Unlike traditional linear analytical approaches, fuzzy DEMATEL enables the identification of direct and indirect causal relationships among variables while accounting for uncertainty in expert judgments. This methodological approach provides a deeper understanding of communication dynamics and offers practical insights for strategic communication planning in free zones and regional branding contexts.

The findings overall demonstrate that branding the Aras Free Zone requires an integrated, systematic, and strategically coordinated communication system in which visual identity, media strategies, public relations, digital content, and experiential activities operate cohesively to create a favorable and sustainable regional brand image. Without communication integration, branding efforts may remain fragmented and incapable of generating long-term stakeholder trust and competitive advantage.

One limitation of the present study was the relatively limited number of experts participating in the fuzzy DEMATEL analysis, which may restrict the generalizability of the findings to other regional and international contexts. Additionally, the study focused specifically on the Aras Free Zone, and therefore the communication relationships identified may differ in other free trade-industrial zones with distinct cultural, political, or economic environments. Another limitation concerns the use of expert judgments as the primary source of data, which may involve subjective interpretations despite the use of fuzzy analytical techniques to reduce uncertainty.

Future research is recommended to examine the proposed integrated communication model using quantitative structural equation modeling approaches and larger statistical samples to empirically validate the causal relationships identified in this study. Comparative studies between different Iranian and international free zones could also provide valuable insights into contextual differences in branding communication systems. Furthermore, future studies may investigate the influence of artificial intelligence, big data analytics, and personalized digital communication technologies on the effectiveness of integrated branding strategies in regional and place branding contexts.

From a practical perspective, it is recommended that managers and policymakers of the Aras Free Zone develop a comprehensive integrated communication strategy that coordinates all communication activities, including public relations, advertising, digital media, and events, within a unified branding framework. Establishing a specialized communication coordination unit, strengthening visual identity consistency, enhancing stakeholder engagement, and utilizing strategic digital storytelling may significantly improve the international competitiveness and brand image of the zone. Continuous monitoring of audience perceptions and communication effectiveness should also be incorporated into managerial decision-making processes to ensure long-term branding sustainability and stakeholder trust.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Written consent was obtained from all participants in the study.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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References

- [1] S. Hanna, J. Rowley, and B. Keegan, "Place and destination branding: A review and conceptual mapping," *European Management Review*, vol. 18, no. 2, pp. 105-117, 2021.
- [2] H. Skinner, "Place branding: The challenges of getting it right," *Tourism and Hospitality*, vol. 2, no. 1, pp. 173-189, 2021.
- [3] M. R. Yazdanpanah Shahabadi, H. Sajjadzadeh, and M. Rafeian, "Explaining a conceptual model of place branding: A literature review," *Bagh-e Nazar*, vol. 16, no. 71, pp. 19-34, 2019.
- [4] L. P. Andersen, F. Lindberg, and J. Ostberg, "Unpacking Nordic branding: The value regimes of Nordicness," *Journal of Place Management and Development*, 2021.
- [5] U. Mirani, "Analysis of The Digital Marketing Communication Strategies from A Business Perspective," *South Asian Journal of Operations and Logistics*, vol. 3, no. 2, pp. 168-179, 2024, doi: 10.57044/SAJOL.2024.3.2.2436.
- [6] H. Shahriar and B. M. Habibul, "Exploring the Impact of Digital Tools on Business Communication," *International Journal of Applied Research in Business and Management*, vol. 5, no. 2, 2024, doi: 10.51137/wrp.ijarbm.2024.hset.45621.
- [7] K. L. Keller, "The future of brands and branding," *Journal of Consumer Research*, vol. 48, no. 4, pp. 527-540, 2021.
- [8] T. H. Cham, Y. M. Lim, and M. Sigala, "Marketing and social influences, hospital branding, and medical tourists' behavioural intention," *International Journal of Tourism Research*, vol. 24, no. 1, pp. 140-157, 2022.
- [9] M. Han, G. E. Newman, R. K. Smith, and R. Dhar, "The curse of the original: How heritage branding reduces consumer evaluations," *Journal of Consumer Research*, vol. 48, no. 4, pp. 709-730, 2021.
- [10] F. Xu, C. Zhan, L. Lu, J. Tan, S. Li, and J. Li, "Destination brand loyalty mechanisms," *Journal of Destination Marketing & Management*, vol. 22, p. 100658, 2021.
- [11] E. Loucanova *et al.*, "Sustainability and branding: An integrated eco-innovation perspective," *Sustainability*, vol. 13, no. 2, p. 732, 2021.
- [12] F. Maon, V. Swaen, and K. De Roeck, "Corporate branding and corporate social responsibility: Toward a multi-stakeholder interpretive perspective," *Journal of Business Research*, vol. 126, pp. 64-77, 2021.

- [13] E. Moghraziasl, "A comparative study on foreign participation in commercial companies of free zones," *Legal Research Journal*, no. 39, pp. 169-196, 2019.
- [14] A. Sadeghi and H. Mohammadi, "Investigating the role of public relations and social media in branding Iran's free zones," *Journal of Marketing Management*, vol. 11, no. 3, pp. 77-95, 2019.
- [15] M. Hajizadeh, A. Rezaei, and Z. Naderi, "Designing an integrated model of communication messages for free zones branding: Case study of Aras Free Zone," *Journal of Communication Management*, vol. 12, no. 1, pp. 35-60, 2021.
- [16] C. Pasquinelli, M. Trunfio, N. Bellini, and S. Rossi, "Sustainability in overtouristified cities: A social media insight into Italian branding responses to Covid-19," *Sustainability*, vol. 13, no. 4, p. 1848, 2021.
- [17] Y. Chen, H. Rui, and A. Whinston, "Tweet to the top? Social media personal branding and career outcomes," *MIS Quarterly*, vol. 45, no. 2, 2021.
- [18] E. Sinitsyna, A. Anand, and M. Stocker, "The Role of Internal Communication on Employee Loyalty—A Theoretical Synthesis," *Journal of Asia Business Studies*, vol. 18, no. 2, pp. 367-384, 2024, doi: 10.1108/JABS-05-2023-0179.
- [19] A. T. Vercic, "The impact of employee engagement and employer branding on internal communication satisfaction," *Public Relations Review*, vol. 47, no. 1, p. 102109, 2021.
- [20] G. N. Phu, T. H. Thi, and H. T. N. Bich, "The impact of cloud computing technology on cloud accounting adoption and financial management of businesses, humanities and social sciences communications," vol. 851, no. 2, pp. 119-153, 2025. [Online]. Available: <https://doi.org/10.1057/s41599-025-05190-3>.
- [21] N. Qosidah, "Enhancing Employee Performance Through AI-Driven Business Communication: A Case Study," *Jmi*, vol. 3, no. 2, pp. 163-179, 2024, doi: 10.51903/jmi.v3i2.29.
- [22] X. Liu, "Bridging Cultures in Virtual Workplaces: A Communication-Focused Review of Global Virtual Teams," *Business and Professional Communication Quarterly*, 2025, doi: 10.1177/23294906251327747.
- [23] N. Fakouhi, "Urban culture and social branding in Iran," *Iranian Journal of Sociology*, vol. 16, no. 4, pp. 101-120, 2015.
- [24] M. H. Yazdani, E. Alipour, A. H. Dashti, and B. Arzhang, "Analyzing the role of mass media in urban branding with emphasis on tourism: Ardabil Province," in *Proceedings of the 4th International Conference on New Technologies in Civil Engineering, Architecture and Urban Planning*, Tehran, 2017.
- [25] M. Haghighi Kafash, M. Hamidi Beinabaj, M. R. Karimi Alavijeh, and S. Khalilnezhad, "Presenting a strategic branding model," *Journal of Strategic Management Studies*, no. 43, pp. 21-43, 2020.
- [26] M. Gheili, L. Firoozandeh Dehkordi, M. Hosseini, and M. Mahmoudi Meimand, "Modeling ethical variables affecting corporate branding using PLS-SEM and thematic analysis," *Journal of Management Research in Iran*, vol. 24, no. 4, pp. 1-17, 2020.
- [27] N. Mazloui, S. A. Afjeh, and S. Bayat, "The mutual effects of key employer branding variables in ICT industry," *Journal of Brand Management*, vol. 5, no. 1, pp. 81-108, 2018.
- [28] D. Arrieta Barros and E. Garcia Cali, "Internal branding: Conceptualization from a literature review and opportunities for future research," *Journal of Brand Management*, vol. 28, no. 2, pp. 133-151, 2021.
- [29] M. I. Kostadinović and G. Kostadinović, "Personal Branding Of Athletes In Digital Marketing: The Role Of Communication Strategies And Their Commercial Potential," *SPORT, MEDIA AND BUSINESS*, vol. 11, no. 1, pp. 119-130, 2025, doi: 10.58984/smb2501119i.
- [30] T. Zhang, X. Yan, W. Y. C. Wang, and Q. Chen, "Unveiling physicians' personal branding strategies in online healthcare service platforms," *Technological Forecasting and Social Change*, vol. 171, p. 120964, 2021.
- [31] M. Hajizadeh and M. Shafiee, "Comparative analysis of urban branding model in Iran," *Urban Management Research Quarterly*, vol. 8, no. 2, pp. 51-72, 2017.
- [32] M. Kheyari Haghighat, "Designing a brand performance model in industrial markets," *Journal of Organizational Resource Management Research*, vol. 6, no. 1, pp. 25-46, 2016.
- [33] M. Kourobi, F. Yavari Gahar, S. M. Mahmoudzadeh, and S. Mohammadian Mahmoudjiq, "Analysis of tourism branding and brand management of Iran in upstream policy documents," *Journal of Tourism Management Studies*, vol. 16, no. 56, pp. 45-81, 2021.