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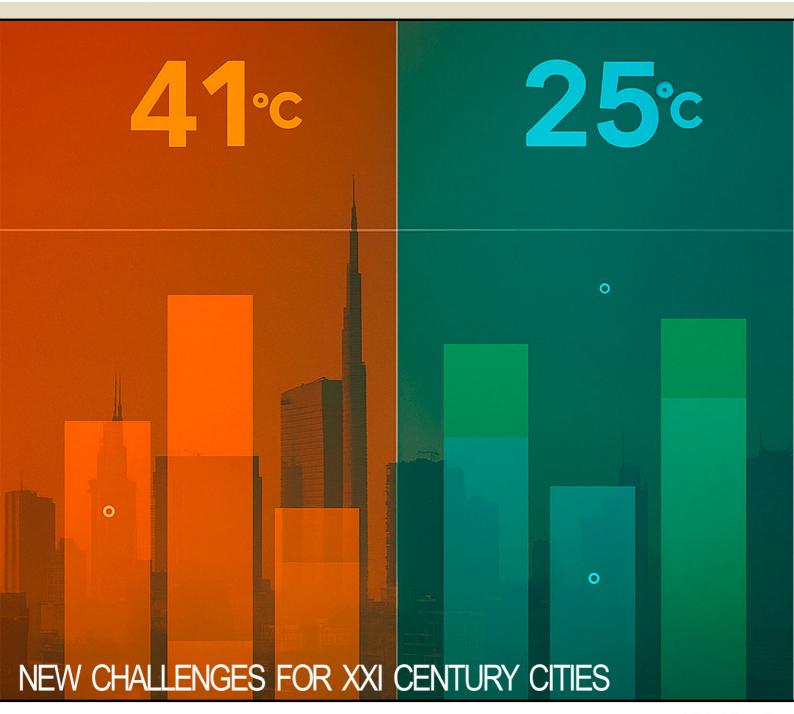
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Multilevel scientific approach to impacts of global warming on urban areas, energy transition, optimisation of land use and emergency scenario

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NEW CHALLENGES FOR XXI CENTURY CITIES:

Multilevel scientific approach to impacts of global warming on urban areas, energy transition, optimisation of land use and emergency scenario

3 (2025)

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Capacity assessment of the creation and development of regional brands in Guilan province

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Abstract

This study investigates the capacity for regional branding for Guilan province concerning the existing brands' identification, new brands' creation opportunities, and development obstacles. The current mixed-method study by using MICMAC analysis method describes the main variables affecting branding results. Its findings recognize tourism, agriculture, and horticulture as the most dominant existing brands and ecotourism, agritourism, and commercial tourism as having huge development potential. Inferior infrastructure, inadequate coordination among stakeholders, and lack of governmental support are major barriers. The study proposes practical solutions to overcome these barriers and to use regional assets effectively. The findings present critical views for policymakers and stakeholders toward the competitiveness and sustainable development of Guilan.

Keywords

Regional branding; Branding capacity assessment; MICMAC analysis; Regional competitiveness; Branding challenges

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1. Introduction

In the globalization context, different parts of the world face increased competition for resources, investment, tourism, and residents. The evolution of regional branding emerged as a vital method of enhancing competitive edge through the creation of distinct identities that are attractive to stakeholders. An effective regional brand will spur economic growth, attract investments, and promote tourism by leveraging the unique characteristics of a region (Kavaratzis, 2004; Rainisto, 2003). Recent studies such as (Carra et al., 2022) has determined that walkability, spatial access, and climate-responsive urban design have the potential to greatly add to the identity and branding potential of an area, particularly if implemented in line with local demands and daily experiences. In developed countries, branding approaches are extensively utilized and constantly refined through integrated planning frameworks and smart city strategies that align governance, infrastructure, and innovation (Gargiulo & Tremiterra, 2015); however, in less developed areas, these approaches frequently face considerable obstacles, such as infrastructural, administrative, and cultural difficulties (Björner, 2014; Shoaib & Keivani, 2015).

The province of Guilan with its favorable climate, rich cultural heritage, and strategic geographic position, has all the ingredients to become one of the greatest regional brands in Iran. Despite all its special resources, Guilan has problems with developing and sustaining competitive branding regarding infrastructure shortages, lack of support from the government, and poor coordination between stakeholders in the sector (Akhavan Foumani et al., 2022; Cheraghi & Moosavi Nadoshan, 2024). Addressing these problems is the key to using the capacities of the province to make it become a benchmark for regional development. This research aims to analyze the potential of Guilan in terms of regional branding by identifying existing brands, discovering new opportunities for brand development, and investigating barriers that impede progress. Using MICMAC methodology, the research examines key variables to provide realistic recommendations for decision-makers, stakeholders, and local governmental authorities on the basis of (Godet et al., 2008) and (Villacorta et al., 2014). The main purpose of the study is to propose viable strategies for overcoming problems and bring about sustainable regional development. The research is based on some research questions: (1) what brands are there in the Guilan province at the moment, and how do they help to improve local competitiveness? (2) What are the critical barriers to branding exercises in Guilan? (3) How can the branding of Guilan be used to build and develop sustainable regional brands?

2. Literature review

2.1 Branding theories and concepts

Branding theories have evolved significantly offering frameworks for understanding how regions, cities, and nations can craft and communicate their identities. One of the most prominent frameworks is Kavaratzis' Place Branding Framework (2004), which emphasizes the interplay of place identity, stakeholder engagement, and effective communication. This model highlights the importance of aligning regional characteristics with stakeholders' perceptions to construct a cohesive and competitive brand. Another widely utilized model is Anholt's Nation Brand Hexagon (2010) which delineates six dimensions of branding: tourism, governance, exports, people, culture, and investment. While developed for national branding, this model is adaptable to regional contexts providing a comprehensive approach to evaluating a place's strengths and weaknesses.

Van Ham's Branding as Diplomacy Approach (2008) posits that branding transcends mere marketing; it is a form of soft power that shapes perceptions and fosters economic and cultural relationships. This approach underscores the strategic role of branding in regional and international diplomacy emphasizing its potential in developing regions seeking investment and recognition. In the context of regional branding, Rainisto (2003) highlights success factors such as infrastructure, governance, and stakeholder collaboration. Meanwhile, Herstein (2012) explores the unique challenges faced by developing countries, including misalignment between branding strategies and local cultural or administrative practices. These theories underscore the necessity for

integrated strategies that account for social, economic, and political dimensions of branding. For Guilan province, these frameworks provide a theoretical foundation for identifying branding opportunities and addressing the barriers to effective implementation.

Title	Author(s), Year	Focus/Objective	Methodology	Key Findings
Factors and Stimuli Affecting the Conversion of Urban and Rural Places to Tourism Brands (Study: Guilan Province)	(Cheraghi & Moosavi Nadoshan, 2024)	Explores the potential for urban and rural areas in Guilan to become tourism brands.	Mixed- methods case study.	Identifies Guilan's unique attributes and challenges in tourism branding.
Place Branding: The State of the Art	(Van Ham, 2008)	Discusses branding as a form of diplomacy and its global implications.	Literature synthesis.	Branding shapes perceptions and fosters economic and cultural relationships.
Realization Path of Geographical Indication Branding of Agricultural Products to Boost Rural Revitalization	(Yang, 2024)	Investigates how GI branding enhances rural economies and local identity.	Case study on GI branding.	GI branding improves market positioning and fosters economic growth.
Methodology of Marketing Territory as a Factor of Socio-Economic Development	(Denisov & Chuvashlova, 2023)	Explores how marketing strategies can drive socio- economic development.	Qualitative analysis of marketing strategies.	Aligns branding with socio-economic goals for sustainable growth.
Regional Branding as an Effort to Promote a Sustainable Environment	(Munawaroh & Fajri, 2023)	Examines the integration of branding and sustainability in developing regions.	Case study approach.	Sustainable branding enhances eco- conscious appeal and competitiveness.
Challenges in Urban and Rural Place Branding	(Pasquinelli et al., 2022)	Explores barriers to branding across urban and rural contexts.	Systematic literature review.	Lack of cohesion and infrastructure limits effective branding in developing regions.
Territorial Branding in the Face of Society's New Challenges	(De-San-Eugenio & Ginesta, 2020)	Analyzes factors contributing to successful territorial branding.	Literature review.	Stakeholder collaboration is critical for successful branding.
The Development of a Sustainable Tourism Area for Borobudur Temple	(Soesanta et al., 2023)	Explores city branding themes linked to sustainable tourism.	Case study.	Sustainable tourism enhances competitiveness and cultural preservation.
Self-Branding of Grobogan District Through Mapping Superior Potential	(Astuti et al., 2023)	Maps branding opportunities for local products in Grobogan District.	SWOT analysis and mapping.	Emphasizes strategic use of local resources for regional branding.
Local Branding: Imperative Strategy Towards Sustainable Destination Competitiveness Through Social Media	(Kuswardani et al., 2023)	Highlights the role of social media in enhancing local branding and sustainability.	Social media content analysis.	Digital platforms amplify local branding and enhance destination competitiveness.
Urban planning for biodiversity: An assessment of green plans in Northern Italy	(Lazzarini et al., 2024)	Evaluates how urban green plans in Northern Italy incorporate biodiversity into planning processes	Qualitative assessment of policy documents and planning frameworks	Demonstrates that biodiversity-integrated planning enhances ecological resilience, improves quality of life, and supports the development of a distinct regional identity
Sustainable Branding for Local Products: Empowering Rural Economic Development	(Aesthetika et al., 2023)	Explores branding as a tool for economic development in rural areas.	Rural case studies.	Branding strategies empower communities and drive rural economic growth.

Tab.1 Literature review

2.2 Challenges in branding

Regional branding faces varied challenges across global and local contexts. Globally, key issues include governance complexity, stakeholder misalignment, and lack of long-term planning. Developing regions often struggle to adapt Western-origin branding models, which assume participatory governance and strong institutional frameworks (Björner, 2014; Casais & Monteiro, 2019).

A major barrier is infrastructure—poor transport, accommodation, and communications weaken branding impact (Rainisto, 2003). In Guilan, specific challenges include political instability, inadequate government support (Akhavan Foumani et al., 2022), and administrative inefficiencies. Cultural resistance and public skepticism further hinder progress (Pasquinelli et al., 2022), while limited budgets and reliance on public funding restrict private sector involvement. Environmental pressures add complexity, requiring a balance between development and preservation (Munawaroh & Fajri, 2023).

Despite extensive research, gaps persist for regions like Guilan. Most literature focuses on urban areas in developed countries (Kavaratzis, 2004; Rainisto, 2003), often overlooking the realities of rural, mixed-use, or resource-constrained regions (Herstein, 2012; Pasquinelli et al., 2022). Branding frameworks like Anholt's Hexagon and Kavaratzis' model rarely address operational challenges such as stakeholder fragmentation or lack of tailored strategies.

Sustainability is also underexplored, especially how to align branding with ecological priorities. This study bridges those gaps by adapting a mixed-methods approach to Guilan's context, offering practical guidance for branding in similar developing regions.

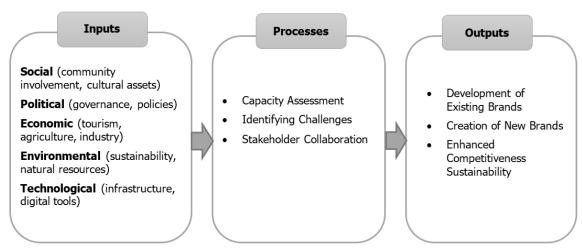


Fig.1 Conceptual Framework of Regional Branding Capacity Assessment

The proposed framework conceptualizes regional branding through three components: inputs, processes, and outcomes. Inputs encompass social, political, economic, environmental, and technological factors shaping the branding context. Processes include capacity assessment, identifying challenges (e.g., stakeholder misalignment), and promoting collaboration. Outcomes aim to enhance existing brands, create new ones, improve competitiveness, and support sustainable growth. This structure offers a holistic view of Guilan's branding potential aligned with the study's objectives.

2.3 International perspective on regional branding

Recent studies highlight the growing intersection between spatial planning and regional branding. In northern Portugal, (Oliveira, 2015) shows how branding aligned with spatial planning through territorial identity and participatory governance, though long-term success depended on sustained political and cross-sectoral support.

Similarly, (Lucarelli & Heldt Cassel, 2020) examine Swedish Lapland's multi-municipality branding initiative, initially driven by collective discourse but later weakened by shifting agendas and fragmented governance. These cases suggest that enduring branding efforts require strong institutional backing beyond initial momentum. For developing regions like Guilan, they underscore the need to embed branding within spatial planning frameworks to drive lasting, integrated development.

2.4 Geographic and spatial profile of the study area

Guilan Province, located in northern Iran along the Caspian Sea's southern shore, borders Mazandaran (east), Ardabil (west), and Zanjan and Qazvin (south). Spanning about 14,000 square kilometers, it features a rich geographic tapestry—coastal plains, wetlands, river deltas, and the forested northern slopes of the Alborz Mountains.

The province's humid, temperate climate sustains fertile lands and the ancient Hyrcanian forests, enabling rice, tea, and citrus cultivation. Rivers like Sefidrud play a vital ecological and economic role.

Rasht, the provincial capital, is the administrative and cultural hub, while cities like Bandar Anzali (a key maritime port) and Lahijan (a center for tea and horticulture) contribute to the region's distinct identity. Guilan's population, known for its unique language and customs, weaves a vibrant cultural fabric.

The economy is grounded in agriculture and fishing, with tourism on the rise. Guilan's strategic access to roads, railways, airways, and the Anzali Free Zone enhances its role as a trade corridor.

As Fig.2 illustrates, Guilan's unique mix of sea, forest, and farmland provides a strong spatial foundation for developing place-based regional brands. Understanding this geography is key to assessing its branding potential.



Fig.2 Location and topographical context of Guilan Province in northern Iran (based on Google Earth, 2024)

3. Methodology and data

This study was conducted in Guilan province (July 2023 - January 2024) using a mixed-method approach that combined qualitative and quantitative data from library research and fieldwork.

The methodology centered on two techniques: the Delphi method and MICMAC analysis, which together helped identify and classify key variables influencing Guilan's regional branding system.

3.1 Delphi method

The Delphi method, a structured consensus-building technique, was used to explore branding opportunities and challenges in Guilan.

A panel of 21 experts - including scholars, branding professionals, tourism officials, and government representatives—participated in two iterative rounds.

- In the first round, open-ended questions elicited key challenges and opportunities;
- In the second, panelists rated the importance and feasibility of these items using a Likert scale, facilitating
 consensus on the most critical factors.

This iterative process technique was chosen for its ability to synthesize divergent views, especially for contexts characterized by low a priori data, ensuring rich understanding of Guilan's branding dynamics (Arcade et al., 1993; Chine et al., 2017).

3.2 MICMAC analysis

MICMAC analysis was used to structurally map the key variables influencing Guilan's branding system. As outlined by (Arcade et al., 1993), the process includes:

- identifying critical variables via the Delphi method;
- analyzing interrelations using a cross-impact matrix;
- classifying variables into five categories: input, intermediate, output, excluded, and clustered (Godet et al., 2008).

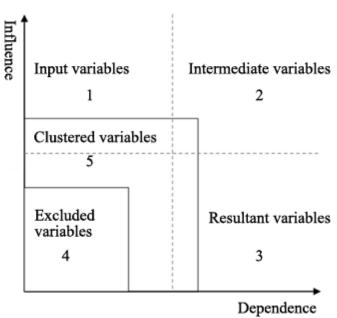


Fig.3 Classification of Variables Based on System Influence and Dependence (Authors' adaptation based on Godet et al., 2008)

The resulting diagram shows variables' influence (vertical axis) and dependence (horizontal), offering insights into strategic priorities (Nematpour & Faraji, 2019; Villacorta et al., 2014).

The classifications are:

- Input highly influential, minimally dependent;
- Intermediate both influential and dependent (Asan & Asan, 2007);
- Output dependent, low influence;
- Excluded low impact overall;
- Clustered uncertain or overlapping roles.

3.3 Data collection

Data collection combined primary and secondary sources to provide a comprehensive view of regional branding in Guilan.

Primary data included:

- Semi-structured interviews with five experts (from tourism, fisheries, and academia) covering existing brands, regional potentials, and branding challenges;
- Expert surveys using structured questionnaires distributed to 21 professionals across academia, industry, and government.

Secondary data came from:

- Library research (books, articles, and reports, theses) to identify branding factors;
- Government and industry reports on development plans, policies, and tourism statistics.

3.4 Data characteristics

The dataset includes qualitative and quantitative data. Qualitative data derived from semi-structured interviews and open-ended survey responses. Quantitative data were collected using Likert-scale scoring in surveys, where variables were evaluated for importance and agreement. In Tab. 2 - 4 the results of the questionnaire are summarized.

	Agreement (percent)/ Likert Scale					Importance
Existing brands	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	(mean) (0-10)
Tourism	0.0	0.0	4.3	13.0	82.6	9.30
International Trade	0.0	4.3	21.7	39.1	34.8	7.30
Cellulose Industries	0.0	13.0	26.1	34.8	26.1	6.47
Agriculture	0.0	0.0	4.3	17.4	78.3	9.21
Horticulture	0.0	0.0	0.0	26.1	73.9	8.91
Fisheries	0.0	0.0	13.0	21.7	65.2	8.26

Tab.2 Results of Existing brands section of questionnaire (Authors analysis, 2024)

	Agreement (percent)/ Likert Scale					Importance
Potential brands	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	(mean) (0-10)
Pharmaceutical Industry	0.0	21.7	26.1	26.1	26.1	6.39
Ecotourism	0.0	0.0	4.3	30.4	65.2	9.30
Herbal Medicines	0.0	0.0	30.4	47.8	21.7	7.74
Agritourism	0.0	4.3	4.3	21.7	69.6	8.82
Domestic Maritime	0.0	0.0	26.1	43.5	30.4	7.69
Commercial Tourism	0.0	0.0	0.0	60.9	39.1	8.52
Foreign Marine Tourism	0.0	13.0	8.7	30.4	47.8	7.69
Beach Sports	0.0	4.3	13.0	34.8	47.8	8.65
Transit	0.0	4.3	4.3	65.2	26.1	8.21
Customs	0.0	0.0	17.4	52.2	30.4	8.00

Tab.3 Results of Potential brands section of questionnaire

			Agreement (percent)/ Likert Scale				₽
Cha	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Importance (mean) (0-10)	
Political	Lack of sufficient government support for branding initiatives	0.00	13.00	8.70	30.40	47.80	8.00
Political	Political pressure regarding branding effectiveness	0.00	13.00	52.20	21.70	13.00	5.73
	Long-term return on investment	0.00	8.70	4.30	56.50	30.40	7.52
	Deficiencies in infrastructure and facilities	0.00	0.00	13.00	21.70	65.20	8.78
Economic and	Budgetary and financial limitations	0.00	13.00	13.00	30.40	43.50	7.69
marketing	Inability to reach target groups properly	0.00	21.70	17.40	34.80	26.10	6.69
	Difficulty selecting the best branding attribute	0.00	26.10	26.10	30.40	17.40	6.52
	Similarity to existing brands and unintelligent design	0.00	8.70	34.80	30.40	26.10	6.95
	Short management tenure	0.00	4.30	8.70	30.40	56.50	8.56
Administra tive	Managers lack the necessary individual skills	0.00	4.30	21.70	17.40	56.50	7.73
	Complexity of administrative processes	0.00	8.70	4.30	34.80	52.20	8.39
	Lack of positive public perception of the brand	0.00	8.70	56.50	13.00	21.70	4.82
	Imbalance between internal and external stakeholder interests	0.00	8.70	30.40	39.10	21.70	7.00
Social and Cultural	Lack of proper coordination between the government and society	0.00	17.40	17.40	26.10	39.10	7.52
	Insufficient education for local communities to engage with investors	0.00	8.70	8.70	30.40	39.10	7.69

Tab.4 Results of Obstacle and Challenges section of questionnaire

4. Analysis

4.1 Inventory of variables

The MICMAC analysis began by identifying variables from the questionnaire responses, categorized into two groups: *Existing and Potential Brands* (13 variables reflecting Guilan's branding assets and opportunities), and *Challenges and Obstacles* (9 variables highlighting barriers to branding efforts).

	Variables	Short Label
	1. Tourism	Tourism
	2. Agriculture	Agri
	3. Horticulture	Horti
	4. Fisheries	Fishery
	5. Ecotourism	Ecotourism
	6. Herbal Medicines	Herbal med
Existing and Potential Brands	7. Agritourism	Agritouris
Dianus	8. Domestic Maritime Transport	In Mariti
	9. Commercial Tourism	Comtourism
	10. Foreign Marine Tourism	Out Mariti
	11. Beach Sports	Beach Sport
	12. Transit	Transit
	13. Customs	Customs

	Variables	Short Label
	Lack of sufficient government support for branding initiatives	Supportlac
	2. Long-term return on investment	InvestRetu
	3. Deficiencies in infrastructure and facilities	Infrastruc
	4. Budgetary and financial limitations	Budget
Challenges and	5. Short management tenure	Duration
Obstacles	6. Managers lack the necessary individual skills	SkillLack
	7. Complexity of administrative processes	Complexity
	Lack of proper coordination between the government and society	Coordinate
	Insufficient education for local communities to engage with investors	Education

Tab.5 Variables and Short Labels

4.2 Cross-Impact matrices

To assess relationships among key variables, two MICMAC cross-impact matrices were developed. The 13×13 Existing and Potential Brands Matrix identifies key drivers and dependencies among branding opportunities, while the 9×9 Obstacles and Challenges Matrix maps interdependencies among systemic barriers

4.3 Key variables for next steps

Based on Tab. 2 - 4, variables with \geq 50% agreement and importance scores \geq 7.5 were selected for deeper analysis. Key brand-related variables include tourism, agriculture, horticulture, ecotourism, agrituorism, and commercial tourism. Key challenges include infrastructure deficiencies, administrative complexity, and branding support gaps—the latter involving lack of coherent policies, funding, and coordination.

4.4 Micmac analysis results

The MICMAC results are shown in Influence-Dependence Maps (Fig. 4), which categorize variables into: Drivers (high influence, low dependence), Outcomes (high dependence, low influence), Intermediate/Linkage Variables, and Excluded/Independent Variables.

The Direct Influence Graph illustrates how branding opportunities and challenges interact and identifies the most influential factors.

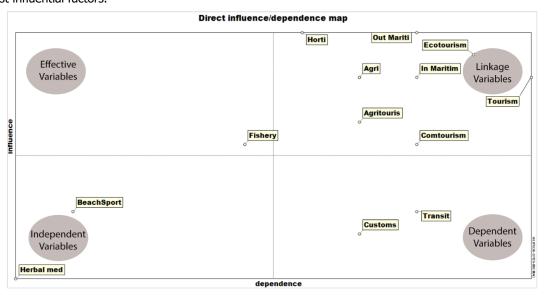


Fig.4 Influence-Dependence Map of Existing and Potential Regional Brands in Guilan (Authors analysis, 2024)

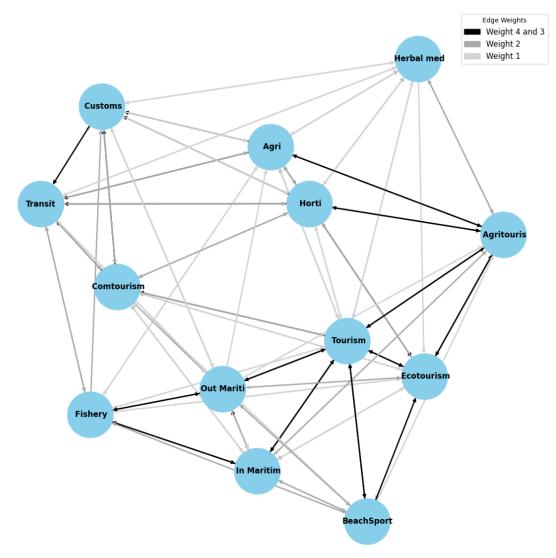


Fig.5 Network of Direct Influences Among Existing and Potential Regional Brands (Authors analysis, 2024)

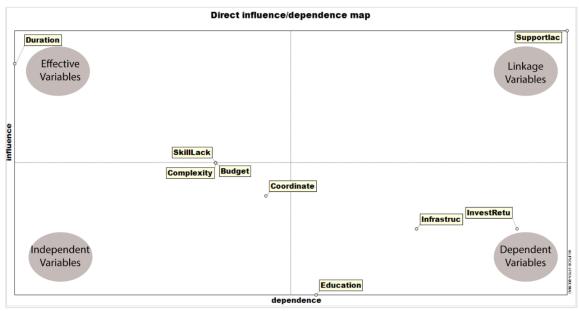


Fig.6 Influence-Dependence Map of Identified Obstacles and Challenges in Regional Brand Development (Authors analysis, 2024)

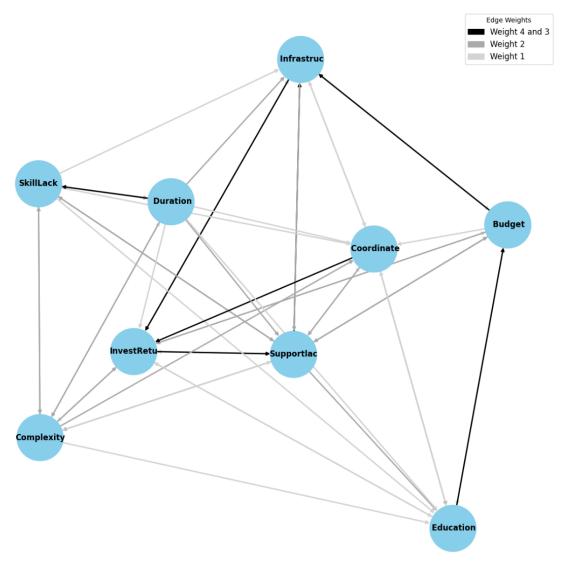


Fig.7 Network of Direct Influences Among Obstacles and Challenges in Regional Branding (Authors analysis, 2024)

5. Discussion

5.1 Key findings and interpretation

The MICMAC analysis identified tourism, agriculture, and ecotourism as the most influential drivers of Guilan's branding, reflecting its cultural, natural, and economic strengths. In contrast, infrastructure gaps, branding support deficiencies, and administrative complexity were major barriers limiting branding effectiveness.

These findings align with earlier research emphasizing tourism and agriculture as key to competitive branding (Huang & Yang, 2023; Kavaratzis, 2004). However, Guilan's challenges - especially fragmented stakeholder coordination and limited resources - are more pronounced than in branding studies from developed contexts (Pasquinelli et al., 2022).

5.2 SWOT analysis

The SWOT analysis evaluates the strengths, weaknesses, opportunities, and threats of Guilan's key brands. Existing brands include tourism, agriculture, and horticulture, while potential ones comprise agritourism, ecotourism, commercial tourism, domestic maritime transport, and foreign marine tourism. This framework helps identify strategic priorities, guide investment and marketing decisions, and support regional development planning.

	Strengths	Weaknesses	Opportunities	Threats
Tourism	- Natural, historical, and cultural landmarks - Favorable geography and climate - Abundance of local foods and products - A tourist-friendly culture - Enhancement of the built environment	- Absence of a designated authority for tourism development - Seasonal imbalance in tourist distribution - Insufficient amenities and accommodation facilities - Ineffective communication and advertising systems - Cultural conflicts between tourists and locals	- Encouraging private sector investment in the region - Generating employment and driving regional economic growth - Increasing focus on tourism planning and policy by officials	- Increased pollution and damage to the local ecosystem - Construction of residences and villas on forested slopes and areas rich in natural resources - Destruction of agricultural lands and fields - Rising land and service prices in the region - Negative impact on local culture
Agriculture	- Favorable geographic and climatic conditions for agriculture - High fertility and productivity potential of the land - Availability of various suitable water sources - A young and dynamic workforce in the region - Proximity to consumer markets and efficient transportation of products	- Use of inappropriate cultivation and supply methods, leading to significant agricultural waste - The current system is inefficient and has low productivity - Inefficient water usage due to outdated irrigation techniques - Absence of a coherent production chain, resulting in reduced incomes for farmers - Insufficient mechanization and outdated agricultural machinery	- Securing capital to develop conversion, processing, and packaging industries - Improving productivity through the use of modern designs and technologies - Potential for expanding markets and exporting agricultural products - Enhancing the attractiveness of agribusiness and rural livelihoods to encourage the younger generation to enter the sector	- Soil erosion and degradation resulting from unsustainable agricultural practices and overexploitation - Depletion of water resources due to misuse - Economic vulnerability of farmers, who are unable to sell products at their true value without profit-driven intermediaries - Lack of localized technology to enhance productivity
Horticulture	- Comparative advantage of horticultural products and economic value per unit of water used - Lower water consumption compared to traditional agriculture - Availability of suitable land for horticulture - Favorable climate and weather conditions for gardening	- High levels of waste and quality loss from harvest to distribution - Workers in the industry lack technical knowledge and skills - Insufficient funding and lack of investors - Absence of mechanization in gardening and inadequate facilities	- Potential to export products to neighboring countries and generate foreign currency - Utilization and restoration of degraded forests and pastures to establish gardens - Introduction of new foreign species and cultivars for exportoriented production - Preservation of resources and creation of employment opportunities	- A weak trade and export system, alongside limited expansion into foreign markets - Lack of coordination among research, laboratory, and educational activities - Inadequate infrastructure for transporting and storing horticultural products

Tab.6 SWOT analysis of key existing brands (Authors analysis, 2024)

	Strengths	Weaknesses	Opportunities	Threats
Agritourism	Provides farmers with a second source of income Enhancing commuting routes and infrastructure	Low literacy levels among agricultural workers Lack of knowledge and acceptance of this method of generating income among farmers	- Creating employment and attractiveness for farmers and rural residents - Familiarizing tourists with agriculture processes	 Increasing tourism in agricultural areas and potential environmental damage An increase in undesired constructions Lack of advertising and awareness campaigns

Ecotourism	 A wide range of ecotourism attractions are available in the region Integrating natural and urban environments 	 Lack of infrastructure and facilities in areas such as Asalem Road, Bojagh National Park, etc. Tourists are unaware of ecotourism principles and environmental protection Pollution and environmental damage 	- Teaching ecotourism and tourism principles without harming the environment Science, research, and ecotourism tourists arrive in pristine and valuable environments - Sustainable development and environmental protection	- The government and residents are unwilling to allow tourists to enter pristine and protected areas due to the fear of environmental damage - Insufficient advertising for ecotourism
Commercial Tourism	 Anzali Free Zone with appropriate business facilities and locations Bandar Anzali's proximity to Rasht Airport A proximity to an industrial area 	- Insufficient economic stability in the country, leading to a lack of investors	 Positive impact on other sectors of the tourism industry Being located along the north-south transit route Contribute to the creation of local jobs 	- Sanctions and restricted access to goods and inputs - Risks associated with currency fluctuations
Domestic Maritime Transport	- Offering users an innovative and attractive mode of transportation - Capacity to transport cargo and goods safely and efficiently	- Insufficient equipment, infrastructure, and ports - A lack of coordination and custodial care - Degrading the environment	- Creating jobs and stimulating the economy - Reducing road traffic accidents and fatalities - Reducing the cost of road maintenance and repairs	Insufficiency of specific and coherent shipping lines Variation in atmospheric conditions, particularly during cold seasons, which can lead to unpredictable limitations
Foreign Marine Tourism	- Setting up a currency import source - Establishing a safe and attractive tourist route	 Sanctions and political problems Insufficient tourism infrastructure and inadequate facilities for foreign tourists Polluting the sea due to ship traffic and waste 	- Difference in exchange rates between neighboring countries and potential for foreign tourists to be attracted to the country - Provide employment opportunities	- Cultural and legal restrictions that discourage tourists - Lack of coordination between neighboring countries and weak political relations

Tab.7 SWOT analysis of key potential brands (Authors analysis, 2024)

5.3 Integrating regional branding with spatial and land use planning

The SWOT analysis shows that Guilan's core branding assets - agriculture, natural landscapes, and cultural heritage—are inherently spatial. These strengths are geographically rooted and shaped by ecological and landuse patterns, making spatial and land use planning essential for meaningful branding. For instance, ecotourism branding requires concrete interventions like zoning, conservation, and infrastructure, while agricultural branding depends on land protection, irrigation, and rural services. Without spatial alignment, branding remains symbolic rather than transformative. As (Zecca et al., 2020) argue, spatial planning must adapt to behavioral and infrastructural realities—especially post-crisis. Similarly, Guilan's challenges—fragmented infrastructure, weak coordination, and administrative inefficiencies—are fundamentally spatial governance issues. Addressing them requires participatory planning, rural development strategies, and territorial policy coordination. Supporting this, (Gomes et al., 2024) call for governance-driven spatial planning to balance resource use and sustainability, while (Chen & Gong, 2025) emphasize adaptive spatial strategies to anticipate long-term challenges. Embedding branding within these frameworks can anchor identity-building in real, actionable development.

5.4 Spatial and statistical validation of findings

The Delphi-based results are validated through spatial and statistical evidence. As shown in Fig.8, Guilan features dominant agricultural lands, forests, wetlands, and coastal areas - aligning with expert rankings of

agriculture, ecotourism, and agritourism as key brand assets. This land use pattern confirms the region's natural branding potential.

However, the Delphi study also highlights infrastructure and accessibility as major constraints, echoed in the disconnection between inland agricultural/ecological areas and urban/coastal tourist zones, limiting integrated mobility and tourism development.

Tourism data further supports these insights. According to the Guilan Cultural Heritage, Tourism and Handicrafts Department, over 8.25 million domestic travelers visited during Nowruz 2024, a 4% increase from the previous year. Cities like Rasht, Bandar Anzali, and Astara saw 99% accommodation occupancy, reflecting the province's strong tourism pull. Together, the land use structure and tourist data empirically support the Delphi findings and underline the urgency of addressing infrastructure gaps to strengthen Guilan's branding potential.

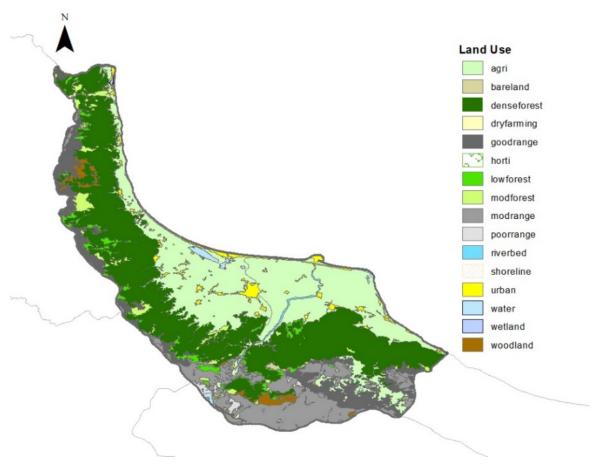


Fig.8 Land Use Distribution in Guilan Province (Authors analysis, 2024)

5.5 Addressing research questions

— What brands are there in the Guilan province at the moment, and how do they help to improve local competitiveness?

Guilan province's leading local competitiveness brands center on tourism, supported by its rich cultural heritage, natural beauty, and historic landmarks that attract both domestic and international visitors.

Tourism significantly contributes to the region's economy and identity. Complementing tourism, agriculture - particularly the cultivation of tea and rice using fertile land and traditional methods- remains a cultural and economic cornerstone. Additionally, ecotourism emerges as a strong branding opportunity, aligned with global sustainability trends and Guilan's diverse landscapes and biodiversity.

MICMAC analysis highlights tourism, agriculture, and ecotourism as key drivers of Guilan's branding success, defining regional identity and competitive advantage while fostering collaboration among stakeholders to enhance economic resilience. However, systemic challenges such as inadequate infrastructure, limited marketing resources, and fragmented governmental support hinder these sectors' full potential. Addressing these barriers through strategic investment, targeted marketing, and stakeholder cooperation is essential for strengthening Guilan's competitive position in regional and international sustainable development markets.

— What are the critical barriers to branding exercises in Guilan?

The study identifies critical barriers hindering Guilan's branding success, stemming from systemic, administrative, and resource-related challenges. Infrastructure deficiencies -particularly in road transport and tourism facilities- limit accessibility and detract from tourist experiences, thereby constraining the region's tourism potential.

A key obstacle is the lack of state-level support for branding initiatives. Insufficient funding, low policy prioritization, and weak government-stakeholder collaboration impede effective strategy development and execution, echoing prior research underscoring governance as vital for regional branding success.

Administrative complexity further hampers progress, with bureaucratic inefficiencies, protracted decision-making, fragmented management, and gaps in managerial skills undermining innovative campaign implementation. Financial constraints restrict investment in essential branding tools and marketing activities, limiting brand visibility locally and globally.

Additionally, negative public perceptions -rooted in limited awareness among local stakeholders - erode collective support for branding efforts.

These challenges demand strategic responses, including infrastructure investment, management capacity building, streamlined administrative processes, and stronger government commitment. Addressing these barriers is crucial for enhancing Guilan's branding ecosystem and realizing its potential as a competitive regional brand.

— How can the branding of Guilan be used to build and develop sustainable regional brands?

Based on the research findings, strategic recommendations for establishing sustainable regional brands in Guilan emphasize leveraging high-impact sectors -tourism and agriculture- to strengthen regional identity. Targeted capital investment in tourism infrastructure and the promotion of sustainable agricultural practices can significantly enhance these core drivers.

Addressing systemic challenges requires increased government funding and fostering public-private partnerships to resolve infrastructure gaps and improve branding support. Streamlining administrative processes will facilitate greater stakeholder engagement and more efficient branding initiatives.

Exploiting Guilan's unique assets, such as ecotourism and agritourism, offers further branding opportunities. Initiatives like developing eco-trails, promoting organic farming experiences, and marketing local products (e.g., herbal medicines) can position Guilan as a leader in sustainable tourism and local enterprise.

Engaging communities through educational campaigns and training to align stakeholders with branding objectives will strengthen local ownership of the regional brand. Additionally, integrating digital marketing - social media, virtual tours, and other platforms- can expand Guilan's reach among tech-savvy tourists.

Together, these strategies can foster a coherent, sustainable regional brand that highlights Guilan's distinctive cultural, natural, and economic strengths while overcoming existing challenges.

5.6 Implications

This study provides important theoretical and practical contributions to regional branding, especially in developing regions like Guilan Province. Theoretically, it demonstrates how MICMAC analysis can clarify the interconnections among drivers, intermediates, and outcomes in branding systems.

Practically, it underscores the need to prioritize high-impact variables, improve infrastructure, and involve local communities to build brand ownership.

These findings align with (Marinelli et al., 2022), who emphasized that infrastructure gaps and spatial fragmentation were major barriers to territorial development in post-seismic Italy, and that local engagement was key to building resilience.

By tackling these systemic challenges, Guilan can establish a sustainable and competitive regional brand with long-term global potential.

5.7 Limitations and future research

Considering the research focuses on expert opinions and in a short-term period, the geographical scope has been limited to Guilan province. Future studies should investigate the long-term effects of branding strategies or expand to other regions with similar conditions. Adding quantitative measurements of branding performance might be able to strengthen the findings further.

6. Conclusion

This study identified key existing brands in Guilan - tourism, agriculture, and horticulture - and emphasized the need for strategic development to leverage these assets. The findings align with (Cheraghi & Moosavi Nadoshan, 2024; Monem Lafmejani et al., 2022), who also highlighted tourism as Guilan's core brand. Emerging opportunities include agritourism, ecotourism, commercial tourism, inland waterway transport, and foreign cruise tourism, all of which suggest strong potential for sustainable growth.

The SWOT analysis confirms Guilan's strengths - natural and cultural richness - and aligns with (Moroz et al., 2020) on sustainable tourism's role in regional branding. While challenges such as infrastructure gaps, administrative complexity, and limited government support persist, they can be addressed through strategic use of existing strengths.

Barriers identified include bureaucracy, limited managerial skills, and short tenures. Solutions include streamlining processes via IT, investing in training and teamwork, and designing long-term strategies, as noted by (Mariutti & Giraldi, 2021). Strengthening collaboration between governance and branding stakeholders is also vital, echoing the insights of (Beran et al., 2016; Johnson et al., 2020).

By tackling these issues, Guilan can enhance its branding system and serve as a model for regional development in similar contexts.

Theoretically, this study highlights the interplay of influential and dependent variables in branding systems, contributing to the literature on branding in emerging economies.

Future research should explore the long-term impact of these strategies and their applicability to other regions with comparable socio-economic conditions.

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Image Sources

Fig.1: Authors, 2024;

Fig.2: Authors, based on Google Earth (2024);

Fig.3: Adapted from (Godet et al., 2008);

Fig.4: Authors analysis, 2024;

Fig.5: Authors analysis, 2024;

Fig.6: Authors analysis, 2024;

Fig.7: Authors analysis, 2024;

Fig.8: Authors analysis, 2024.

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