

Branding by the Kalimas River: Positioning Surabaya as Indonesia's Leading Waterfront City

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ABSTRACT

The development of waterfront city areas has become a sustainable approach for enhancing the potential of strategic urban regions. In this context, city branding provides a unique identity for a city, influencing its appeal to residents, tourists, businesses, and investors. The Kalimas River, the largest river in Surabaya, Indonesia, holds historical and iconic significance for the city. This study explores efforts to reorganize and revitalize the Kalimas River as a distinctive feature that can serve as a branding element using the waterfront city concept. A qualitative descriptive method was employed, utilizing a case study approach. Data collection included in-depth interviews, focus group discussions with local government representatives, academics, and industry players, as well as documentation and direct field observations. The findings reveal that the Kalimas River has significant potential to serve as a unique brand for Surabaya City. Collaboration among all stakeholders is essential to strengthen the city's brand image to realize this potential sustainably.

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1. Introduction

The rapid advancement of technology and its role in enhancing global competitiveness present both opportunities and challenges for accelerating progress in urban development. Among these challenges is the sustainable development of waterfront cities, which require strategic positioning to harness their unique potential. Technological tools are critical in implementing urban development initiatives, particularly in waterfront areas, which serve as vital components of urban identity and global

connectivity (Shamsuddin et al., 2012). These areas attract visitors based on temporal preferences (Wu et al., 2019) and support biodiversity and ecosystems, offering opportunities to reduce urbanization's environmental impact (Ayu et al., 2022).

Waterfront development integrates ecological and urban design principles, including functional zoning, public space management, and sanitation (Ramadhani et al., 2021). However, effective implementation depends on holistic collaboration among operators, regulators, and stakeholders (Wirawan et al., 2018).

For waterfront cities to thrive as tourist destinations, they must fulfill essential conditions: offering attractions, activities, and opportunities for commerce (Yoeti, 1991).

City branding plays a crucial role in urban development, yet strategic misalignment between branding efforts and urban management can hinder its success (Skinner, 2008). Over the past decade, researchers have emphasized city branding as a tool for urban development, alongside city promotion and marketing (Ma et al., 2021). Public spaces, a key urban element, enhance a city's livability and identity when designed to accommodate diverse activities and users (Ekawati et al., 2020). In Indonesia, where coastal settlements are integral to the economy and environment, waterfront development offers a promising pathway for sustainable urban growth (Isra et al., 2020).

Surabaya, a coastal city in eastern Java, Indonesia, exemplifies this potential. The Kalimas River, a 12-kilometer waterway running through the city, has long been central to its history and culture. It also served as a meeting point for diverse ethnic and racial communities engaged in trade and other riverbank activities, making it central to the community's life. Historically, the river was vital to Surabaya's growth as a port town and trade center, facilitating the indirect entry of Arabian, Chinese, and European cultures through commerce (Idajati & Nugroho, 2019). Although its condition has changed since the Dutch colonial era, the Kalimas River retains the potential to support community activities through appropriate revitalization efforts. While the local government has initiated revitalization efforts, further collaboration and strategic planning are needed to fully realize its potential as a branding identity for Surabaya.

This research identifies Surabaya's Branding as a Waterfront City through reviving the Kalimas River as a potential strategic urban region. In particular, the evolution and transformation of the waterfront city aims to identify research achievements and knowledge gaps, especially in the field of strengthening the branding of the Kalimas River. In other words, making branding effective and efficient should continue by involving target markets such as investors, tourists, talent, and event participants in the activity.

While studies on city branding and waterfront revitalization have proliferated globally, there is a paucity of empirical research that explores the integration of river revitalization and strategic city branding in secondary cities of the Global South. Specifically, little attention has been given to how historical rivers in Indonesia can be leveraged as branding assets in the context of sustainable urban development.

This study seeks to fill that gap by examining the case of the Kalimas River in Surabaya, thereby contributing to the theoretical framework of place-based branding. Also, this study seeks to fill that gap by examining a comprehensive strategy to enhance the strategic and historical value of the Kalimas River. By examining existing conditions and programs, optimizing its potential through revitalization initiatives, and integrating branding efforts rooted in its natural resources, the research aims to ensure sustainable economic, social, and cultural benefits for the community. Also,

this paper contributes to city branding theory by reframing urban river revitalization as a process-based branding mechanism rather than a supporting physical intervention. Moving beyond marketing-centric approaches, it argues that ecological restoration, governance coordination, and community participation collectively shape a substantive and sustainable urban identity in postcolonial and secondary cities.

2. Literature Review

2.1 City Branding: Concepts And Strategic Dimensions

City branding has emerged as a pivotal strategy for urban areas aiming to enhance their global competitiveness and appeal. City branding involves not just marketing tactics but also the strategic management of a city's identity and image. It is a multidisciplinary field encompassing producing, consuming, and critiquing perspectives (Lucarelli & Olof Berg, 2011). Kasapi and Cela (2017) further elaborate on the evolution of city branding, noting its transition from traditional marketing approaches to more integrated strategies that consider the unique characteristics and aspirations of cities. However, much of this literature tends to emphasize promotional outcomes rather than examining how branding is embedded in urban governance and environmental transformation processes. This limitation suggests a need to reposition city branding as a long-term, process-oriented strategy rather than a short-term image-building exercise.

In the context of developing countries, the role of cultural and symbolic elements becomes an asset in city branding. Integrating local culture, landmarks, and community narratives can significantly enhance a city's image and identity (Abd Ghafar et al., 2022). The concept of brand advocacy in city branding proposes a model that considers cognitive, affective, and personality associations. These associations influence visitors' word-of-mouth behaviors, thereby impacting the city's reputation and attractiveness (Sahin & Baloglu, 2014).

Moreover, the integration of sustainability into city branding narratives has gained attention. Ripoll Gonzalez and Gale (2023) critically examine how cities adopt sustainability narratives, cautioning against superficial branding that overlooks systemic environmental and social challenges. The study advocates for a more holistic approach that aligns branding with genuine, sustainable urban development.

2.2 Waterfront cities as catalysts for enhanced city branding

Waterfront development has been recognized as a strategic avenue for cities to rejuvenate their image and stimulate economic growth. Maulana et al. (2024) analyze the challenges faced by Indonesian cities like Makassar and Surabaya in branding themselves as waterfront cities, identifying inadequate infrastructure, policy inconsistencies, and limited stakeholder collaboration as key barriers. While these findings highlight structural and managerial constraints, they largely frame waterfront branding as a policy and planning problem. Less

attention is given to how ecological functions and historical narratives of rivers themselves can actively shape branding outcomes. This gap is particularly evident in secondary cities, where rivers often serve as both environmental infrastructure and cultural symbols.

Rotterdam serves as a notable example of successful waterfront redevelopment. The transformation of its Keilehaven area into a tidal park exemplifies how ecological sensitivity and innovative urban design can coexist. This initiative not only enhances the city's resilience to climate change but also contributes to its branding as a forward-thinking and sustainable urban center. The incorporation of cultural elements into waterfront development further enriches city branding. The interplay between city branding and cultural branding in Bandung, Indonesiashows that leveraging cultural heritage and local identity in waterfront projects can create a distinctive brand that resonates with both residents and visitors (Aldianto et al., 2019).

2.3 Rivers as Potential Assets In Waterfront City Development

Rivers have historically been central to urban development, and their revitalization presents opportunities for enhancing city branding. One example is Cikapundung Park in Bandung, where the transformation of a previously polluted river area into a public park has led to improvements in both environmental quality and community well-being. This study underlines how vital public engagement and eco-friendly practices are to the success of such developments (Situngkir, 2016).

In the broader context, the Netherlands' "Room for the River" program illustrates how integrating river management with urban planning can yield multifaceted benefits. By creating floodplains and green spaces, the program not only mitigates flood risks but also enhances the aesthetic and recreational value of urban rivers, contributing to the cities' branding as resilient and livable.

Furthermore, the strategic use of rivers in city branding is evident in the experiences of cities like London and New York. Cultural capital, which is often concentrated along riverfront areas, has been shown to correlate with economic development and urban attractiveness, suggesting that investment in cultural activities and infrastructure near rivers can significantly enhance a city's brand and appeal (Hristova et al., 2018).

Overall, the reviewed literature demonstrates that while city branding, waterfront development, and river revitalization have been extensively studied, they are often treated as separate domains. Few studies integrate rivers as ecological infrastructure within a process-based city branding framework, particularly in secondary cities of the Global South. This study addresses this gap by examining how the revitalization of the Kalimas River

contributes not only to environmental improvement but also to the construction of Surabaya's waterfront city brand.

3. Methodology

This research employs a descriptive qualitative approach using a single-case analytic study method. This research employs a descriptive qualitative approach using a single-case analytic study method (see Figure 1). The descriptive approach is used to systematically, factually, and accurately describe the current conditions, characteristics, and relationships between the phenomena under investigation (Mohammad Nazir, 2009). Descriptive research aims to analyze results without drawing broader conclusions (Sugiyono, 2022). Meanwhile, the single-case method is applied to conduct an in-depth examination of a specific phenomenon, such as individuals, organizations, geographical locations, or policies, which can be used to develop a comprehensive strategy (Tracy, 2019).

This study was conducted in Surabaya, specifically in the Kalimas River area, with a focus on the potential revitalization of the waterfront city. Primary data is collected through in-depth (semi-structured) interviews, focus group discussions, direct field observations, and documentation to obtain information on the current conditions, development processes, and programs supporting the enhancement of Surabaya's branding as a waterfront city. The semi-structured interviews followed a guided protocol consisting of descriptive, process, and reflective questions to explore stakeholders' experiences and perspectives. Each interview lasted between 45-60 minutes and was conducted either face-to-face or via online video calls. All interviews were audio-recorded with prior consent and later transcribed verbatim to support accurate analysis.

The total number of respondents in the data collection consists of a total 17 individual informants. The characteristics of the informants consist of 11 participants from government institutions, 2 from the private sector/practitioners, and 4 from academia, all of whom have been involved in regional development, city branding, and urban planning in the context of Surabaya's development. A larger proportion of government informants was selected because they play a crucial role in the planning, implementation, and evaluation processes related to city branding. The informants involved in this study were selected based on having more than five years of relevant professional experience. The details of the informants can be seen in Table 1. The selection of informants is highly specific, with a limited number of participants to minimize bias (Fugard & Potts, 2015; John W. Creswell, 2007). Data collection was conducted over one year in 2022. The following is an illustration of the research process undertaken:

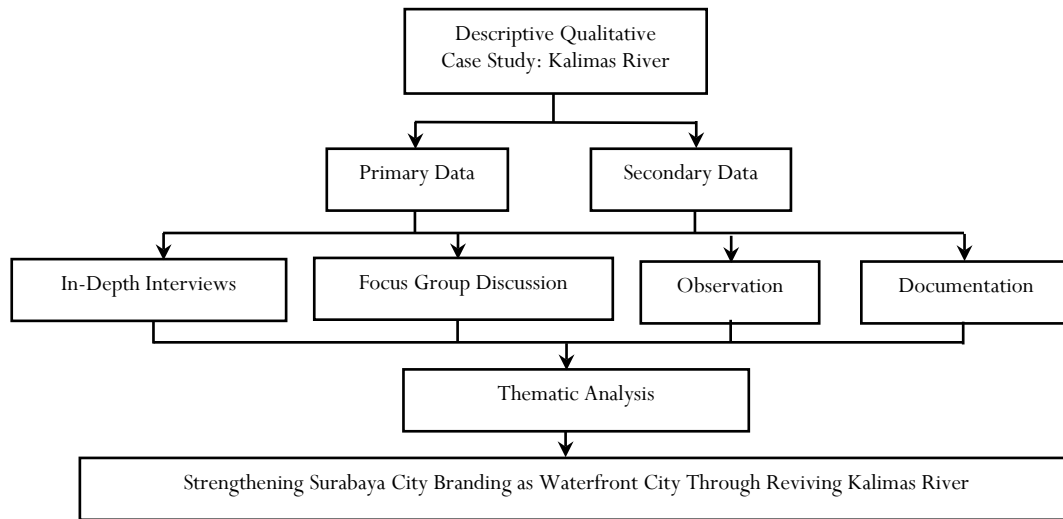


Figure 1 Research Flow
Source: Authors

Table 1 List of Informants

No	Informant	Amount	Characteristic
1	Regional Development Planning Agency, Research and Development of Surabaya City	7	Government
2	Department of Cooperatives, Small and Medium Enterprises, and Trade of Surabaya City	1	Government
3	Department of Water Resources and Highways of Surabaya City	1	Government
4	Department of Culture, Youth, and Sports, and Tourism of Surabaya City	1	Government
5	Department of Public Housing, Settlement Areas, and Land Affairs of Surabaya City	1	Government
6	Practitioners/entrepreneurs	2	Community and the private sector
7	Academics	4	Lecturers/researchers

Data analysis was conducted using a thematic analysis method based on the information provided by the informants, following structured coding procedures proposed by Nowell et al. (2017). The analysis began with familiarization through repeated reading of interview transcripts and observation notes, followed by initial line-by-line coding to identify meaningful units. Codes were then grouped to form candidate themes, which were reviewed, refined, and named based on their conceptual coherence. Triangulation was conducted by comparing data across interviews, FGDs, field observations, and document analysis to validate the consistency and robustness of the themes.

This method was chosen for its flexibility in data processing, its focused and in-depth approach to analyzing a single-case study, and its ability to elaborate on interview findings by cross-referencing them with field observations (Nowell et al., 2017). Additionally, secondary data collection was carried out to

strengthen the findings from field research. Field observations were also conducted to validate the data obtained. These observations contributed to the analysis by providing contextual evidence that complemented and clarified the interview data, such as verifying infrastructure conditions, public activities, and environmental issues along the river.

Through this approach, the study aims to provide comprehensive insights into optimal strategies for enhancing Surabaya's image as a waterfront city through the revitalization of the Kalimas River area.

4. Results

4.1 A Review Of The Kalimas River In Surabaya, Indonesia

The Kalimas River has historically played a central role in Surabaya's economic and social life, serving as a major transportation route since the colonial era (Hidayat et al., 2022). As a branch of the Brantas River, it was a key conduit for trade during the VOC period, facilitating the movement of goods such as fish, coffee, and spices from Tanjung Perak Port to key areas like Kembang Jepun and Kayoon (now Surabaya Mall) (Nugroho Kartiko Adi, 2019). The river flows into the Wonokromo River, controlled by the Jagir Dam, and eventually empties into the Madura Strait. Its strategic location attracted Arab and Chinese traders, prompting Dutch colonial authorities to establish European settlements along its banks. However, limitations in river width prevented access for large vessels, leading to their docking in the Madura Strait. Over time, the river's function declined due to infrastructural expansion, including the construction of wide roads and an electric tramway in the 19th century, along with increased reliance on land transportation and environmental degradation.

Despite its potential as a vibrant waterfront city, the Kalimas River faces critical challenges, including pollution from domestic, industrial, and agricultural waste, which has severely degraded water quality and threatens public health. Encroachment by

private entities and informal settlements has further disrupted the river's ecosystem and reduced its width (Hastijanti, 2014; Pamungkas et al., 2019). Limited public access hinders recreational and tourism development, while low community involvement in river restoration efforts highlights the need for greater public engagement and awareness.

4.2 Efforts In Rearranging, Revitalizing, And Relaunching The Kalimas River

The Surabaya government has recognized the need to rearrange and revitalize the Kalimas River to improve the environmental quality, aesthetics, and water quality of the city. The government's interventions have included the improvement of basic infrastructure, such as retaining sheet piles, shallow water management, and waste management in the Kalimas area. Additionally, they have created a promenade path, a riverside pedestrian path, and waterfront bike paths, as well as designated and developed tourism activities along the river's edge. These efforts contribute to the development of a vibrant waterfront city in Surabaya (Figure 2).

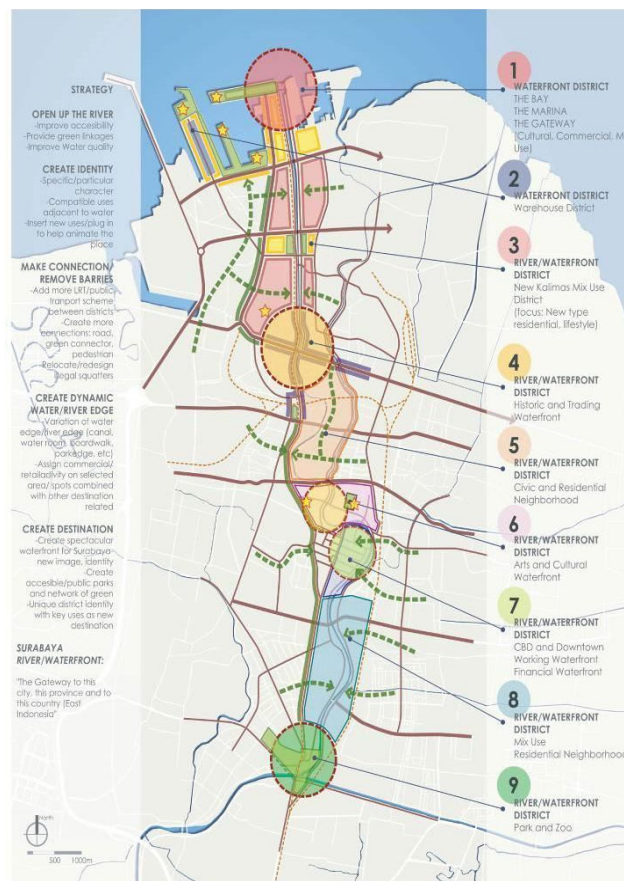


Figure 2 Map of the Kalimas River, Surabaya, Indonesia

Source: Regional Development Planning Agency, Research and Development of Surabaya (2022)

Urban waterfronts have always played a crucial role in the economic development and socio-cultural identity of many port cities. Smith and Garcia Ferrari (2012) emphasize physical regeneration processes, while Hristova et al. (2018) highlight the

contribution of cultural activities to urban attractiveness. Unfortunately, due to urbanization and industrialization, the Kalimas River has suffered from significant pollution and degradation (Kurnianto et al., 2024; Laely Nurhidayah, 2008).

However, several potential developments could help improve the river's condition and make it a more valuable resource for the city:

(i) River cleanup and restoration

The first step towards the Kalimas River's development is to clean up the pollution and restore the river's natural habitat. This would involve removing trash and debris and treating wastewater and industrial effluent before it enters the river. The quality of water in the river has deteriorated over the years due to high levels of industrial waste, domestic sewage, and other pollutants. By implementing effective waste management and water treatment systems, the city can significantly improve the water quality, restore the river's ecosystem, and enhance biodiversity. Efforts to clean up the river would not only benefit the aquatic life but also improve the health and safety of communities living near the river.

(ii) Ecotourism

Following restoration, the Kalimas River holds strong potential for ecotourism development, leveraging its historical and cultural significance. Activities such as boat tours can offer scenic and educational experiences, raising public awareness about environmental conservation. Sustainable tourism can also stimulate the local economy by generating employment and encouraging the growth of river-based enterprises, such as cruises, cafes, and souvenir shops. This initiative could position Surabaya as a leading eco-friendly tourism destination.

(iii) Riverfront development

Flowing through the center of Surabaya, the Kalimas River's riverfront holds significant potential for commercial and recreational development. The construction of parks, cafes, and

retail spaces can transform the area into a vibrant urban hub that harmonizes natural beauty with public use. Pedestrian-friendly design and recreational facilities would attract both residents and tourists, revitalizing surrounding neighborhoods and stimulating local economic growth.

(iv) Flood control

The Kalimas River is prone to flooding, which can cause significant damage to the surrounding area. New flood control measures, such as levees and retention basins, could be constructed to mitigate the risk of flooding and protect the local population. Over the years, Surabaya has experienced frequent flooding, especially during the rainy season, causing property damage and displacing families. By implementing comprehensive flood management strategies, the city can not only safeguard its infrastructure and economy but also ensure the well-being of its citizens. Sustainable flood control measures, including green infrastructure solutions such as wetland restoration and floodplain management, would also provide ecological benefits, support biodiversity, and enhance the urban environment.

In general, the development potential of the Kalimas River could bring significant benefits to Surabaya by improving its environmental quality and creating new opportunities for economic growth and recreation. The development of the Kalimas River can be divided into four crucial areas, from upstream to downstream: water treatment, the Central Business District (CBD), the historic and civil district, and the port (Figure 3).

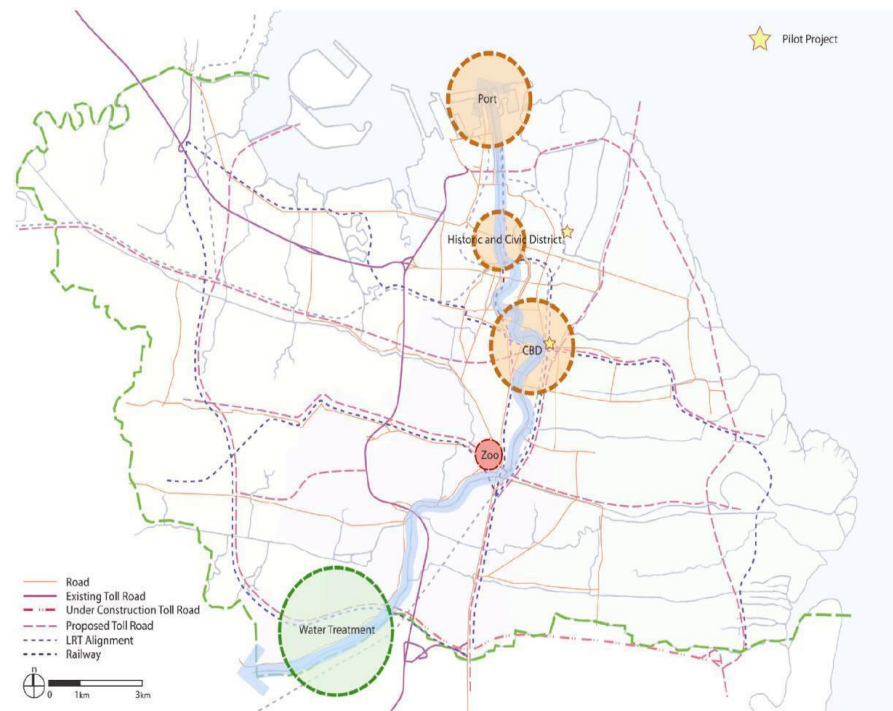


Figure 3 Map of the Kalimas River's potential development

Source: Regional Development Planning Agency, Research and Development of Surabaya (2022)

A key area for the development of the Kalimas River is water treatment, which is essential for enhancing water quality. Although the river serves important functions in transportation, fishing, and recreation, its condition has been severely impacted by pollution from residential, commercial, and industrial sources. To mitigate this, water treatment facilities have been implemented upstream in Surabaya. The Wonokromo Wastewater Treatment Plant, with a capacity of 2,100 liters per second, utilizes primary sedimentation, biological, and tertiary treatments to purify wastewater before its release. Downstream, the Ngagel Water Treatment Plant, with a capacity of 1,500 liters per second, contributes additional clean water to the city.

Another key development area near the Kalimas River is the Central Business District (CBD). Surabaya, the second-largest city in Indonesia, has been experiencing rapid urbanization and economic growth in recent years. In response, the city has been developing a CBD to accommodate the increasing demand for office space and commercial activities. The following are some key features of Surabaya's CBD:

- i. Location: The CBD is situated in the western part of the city, near the Surabaya Gubeng train station. Its accessibility by road, rail, and public transportation makes it a prime location for businesses and visitors alike.
- ii. Commercial buildings: The CBD houses many modern office buildings and commercial complexes, such as Tunjungan Plaza and Surabaya Plaza Office Tower. These buildings offer a range of amenities and services, including meeting rooms, coworking spaces, and retail outlets.
- iii. Hotels: Several high-end hotels are located within the CBD, including Sheraton Surabaya Hotel & Towers and JW Marriott Hotel Surabaya. These hotels cater to business travelers and provide conference facilities and business centers.
- iv. Infrastructure: The CBD boasts modern infrastructure, including high-speed internet connectivity, efficient transportation networks, and well-maintained roads and sidewalks, making it an attractive destination for businesses and investors.

Overall, Surabaya's CBD plays a vital role as a hub for commercial and business activities in the city. Its modern facilities and infrastructure make it a highly attractive location for both domestic and international businesses seeking to expand in the region.

Another potential area is the historic and civil district, which is a pilot project initiated by the local government. Several historical sites near the river are worth exploring, including:

- i. Kampung Arab: This historic neighborhood near the Kalimas River dates to the 18th century and is known for its unique blend of Arab and Javanese architecture, along with its traditional shops and food stalls.
- ii. Kampung Peneleh: Another historic neighborhood, Kampung Peneleh, is located near the Kalimas River and dates to the Dutch colonial period. It is known for its colonial-era buildings and is a popular destination for those interested in the city's history. The neighborhood is also nicknamed "Kampung Bung Karno" because it is the birthplace of Soekarno, the first president of Indonesia.

- iii. Heroes Monument: Situated near the Kalimas River, the Heroes Monument honors the heroes of Indonesia's struggle for independence. The monument is surrounded by a park and is a popular spot for visitors to take photos.
- iv. House of Sampoerna: The House of Sampoerna, a museum and cultural center near the Kalimas River, is housed in a historic building that once served as a Dutch colonial-era cigarette factory. It is renowned for its exhibits on Indonesian history and culture.

The final area of potential development is Surabaya's port, one of the busiest in Indonesia and a vital gateway to the eastern part of the country. The development of Surabaya's port could bring many benefits to both the city and the surrounding region. To accommodate the increasing volume of trade and shipping traffic, several areas require development:

- i. Expansion: Surabaya's port is currently operating at full capacity, making expansion essential. This could involve constructing new docks, piers, and terminals, as well as deepening the port to accommodate larger vessels.
- ii. Improved infrastructure: Along with the physical expansion of the port, there is also a need for investment in infrastructure. This includes upgrades to road and rail connections to the port, as well as the modernization of cargo handling facilities and communication and navigation systems.
- iii. Green Port: Reducing the environmental impact of port operations is becoming increasingly important. Surabaya's port could be developed as a green port, utilizing cleaner fuels, reducing emissions from ships and cargo handling equipment, and enhancing waste management and recycling efforts.
- iv. Industrial development: Surabaya's port could also serve as a hub for manufacturing and industrial activities. New factories and industrial parks in the surrounding area could leverage the efficient transportation links provided by the port.

While the potential development of Surabaya's port could provide significant economic benefits to the city and its surrounding region, it is crucial to balance this with environmental concerns and the well-being of the local community.

The Kalimas River revitalization project aims to restore the river's function and enhance its surroundings by developing pedestrian areas and creating new tourist attractions. To achieve this, the government can take the following steps:

- i. Develop a comprehensive plan that outlines the necessary measures to revitalize the Kalimas River, such as reducing pollution, improving water quality, and restoring the river's ecosystem. Revitalizing the Kalimas River requires an integrated plan addressing pollution from industrial, agricultural, and residential sources. This includes installing advanced upstream treatment facilities and improving wastewater management to prevent the discharge of untreated pollutants. Riverbank restoration, through native vegetation, is also crucial to control erosion and enhance biodiversity, ensuring long-term ecological sustainability.
- ii. Increase funding for infrastructure development, research, and education programs related to revitalizing the Kalimas River.

Adequate funding is crucial for the sustained revitalization of the Kalimas River, particularly for infrastructure upgrades such as sewage treatment, waste management, and flood control systems. Investment should also support the development of green spaces, parks, and pedestrian paths that promote tourism and aid natural water filtration. Additionally, research funding is vital to assess ecological health, monitor water quality, and identify effective restoration strategies.

- iii. Enforce regulations related to water pollution, such as imposing fines on individuals and companies that violate regulations and regularly monitoring the quality of water in the Kalimas River. Strict enforcement of water pollution regulations is essential to protect the Kalimas River. This includes imposing significant penalties on individuals and businesses that violate pollution standards, supported by clear legal frameworks. Sanctions such as fines, temporary factory closures, or permit revocations can deter non-compliance and promote environmentally responsible practices. Regular inspections and public awareness campaigns are also necessary to foster community accountability and adherence to environmental laws.
- iv. Establish partnerships with stakeholders, such as NGOs, academic institutions, and the private sector, to bring together expertise, funding, and resources to achieve a common goal. Establishing strong multi-stakeholder partnerships is vital for the successful revitalization of the Kalimas River. NGOs contribute by mobilizing communities, promoting environmental advocacy, and supporting sustainable development efforts. Academic institutions offer critical research on river ecology, pollution sources, and best practices in water and ecosystem management. Their collaboration can drive innovative, eco-friendly solutions to address the river's environmental challenges.

The Surabaya city government is currently working on developing the Kalimas River into a popular tourist destination through the Kalimas River Boat Tour program. This program aims to reintroduce the Kalimas River as a captivating and unique tourist attraction, particularly at night. To achieve this, the development of the Kalimas River on the southern side has been divided into five zones, each with a different theme, and each zone is linked by a bridge along the river. The relaunch program is expected to generate increased public interest in exploring and touring the Kalimas River. Its success will require a collaborative effort from the government and other stakeholders.

5. Discussion

5.1 Efforts to revive the Kalimas River

Reviving the Kalimas River in Surabaya will require a multi-faceted approach that involves the cooperation and participation of various stakeholders, including the government, the private sector, and local communities. Some steps that could be taken to revive the Kalimas River such as:

- i. Identify the sources of pollution

One of the main reasons why the Kalimas River is heavily polluted is the discharge of untreated wastewater from households, industries, and agriculture. It is essential to identify and monitor these sources of pollution to target interventions effectively.

Conducting regular water quality assessments and engaging with local industries will help identify critical sources of contamination and enable appropriate mitigation measures. Moreover, this step is vital for enforcing environmental regulations.

- ii. Improve wastewater treatment

To prevent untreated wastewater from entering the river, the government could invest in upgrading existing wastewater treatment plants and constructing new ones where needed. A modernized treatment infrastructure will ensure better filtration of industrial, household, and agricultural waste before it is released into the river. Additionally, improving wastewater management facilities in urban and rural areas around the river's catchment areas can significantly reduce pollution levels and improve water quality.

This condition is consistent with the informant's statement, as follows:

“...At present, the local government, particularly the Environmental Agency, has undertaken efforts to manage and rehabilitate river areas through the establishment of waste-filtering task forces that routinely clean canals and rivers...”

The above statement indicates that the local government has taken concrete measures in the management and rehabilitation of river areas through both institutional and operational approaches.

- iii. Promote sustainable agriculture

Agriculture is another major source of pollution for the Kalimas River, especially with the excessive use of fertilizers and pesticides, which run off into the river during rainfall. The government can encourage sustainable farming practices that reduce dependency on harmful chemicals. Introducing organic farming methods, providing training to farmers, and offering incentives for environmentally friendly practices will help reduce agricultural runoff into the river.

- iv. Encourage public participation

The success of any river restoration project depends on the active participation of the local community. The government should engage with residents through awareness campaigns, workshops, and volunteer activities such as river clean-up drives. This principle is reflected in the field findings, where one of the informants noted that residents already play an active role as users of public space. One of the informants mentioned that residents play an active role:

“...They (park visitors) engage in sporting activities and also form part of creative communities that contribute to artistic and musical performances on board the boats...”

Educational programs in schools, as well as collaboration with local NGOs, will ensure that the public understands the importance of preserving the Kalimas River and is motivated to take part in its revitalization. An informant explained that the educational aspect is implemented by repurposing the former Taman Siswa School building into a Museum of Education.

“...The presence of the museum provides a contextual learning experience in which the river is positioned as an integral part of the city's history and urban life that must be preserved and sustainably maintained...”

- v. Develop green infrastructure

Green infrastructure, such as wetlands, green roofs, and rain gardens, can play a significant role in absorbing stormwater runoff

and filtering pollutants before they reach the river. By investing in such infrastructure, the government can reduce the volume of polluted runoff entering the river during heavy rains. Additionally, creating green spaces along the riverbank can improve water quality, enhance biodiversity, and provide recreational spaces for the community.

vi. Enforce regulations

Strict enforcement of existing regulations is essential to maintaining water quality in the Kalimas River. The government must implement regular monitoring and inspection of industries and local communities to ensure compliance with pollution control standards. Fines or other penalties for violations will act as a deterrent. Strengthening legal frameworks for environmental protection and ensuring transparency in reporting pollution levels will also contribute to a cleaner river.

Reviving the Kalimas River will require sustained efforts and a long-term vision. However, implementing these steps ensures that future generations can enjoy a healthy and vibrant river ecosystem. The synergistic relationship between revitalization and branding aligns with Ripoll Gonzalez & Gale's (2023) notion that genuine environmental improvement enhances a city's credibility. The field data affirm that without ecological restoration and active citizen involvement, branding strategies risk becoming superficial or performative. Thus, this case affirms the need for environmental branding to be process-based rather than purely representational.

5.2 Thematic Analysis: Strengthening the Kalimas River as the Brand Identity

The Kalimas River holds significant historical and cultural value for Surabaya. It has served as a crucial transportation route for goods and people, contributing to the city's growth and development. Recently, efforts have been made to promote the river as a cultural and tourism destination, establishing it as a symbol of Surabaya's past, present, and future.

To validate the strategic potential of the Kalimas River, a thematic analysis was conducted based on in-depth interviews and Focus Group Discussions (FGDs) with key stakeholders, including urban design experts, tourism ministry officials, and local government planners (see Table 2). The analysis identified three dominant themes that currently define the gap between Surabaya's branding aspirations and reality: (1) The "Performance" Gap in Branding, (2) Historical Identity as a Differentiator, and (3) Fragmentation in Governance.

Table 2 Thematic Summary and Frequency Patterns

Dominant Theme	Frequency Pattern	Key Stakeholder Group	Representative Statement (Translated)
1. Branding as "Performance" (Infrastructure Reliability)	High (Recurring across all groups)	Academics & Design Experts	"Branding is a promise... an expectation of performance. If people go to

			Kalimas, what do they see?"
2. Historical & Local Identity (Kampung/Heritage)	Medium-High	Urban Planners & Community	"Branding starts from character... identified from history. Kampung Lawas Maospati is a pioneer
3. Governance Fragmentation	Medium	Government & Ministry	"We are still lacking information on actors involved... difficult to trace the specific programs."

City branding is a widely accepted practice used to showcase a city's competitive advantages, including its history, lifestyle, and culture, to attract investment and enhance its global standing (Evans, 2003; Langer, 2001; Morgan, 2004).

Surabaya has effectively incorporated the Kalimas River as a central branding element in its promotional campaigns and initiatives. The city hosts various events and festivals along the river, such as the Kalimas River Festival, which highlights the river's cultural and historical significance. Surabaya also utilizes slogans like "Experience the charm of the Kalimas River" and "Discover the beauty of Surabaya through the Kalimas River" to promote the river in its tourism branding. Qualitative findings confirm this asset is crucial. An urban planner noted:

"Branding starts from a character identified from history...Kampung Lawas Maspati is a pioneer..."

indicating that heritage is the primary differentiator for Surabaya's waterfront.

To ensure that the river continues to be a prominent part of the city's brand, efforts are underway to improve the water quality and cleanliness of the Kalimas River. This includes constructing new wastewater treatment plants and implementing stringent environmental regulations to curb pollution. This observation is supported by the interview data, where most respondents emphasized that branding is a 'promise of performance', as stated by an informant:

"...If people go to Kalimas, what do they see? Branding is an expectation of performance..."

However, governance remains a challenge. The Ministry discussion revealed a lack of data integration:

"... We are still lacking information on actors involved... it is difficult to trace specific programs..."

It's highlighting the need for a more cohesive 'Grand Design'.

We argued that the Kalimas River is not just an iconic natural feature but also a critical branding tool for Surabaya, representing the city's rich history, cultural heritage, and potential for future growth. City branding should reflect the essence of the city, its people, and its future aspirations (Ward, 2000). The Kalimas River holds great potential to become a vibrant branding element for Surabaya, a dynamic waterfront city. To build a strong brand around the river, Surabaya must implement strategic steps (Zhang

& Zhao, 2009). Some essential actions that can further develop the Kalimas River as a key branding asset for the city include (Freire, 2009; Hospers, 2010; Olsson, 2016):

- i. Develop a comprehensive master plan that includes strategies for infrastructure development, zoning, public access, and environmental conservation to ensure long-term sustainability.
- ii. Promote mixed-use development along the riverfront, combining residential, commercial, and recreational spaces to create a vibrant, diverse community.
- iii. Enhance public access by constructing parks, boardwalks, bike paths, and other amenities that foster social interaction, recreation, and economic activity.
- iv. Improve transportation infrastructure to better connect the riverfront with the rest of the city, including public transit options and bicycle-friendly routes.
- v. Protect the river's ecosystem by reducing pollution, promoting sustainable land-use practices, and preserving natural habitats.
- vi. Foster economic development by incentivizing businesses to invest in the riverfront and promoting tourism opportunities.
- vii. Engage the local community in the development process, incorporating their input and ensuring they play an active role in shaping the riverfront's future

Developing the Kalimas River as a key branding element for Surabaya can bring numerous benefits, including economic growth, environmental preservation, and an enhanced quality of life for residents. By adopting a collaborative approach and following these steps, it is possible to create a vibrant, sustainable waterfront city that will benefit both the community and the economy.

The development of the Kalimas River as a branding asset also contributes to the creation of a sustainable city. Two main priorities are essential for achieving sustainability (Ripoll Gonzalez & Gale, 2023): (i) The first is collaboration and participation across economic, social, and environmental sectors to create a shared vision for the city's identity, (ii) The second is creating a new sustainability that integrates both social and environmental considerations, achievable through a collaborative approach. Ultimately, the development of the Kalimas River as a waterfront city brand has the potential to foster a sustainable, thriving urban environment for Surabaya.

6. Conclusion

The Kalimas River holds significant historical value and serves as a vital trade route. However, its current state, marred by pollution and degradation, necessitates its revitalization. Crucially, this study confirms that successful branding is contingent upon closing the gap between 'promotional promises' and 'physical performance'. By realigning the Kalimas River, the largest river in Surabaya, the city can seize the opportunity to enhance and reinforce its branding as a waterfront city. Structuring the branding of Surabaya around the Kalimas River, with the concept of a waterfront city, can foster economic growth, promote

environmental conservation, and improve the quality of life for its residents.

Empirical evidence indicates that stakeholders consistently perceive the river as a potential integrative platform connecting environmental restoration, cultural identity, and urban economic activities. These converging perspectives suggest that branding outcomes are shaped through institutional coordination rather than promotional narratives alone. However, the thematic analysis highlights that a 'governance gap' (specifically the lack of data integration and actor synchronization) remains a primary hurdle that must be resolved to execute a unified branding strategy.

The analysis further reveals that current revitalization initiatives function as process-based branding mechanisms, where environmental improvement and everyday public use reinforce the city's identity in practice. Field observations confirm that these initiatives have begun to transform the river from a neglected infrastructure into an active public space, supporting community activities, creative events, and educational functions.

Positioning Surabaya as a waterfront city through the Kalimas River requires a shift from branding as image-making toward branding as an ongoing socio-ecological process. The qualitative evidence supports the claim that environmental restoration, integrated governance, and community involvement collectively shape the city's brand identity.

The revitalization and branding of the Kalimas River offer not just an opportunity for economic advancement but also a pathway to creating a more sustainable and vibrant city. With a shared vision and coordinated effort, Surabaya can position itself as a model of urban development, where historical heritage, environmental responsibility, and modern progress coexist harmoniously, ensuring a prosperous future for its people and the generations to come.

From a theoretical perspective, this study contributes to the growing body of literature on city branding by integrating the concept of ecological infrastructure as a vital component of urban identity, particularly within the context of postcolonial and secondary cities in the Global South. It advances the theoretical understanding of place-based branding by demonstrating how natural and historical assets, such as the Kalimas River, can be strategically revitalized and repurposed to support a city's brand narrative. The research also highlights the need for a process-based approach to branding that emphasizes environmental restoration, cultural relevance, and community participation, moving beyond symbolic representation toward substantive, sustainable identity building. This offers a refined conceptual framework that bridges environmental urbanism with brand development theory.

In terms of managerial implications, particularly for urban planners and policymakers, this research underscores the importance of adopting a multi-stakeholder, integrated planning approach in branding initiatives involving natural heritage assets. The case of the Kalimas River reveals that revitalization programs

must not only focus on physical infrastructure and aesthetics but also address ecological rehabilitation, flood management, tourism development, and community engagement to ensure long-term impact. Managers are encouraged to develop cross-sector collaborations among government agencies, private enterprises, academic institutions, and civil society to mobilize resources and co-create a coherent brand identity. The implementation of mixed-use zones, pedestrian-friendly riverfronts, and thematic destination zones along the Kalimas can serve as replicable strategies for other cities seeking to brand themselves through underutilized waterfronts.

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Conflicts of Interest

The author(s) declare(s) that there is no conflict of interest regarding the publication of this paper

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