

## **8 OPEN ACCESS**

Citation: Hamjen, H., Oktavianor, T., & Arbain, T. (2023). Implementation of Smart Branding Policy in the River City of Banjarmasin. *Jurnal Bina Praja*, 15(1), 163–179. https://doi.org/10.21787/jbp.15.2023.163-179

Received: 27 February 2023 Accepted: 26 April 2023 Published: April 2023

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## **ARTICLE**

# Implementation of Smart Branding Policy in the River City of Banjarmasin

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Abstract: This study departs from the regulation of the Mayor of Banjarmasin Number 40 of 2019 concerning the Smart City Masterplan, which requires the implementation of Smart City Banjarmasin revised to maximize the identity of the river city as city branding, namely D(River) smart city. This study aims to identify policies and implementation of Smart Branding Policies in Banjarmasin. This study used a qualitative descriptive approach with data collection techniques carried out by triangulation of sources through literature studies, observation, in-depth interviews, and inductive data analysis. The results show that Smart Branding policies are contained in the Smart City Masterplan for 2022-2026, which was revised based on the 2021-2026 Medium Term Development Plan. Then the implementation of Smart Branding can be identified into three categories: Facilitation of ICT at Riverside View Tower, ICT System Integration in Tourist Areas, and Digitalization of Tourism and Cultural Promotion. In each category, there is a gap between implementation and ideal conditions due to a lack of public participation, data, resources, regulations, and disaster mitigation. However, it is recommended that the gap should be minimized by overcoming the identified constraints so that policy implementation becomes more optimal.

Keywords: city branding; smart city; river city; Banjarmasin; public policy

## 1. Introduction

The smart city program has been launched by the central government since 2017. At first, 25 cities were designated nationally for implementing smart cities that year. The implementation of the smart city concept in the City of Banjarmasin, South Kalimantan, began in 2018 when the city of Banjarmasin was among the 50 districts/cities selected to implement the 50 smart city districts/cities program in 2018. This study departs from the Mayor of Banjarmasin Regulation No. 40 of 2019 concerning the Smart City Masterplan. Those who wish to implement Banjarmasin City smart city refer to the 2021-2026 City of Banjarmasin Medium term development plan document so that it is adjusted and revised to maximize the utilization of the city's river identity so that the River City brand must be introduced to its full potential. This can be optimized through the implementation of a smart city, especially in the smart branding dimension.

Smart city is a term that was first coined by IBM (International Business Machine) in 1998, but the concept of smart city began to be developed in the 2000s (Patel & Padhya, 2014). The smart city utilizes technology to improve the quality and standard of living of its citizens. A vision of city development by integrating information and communication technology into various systems and infrastructure (Soni, 2019). There are also those who define a smart city as synonymous with digital city planning, which includes electronic service features (Bakri & Kasim, 2018). Smart city comprehensively considers several elements, including the environment, society, technology and government (Dameri, 2013). Likewise, according to European research studies, define a smart city as a combination of information and communication technology, social infrastructure (city and human resources), and public institutions that handle economic, social, environmental, and cultural development (Kozlowski & Suwar, 2021). A smart city is the management of a technology-based city. However, it is difficult for a city to become a smart city if it only uses technology, but there needs to be integrated with other elements such as a smart economy, smart people and living, smart environment, smart governance, and smart mobility (Winkowska et al., 2019).

There are two perspectives regarding the development of smart cities, namely those that view ICT as the main component in developing smart cities. From this perspective, it cannot be negotiated that its existence is important and irreplaceable in developing smart cities. While the second perspective considers that ICT is not everything, ICT is a small part of developing smart cities. The existence of ICT as a support for a better city and is part of technology in general (Firmansyah et al., 2015). There are several groups in developing smart cities. One leads to the use of ICT for various smart city components, and the other leads to maximizing various city components and innovation in carrying out various activities to improve city services (Firmansyah et al., 2015). Based on these two points of view, it can be said that ICT cannot be separated from the concept of a smart city. Based on the results of research on 100 articles in 2011 to 2019 journals around the world related to smart cities, it was found that most of them came from Europe. Research related to the implementation of smart cities is still minimal in Asia and other regions outside Europe (Fauzi et al., 2020). While this research examines smart cities specifically on the smart branding dimension with a focus on public policy. According to Jann and Wegrich (2007, as cited in Desrinelti et al., 2021), public policy is defined as actions or processes, or patterns that are interconnected to achieve goals implemented by the government, which are carried out consciously, deliberately, and directed and guiding the government in overcoming certain problems and a decision not to take certain actions. Public policy can be felt if implemented or applied to the community.

The implementation stage is the link between policy formulation and policy results (Tinolah, 2016). Nationally, several policies underlie the implementation of the smart city program in Indonesia, including the 2003 Indonesian Presidential Instruction on National Policy and Strategy for E-Government Development, Law No. 23 of 2014 concerning regional government related to regional innovation, Law No. 11 of 2008 concerning Information and Electronic Transactions (UU ITE), Law No. 14 of 2008 concerning Public Information Disclosure (UU KIP), Presidential Regulation No. 95 of 2018 concerning Electronic-Based Government Systems. Thus, the smart city policy in regencies and cities refers to the law as previously mentioned, including the policy in the City of Banjarmasin, which in its implementation is based on the policies set by the government of the City of Banjarmasin.

The City of a Thousand Rivers is the nickname for the City of Banjarmasin. The development of the city of Banjarmasin, which is oriented towards river activities, makes the tourism of the city of Banjarmasin partly focused on river tourism. Based on Government Regulation Number 50 of 2011 concerning the 2010-2025 Tourism Development Master Plan, it is stated that Banjarmasin City has been designated as one of the National Tourism Destinations (DPN). By looking at its potential and local wisdom, the Banjarmasin City Government wants to develop a smart city integrated with river development. The river is the lifeblood and development of the City of Banjarmasin. Almost all aspects of the life of the people of Banjarmasin City cannot be separated from the existence of the river. Until now, the river remains a social and cultural entity for the people of Banjarmasin City. The development of a smart city requires substantial investment in infrastructure, human capital, and technology. Banjarmasin City is confronted with obstacles in obtaining sufficient as conveyed by the head of the e-government division of the Banjarmasin City Communication, information, and Statistics Agency in a pre-research interview. According to the Head of E-government at the Information and Statistics Communication Service for the City of Banjarmasin, Mr. Husni Amani, the Smart City Banjarmasin master plan was revised in early 2022 by the Banjarmasin city government in collaboration with a consultant from Yogyakarta named Inxindo. Revision of the master plan was also carried out to adjust the development of Banjarmasin in maximizing the utilization of the identity of the river city so that the River City brand must be optimally introduced. This can be optimized by implementing a smart city, especially in the smart branding dimension. Elements of smart branding are important and are expected to be able to boost regional competitiveness, especially in economic activities. In making regional branding, it is important to include elements of the local wisdom of the area, which will make the general public interested in visiting. In this smart branding target, the City of Banjarmasin focuses on branding for tourism activities where, which is done to encourage tourism development activities. Previously, ICT was minimal for branding Banjarmasin City, which posed a distinct challenge, especially in the dimension of Smart Branding. Moreover, the City of Banjarmasin wants to develop the Banjarmasin River Smart City concept. Therefore, this research was carried out with several problem formulations, including implementing policies and smart branding in Banjarmasin. This study aims to identify policies and implementation of smart branding in Banjarmasin. Thus, it is hoped that its implementation can be more optimal in presenting the face of the city of Banjarmasin as a (D)river city and can be used to optimize programs towards smart cities, especially smart branding for the public in South Kalimantan and in general for other areas that have river tourism areas.

Public policy is defined as a set of interconnected actions, processes, or patterns consciously and intentionally carried out by the government to achieve specific goals

and serve as a guide for addressing certain issues, as well as the decision not to take certain actions (Desrinelti et al., 2021). Public policy can be felt by its existence when it is already implemented or applied to the public. The implementation stage serves as a link between policy formulation and policy outcomes (Tinolah, 2016). There are several stages in the policy-making process, including agenda setting, policy formulation, policy adoption, policy implementation, and policy evaluation (Dunn, 2003). In this research policy analysis is carried out on the monitoring procedures, specifically on the policy implementation stage related to the one of the smart city dimensions.

Smart city is a term first coined by IBM (International Business Machine) in 1998, but the concept of smart city started to develop in the 2000s. The concept of a smart city encompasses services, public policy formulation, and planning (Patel & Padhya, 2014). A smart city is a city that utilizes technology to improve the quality and standard of living of its citizens. It is a vision for city development by integrating information and communication technology into various systems and infrastructure (Soni, 2019). There are various perspectives on developing the concept of a smart city and defining its components. There are two groups in developing smart city, while the others focus on maximizing various city components and innovation in carrying out various activities to improve city services (Firmansyah et al., 2015). Meanwhile, another comprehensive definition of a smart city considers several elements: environment, society, technology, and government. It can have a regional, national, or global scope, has clear and measurable goals, is sustainable, created by intellectual, and has community participation (Dameri, 2013). Similarly, according to European research studies, a smart city is defined as a combination of communication and information technology, social infrastructure (city and human resources), and public institutions that deal with economic, social, environmental, and cultural development (Kozlowski & Suwar, 2021). Meanwhile in Indonesia there are at least 6 characteristics of Smart City, including Smart Governance, Smart Branding, Smart Economy, Smart Living, Smart Society, and Smart Environment (Kominfo, 2020). This research focuses on smart branding.

A brand is not just a symbol and a logo but should also provide benefits, uniqueness, and services to the user (Basit & Nurlukman, 2021). The definition of a brand is a combination of a name, term, symbol, or design used to identify a product or service of a seller or a group of sellers and differentiate it from competitors city branding is a key component of city planning by building various ways to create a strong city identity that can attract tourists, reliable investors, human resources and industries to strengthen the relationship between citizens and the city (Salshabilla & Wahyuni, 2022). In order to increase public satisfaction, Smart City Services can also provide economic benefits through Smart Branding so that local governments can obtain economic benefits and help the community's economy, meaning public participation can increase community welfare. Therefore, public participation is highly encouraged to increase. However, Smart Branding applied in a city is not solely used as a way to gain economic benefits, but it becomes one of the pillars which is a manifestation of the identity intended by the city government to advance its recognition level, starting from local, regional to national and international levels. Thus the city can be well known among tourists and can serve as a reference for various needs that will ultimately have a positive impact on the city, its government, and its local community (Patabuga et al., 2019). Research related to implementing Smart Cities is still minimal in Asia and other areas outside of Europe. Based on the results of research on 100 articles from journals all over the world related to Smart

City from 2011 to 2019, it was found that most of them were from Europe, namely 83 articles, while in Asia, there were only ten articles (Fauzi et al., 2020).

Meanwhile studies related to the implementation of smart city policies that have been conducted in Indonesia as shown in Table 1.

**Table 1.** Similar Studies Related to Smart City & Smart Branding

No.	Title	Author (Year)	Focus
1.	City Branding Strategy in Realizing Smart City in Sumedang Regency	Salshabilla and Wahyuni (2022)	Smart City
2.	Implementation of Smart Branding Through Tourism Management in Efforts to Increase Tourism in the City of Semarang	Susanto (2021)	Smart Branding
3.	Development of Smart Branding as the First Step Toward the Realization of Smart City in Tomohon City	Patabuga et al. (2019)	Smart Branding
4.	Implementation of Smart City Policy in the City of Bandung	Mursalim (2017)	Smart City
5.	Implementation of Surabaya City Government Policy in Realizing Smart City Innovation	Novita Sari et al. (2020)	Smart City

Similar studies, as previously stated in Table 1 are related to the implementation and development of Smart Branding but do not refer to the Smart Branding policy. Studies that refer to policy are related to the implementation of Smart City Policy but not specifically to the Smart Branding dimension. Whereas this study refers to the Smart Branding policy of the Banjarmasin city government that was conducted during the implementation stage, specifically in the Smart Branding dimension.

## 2. Methods

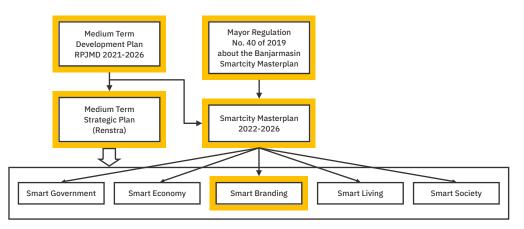
The research was carried out at the policy implementation stage so that monitoring procedures were carried out to analyze research findings within a retrospective framework/Ex post (Dunn, 2003). The Rationale behind using Dunn's policy stage theory is due to its comprehensiveness, sequential process, and adaptability to different policy areas contexts, making it a beneficial framework for policymakers and practitioners when compared to other policy theories, such as the advocacy coalition framework or the multiple streams approach. Dunn's model provides a more structured and systematic process. The research uses a qualitative descriptive approach. Data collection techniques utilized triangulation of sources through literature studies, observations, in-depth interviews with informants, then inductive data analysis. This purposive research focused on one of the dimensions of a smart city, namely the dimension of smart branding, especially on policy implementation. The key informants in this study were the Head of the Tourism Sector from the Culture and Tourism Office, the Head of the E-government sector from the Office of Communication, Informatics and Statistics, and the Head of the Agency Sector Planning, Research and Regional Development of Banjarmasin City.

## 3. Results and Discussion

## 3.1. Banjarmasin Smart Branding Policy

The previous smart city implementation was based on the 2018-2025 Masterplan. The Banjarmasin city government already has regulations related to Smart City, and the development vision of Banjarmasin City has also included aspects of Smart City and city development goals. Policies related to the smart city in Banjarmasin are the Mayor of Banjarmasin Regulation No. 40 of 2019 concerning the smart city master plan, which explains the plan for implementing a smart city in the city of Banjarmasin for a certain period. During an interview session with the Head of the E-Government Service Sector, Mr. M. Yamani from the Banjarmasin City Communication,

Informatics, and Statistics Office in July 2022 at the Banjarmasin City Communications and Information and Statistics Office showed that 2022 a revision of the 2018-2025 master plan would be made into the 2022-2026 Masterplan to conform with the 2021-2026 Medium Term Development Plan of the Banjarmasin City. In preparing the 2022-2026 Master plan, the Banjarmasin city government was assisted by third parties or Inxindo consultants from Yogyakarta. Preparing the master plan was not carried out unilaterally but also involved the entire Regional Organization (OPD) of Banjarmasin City. The same was conveyed by the Head of the Economic and Cultural Planning Sector, Mr. Dedi Supriyatna, from the Regional Planning, Research and Development Agency for the City of Banjarmasin in an interview session in May 2022 with the four offices of the Regional Research and Development Planning Agency for the City of Banjarmasin that the smart city master plan conforms to the 2021-2026 Medium Term Development Plan as shown in Figure 1.



**Figure 1.** Banjarmasin Smart Branding Implementation Policy

Source: Data is processed from research interview results (2022)

In the Medium-Term Development Plan of the city of Banjarmasin 2021-2026, the mission of the city of Banjarmasin is related to the smart city, especially in the smart branding dimension. Based on this mission, Banjarmasin's 2021-2026 city development policy priority is Smart city-based public services to support riverbased tourism and river transportation.

Based on the vision and mission of the development of the City of Banjarmasin and the Smart City concept desired by the Banjarmasin City government, the vision of the Smart City of Banjarmasin is:

"Optimally Banjarmasin is the City of Rivers as (D) River Smart City that Prioritizes the Preservation of Local Wisdom"

The equivalent word is interpreted as a combination of driver and river. This is intended to describe the vision of realizing the City of Banjarmasin as a smart city model/trendsetter with rivers as a spatial orientation (Book I Masterplan Smartcity Banjarmasin, 2022).

The Banjarmasin smart city master plan document for 2022-2026 is a continuation of the previous master plan for 2018-2021, which was revised taking into account compatibility with changes to the 2021-2025 Medium Term Development Plan, namely, to make Banjarmasin a river city towards the gateway to Kalimantan.

In this case, the Mayor of Banjarmasin for 2022-2026 is still held by the previous defense or Mayor for 2016-2021. However, changes and revisions were made to the

Masterplan document by adding several activities based on ISO SNI 37122:2019 indicators. With the desired degree/scope of change, namely the number of changes to the planning documents (Medium Term Development Plan) and adjusting to the indicators of SNI 37122:2019. Prior to 2022, the smart city of Banjarmasin had not yet implemented the ISO SNI 3712:2019 standard, but the ISO SNI 3712:2019 standard had begun to be implemented as contained in the Smart City master plan for the city of Banjarmasin for 2022-2026, which is aligned with the 2021-2026 Medium Term Development Plan. The main strength of the latest master plan is its clear alignment with international and Indonesian smart city standards, which has overcome the limitations of the previous plan. However, one weakness is that it only intends to incorporate one indicator from the ISO SNI 3712:2019 standard, representing only a small fraction of the complete set of indicators. To address this limitation, it is recommended that additional indicators be gradually added to future planning efforts."

In this case, it was found that even the same leadership or policy makers are the same people as before. However, the contents of the policy have changed. This can be understood by Grindle's theory, as quoted by Prihatin and Wicaksono (2021) that the factors influencing policy implementation are divided into two main factors, namely the content of the policy and the policy environment, the content of the policy, apart from being dependent on the decision maker, also depends on the interests that influence it, implementers activities, resources, benefits, the degree of change to be achieved means that the content of the policy is very dynamic even though the decision makers are the same party so that the implementation of the policy will also experience changes based on the content of the policy. This is also consistent with Van Meter and Van Horn's theory (1975, as cited in Adha et al., 2022) that policy implementation is influenced by size or policy standards, as the results of this study note that policies to follow SNI 37122: 2019 indicators are determined in the 2022-2025 master plan, meaning that in the master plan. Previously, the policy was not to have a certain standard, so the implementation was not carried out based on the SNI 37122: 2019 Indicator. This is one form of policy dynamics found in this study apart from being due to adjustments to the 2021-2025 Medium-Term Development Plan.

Public policy can be felt by its existence when it is already implemented or applied to the public. The implementation stage serves as a link between policy formulation and policy outcomes (Tinolah, 2016). The outcomes should be synchronized with the Smartcity Masterplan, especially smart branding dimension. In order to achieve specific goals (Desrinelti et al., 2021).

Public policy is defined as a set of interconnected actions, processes, or patterns consciously and intentionally carried out by the government to achieve specific goals and serve as a guide for addressing certain issues, as well as the decision not to take certain actions.

## 3.2. Policy Implementation

Smart branding in Banjarmasin is implemented by the Culture, Youth, Sports, and Tourism Office as the leading sector, which coordinates with related agencies and parties concerning the masterplan document. Based on the research results, the implementation of smart branding policies for Banjarmasin can be identified into three categories, including ICT Facilitation at the riverside view tower, ICT Integration in the Tourism Area of Banjarmasin City and Digitalization of Tourism and Cultural Promotion. Each category is explained as follows.

## 3.2.1. ICT Facilitation at the Riverside View Tower

The Banjarmasin River, Side View Tower, is one of the tourist attractions in Banjarmasin, inaugurated in 2019. At the top of this tower, the face of the city of Banjarmasin can be seen from a height. It is located on the banks of the Martapura River, portraying Banjarmasin as a river city. In the same location, there is also a museum managed by the Culture, Youth, Sports, and Tourism office, which contains various information, pictures, and objects that are relics or characteristics of Banjarmasin. Apart from the museum, there is also the Smart City Plaza, which is a coworking space (CWS) facility managed by the Banjarmasin City Information Communication and Statistics Office.



**Figure 2.** Coworking Space at Banjarmasin View Tower/Smartcity Plaza

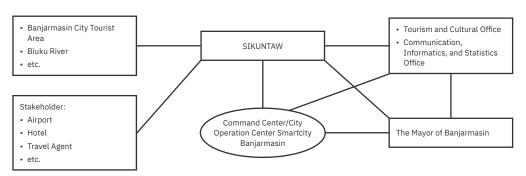
Source: Research observation (2022)

Plaza Smartcity uses an information system where visitors must make reservations/orders online through a website or application in advance by filling in their data before accessing CWS. Thus, it is known the number of visitors every Monday to Friday. The room is facilitated with Information and Communication Technology (ICT) in the form of free internet or Wi-Fi, along with computers and other supporting facilities so that it can be used for work, study, and holding other events. Visitors can also see views of the Martapura River from inside the CWS. This information system has been operational since 2019 until now. Visitors can make reservations through the website or smartphone application.

## 3.2.2. ICT Integration in the Tourism Area

Banjarmasin has several tourist areas, mostly river tourism, but not yet fully integrated with Information and Communication Technology (ICT) systems. The ICT system is based on information and communication technology, such as using information systems and applications accessed through electronic and telecommunication devices such as laptops, computers, and smartphones. However, most of the data related to tourist areas and visitors to the area have not been managed through an integrated ICT system. Of course, in realizing this integration, it is first necessary to coordinate across services within the Banjarmasin city government. The Culture, Youth, Sports, and Tourism office has been given authority regarding implementing the smart branding program. According to Edward III's theory (as cited in Roring et al., 2021) that disposition is the character and characteristics the implementor possesses, such as commitment, honesty, and democratic traits. If the implementor has a good disposition, then the implementor can carry out the policy and what the policymakers want. When the implementor has a different attitude or perspective from the policymakers, the policy implementation process will also be ineffective. The agency has been appointed as the implementer

of the Banjarmasin City smart branding program, as stated in the Banjarmasin Smart City master plan for 2022-2025. The Head of the Tourism Sector is committed to implementing what the work program is, even though he does not fully understand the suitability of the disposition delegated to him, but all programs in services, including the service work program, are, of course, guided by the master plan. As the main implementer, the agency is making efforts to integrate the ICT system at an early stage, namely coordinating with other parties, as illustrated in Figure 3.



**Figure 3.** Model of ICT System Integration in the Tourism Area of Banjarmasin City

Source: Data is processed from research interview results (2022)

Regarding the master plan in the figure, it is identified that the Culture, Youth, Sports, and Tourism Office coordinates with related agencies such as the Information Communication and Statistics Office to develop a Tourist Visit Information System Application even though it has not been fully realized. This program starts in 2022 with an implementation time of up to 2025. However, up to now, the integration of the system has not been working according to plan due to the lack of human resources with IT Background and the lack of budget, which becomes a weakness in its implementation. Thus, internal Human Resources needs an educational background, IT competence, or a budget to recruit external human resources. Based on the data obtained, it is known that the office has human resources who have engineering degrees. There are six people and one computer graduate. This amount is still very minimal compared to the programs that have been planned. In addition to internal Human Resources, external Human Resources are also needed at tourist destinations in the city of Banjarmasin so that they can support tourism in the city of Banjarmasin, as conveyed through Edward III's theory (as cited in Roring et al., 2021) that resources, including human and financial resources, are factors that determine the successful implementation of policy.

## 3.2.3. Digitalization of Tourism and Cultural Promotion

In the context of implementing smart branding in the city of Banjarmasin, the implementers are also trying to promote tourism, culture, and local products in the city of Banjarmasin not only conventionally but also digitally through information systems and applications that can be accessed via laptops and smartphones connected to the internet. A number of infrastructures and software supporting the smart branding policy were built by related parties, including Tourism Information Systems, e-tourism, Websites and social media promotions, and so on. Examples of promotions through websites or e-tourism are shown in Figure 4.

Smart tourism or e-tourism programs are part of smart branding supported by software infrastructure, internet networks, and digital platforms for developing and promoting tourist destinations. The definition of smart tourism is a way to obtain information about tourism or tourism by utilizing ICT. Smart Tourism is a logical development from traditional tourism, which has recently developed into e-tourism

Figure 4. Banjarmasin Tourism Information System/Website Front Page



## WWW.BANJARMASINTOURISM.COM

Dinas Kebudayaan, Kepemudaan, Olahraga dan Pariwisata Kota Banjarmasin



SUSUR SUNGAI



SENI & BUDAYA



Beragam kuliner khas daerah wajib



FASILITAS

lara asik mengunjungi Objek Wisata di Kota Seribu Sungai. Kota tua yang memiliki beragam peninopalan Kesenian dan

Beragam kuliner khas daerah wajib dicoba dan dilamin bikin ketadihan. Memanjakan dengan berbagai jenis akomodasi transportasi dan lainnya.

Source: Screenshots from https://banjarmasintourism.com

based on information and communication technology innovation and orientation. Banjarmasin Tourism is an information system managed by the Culture, Youth, Sports, and Tourism office of the City of Banjarmasin. Website-based and no Android or iOS-based applications yet. It contains information relating to the branding of Banjarmasin, starting from tourist objects such as riversides and other tourist objects. There is also information on tour guides that can be contacted by tourists who are interested in visiting tourist destinations. In addition, there is information on several culinary locations, entertainment venues, etc. However, not all of the information on the menu is loaded on the website, and there are several blank pages. For example, information related to art and culture is still in the process of being filled in due to various reasons such as human error, lack of resources, technical issues, or maintenance activities. In addition, information related to tourism programs such as Biuku River tourism, Kuin River, and The River Museum which are included in the smart branding program, has also not been published on the website, so the branding of the city of Banjarmasin has not been displayed optimally through this information system.

# 3.3. Conditions and Constraints on Policy Implementation

Smartbranding implementation has conditions and constraints for each category as shown in Table 2.

**Table 2.** Constraints to the Implementation of Smartbranding in the City of Banjarmasin

	Category	Ideal Conditions	Implementation Conditions	Constraints
Α	ICT Facilitation at the Riverside View Tower	The implementation target is guided by ISO 3122 number 14.1 percentage of public recreation that can be ordered online	Facilities are used by certain circles	minimum number of visitors lack of public participation Covid-19 pandemic
В	ICT System Integration in the tourist area	Communication is delivered clearly and consistently	The mayor attends a routine meeting between OPD at the beginning of the year. The community expressed their aspirations through the OPD.	lack of delegation of data from previous officials to new officials

	Category	Ideal Conditions	Implementation Conditions	Constraints
		Adequate resources (Human Resources, finance, authority)	Newly disposed officials have a commitment to work optimally	New officials lack expertise in the field, and human resources cannot yet resolve technical issues of floods
		Policy environment, social and economic conditions related to river city branding	River tourism area with people who carry out social and economic activities on the river and the surrounding area	Some of the social and economic activities that were originally on the river have shifted to land far from the river
С	Digitalization of Tourism and Cultural and Promotion	Adequate resources (HR, finance, authority)	Human resources master ICT, community participation, budget support	Human resources lack the capacity to solve technical problems
		There is political support	There is support for the Mayor Regulation	There are no related Regional Regulations

## A. ICT Facilitation at the Riverside View Tower

In this study, it was identified that ICT facilitation in the riverside view towers was the target of implementation in accordance with ISO 3122 guideline number 14.1 regarding the percentage of public recreation that can be ordered online. In this case, the city government, through related agencies, pays attention to the needs of the community, especially in terms of the availability of rooms, devices, and internet access for visiting people so that they can take advantage of ICT facilities at the location of the riverside view tower. Because the completeness of the facility is determined by the characteristics of suitability for the needs of the community (Kusumantoro, 2007). According to Broomley (as cited in Nurmalasyjah & Suryani, 2018) that policy implementation influences community interaction. Dynamic interactions between actors facilitated by an open web-based platform can be a new way to develop innovation systems in urban areas (Putra & Van Der Knaap, 2018). Likewise, community participation through participation activities will make a positive contribution (Martokusumo, 2008). It's just that people who use the facilities come from certain circles, namely students or workers or groups who need computers and the internet to do their work, meaning that human resources are limited to those who know, are able, and need to take advantage of the facilities available even though the number of facilities is more adequate than the human resources of the users. This can be understood because socializing the Smart City program requires a long process and must also be supported by the government and its citizens (Mursalim, 2017).

Apart from human resources and their involvement, the effectiveness of the facilitation was also hampered due to the COVID-19 pandemic, where the Large-Scale Social Restrictions policy was implemented, so that at the beginning of this program, the facilities were closed to the public for some time. After the pandemic started to be overcome, the facilities were limited to the number of visitors until they reopened to the public in 2022, as the results of the interview with the admin at the facility. In this case, the city government tries to be inclusive because only an inclusive city can grow and develop in all situations and challenges in the future (Raissa et al., 2021). Besides that, Smart branding is also related to other dimensions that come into contact with Human Resources, namely the dimension of smart

people. In general, a city is said to be successful when people can improve their abilities, care about and participate in advancing the city (Wicaksono et al., 2021).

## B. ICT Integration in the Tourist Area

This study was conducted during the transition period from the 2018-2021 master plan to the 2022-2026 master plan. The organizational transition at the Information Communications and Statistics Office and The Tourism and Cultural Office, which changed nomenclature, originally the Tourism and culture Office, then became the Culture, Youth, Sport, and Tourism Office. Meanwhile, tasks and functions related to innovative branding are handled by the tourism sector, where there is a transition of old officials who new officials replace.

In integrating ICT in the tourism area in Banjarmasin, communication is needed not only across Local Government Offices but also between internal officials within a Local Government Offices because through communication that is conveyed clearly and consistently, it will affect the successful implementation of policies as Edward III's theory (as cited in Roring et al., 2021). Internal communication is carried out in cross-Local Government Offices, meeting activities attended by the mayor, which are held at the beginning of the year to discuss priority programs, equalize perceptions, and distribute tasks and responsibilities related to activities and budget synchronization. In this study, obstacles were found in terms of communication between previous officials and new officials where there was data that had not been conveyed to the new officials, so it became an obstacle in terms of implementation as the results of the interview with the head of tourism division in the office of culture, youth, and tourism of Banjarmasin City This needs to be a concern so that each office can handle this. Apart from that, other constraints on limited resources include human resources, funds, and authority in related offices, so collaboration with other offices and stakeholders is needed to integrate ICT in the tourist area of Banjarmasin. The tourist area in Banjarmasin is generally a river tourism area, and this is also in accordance with the branding of Banjarmasin as a city of rivers. Implementation needs to be adjusted to policies and regulations regarding rivers to comply with existing regulations (Rachmanto, 2012). However, the river management policy in Banjarmasin is not optimal because the number of rivers with resources is not directly proportional to the budget, there are fewer parties involved, and very little knowledge of river management (Anjani et al., 2022). Completion of various regulations and planning standards is the legal basis for the government of the city in enforcing the law as well as a reference for developers and the community to assess the feasibility of the proposed development themselves, but without firm and consistent law enforcement these plans, and regulations will not be effective in solving the problems faced by the city government (Zulkaidi, 2003).

ICT is expected to help minimize problems, especially in terms of the availability of information and communication, improve the quality of the existing environment, create environmental life through integrated environmental assessment (Sidarta, 1996). The successful implementation of infrastructure requires a comprehensive understanding of political, social, economic and environmental issues (Tauhid & Zawani, 2018). No single metropolitan area in Indonesia matches the character of an ideal metropolitan infrastructure service. This is because it has not fulfilled all the study indicators that represent the ideal metropolitan infrastructure service characteristics (Lumbanbatu, 2010). Likewise for riverside areas, as another example in Pontianak City, there is less infrastructure to support tourism areas than trade areas (Muazir, 2018). Because the main targets are business areas and shopping centers (Hidayat et al., 2022). However, city branding is also needed to

increase regional income through the tourism sector (Pasande & Suhendra, 2017). The problem of technology governance in the context of public sector planning relates to integrating the vision and social objectives of planning into the technology selection stage (Yuliar, 2008). Some of the challenges in building good governance based on an adaptive approach are encouraging community involvement, increasing local government capacity, and building integration between actors, networks, and collaboration (Ni'mah et al., 2021). To create a balanced ecosystem, the government needs to implement better environmental management by creating sustainable management (Renaldi & Frinaldi, 2022). Governance and management should pay attention to the policy environment. Community activities and culture must be considered by involving them in development activities and providing space for the community to carry out long-lasting activities such as using water bodies as transportation, holding cultural ceremonies, etc. (Sastrawati, 2003). The tendency of the figures involved to dominate the decision-making process because excessive self-confidence and lack of confidence in the abilities of society in general (Sawitri, 2006). Such problems need to be corrected so that obstacles in implementation can be minimized from the internal side.

In addition to internal constraints, external constraints such as disturbances or natural disasters. Disasters that are very likely to occur in the river area are flood disasters such as the 2021 major flood in the Banjarmasin area and those that will also be affected in tourist areas such as the Biuku River. The smart branding program was implemented in Biuku Village this year, but the flood disaster caused some damage in Then. In addition, infrastructure facilities are still very minimal at the tourist location; as stated by POKDARWIS (a tourism awareness group) in Kampung Biuku that infrastructure or facilities are still not available, for example, public toilet facilities, internet, and so on, the tourism office is constrained by the budget and requires cooperation with other related agencies, the Public Works and Public Housing Office, the Environment Office, the Ministry of Communication and Information and so on. The most urgent obstacle is the budget to fulfill all of these facilities. Major floods cause damage to the infrastructure that has been built and impact the surrounding community in the Sungai Biuku area, as the results of the interview with Mrs. Fitria, the head of the tourism division in the Office of culture, youth, and tourism of Banjarmasin City. Land that should have been used for water catchment areas was turned into mining land, and around the watershed was used for settlements and waste disposal. However, relocation has also become an obstacle because perceptions of the relocation plan are related to the factors that influence it, including physical, environmental, economic, social culture, internal characteristics (Harliani, 2014). In addition to relocating revitalization activities, it is also necessary to consider social and environmental conditions. Revitalization activities apart from having to create a good image through improving visual/physical quality, revitalization must have a real contribution in terms of social and environmental improvement (Martokusumo, 2008).

There is no ICT-based early warning system for flood disasters and sensors in the river area. However, an early warning system is still needed so that the parties concerned can anticipate early on to minimize the impact, as mentioned in the interview with the head of the tourism division in the Office of Culture, Youth, and Tourism of Banjarmasin City. Besides that, the role of ICT early warning of flood systems and disaster mitigation will certainly be an attraction in branding river tourism areas in Banjarmasin. Natural events are not synonymous with disasters but can provide positive opportunities both as resource providers and as catalysts for change, innovation, and social transformation (Yusup, 2014).

## C. Digitalization of Tourism and Cultural Promotion

The Banjarmasin Government promotes Banjarmasin tourism through digital information systems covering tourist areas and cultures. With the digitization of tourism promotion, it is expected to increase the number of visitors from outside the area; of course, an increase can have positive and negative impacts. The positive impact can increase the income and welfare of local communities around the tourist area, but the negative impact is the cleanliness of the river can be affected if not properly monitored (Damanik & Pratiwi, 2017). In addition to the Banjarmasin tourism information system, there is also another information system that has been developed since 2018, namely the android application "Let's Go to Banjarmasin with the eReport application, Culinary Places Map and tourist attractions in Banjarmasin and its flagship application, namely Go-Klotok, but its current condition is no longer active. Again, due to the lack of support from go-klotok drivers who do not understand and are not used to using applications and digital devices, conventional patterns are still being carried out.

According to the interviews conducted with Mrs. Fitriah, the head of the tourism division in the office of culture, youth, and tourism of Banjarmasin City of the smart branding program, several problems were encountered in the implementation of smart branding, including the mindset of the people who did not consider smart city important, and the use of technology facilities could not be maximized because many were not literate in ICT, and financial support was still limited. The acceleration of digitalization occurred quite quickly during the pandemic but only in government, offices, and commerce but has not touched all levels of society in the City of Banjarmasin. Another problem faced is technical constraints related to the ICT system. As is the theory of Mazmanian and Sabatier (1983, as cited in Rahawarin, 2019) technical problems also influence that policy implementation. In terms of overcoming technical difficulties, the Disbudporapar still needs to be competent, so it requires cooperation with related services such as Communication Informatics and Statistic Office. Institution-based collaboration is needed to improve the quality of promotions (Yusnikusumah & Sulistyawati, 2016). In addition, interaction between the region and the community is also needed (Setiyaning & Nugroho, 2017). As has been done in the Biuku River tourist area, the tourism awareness group (POKDARWIS) also socialized the tourist area. According to the head of the tourism division in the Office of Culture, Youth, and Tourism of Banjarmasin City.

## 4. Conclusion

Banjarmasin Smart Branding policies are contained in the 2022-2026 SmartCity Masterplan document, which was revised based on the 2021-2026 Medium Term Development Plan of Banjarmasin City and Banjarmasin Mayor Regulation Number 40 of 2019. Then the implementation of Banjarmasin City Smartbranding can be identified into three categories: ICT facilitation at Menara Pandang riverside, ICT System Integration in Tourism Areas, and Digitalization of promotion of tourism, culture, and local products. Each category has a gap between implementation conditions and ideal conditions due to constraints, including lack of public participation, data, resources, regulations, and disaster mitigation. Thus, it is expected that the implementer can minimize the gap by overcoming implementation constraints identified in several conditions.

#### Acknowledgment

The author would like to thank the Head of Tourism of the Culture, Youth, Sports and Tourism Office, the Head of E-government of Information Communication and Statistics Office, and the Head of Economic and

Cultural Planning of Regional Research and Development Planning Agency of Banjarmasin City for their support in data collection.

#### References

- Adha, R. P., Koeswara, H., & Aromatica, D. (2022). Implementasi Kebijakan Pengelolaan Perpustakaan untuk Peningkatan Minat Baca Masyarakat. *Jurnal Kebijakan Publik, 13*(1), 33–38. https://jkp.ejournal.unri.ac.id/index.php/JKP/article/view/7985
- Anjani, Syafari, M. R., & Arbain, T. (2022). Implementasi Kebijakan Pengelolaan Sungai di Kota Banjarmasin. *Jurnal Niara*, 14(3), 168–175. https://doi.org/10.31849/niara.v14i3.7382
- Bakri, M., & Kasim, A. A. (2018). The Urban Planning Concept Based on Smart City Approach. *LivaS: International Journal on Livable Space*, 3(2), 63–70. https://doi.org/10.25105/livas.v3i2.3014
- Basit, A., & Nurlukman, A. D. (2021). Branding Smart City pada Teknologi Komunikasi Tangerang Live. Dinamisia: Jurnal Pengabdian Kepada Masyarakat, 5(6), 1429–1439. https://doi.org/10.31849/dinamisia.v5i6.5275
- Damanik, F. K., & Pratiwi, W. D. (2017). Consideration of Tourism Riverfront Development Elements for Pekanbaru City Transformation. *Journal of Regional and City Planning, 28*(2), 140–150. https://doi.org/10.5614/jrcp.2017.28.2.5
- Dameri, R. P. (2013). Searching for Smart City Definition: A Comprehensive Proposal. *International Journal of Computers & Technology*, 11(5), 2544–2551. https://doi.org/10.24297/ijct.v11i5.1142
- Desrinelti, D., Afifah, M., & Gistituati, N. (2021). Kebijakan Publik: Konsep Pelaksanaan. *JRTI (Jurnal Riset Tindakan Indonesia)*, 6(1), 83–88. https://doi.org/10.29210/3003906000
- Dunn, W. N. (2003). Pengantar Analisis Kebijakan Publik (2nd ed.). UGM Press.
- Fauzi, E. A., Nurmandi, A., & Pribadi, U. (2020). Literature Review: Smart City and Smart Governance in Analysis. *JPPUMA: Jurnal Ilmu Pemerintahan dan Sosial Politik UMA, 8*(1), 84–89. https://doi.org/10.31289/jppuma.v8i1.3304
- Firmansyah, H. S., Supangkat, S. H., & Arman, A. A. (2015). Studi tentang Model Pengembangan Kota Cerdas. e-Indonesia Initiatives (eII-Forum), Institut Teknologi Bandung.
- Harliani, F. (2014). Persepsi Masyarakat Kampung Cieunteung, Kabupaten Bandung tentang Rencana Relokasi Akibat Bencana Banjir. *Jurnal Perencanaan Wilayah dan Kota, 25*(1), 37–57. https://doi.org/10.5614/jpwk.2014.25.1.3
- Hidayat, B., Fatoni, A., Saksono, H., Asriani, A., & Andari, T. (2022). Integrated River Transport Development to Support Smart City. *Jurnal Bina Praja*, 14(1), 1–15. https://doi.org/10.21787/jbp.14.2022.1-15
- Kominfo. (2020). Laporan Tahunan 2019 Direktorat Jenderal Aplikasi Informatika, Kementerian Komunikasi dan Informatika.
- Kozlowski, W., & Suwar, K. (2021). Smart City: Definitions, Dimensions, and Initiatives. *European Research Studies Journal, XXIV* (Special Issue 3), 509–520. https://doi.org/10.35808/ersj/2442
- Kusumantoro, I. P. (2007). Menggagas Bentuk Ruang Kota Alternatif: Upaya Mereduksi Intensitas Pegerakan Lalu Lintas Kota. *Journal of Regional and City Planning*, 18(3), 78–90. https://journals.itb.ac.id/index.php/jpwk/article/view/4230
- Lumbanbatu, H. A. (2010). Penilaian Kinerja Pelayanan Infrastruktur Dasar Kawasan Metropolitan di Indonesia (Kasus Studi: Air Bersih, Air Limbah, Drainase, dan Sampah). *Journal of Regional and City Planning*, 21(3), 227–242. https://journals.itb.ac.id/index.php/jpwk/article/view/4163
- Martokusumo, W. (2008). Revitalisasi, Sebuah Pendekatan dalam Peremajaan Kawasan. *Journal of Regional and City Planning*, 19(3), 57–73. https://journals.itb.ac.id/index.php/jpwk/article/view/4205
- Muazir, S. (2018). Urban Network in Trade and Tourism City Case Study: Pontianak City, Indonesia. *Journal of Regional and City Planning*, 29(1), 45–56. https://doi.org/10.5614/jrcp.2018.29.1.4
- Mursalim, S. W. (2017). Implementasi Kebijakan Smart City di Kota Bandung. *Jurnal Ilmu Administrasi:* Media Pengembangan Ilmu dan Praktek Administrasi, 14(1), 126–138. https://doi.org/10.31113/jia.v14i1.1
- Ni'mah, N. M., Wibisono, B. H., & Roychansyah, M. S. (2021). Urban Sustainability and Resilience Governance: Review From the Perspective of Climate Change Adaptation and Disaster Risk Reduction. *Journal of Regional and City Planning*, 32(1), 83–98. https://doi.org/10.5614/jpwk.2021.32.1.6
- Novita Sari, D., Rahmadani, D. Z., & Yusuf Wardani, M. (2020). Implementasi Kebijakan Pemerintah Kota Surabaya dalam Mewujudkan Inovasi Smart City. *Journal of Governance Innovation*, 2(2), 112–130. https://doi.org/10.36636/jogiv.v2i2.435

- Nurmalasyiah, & Suryani, L. (2018). Pengaruh Implementasi Kebijakan Pengelolaan Sampah Terhadap Partisipasi Masyarakat dan Efektivitas Pengelolaan Sampah di Kecamatan Murung Pudak Kabupaten Tabalong (Perda Nomor 14 Tahun 2011 tentang Pengelolaan Sampah). PubBis: Jurnal Pemikiran dan Penelitian Administrasi Publik dan Administrasi Bisnis, 2(1), 39–53. https://doi.org/10.35722/pubbis.v2i1.36
- Pasande, M., & Suhendra, A. (2017). The Strengthening of Region Competitiveness by Implementing City Branding in Yogyakarta. *Jurnal Bina Praja*, 9(1), 115–126. https://doi.org/10.21787/jbp.09.2017.115-126
- Patabuga, R., Purnomo, E. P., & Kasiwi, A. N. (2019). Pengembangan Smart Branding Sebagai Langkah Awal Menuju Terwujudnya Smart City di Kota Tomohon. *Jurnal Ekonomi Pembangunan STIE Muhammadiyah Palopo*, 5(2), 116–126. https://doi.org/10.35906/jep01.v5i2.420
- Patel, P. R., & Padhya, H. J. (2014). Review Paper for Smart City.
- Prihatin, P. S., & Wicaksono, A. (2021). Grindle Policy Implementation Theory in Analysis of Forestry Conflict in Pelalawan District, Riau Province. *Jurnal Kajian Pemerintah: Journal of Government, Social and Politics*, 7(2), 31–44. https://doi.org/10.25299/jkp.2021.vol7(2).9493
- Putra, Z. D. W., & Van Der Knaap, W. G. (2018). Urban Innovation System and the Role of an Open Web-Based Platform: The Case of Amsterdam Smart City. *Journal of Regional and City Planning, 29*(3), 234–249. https://doi.org/10.5614/jrcp.2018.29.3.4
- Rachmanto, F. (2012). Peluang Pembangunan Monorail pada Sempadan Sungai Cikapundung Berdasarkan Karakteristik Sungai. *Journal of Regional and City Planning, 23*(1), 51–66. https://doi.org/10.5614/jpwk.2012.23.1.4
- Rahawarin, M. A. (2019). Implementasi Kebijakan Pelayanan Publik di Kantor Camat Teluk Waru Kabupaten Seram Bagian Timur. *Badati*, 1(1), 1–24. https://doi.org/10.38012/jb.v1i1.192
- Raissa, G., Christy, F., Sihotang, S., & Wijaya, K. (2021). Rethinking Inclusive City Development Amid COVID-19: The Indonesia Context. *Journal of Regional and City Planning*, 32(1), 71–82. https://doi.org/10.5614/jpwk.2021.32.1.5
- Renaldi, I., & Frinaldi, A. (2022). Implementation of Batang Arau Watershed Management with Good Environmental Governance Perspective. *Jurnal Bina Praja*, 14(2), 225–237. https://doi.org/10.21787/jbp.14.2022.225-237
- Roring, A. D., Mantiri, M., & Lapian, M. T. (2021). Implementasi Kebijakan Pemerintah dalam Penanganan Virus Corona (Covid 19) di Desa Ongkaw 1 Kecamatan Sinonsayang Kabupaten Minahasa Selatan. Governance: Jurnal Ilmiah Jurusan Ilmu Pemerintahan FISIP Unsrat, 1(2), 1–11. https://ejournal.unsrat.ac.id/v3/index.php/governance/article/view/34838
- Salshabilla, R. A., & Wahyuni, I. I. (2022). Strategi City Branding dalam Mewujudkan Smart City di Kabupaten Sumedang. *Medium: Jurnal Ilmiah Fakultas Ilmu Komunikasi, 10*(1), 1–18. https://doi.org/10.25299/medium.2022.vol10(1).8803
- Sastrawati, I. (2003). Prinsip Perancangan Kawasan Tepi Air (Kasus: Kawasan Tanjung Bunga). *Journal of Regional and City Planning*, 14(3), 95–117. https://journals.itb.ac.id/index.php/jpwk/article/view/4305
- Sawitri, D. (2006). Keikutsertaan Masyarakat dalam Pengembangan Lokal (Studi Kasus: Pengembangan Desa di Jawa Barat). *Journal of Regional and City Planning, 17*(1), 39–60. https://journals.itb.ac.id/index.php/jpwk/article/view/4233
- Setiyaning, K. A., & Nugroho, P. (2017). The Role of Batik and Lurik in Forming Local Identity in Klaten Regency Based on Public Perception. *Journal of Regional and City Planning, 28*(1), 32–51. https://doi.org/10.5614/jrcp.2017.28.1.3
- Sidarta, M. (1996). Jakarta Waterfront City Development. *Journal of Regional and City Planning, 7*(21), 38–45. https://journals.itb.ac.id/index.php/jpwk/article/view/4394
- Soni, N. (2019). Smart City: A Review and Analysis of India. *International Journal of Computer Engineering and Applications, X*(VII), 41–46.
- Susanto, A. (2021). Pelaksanaan Smart Branding Melalui Manajemen Pariwisata dalam Upaya Peningkatan Pariwisata di Kota Semarang. Syntax Literate: Jurnal Ilmiah Indonesia, 6(2), 1308–1320. https://doi.org/10.36418/syntax-literate.v6i2.5140
- Tauhid, F. A., & Zawani, H. (2018). Mitigating Climate Change Related Floods in Urban Poor Areas: Green Infrastructure Approach. *Journal of Regional and City Planning*, 29(2), 98–112. https://doi.org/10.5614/jrcp.2018.29.2.2

- Tinolah, R. S. (2016). Kebijakan Publik yang Tidak Terimplementasikan: Studi Kasus Peraturan Pemerintah Nomor 74 Tahun 2014 Tentang Angkutan Jalan pada Perubahan Kepemilikan Angkutan Umum Milik Perseorangan Menjadi Badan Hukum di Surabaya. *Kebijakan dan Manajemen Publik, 4*(1), 1–11.
- Wicaksono, B., Asta, R., & Rafi, M. (2021). Comparative Study: Dimension Policy of Smart People in Metropolitan City of Bandung, Jakarta, and Pekanbaru. *Jurnal Bina Praja*, 13(1), 93–103. https://doi.org/10.21787/jpb.13.2021.93-103
- Winkowska, J., Szpilko, D., & Pejić, S. (2019). Smart City Concept in the Light of the Literature Review. Engineering Management in Production and Services, 11(2), 70–86. https://doi.org/10.2478/emj-2019-0012
- Yuliar, S. (2008). Tata Kelola Teknologi dalam Perencanaan Sektor Publik. *Journal of Regional and City Planning*, 19(3), 21–38. https://journals.itb.ac.id/index.php/jpwk/article/view/4203
- Yusnikusumah, T. R., & Sulistyawati, E. (2016). Evaluasi Pengelolaan Ekowisata di Kawasan Ekowisata Tangkahan Taman Nasional Gunung Leuser Sumatera Utara. *Jurnal Perencanaan Wilayah dan Kota,* 27(3), 173–189. https://doi.org/10.5614/jrcp.2016.27.3.1
- Yusup, Y. (2014). Hidup Bersama Risiko Bencana: Konstruksi Ruang dalam Perspektif Ruang Relasional. Jurnal Perencanaan Wilayah dan Kota, 25(1), 58–76. https://doi.org/10.5614/jpwk.2014.25.1.4
- Zulkaidi, D. (2003). Kemampuan Perencangan Kota dalam Memecahkan Persoalan Perkotaan. *Journal of Regional and City Planning*, 14(3), 1–20. https://journals.itb.ac.id/index.php/jpwk/article/view/4301