A Study on the potential of branding aspect in Balikpapan Kota District, Balikpapan City, Indonesia

R Y Pratama*, M Ulimaz

1 Urban and Regional Planning Department, Institut Teknologi Kalimantan, Balikpapan, East Kalimantan, 76127, Indonesia

*Email: reynaldiyudha@gmail.com

Abstract. Balikpapan is experiencing urbanization quite rapidly and has a role in residential development to accommodate the needs of its citizen. One of the strategic issues of settlements in Balikpapan is the settlements that have decreased in quality in settlement area. Based on the City Service Center System Plan of the Balikpapan Spatial Plan, Balikpapan Kota District functions as a Government Service Center, Trade and Service Center, Health Service Center, and Education Center in a City-wide Scale. Balikpapan Kota District Settlement Area is included in the area with a mild level of slum. Naturally, this will result in a shift in public perception of the area and, thus, undermines the image of the area or, arguably, the area does not have the essence of city branding value. Thus, it is necessary to study the potential in the aspect of branding in the Balikpapan Kota District Settlement Area. In achieving these objectives, an analysis related to the city's branding aspects was carried out. The branding aspect approach in this study used the City Branding Hexagon approach. The analysis was conducted by means of quantitative descriptive method (scoring method). The results of this study provided a score from the branding aspect of the settlement area. The results of the branding aspects analysis in the Balikpapan Kota District have been identified from the neighbourhood, sub-district, and district scale. Balikpapan Kota District Settlement Area has the most substantial potential in the dimensions of Potential (2.90) and Prerequisite (2.76). There are two branding potentials but they are quite weak compared to the other aspects, which are the Presence (1.75) and Pulse (1.67) dimensions. Moreover, there are dimensions of Place (2.03) and People (2.50), which have potential that can be developed.

1. Introduction
Settlements that experience a decline in quality can be caused by several factors, such as building density, substandard and limited facilities and infrastructure in settlement areas, building conditions, and environmental problems that occur. These things will cause a decrease in the quality of settlements, rendering them vulnerable to transforming into slum settlements [1]. Branding is not seen as a way to manage a city, but is seen as a tool to convey a positive image that aims to increase perceptions held by various stakeholders [2]. City branding is considered very important as a network of associations or perceptions within the community to attract potential from an area [3]. In determining the index of city branding, there needs to be a standard or approach. According to Anholt [4], when measuring city branding, there are indicators to be used, one of which is the Anholt-Ipsos City Branding Index (CBI). In assessing and advancing the reputation of a place to increase success, there are six dimensions in measuring city branding, otherwise known as City Branding Hexagon. The
City Branding Hexagon dimension consists of Presence, Place, Potential, People, Pulse, and Prerequisite. Using this approach, city branding can change the image of a city[4].

In the National Spatial Planning, Balikpapan is included in the area that functions as a National Activity Center [5]. Balikpapan is the gateway to East Kalimantan Province and one of the cities that is experiencing rapid urbanization. On the other hand, Balikpapan City has a vital role in city development, especially in regard to residential development to meet the basic needs of its people [6]. The population of Balikpapan in 2014 was 605,096 people; in 2018, there were 645,727 people. Based on this, the population growth rate in Balikpapan City is 1.34%. The high rate of population growth, coupled with the strategic potential in residential areas, will have implications on the increasing need for urban land as settlement. Bear in mind that increased needs without adequate land availability will result in economic consequences of increased land prices and low ability to own a house [7][8]. This will result in the compaction of buildings at points of residential areas and will further result in slum areas. The development of a city and the growth of other sectors will considerably impact land use changes in Balikpapan [9]. From 2009 to 2015, there was an increase in land cover in residential areas in Balikpapan of 13.34%. The issue of settlements in the Balikpapan Kota District includes the decline in the quality of settlements in slum areas in urban settlements [10]. Some of these findings will change one's perception of the Balikpapan Kota District. This is in line with another study, stating that informal settlements serve as a resource to change the image of an area in the face of unfavorable perceptions of the community [11].

Balikpapan Kota District has three sub-districts with slum areas and one with potential slum village, precisely in Klandasan Ilir Sub-District in a riverside settlement. The slum settlements in the Balikpapan Kota District are included in the Priority 1 Environment scale. The problems that occur consist of several indicators, such as the irregularity and density of buildings between houses, unserved coverage and quality of neighborhood roads, non-fulfilment of purified water and drinking water provisions, unmaintained drainage channels, the lack of wastewater management facilities and infrastructure, unmaintained waste management facilities and infrastructure, and the lack of fire safety security [10]. Based on the issues and problems that took place, the Balikpapan City Settlement Area is included in an area with a mild slum level, as stated in the Decree of the Mayor of Balikpapan Number 188.45-285 Year 2019 [12]. Thus, it will naturally result in a shift in public perception of the area and reduce the image of the area, i.e., it can be said that the area does not have the essence of city branding value in Balikpapan Kota District [11]. Therefore, based on the problems described, there is a need for research related to the Study the Potential Aspects of Branding with the City Branding Hexagon Approach in Settlement Areas in Balikpapan Kota District, Balikpapan City.

2. Methods

2.1. Data Collection Method

The population in this study was the settlements in each administrative neighborhood of Balikpapan Kota District in Balikpapan. The number of administrative neighborhoods in the Balikpapan Kota District is 131. There was no research sample in this study because the researcher would examine or observe the area of city branding aspects in the Balikpapan Kota District.

2.2. Analysis Method

In the first target, there were 6 (six) indicators in measuring the branding aspect of a city. These six indicators had been discussed in the literature review, which used the approach of Simon Anholt with City Branding Hexagon Theory. These indicators include Presence, Place, Potential, People, Pulse, and Prerequisite. An approach on the settlement side defines each dimension, and each indicator has several different variables according to the definition of the six aspects of City Branding Hexagon. The analysis of branding aspects was undertaken based on field observations of city branding index in settlement areas in Balikpapan Kota District.
In analyzing the branding aspect, quantitative descriptive analysis was used with a scoring method. This method was used because there was no calculation method from the city branding hexagon theory in measuring aspects of city branding. According to the rules, the researcher would assess aspects of city branding in the Balikpapan Kota District environment. Then, the existing data was classified against the 3 (three) scores that had been defined.

| Indicator | Variable | Assessment Criteria | Analysis | Reference |
|-----------|----------|---------------------|----------|-----------|
| Presence  | Area Function | The area is known to have regional functions for city services. If they have 1-2 regional function (score 1); 3-4 regional function (score 2); more than 4 regional function (score 3). | Calculation of the number of space patterns and service centers in the area | [4][13] |
| Place     | Green Open Space Requirement | The area has a green open space with an area of less than 250 m² (score 1); not well maintained but has an area of 250 m² (score 2); well maintained and has an area of 250 m² (score 3). | Identifying the area of green open space in the settlement area. | [4][14][15][16] |
| Potential | Educational Opportunities | The area is not covered by formal education facilities (score 1); covered by formal education but not at all levels (score 2); affordable formal education facilities at all levels (score 3) | The existence of formal education facilities in the area has been well served. The study used the buffer tool analysis in ArcMap [2]. | [4][14][15][16] |
| People    | Community Hospitality | The service at the administrative neighborhood is unfriendly (score 1); the service is friendly but not active in the social activities in the community (score 2); friendly and active in the social activities in the community (score 3). | The hospitality assessment is based on direct field observations by researchers or surveyors with a score range of 1 (less) to 3 (good). | [4][17] |
| Pulse     | The Intensity of Visiting Public Spaces | The frequency of visit to public spaces in the majority in the area for once a week (score 1); 2 times a week (score 2); more than two times a week (score 3). | Calculation of the number of visits to public spaces in the area in one week. | [4] |
| Prerequisite | Public Facilities Affordability | Inaccessibility of some public facilities (score 1); there are one to two public facilities that are not affordable (score 2); accessibility of all public facilities in the area (score 3). | The area's affordability to facilities for education, health, and places of worship. The study used the buffer tool analysis in ArcMap [2]. | [4][15] |

3. Results and Discussion
Balikpapan Kota District is one of the subdistricts in Balikpapan City, which consists of five subdistricts including Prapatan Sub-District, Telaga Sari Sub-District, Klandasan Ulu Sub-District, Klandasan Ilir Sub-District, and Damai Sub-District [18]. The identified settlement locations are 131 neighborhood units in Balikpapan Kota District.

3.1. Scoring of Settlement Branding Aspect Variables
The following subsection discusses the calculation of each indicator in the City Branding Hexagon in the settlement area of the Balikpapan Kota District of the city.

3.1.1. Presence, People, and Pulse
The function of the area in the Presence is known to support the function of the bigger area. The score of the area function in this variable was obtained from the Spatial Pattern of the Balikpapan Kota District and the area function of the Balikpapan City Spatial Plan [18]. Based on the calculations in the
research area, the score of 3 dominates in the distribution of data with an average of two spatial patterns and one city-scale service centre. The score of 3 is in 62 neighborhoods. There are 45 neighborhoods with a score of 2, which means that the areas have one regional function with an average settlement space pattern and city-scale service centre in each urban village. There is one neighborhood with a score of 6, located in Neighborhood 34 of Klandasan Ulu Sub-District. These areas have 3 spatial patterns and 3 city-scale service centres. This implies that the areas have branding potential by sharing identities in the areas and the functions of the previously mentioned areas. The result can be seen on the map in Figure 1 [a].

The People dimension in the research area mostly consists of the score 3 in the distribution of data, where the score of 3 is in 69 neighborhoods. The score of 3 (three) indicates that in the areas, the Head of the Neighborhood Association has a friendly attitude, while also serving and upholding service to the residents or guests, and there are supporting documents in the preparation of this research. In addition, there are 59 neighborhoods with a score of 2 (two), which means the areas have good hospitality but there are no supporting documents and the documents are not organized or stored properly. There are 3 (three) RTs with a 1 (one) score, namely neighborhood 26 of Prapatan Sub-District and neighbourhood 39 Klandasan Ulu Sub-District. This is indicated by the two neighborhoods not showing a friendly attitude in serving guests. The score map of the people indicator variables can be seen in Figure 1 [b].

With a great intensity value of visits to the area's public spaces, the meaning of the pulse itself will be interpreted directly by the community. This means that areas with a high value of visiting intensity will be known not only by the residents around the area, but also by the city residents and have a branding potential. Based on observations, there are 7 (seven) values or 7 times a week for people go to public spaces in their area. This is based on the average number of days people visit public spaces in their neighborhood. A high intensity value can be said that the public space is a means for social interaction on neighborhood facilities for all groups. The score of 2 (two) dominates in the distribution of data, found in 20 neighborhoods. This indicates that the area has an average of 2 times a week of public space visit. Several activities are carried out in the area, such as exercising, relaxing, or spending time with family. The score map of the pulse indicator variables can be seen in Figure 1 [c].

3.1.2. Place
The first variable in the Place indicator is Green Open Space Requirement. 37 neighborhoods have green open space on an area-scale in the form of a field. In addition to fields, other green open spaces are found in several areas, such as the field (environmental scale), public cemetery, and city park. The second variable in the Place indicator is Area Cleanliness. The settlement area of Balikpapan Kota District has good hygiene, where 85% of the area dispose waste at the neighborhood temporary garbage shelter in the area. Moreover, 112 neighborhoods do not have piles of garbage in their place or at an environmental temporary garbage shelter. The third variable is Landmark. Eighty-five
neighborhoods do not have a residential-area landmark or buildings that become the area's identity. In the area, regional landmarks are dominated by types of landmarks in the form of buildings. In addition to buildings, there are other types of landmarks in the form of areas, green open spaces, or public facilities. The score map of the three place indicator variables can be seen in Figure 2.

**Figure 2.** [a] Green open space requirement; [b] Area cleanliness; [c] Landmark of settlement area in Balikpapan Kota District

### 3.1.3. Potential
The settlement area in Balikpapan Kota District has an economic opportunity of 2.16%. This can be said to be quite good, where in one residential area, the number of unemployment rates is close to 0 (zero). However, the large number of unemployment indicates that the job opportunities offered to the region are still lacking. Klandasan Ulu Sub-District has the highest average score of the overall data distribution, which is 4.35%. The high percentage means the higher number of unemployment in the region, which can be said that this is due to the highly competitive job market in the Balikpapan urban area. This agrees with the City Branding Hexagon theory, in which economic opportunity measures the ease of finding a job. The 1 (one) sub-district with a percentage close to 0 (zero) is Prapatan Sub-District.

The second variable in the Potential indicator is Educational Opportunities. The results of the buffer analysis state that there are 3 neighborhoods whose area is not served (dominated) by the educational facilities of the kindergarten unit. However, elementary school services have well served all of the areas. Regarding services of junior high schools, there remain several suburban areas in the research area that have not been served. Also, the coverage of senior high schools shows that all areas have been well served. The score map of the two place indicator variables can be seen in Figure 3.

**Figure 3.** [a] Economic opportunity [b] Educational opportunities of settlement area in Balikpapan Kota District
3.1.4. Prerequisite
The first variable in the Prerequisite indicator is Satisfaction with Public Facilities. The score of satisfaction with public facilities in the Balikpapan Kota District is dominated by areas that do not have issues, evidenced by a score of 3. However, there is some neighborhoods with a score of 2; this indicates that the community is still not completely satisfied with the public facilities with a number of 1-2 different problems in each neighbourhood.

The second variable in the Prerequisite indicator is Public Facilities Affordability. Based on the results of the buffer analysis, public facilities (education, health, and places of worship) in the Balikpapan Kota District have reached all areas. However, some suburban areas are still not served from the analysis process that has been carried out. The score map of the two place indicator variables can be seen in Figure 4.

![Figure 4](image)

Figure 4. [a] Satisfaction with public facilities [b] Public facilities affordability

3.2. Result of Settlement Branding Aspect Analysis
Based on the scoring results in the previous discussion, an index value was obtained in 131 neighborhoods. The following is the branding index value in each sub-district, which can be seen in Figure 7.

![Figure 5](image)

Figure 5. Spider chart of branding index of: [a] Prapatan Sub-District; [b] Telaga Sari Sub-District; [c] Klandasan Ulu Sub-District; [d] Klandasan Ilir Sub-District; [e] Damai Sub-District

Based on the picture above, several findings have been identified for each sub-district. In Prapatan Sub-District, the highest potential index is identified in the dimensions of (3) Potential and (6) Prerequisite. In Telaga Sari Sub-District, the highest potential index is identified in the dimensions of (3) Potential, (4) People, and (6) Prerequisite. In Klandasan Ulu Sub-District, the highest potential index is identified in the dimensions of (1) Presence, (3) Potential, (4) People, and (6) Prerequisite. In Klandasan Ilir Sub-District, the highest potential index is identified in the dimensions of (3) Potential and (6) Prerequisite. As for the Damai Sub-District, the highest potential index is identified in the dimensions of (3) Potential. Of the five sub-districts, this study also observed the weakness of the branding dimension. The lowest value is on the Presence and Pulse dimension. Potentials and
weaknesses are findings in the research area. The total value of each branding dimension includes Presence (P1) = 1.75; Place (P2) = 2.14; Potential (P3) = 2.9; People (P4) = 2.5; Pulse (P5) = 1.67; and Prerequisite (P6) = 2.76. The following Figure 8 is the branding index value in Balikpapan Kota Sub-District.

![Figure 6. Branding index of settlement area in Balikpapan Kota District](image)

The potential value of the branding aspect has been obtained in the settlement areas in the Balikpapan City District. From the index value above, the most substantial aspect is the Potential (2.90) and Prerequisite (2.76) dimensions, where the two dimensions consist of variables of economic opportunity, educational opportunity, satisfaction and affordability of public facilities. These two dimensions have great potential for providing a good image of the settlement area. That result is also linear with the characteristics of the residential branding index for increasing environmental security in Balikpapan, which the Prerequisite dimension also has the potential to be branded in Balikpapan [19]. In other words, a branding value approach has been derived based on settlement values in improving the quality of settlements. There are 2 (two) branding potentials but they are quite weak compared to other aspects, namely the Presence (1.75) and Pulse (1.67) dimensions. Moreover, there are dimensions of Place (2.03) and People (2.50) that can be developed in the settlement areas of Balikpapan City District. The potential that can be improved is according to the derivative variables in each aspect of branding, namely the need for green open space, management of garbage piles, provision of landmarks, and improvements on community hospitality. Furthermore, from the results above, the 2 (two) most substantial dimensions have a value close to 3. Therefore, it can be said that the potential for developing settlement structuring branding can be suggested in the economic, social, and public facilities fields.

4. Conclusion
This research concludes that a study of the potential branding aspects has been carried out in the settlement areas of the Balikpapan Kota District. The potential of the city branding hexagon approach was employed in Balikpapan Kota District. The most substantial aspect is found in the Potential and Prerequisite dimensions, where the two dimensions consist of variables of economic opportunity, educational opportunity, satisfaction and affordability of public facilities. Hence, in providing a good image of the residential areas in the Balikpapan Kota District, the two dimensions have great potential. In other words, the branding value approach has been derived based on settlement values in improving the quality of settlements. As a result, the direction of settlement arrangement is suggested in the economic, social, and public facilities.

5. Acknowledgement
The authors are very grateful for the Department of Urban and Regional Planning of Institut Teknologi Kalimantan for the constant encouragement and good advice during their final project. The authors also thank LPPM - Institut Teknologi Kalimantan, who has funded research on the Leading Stimulus Research program in order to provide the benefits as it should.
References

[1] Muvidayan, Salma, Sriyono 2019 Karakteristik dan Faktor Penyebab Permukiman Kumuh di Kelurahan Tanjung Mas Kota Semarang (Semarang: Geo Image)

[2] Luthfi, Adhiimsyah, Widyaningrat A I 2018 Konsep City Branding Sebuah Pendekatan “The City Brand Hexagon” Pada Pembentukan Identitas Kota

[3] Sukmaraga, Ashari A, Nirwana A 2019 City Branding: Sebuah Tinjauan Metodologis Dengan Pendekatan Elaboratif, Praktis, dan Ilmiah (Malang: Universitas Ma Chung)

[4] Ipsos 2020 Place Brand Research: Anholt Ipsos Nation Brands Index (NBI) (Paris: Game Changers)

[5] Pemerintah Indonesia 2008 Peraturan Pemerintah Republik Indonesia Nomor 26 Tahun 2008 tentang Rencana Tata Ruang Wilayah Nasional (Jakarta: Sekretariat Negara)

[6] Badan Pusat Statistika Kota Balikpapan 2019 Kota Balikpapan Dalam Angka Tahun 2019 (Balikpapan: Badan Pusat Statistika Kota Balikpapan)

[7] Rindarjono, Gamal M 2012 “SLUM” Kajian Permukiman Kumuh dalam Perspektif Spasial (Yogyakarta: Media Perkasa)

[8] Wilandari, Anindita 2017 Arah Peningkatan Kualitas Lingkungan Kawasan Permukiman Kumuh Berat di Kelurahan Ciketingudik dan Sumurbatu Kota Bekasi (Surabaya: Institut Teknologi Sepuluh Nopember)

[9] Juliana, Alfiyah Rizky 2014 Dampak Perubahan Tata Gunakan Lahan Terhadap Kapasitas Saluran Drainase di Sub DAS Klandasan Kecil Sungai Klandasan Kota Balikpapan (Malang: Universitas Brawijaya)

[10] Badan Perencanaan Pembangunan Daerah Kota Balikpapan 2017 Laporan Memorandum Program Rencana Pencegahan dan Peningkatan Kualitas Permukiman Kumuh Perkotaan (RP2KPKP) Kota Balikpapan Tahun Anggaran 2017

[11] García, Jaime Hernández 2013 Slum Tourism, City Branding and Social Urbanism: The Case of Medellin, Colombia (Colombia: Journal of Place Management and Development)

[12] Pemerintah Kota Balikpapan 2019 Keputusan Wali Kota Balikpapan Nomor 188.45-285/2019 Tentang Hasil Peninjauan Ulang Penetapan Lokasi Perumahan Kumuh dan Permukiman Kumuh di Kota Balikpapan Tahun 2018 (Balikpapan: Pemerintah Kota Balikpapan)

[13] Pemerintah Kota Balikpapan 2012 Peraturan Daerah Kota Balikpapan Nomor 12 Tahun 2012 Tentang Rencana Tata Ruang Wilayah Kota Balikpapan Tahun 2012-2032 (Balikpapan: Pemerintah Kota Balikpapan)

[14] Alfiani, Vinny 2016 Persepsi Masyarakat Terkait Kenyamanan Tinggal di Permukiman Kumuh (Studi Kasus: Permukiman Kumuh Kelurahan Keputih Kecamatan Sukolilo Kota Surabaya) (Surabaya: Universitas Negeri Surabaya)

[15] Badan Standarisasi Nasional 2004 Standar Nasional Indonesia 03-1733-2004 tentang Tata Cara Perencanaan Lingkungan Perumahan di Perkotaan (Jakarta: Badan Standarisasi Nasional)

[16] Cesarin, Binar T, Ginting C 2015 Persepsi Masyarakat terhadap Permukiman Bantaran Sungai (Bandung: Temu Ilmiah IPLBI 2015)

[17] Prawiranata, Adi 2016 Pengaruh Keramahtamahan dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan (Malang: Jurnal Administrasi Bisnis Universitas Brawijaya)

[18] Kementerian Pekerjaan Umum dan Perumahan Rakyat Direktorat Jenderal Cipta Karya 2020 Dokumen Rencana Penataan Lingkungan Permukiman RPLP Kecamatan Balikpapan Kota

[19] Ulimaz M 2021 Characteristics of the settlement brand index for improving environmental safety in Balikpapan IOP Conf. Ser.: Earth Environ. Sci. 623 012058