

Architectural Tourism Development Model as Sustainable Tourism Concept in Bandung

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Abstract. Bandung is famous tourist destinations in Indonesia which experiences rapid tourism development. It is supported by city's diverse tourism potential, include in: nature, culture, heritage building, culinary, fashion, recreation, and entertainment. Moreover, infrastructure and public facility improvement increase tourism attractiveness of Bandung. Two major infrastructure projects, namely Cipularang Toll and Jakarta - Bandung Fast Train will support Bandung tourism development. This condition is benchmark of Bandung tourist attractions. To maintain such potential, it is necessary for Bandung to have programmed, structured, and controlled tourism development model. Current tourism model is inclined to sustainable industrial concept preserving environment and local culture. Tourism programme is directed to generate income and green employment, with regard to conservation. This study aims to assist planning and management of sustainable tourism development by increasing level of understanding on how tourist destinations develop and change. Results of this study can be taken into consideration for stakeholder to develop a framework for strategic planning toward economically, environmentally and culturally sustainable tourism.

Keywords: destination, nature, heritage, environment

1. Introduction

Nowadays, tourism [1] and creative economy play an important role in Indonesia's development, as both has significant contribution to Gross Domestic Product (GDP) and employment - both directly and indirectly. Tourism [2] contributes to 11.8% of Indonesia's [2] GDP and creative economy contributed to 14.66% of total employment. Ministry of Tourism and Creative Economy has established a vision of "the realization of welfare and life quality of Indonesians through tourism and creative economy" [3]. The ministry, supported by International Labor Organization (ILO) and Australian Government develops Strategic Plan for Sustainable Tourism and Green Jobs for Indonesia [3]. This strategic plan is framework and reference to achieve sustainability and provide environmentally friendly employment in tourism sectors in Indonesia [3]. Strategic Plan for Sustainable Tourism and Green Jobs is an answer to improve welfare and life quality within communities. The program is supported by the ILO and Australian Government, as Indonesian government partners in exchanging views and building consensus to build a strong tourism industry. The strategic plan is designed based on consultations among tourism stakeholders, include in government, social partners, communities, industries, and the citizens. Richness of natural and cultural resources has become a major potential in both domestic and



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international tourist markets. Government is challenged to cultivate these potential into national asset for prosperity of the communities. In addition, hospitality and human resources are strategic in achieving national development goals and increasing nation's competitiveness.

After Brazil, Indonesia tourism potential occupies second position. Local culture, natural beauty, and heritage buildings are pillars of Indonesia tourism. As the largest archipelago nation in the world, Indonesia has 17,508 large and small islands making it an extraordinary natural potential. Abundance of natural resources and green environments, West Java has enormous potentials in tourism. Tourism activities in West Java, especially Bandung, requires supporting facilities. Tourism activities have become Bandung main economy sector since 1920. Nowadays, tourism is growing more with the support of Cipularang toll road and fast train lines construction connecting Bandung to Jakarta. Tourism sector is significant in increasing local revenue of Bandung. Nearly 70% of Bandung local revenue comes from tourism sector, according to Bandung Culture and Tourism Office. Bandung has experienced an increase in domestic and foreign tourist arrivals for almost 14% per year. Therefore, tourism sector becomes critical subject of urban planning.

Bandung is not only known as capital of West Java Province, but also famous tourism city. This city preserves cultural heritage that has superior values. Bandung is wellknown for its old architectural style inseparable from city development history itself. It owns several tangible or intangible relics. The long history of Bandung leaves a number of historical buildings. Bandung is given predicate of the most complete architectural laboratory because of its art deco architecture treasures. Sturdy old buildings inherit architectural beauty styles. As a favorite tourist destination, Bandung has potential to (1) heritage tourism; (2) shopping and culinary tourism; (3) educational tourism; (4) recreational and cultural tourism; and (5) as well as Meeting, Incentive, Convention, Exhibition (MICE) destination. Bandung has diverse tourist destination, supported by geographical location, nature, adequate urban planning, and good accessibility. Based on the background, this study is intended to review development of tourist destinations in Bandung through Quality Function Deployment (QFD) analysis. This analysis is conducted over development of holistic tourist destinations by considering all related elements. Result of this analysis is expected to provide input for increasing tourist visits and managing historical buildings as assets of Bandung.

2. Bandung Tourism Potential

Besides Bali and Yogyakarta, Bandung is also the place of interest tourist visit. The city has unique, extraordinary beauty and industrial creativity. Bandung is especially crowded on weekend due to domestic and foreign visitation. The following table (Table 1) shows number of tourist visiting Bandung within the last five years.

Table 1. Data on number of tourists visiting Bandung

Year	Tourist		Total
	Overseas	Domestic	
2014	180.143	5.627.421	5.807.564
2015	183.932	5.877.162	6.061.094
2016	191.289	6.112.248	6.303.538
2017	193.129	6.378.299	6.580.428
2018	198.923	6.578.918	6.777.841

Source: Bandung culture and tourism agency, 2018

Tourist visits in 2015 has reached over 6 million; and increased to almost 12% (around 4% per year) in 2018. This increase is considered significant. This potential stimulates acceleration of tourism businesses growth and other tourism-related businesses, which affect increase in community welfare and local revenue. There are 14 (fourteen) potential tourism clusters in Bandung, include in: (1) Shopping and health tourism clusters on Sukajadi-Setrasari-Pasteur roads; (2) Traditional art and

cultural tourism clusters and craft industries on Padasuka-Suci roads; (3) Historical and heritage tourism clusters on Braga-Asia Afrika-Cikapundung roads; (4) Textile industry clusters on Cigondewah; (5) Cluster of traditional cultural and MICE tourism on East Bandung; (6) Spiritual tourism clusters and shopping tours on Gegerkalong-Setiabudi roads; (7) Entertainment, shopping and geotourism tourism clusters on City Center-Sudirman-Otista-Gardujadi-Pasirkaliki; (8) Natural recreation, cultural, handicraft industry tourism clusters on North Dago-Puncut roads; (9) Heritage, education, natural and artificial recreation, convention, religion tourism clusters on Gedung Sate-Gasibu-Sabuga; (10) Culinary, heritage, education, entertainment and recreation, and geotourism tourism clusters on Ir. H. Juanda (Dago)-Merdeka-Riau roads; (11) Heritage, shopping, culinary, knit industry tourism clusters on Gatot Subroto-Binongjati roads; (12) Shopping and handicraft industries tourism cluster on Cibaduyut; (13) Culinary tourism cluster on Burangrang; and (14) Shopping tourism cluster on Cihampelas. Cluster development is a consequence of urban development and planning along with market demand, as it happened on Ir. Juanda Road which was originally a non-commercial area and now turned into busy shopping tourist destination.

2.1 Bandung Tourism Destination Development

Tourism sector is vital to push economic growth in many countries [4,5,6,7,8]. Therefore, it is necessary to consider several approaches in planning and developing tourism, including: (1) Continuous Incremental and Flexible Approach (in sense of planning as continuous process based on needs and results); (2) System Approach (tourism as an integrated system which needs to be planned through system analysis); (3) Comprehensive Approach (tourism development approach holistically considers elemental and environmental institutions as well as socio-economic implications); (4) Integrated Approach (tourism development approach as an integrated system of area plan and development); (5) Environmental and Sustainable Development Approach (tourism approach starts from planning process, continued by developing process and managing preserved natural and cultural resources as well as performing environmental analysis); (6) Community Approach (developing tourism approach by maximizing community involvement starting from planning until decision making on aspects that affect socio-economic conditions); (7) Implementable Approach (tourism development should formulate objective plans and recommendations, as well as applicable technique and strategies); and (8) Application of Systematic Planning Approach (an approach applied in tourism planning based on logical activity).

2.2 Sustainable Tourism Concept

Butowski (2012) refers sustainable tourism [9] concept to sustainable development [10] concept which emphasizes the need for rational management of natural resources [9]. This is in line with the UN's Secretary General's report on the need to change general concept of economic development through a clear natural resource management. Threats to the environment were main [9] issue in 1972 Stockholm UN conference [9]. The term of sustainable development was actually introduced at that time. Moreover, 1992 UN Conference in Rio de Janeiro agreed upon two important documents on the environment and development known as Rio Declaration. It contains 27 principles defining the rights [9] and obligations of countries in field of sustainable development, and AGENDA 21 [9], global action plan referring to actions needed to achieve sustainable development and high quality [9] of life.

Concept of tourism development referring to principle of sustainable development [9] has actually been discussed since 1980s. Krippendorff (1986) develops concept of alternative tourism [11]. It identifies industrial society system as small-scale, treated [9] as the right [9] choice. Ceballos-Lascurain (1987) introduced concept of ecotourism [12], since then various terms of alternative tourism emerges [9], include in: green tourism, soft tourism, nature tourism, environmental friendly/ environmentally sensible tourism [9], responsible tourism, discreet tourism, appropriate tourism, and ecoethnotourism [11,13,14,16,17,18]. These tourism model are designed under evaluation approach which juxtaposes new forms of tourism with old mass tourism model.

Butler (1980) states that sustainable tourism is the right answer in dealing with tourism problems today [18]. Butler proposes two ideas in tourism. (1) Based on semantic approach, sustainability guarantee [19] long-term survival [19] in accordance with changing market, and (2) concept of sustainable development [9], in sense of treating tourism as regional development without violating principles of sustainable development. This opinion is supported by Niezgodá, (2006) who states that conception of sustainable tourism [9] represents relationship between tourism, environment, and development, as shown in Figure 1.

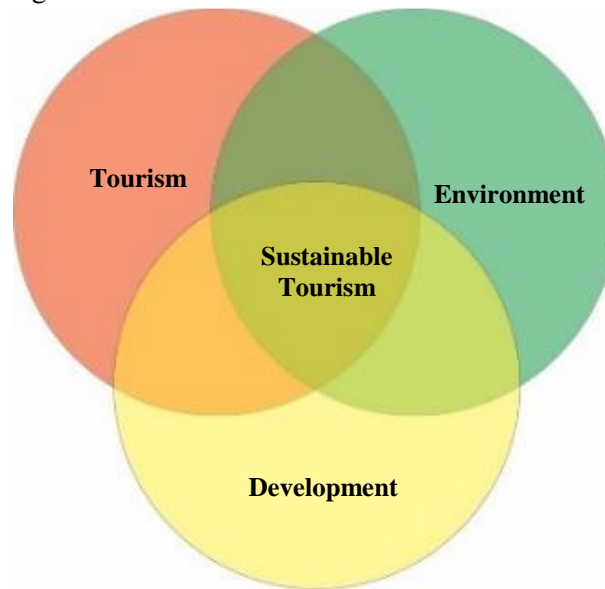


Figure 1. Sustainable tourism concept (Source: modification from various sources, 2019)

Based on Figure 1, sustainable tourism is essential for tourism development itself. According to Farrell and Twining-Ward (2004), sustainable tourism must be based on interdisciplinary approach due to degree of complexity and uncertainty of people behaviour in [9] tourism system [9] that affect tourism [9] itself, yet cannot guarantee satisfactory results [9]. The approach covers fields of ecosystem ecology [9], ecological economics, global change science, and complexity theory [9]. Farrell and Twining-Ward (2004) convey new concept of sustainable tourism [20] with the term "comprehensive tourism system and complex adaptive tourism systems (CATS)" [9].

Principle of sustainable tourism [9] must consider long-term needs of natural environment, positively influence the economy sector [9], and accepted in terms of ethics and culture [9] of local [9] community. Based on the 2008 World Conservation Congress in Barcelona, it was agreed basis of sustainable tourism concept (Table 2).

Table 2. MoU on sustainable tourism

Document	Publishing subject	Year	Place of publication
Charter for Sustainable Tourism	World Conference on Sustainable Tourism	1995	Lanzarote, Canary Islands
Agenda 21 for the Travel Tourism Industry: Towards Environmentally Sustainable Development	WITC, UNWTO, Earth Council	1995	Madrid
Berlin Declaration	International Conference of Environmental Ministers on Biodiversity and Tourism	1997	Berlin

Global Codes of Ethics for Tourism	UNWTO	1999	Santiago de Chile
The Encyclopedia of ecotourism	Weaver D.B (ed.) CABI Publishing	2001	Oxon (UK) – New York (USA)
Sustainable Development of Tourism, Conceptual definitions	UNWTO	2004	Madrid
Global Sustainable Tourism Criteria	World Conservation Congress (Rainforest Allies, UNEP, UNWTO)	2008	Barcelona

Source: organized from various sources, 2018

Based on Table 1, sustainable tourism must consider natural, socio-cultural, and economic [19] aspects [19] and maintain balance of these aspects.

3. Method and Research Location

3.1 Research Method

This research applies qualitative studies using Quality Function Deployment (QFD) method. This method is intended to plan and develop structured products and allows to get specific results clearly about target as desired by customer. Main focus of QFD is to involve customers during product development process as early as possible. QFD is divided into two parts, namely customer table (shows customer information) and technical table (describes technical terms in response to customer need). In detail, QFD involves four matrices of: (1) Product Planning (House of Quality/ HOQ) Matrix; (2) Product Deployment Matrix; (3) Process Planning Matrix; and (4) Production Planning Matrix [10].

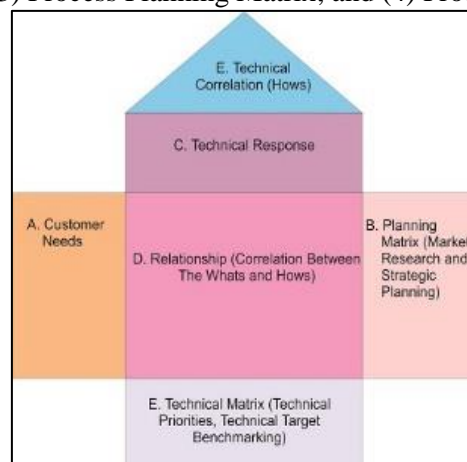


Figure 2. QFD matrix (Source: low cohen, 1995)

3.2 Research Location

Bandung as research location is divided into six sub-city areas (SCA), namely: (1) SCA Bojonegara, (2) SCA Cibeuuying, (3) SCA Bandung Kulon, (4) SCA Maleer, (5) SCA Ujung Berung, and (6) SCA Gedebage (Figure 3).

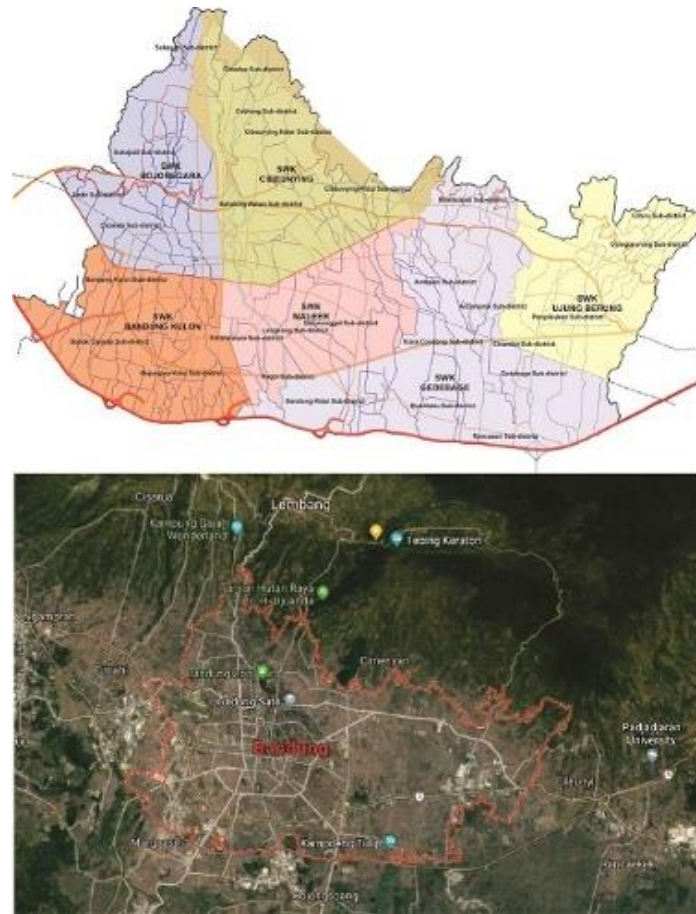


Figure 3. A. Map of Bandung City, B. Satellite map of Bandung City (Source: processed from digital and google map, 2019)

4. Result and Discussion

Tourist attraction and object potential are basic requirement for area or city development to become tourist city. Bandung owns potential in heritage building, natural environment, and socio-cultural asset [17,21,22,23] based on 2018 Bandung profile data. Planning and assisting development of travel destination are important factors in tourism. There are six important factors in tourism planning and development, including: (1) planning must be able to increase quality growth, it requires constructive change, in addition to development of potential attractions/objects to be sold; (2) tourism policy have important role in promotional activities (based on research result); (3) tourism planning requires public and private cooperation to realize expectations of stakeholders; (4) regional and local policy planning must be able to strengthen and support tourism development; (5) regional and local policy planning must be able to stimulate business people to contribute in regional development; and (6) business planning policies should be supported by both business people and government to provide accommodations for all nature and culture attraction.

4.1 Heritage buildings: from architectural to educational tourist destination









A destination can be grouped as developing tourism object when tourism activities exist from the start. To increase tourism potential, it needs sustainable development through ecological, socio-cultural, and economic stability. In 2011, Bandung Cultural Heritage Conservation Society issued a list of 100 old buildings categorized as cultural heritage and preserved buildings, which are divided into 6 groups

(Figure 4), namely Region I (City Center), Region II (Chinatown/Trade Center), Region III (Military), Region IV (Ethnic Sundanese), Region V (Villa and Non Villa), and Region VI (Industry).

No	Building	Address	No	Building	Address	No	Building	Address
Region I (Center)			Region II (Pecinan/Trading)			Region III (Defense and Security/Military)		
1	BMC (Bandungsche Melk Centrale)	Jln. Aceh No. 30	25	Bioskop DIAN	Jln. Dalem Kaum No. 58	74	Gedung Sate dan Museum Pos	Jln. Diponegoro No. 22 dan Jln. Cikali No. 73
2	PPLP (eks KONI)	Jln. Aceh No 47-49	26	SD Merdeka 5	Jln. Merdeka No. 9	75	Museum Geologi	Jln. Diponegoro No. 57
3	Gedung Pencil (Asuransi Dana Raksa)	Jln. Ahmad Yani Gatot Subroto No. 1	27	Gereja Katedral	Jln. Merdeka No. 14	76	Gedung Dwiwarna	Jln. Diponegoro No. 59
4	Kantor Pos Besar	Jln. Asia-Afrika No. 49	28	Polwiltabs	Jln. Merdeka No. 16, 18, 20	77	Mess Puslitbang Material dan Batu Bara	Jln. Ganesha No. 6
5	Gedung PLN	Jln. Asia-Afrika No 63	29	Sama Angela	Jln. Merdeka No. 24	78	Kompleks ITB lama	Jln. Ganesha No. 10
6	Gedung Merdeka dan Museum Konferensi AA	Jln. Asia-Afrika No. 65	30	YPK (Yasayan Pusat kebudayaan)	Jln. Naripan No. 7-9	79	Kantor POS ITB	Jln. Ganesha No. 15 A
7	Hotel Preanger	Jln. Asia-Afrika No. 81	31	Ruko	Jln. Naripan No. 137-145	80	LPM ITB	Jln. Ganesha No. 17
8	Kompleks eks Wisma Suka	Jln. Asia-Afrika No. 104-106-108-110	32	Gedung Pakuan	Jln. Oes Iskandardinata No. 1	81	Gedung eks DIPA Dago	Jln. Ir. H. Juanda No. 41
9	Kompleks Hotel Savoy Homann	Jln. Asia-Afrika No. 112	33	Balai Besar PT KAI dan Perpustakaan	Jln. Perintis Kemerdekaan No. 1	82	PTTA Dago Bengkok	Jln. Ir. H. Juanda
10	Gedung Keuangan Negara	Jln. Asia-Afrika	34	Gedung Indonesia Mengugat	Jln. Perintis Kemerdekaan No. 5	83	Bumi Sangkuriang	Jln. Kipatih No. 14, 16
11	Asia Afrika Culture Centre (Majenit)	Jln. Braga No. 1	35	Kantor dan Gedung-gedung Persediaan PIKA	Jln. Sukabumi No. 20	84	Gereja Pandu	Jln. Pandu No. 1
12	Kimia Farma (Apothek)	Jln. Braga No.2-4-6	36	Kantor Stasiun Kereta Api	Jln. Stasiun	85	Kompleks Bio Farma	Jln. Dr. Djundjuran (Pasteur) No. 28
13	Kimia Farma (eks Aubon Marce)	Jln. Braga No. 5	37	Stasiun Kereta Api	Jln. Stasiun Selatan No. 25	86	RSU Hasan Sadikin (Pasteur)	Jln. Dr. Djundjuran (Pasteur) No. 38
14	BPD/BJB Jawa Barat (Jabar)eks Deitis	Jln. Braga No. 12	38	Puskesmas Tamblong	Jln. Tamblong No. 66	87	Dinkologi AD	Jln. Sangkuriang No. 17
15	Dekmanas Jabar	Jln. Braga No. 15-17	39	Gereja Bethel	Jln. Wastukencana No. 1	88	SMP Negeri 12	Jln. dr. Setiabadi No 195
16	LKBN Antara	Jln. Braga No. 25	40	Kantor Pemkot Bandung	Jln. Wastukencana No. 2	89	Villa Isola/Rektorat UPI	Jln. Setiabadi No. 229
17	Gas Negara	Jln. Braga No. 38	41	SMK Negeri 1	Jln. Wastukencana No. 3	90	Perumahan Dosen UPI	Jln. Setiabadi No. 211, 219, 225, 240
18	Bank Indonesia,	Jln. Braga No. 108	42	Toko De Zon (Koperasi Usaha Kecil)	Jln. Asia-Afrika No. 39	91	Kompleks Sekolah St. Alysius	Jln. Sultan Agung No. 6
19	Eks Insulide (eks Kantor Residen Priangan) Kelenteng	Jln. Braga No. 135, Jln. Cibadak No. 221, 281	43	Centre Point	Jln. Braga No. 117	92	Rektorat ITB	Jln. Tams Sari No. 84
20	Sekolah Luar Biasa	Jln. Cicendo No. 2	44	Landmark	Jln. Braga No. 31	93	Villa Merah	Jln. Tamsari No. 78
21	Rumah Teko (eks Showroom Mobil)	Jln. Cicendo No. 12	45	eks Departemen Tenaga Kerja	Jln. Wastukencana no. 20	94	Kantor dan pabrik Gas Negara	Jln. Serang No. 7
22	Pabrik Kina	Jln. Cicendo/Pajajaran No. 1	46	Gedung Perpustakaan Unpar	Jln. Aceh	95	Bank NISP	Jln. Sawunggaling No. 2
23	Pusat Koperasi Karyawan PTPN VIII	Jln. Cikapundung Barat No. 1	47	Mejisl Cipaganti	Jln. Cipaganti	96	Gedung Tiga Warna	Jln. Sultan Agung No. 2
24	Pendopo dan eks Rumah Bupati/Wali	Jln. Dalem Kaum No. 1	48	Gereja Baptis	Jln. Wastukencana No. 40-42	97	Balai Pendidikan Guru	Jln. Cipto
Region IV (Sundanese ethnicity)			Region V (Villa and non Villa Housing)			Region VI (Industry)		
70 Gabungan Koperasi RI			70 Galeri Kita			97 SMP Negeri 20		
71 SMP Sandi Putra			64 Dirktorat Keuangan Siliwangi			49 Gereja Pasundan		
72 Biro Lingustik Polri			65 Makodiktat TNI			50 Kopkaskas (Koperast Karyawan KA)		
73 SMA Negeri 20			56 SMP Negeri 7			51 Vihara Samudra Bhakti		
			57 SMP Negeri 7			52 SDN Moh. Toha		
			58 SMP Negeri 2			53 Hudem III Siliwangi		
			59 Gedung			54 Kogoldam (Jaarsbeurs)		
			60 SMA Negeri 3-5			55 Kompleks Kodam III Siliwangi		
			61 Dir. Kesehatan Angkatan Darat			56 Komodoklat BNI		
			62 Prinkopad DAM II Siliwangi			57 SMP Negeri 7		
			63 Komando Daerah Militer III Departemen Markas Sabau			58 SMP Negeri 2		
			64 Galeri Kita			69 Lembaga Persewaan Sukamiskin		
			65 Makodiktat TNI			70 Gabungan Koperasi RI		
			66 SMP Negeri 5			71 SMP Sandi Putra		
			67 Paguyuban Pasundan			72 Biro Lingustik Polri		
			68 SMP Negeri 2			73 SMA Negeri 20		
			69 Lembaga Persewaan Sukamiskin					
			70 Gabungan Koperasi RI					
			71 SMP Sandi Putra					
			72 Biro Lingustik Polri					
			73 SMA Negeri 20					

Figure 4. Heritage buildings in Bandung City (Source: organized from various sources, 2018)

Of 100 cultural and heritage buildings preserved, 18 have potential to become educational destination and attraction as shown in figure 5.

No	Building	Figure	No	Building	Figure
1.	Gedung Sate Nowadays, this building is a government building in West Java Province, which has ornamental slivers on the roof. The meaning of 6 ornaments symbolizes the cost of harvesting this building which reached 6 million guilders. The architectural style is a mixture of European-Indonesian building styles.	 Source: Organized from various sources	5.	Gedung Bank Indonesia (De Javasche Bank) Javasche Bank is one of the buildings built by the Dutch-Hind government under the leadership of Herman William Daendels as part of the development of a government center in Bandung. Javasche Bank was built in mid-1909 designed by architects Edward Cuyper, Fermont and Hulswoit. After independence, in 1953, it was taken over and inaugurated as Bank Indonesia.	 Source: Organized from various sources
2.	Gedung Geologi The Geology Museum was established on May 16, 1928. The establishment of the Geological Museum is identical with the existence of the Netherlands in the days of colonialism in Indonesia and also world influence, where Central European geologists at that time were intensively carrying out many geological and mining investigations in the Indonesian territory. At a time, Europe was experiencing an industrial revolution in the mid-19th century and desperately needed many types of mining materials that were used as industrial base material. In 1850, the Dienst van Mijnbouw institution was formed. This institution was later renamed in 1922 to become the Dienst van Mijnbouw which was tasked with investigating geology and mineral resources throughout the Indonesian archipelago. This museum has been renovated with assistance from JICA. After undergoing renovations, the museum was reopened.	 Source: Organized from various sources	6.	Villa Isola The building, located at De Setiabadi street, Number 229, Bandung with this unique architectural design, is now used as the rector's office of the Indonesia University of Education. When viewed from afar, this building looks like a cruise ship. The previous owner was Dominique Willem Beretty who was a descendant of the Indo-Italian mix known as the king of the media.	 Source: Organized from various sources
3.	Museum Konferensi Asia-Afrika The museum was originally used by a group of European elite residents living in Bandung called Societiet Concordia. The corner of the building facing Asia Afrika-Braga streets was once a rigid angle, and then renovated to be circular as it is now.	 Source: Organized from various sources	7.	Hotel Savoy Homann This hotel was designed by architect A.F. Aalbers using a streamlined art deco style. This hotel is one of the historical hotels in Bandung because it became the place to stay for the participants of the Asia-Africa conference in 1955. In addition, the world famous comedian Charlie Chaplin has stayed in this hotel twice.	 Source: Organized from various sources
4.	Gedung Merdeka The Merdeka building with the Museum of the Asian-African Conference is a different building built by the Asian-African Conference designed by architect A.F. Aalbers, while the Merdeka building was by architect Wolff Schoemaker. The Merdeka building was formerly called Schouwburg Concordia, which was the venue for the Societiet Concordia.	 Source: Organized from various sources	8.	Hotel Preanger (Gedung Pramo Grand Preanger) This hotel is designed by Ir. Soekarno when he was assistant architect of Wolff Schoemaker. Preanger Hotel is located at the intersection of Jln. Asia Afrika and Jln. Lengkong Besar. Before this hotel uses the style of art deco architecture as it is now, it used to adopt a baroque style of building.	 Source: Organized from various sources
			9.	N. I Escompto M.L.J This building was used by the first bank in Bandung, namely N. I Escompto M.L.J. Before occupying a location located at the intersection of Jln. Asia Afrika and Jln. Banceng, this bank is located on Jln. Merdeka. Until now, this building is still used by BRI bank, in addition to its high-rise buildings and is unique to the clock tower with Roman numerals at its clock. The number four is not written with the symbol (IV) but with a symbol (IIII).	 Source: Organized from various sources

No	Building	Figure	No	Building	Figure
10.	Nedhandel NV It is a building that was used by a bank from the Netherlands. This building is located on Asia Africa street. The architectural style of this building adopts the neo-classical style using materials imported from Europe. Now this building is used by a state-owned bank.	 Source: Organized from various sources	10.	Nedhandel NV It is a building that was used by a bank from the Netherlands. This building is located on Asia Africa street. The architectural style of this building adopts the neo-classical style using materials imported from Europe. Now this building is used by a state-owned bank.	 Source: Organized from various sources
11.	Gedung DENIS This building was once occupied by NV. De Eerste Nederlandsch-Indische Spaarbank (NV DENIS which is built as the brother of Sasoy Hiamann building). Its architectural style both adopts streamlined art deco and has a tower. Now, this building is used by BJB bank.	 Source: Organized from various sources	11.	Gedung DENIS This building was once occupied by NV. De Eerste Nederlandsch-Indische Spaarbank (NV DENIS which is built as the brother of Sasoy Hiamann building). Its architectural style both adopts streamlined art deco and has a tower. Now, this building is used by BJB bank.	 Source: Organized from various sources
12.	Gedung Pensil It is called "Pencil Building" because the pointed roof looks like the tip of a pencil. It is located in the Asia-Africa Simpang Lima area. This building was previously used as the office of the world's leading lubricating oil agent.	 Source: Organized from various sources	12.	Gedung Pensil It is called "Pencil Building" because the pointed roof looks like the tip of a pencil. It is located in the Asia-Africa Simpang Lima area. This building was previously used as the office of the world's leading lubricating oil agent.	 Source: Organized from various sources
13.	Gereja Katedral Santo Petrus This church is located at the intersection of Merdeka street and Java street which was designed by architect Wolf Schoemaker. When viewed from above, the church building forms a symmetrical cross.	 Source: Organized from various sources	13.	Gereja Katedral Santo Petrus This church is located at the intersection of Merdeka street and Java street which was designed by architect Wolf Schoemaker. When viewed from above, the church building forms a symmetrical cross.	 Source: Organized from various sources
14.	De Majestic This building was previously named Concordia Theater which is one of the legendary theaters in Bandung. In this theater, the first film produced in Indonesia, "Loetoeng Kasaroen", was played in Bandung. At present, the building located on Braga street has been revitalized and returns to its original function as a cinema and art performance building.	 Source: Organized from various sources	14.	De Majestic This building was previously named Concordia Theater which is one of the legendary theaters in Bandung. In this theater, the first film produced in Indonesia, "Loetoeng Kasaroen", was played in Bandung. At present, the building located on Braga street has been revitalized and returns to its original function as a cinema and art performance building.	 Source: Organized from various sources
15.	Dakken This Dutch colonial house is now used as a cafe and restaurant. This building is located on Riau street which is now a shopping center area for factory outlets. This building attracts attention because of its classic design and a tower with a pointed roof on one of its sides.	 Source: Organized from various sources	15.	Dakken This Dutch colonial house is now used as a cafe and restaurant. This building is located on Riau street which is now a shopping center area for factory outlets. This building attracts attention because of its classic design and a tower with a pointed roof on one of its sides.	 Source: Organized from various sources

Figure 5. Cultural heritage buildings as educational tourism objects (Source: organized from various sources, 2018)

4.2 Object Analysis, Tourist Attraction, and Market Analysis

Based on 2018-2023 Bandung Strategic Plan, heritage buildings in the city are object to Bandung Heritage association investigation. As many as 100 buildings are classified into six categories. Of 100 cultural heritage buildings, there are 18 buildings which have potential to become architectural tourism destination and tourism attraction. Market segmentation of both domestic and foreign visitations are natural and artificial recreation, shopping, culinary, recreation, entertainment, education or religion travel. Current market conditions are based on:

- Geographical aspect. Most of tourists visiting Bandung for shopping and culinary destination (52.74%), followed by educational tourism (32.56%). The origin of tourists visiting Bandung are mostly from West Java, Jakarta, and major cities in Indonesia. Tourists motivations coming to Bandung include in fun experiences, togetherness, out of routine, authentic experience, learning, refreshing, fresh physical environment, health motive, and pride.
- Demographic aspect. Visitors who come to Bandung are mainly women (\pm 54.25%) and the rest are men. Female tourists have tendency to enjoy shopping and culinary objects in Bandung. Age of visitors ranges from 20-35 years old. Young tourists play out various activities, such as shopping, culinary, knowledge/architecture sightseeing, and others.
- Psychographic aspect. Besides take joy in beauty of nature and heritage buildings the city, tourists are spoiled by diverse factory outlets and culinary places offering traditional to modern foods.
- Behavioural aspect. Many get information about Bandung from relatives which have come and enjoyed beauty of Bandung, besides other information.

Based on actual potentials, potential market segmentation of tourism objects in Bandung can be arranged in table 3.

Table 3. Potential market segmentation

Aspect	Actual Market	Potential Market
Geographical	The origin of tourist from the area around West Java, Jakarta, and some from major cities in Indonesia	<ul style="list-style-type: none"> • Most of potential tourist come • Some are from overseas, especially Malaysia, ASEAN countries, and other Asia Countries
Demographic	<ul style="list-style-type: none"> • Aged 20-35 years old • Students, students families • Mostly women 	<ul style="list-style-type: none"> • Aged 20-50 years old • High school students, university student, executives, families, business partners • Balance in number between men and women
Psychographic	Motivation to enjoy the beauty of Bandung, besides nature and many Dutch heritage building, factory outlets, and culinary places	Motivation to enjoy the beauty of Bandung (nature and buildings left by the Dutch, factory outlets, and culinary places, architectural tourism, educational tourism, religious tourism
Behavioural	Information source: relatives/friends Modes of transportation: private vehicles, tour buses, shuttle bus In a form of visits with families or friends	Information source: family/friends, relations, business, companies, websites Modes of transportation: private vehicles, tour buses, shuttle bus, airplanes In a form of visits with families or friends, business relations, company partners

Source: organized from various sources and research results, 2018

Numerous tourist attractions makes Bandung favourite destination in Indonesia. But Bandung is still classified as transit city due to 1-3 days average hotel occupancy. Hostelry in Bandung is usually crowded only during weekends (Friday to Sunday) or school and religious holidays. For this reason, it is an opportunity for tourism service entrepreneurs to initiate tour and travel businesses packages combining tourism potential in Bandung.

There are still few tour and travel agencies take this opportunity. This potential should be considered as business opportunity outside existing standard tour package. In order to meet customer demand, market players should enclose these aspects into tour packages. Analysis in determining tour packages must meet four aspects of tourist needs, namely:

- (1) Attraction: main product of a destination. It answers question of “What to see and what to do” during travel exploration. Attraction may be in form of nature’s beauty and its uniqueness, local community culture, historical building, or artificial attraction (games and entertainment). Attractions should be unique and different from other region in order to have high value.
- (2) Accessibility is infrastructure and means of transportation to get to a destination. Highway access and road guidance are important aspects, beside reliable public transportation.
- (3) Amenity means a supporting facility that can meet the need and desire of tourists in a destination. It includes accommodation and restaurant, or other essential facilities for tourists, such as public toilet, parking lot, rest area, praying room, and resting place.
- (4) Ancillary is related to ability to manage a destination. Even though a destination is attractive, accessible, and supported with enough amenities, it will be neglected if not well managed.

Considering potential market and tourists demand aspects, planning strategy for development of sustainable tourism in Bandung can be seen in figure 6.

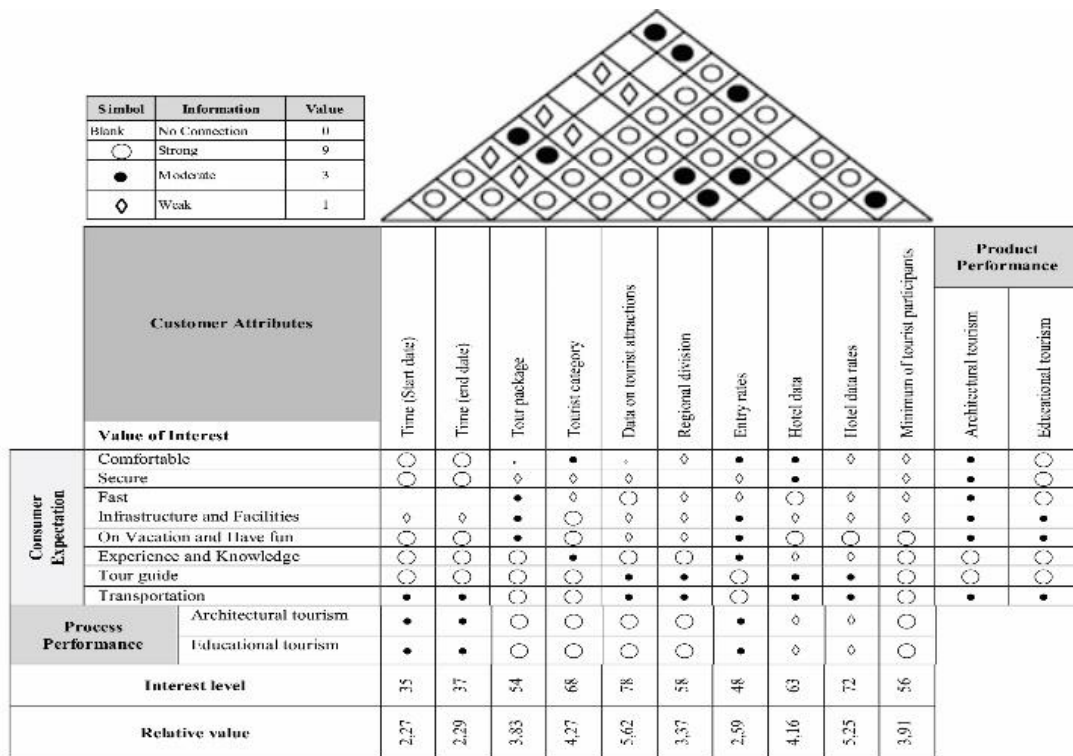


Figure 6. Quality function deployment (QFD) (Source: research result, 2018)

Analysis on Quality Function Deployment (QFD) matrix delivers three development planning strategies as follows:

- (1) *Policy strategy* in form of clear travel guidelines and good tourism management will open private investment opportunities. It is also necessary to increase promotion of all potential destinations, improve quality of human resources, and socialize local regulations related to tourism development.
- (2) *Tourist facility and activity strategy* are needed to optimize physical quality of buildings and services. Improved access to infrastructure and facilities and excellent service will support tourism development in accordance with applicable standard.
- (3) *Marketing strategy* should be divided into four strategies, namely (a) *product strategy* (promoting tourism object by adding unique tourist attractions and attracting broader segments); (b) *price strategy* (carried out through changes in market behavior patterns by giving adjustments to prices); (c) *place/distribution strategy* (renowned destinations as fundamental tourist attraction which need to be socialized continuously); and (d) *promotion strategy* (built through various promotional media, including optimizing sub-variables of attractions, amenity, accessibility, and ancillary services by allocating more funds for tourism development).

5. Conclusion

Bandung is a popular travel destination among domestic (Nusantara) tourists, especially for its shopping and culinary attraction. Dutch heritage buildings are potential to be promoted as excellent architectural and educational tourist destination of Bandung in particular and West Java in general. Evaluation on tourism products and actual market shows that heritage buildings have great potential in developing Bandung tourism business, especially as architectural and educational tourism destination. Improvement of supporting facilities is vital to development of architectural and educational tourism. Besides, government need to allocate greater funds for tourism development as regional leading sector. Management of business object and community-based tourist attraction need to be improved. The government needs to establish stronger and sustainable cooperation with tourism stakeholder, such as

travel agent, hotel managements and academics in developing architectural and educational tourism destination.

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