

Understanding Urban Communication in Information Era: Analyzing Development Progress of Coastal Territories in the Context of West Java's Metropolitan Regions

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Abstract. This paper explores a consequence of metropolitan and development centers policy to the development progress of coastal territories by analyzing municipal website base on urban communication functions of communicative city concept. In terms of coastal territories as a part of development center, efforts have to be made in enhancing the role and function of municipal website to show their development progress. Perceptual analysis is taken as a method to measure their position, especially kabupaten/kota as coastal territories in regional context (West Java Province). The results indicate that the availability of public information in coastal territories cities lower than other cities in metropolitan area. Innovation in specifying coastal features has to be promoted in illustrating development progress of coastal territories as a part of development centers in West Java Province.

1. Introduction

The insistence of metropolitan development in West Java for driving the modern development and increasing regional competitiveness to face the dynamics of rapid global change lead to the cities innovations development. Technology utilization become another way for cities to be able to compete in this information age. However, the majority of the development direction of the city is still not considering the role of the technology in city development. The virtual of regional competitiveness in provisioning digital information reflected in municipal website of each city which can be viewed as an extension of the city [1], [2], [3]. The utilization of municipal website in informing public service aspects are still low, whereas it actually is the benchmark for basic and the easiest way to see the cities capability in the provision of public information digitally. Under Law 14/2008 on *Public Information Disclosure*, said that government bodies are required to provide, deliver, and/or regulate public information that is accurate, accountable, true and not mislead. Public information dissemination is organized through electronic media, one of them is website.

The municipal website comes as one of the government's approach to accommodate the public aspiration through digital communication. The use of ICT in accommodating public participation and spread development information also performed on development planning through *e-tools*. The differences of information content in municipal website depend on the characteristic of each city. This led to the information disparity between the cities which already developing ICT and cities which has not.

One of the urban development issue in West Java metropolitan area is the perception of city development in coastal territories in order to be in line with the development on the national level in ICT era and the perception of urban coastal development progress. Along with the competition among cities, the perception of the representative of coastal areas is necessary, particularly through their municipal website. There are several benefits of the proposed research, ranging from theoretical benefits and in response to the issues of the coastal areas development (the latest issue of the urban



development in West Java Province). This research attempt to exercise the implementation of the theory of communicative city to the context of metropolitan cities, especially coastal metropolis in West Java. The practical benefits can give you a practical extent of the attractiveness of an urban coastal area represented by official information from the municipal as a comparison for the development of social media that can give positive or negative impacts towards urban development in existing and in the future.

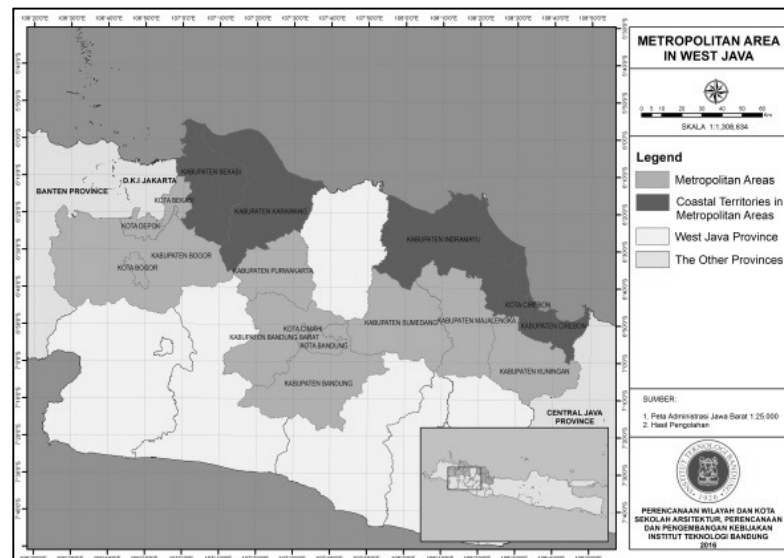


Figure 1. Coastal Area in Metropolitan West Java

2. Methods

This research used a mixed-method approach or qualitative and quantitative approach. The descriptive qualitative method used to find out more about municipal website which potentially able to encourage public participation in the development in terms of the availability of public information. The descriptive quantitative method used to explain the results of the input calculation of the availability of information from each municipal website.

2.1 Data Collection Method

This research uses secondary data with literature studies and content website. The data used in this research is the result of the information input from municipal website of Kota Bogor, Kabupaten Bogor, Kota Depok, Kabupaten Bekasi, Kota Bekasi, Kabupaten Karawang, Kabupaten Purwakarta, Kabupaten Bandung, Kota Bandung, Kabupaten Bandung Barat, Kota Cimahi, Kabupaten Sumedang, Kota Cirebon, Kabupaten Cirebon, Kabupaten Kuningan, Kabupaten Majalengka and Kabupaten Indramayu.

The focus of this research is to compare the public information services provided on municipal website in coastal areas (Kabupaten Bekasi, Kabupaten Karawang, Kabupaten Indramayu, Kabupaten Cirebon and Kota Cirebon) to another city in metropolitan areas.

2.2 Data Analysis Method

This research uses a perceptual analysis approach in the era of the advancement of ICT which developed based on *e-tools* (picture below) as an inseparable part of urban development in the digital era. The representation of this analysis is the municipal website content analysis which is related to metropolitan areas in West Java. In addition, this research uses communicative city approach to the context of the metropolitan areas in the ICT era by focusing on ten municipal functions such as surveillance function, coordination function, entertainment function, mass communication function,

local government function, public service provider functions, economic developers function, community function identifier, and community mobilizer function [4].

This research uses qualitative and quantitative analysis techniques. Qualitative analysis method used is the analysis of website's content. Quantitative analysis method uses is schallogram analysis that aims to determine the hierarchy rank of public information services in metropolitan areas and to determine the potential of availability of information on municipal website and accommodate public participation in development through website.

The formula used in schallogram analysis:

- To determine range
Maximum value (MXV) and minimum value (MNV), the upper limit (UL), the lower limit(LL) and A = *the number or range*.
High : $UL \leq X \leq MXV$
Middle : $LL \leq X < UL$
Low : $MNV \leq X < LL$
- Determine "R" (*Reproducibility Coefficient*) and Error

$$R = \frac{\sum \text{Nodes in Schallogram Ladder}}{\sum \text{Total Nodes}} \times 100\% \quad (1)$$

$$\text{Error} = 100\% - R \quad (2)$$

3. Schallogram

3.1 Schallogram analysis of surveillance function

Surveillance Function measures the extent to which the municipal website informs residents of city activities, provides news about current programs, and alerts residents to potential problems under the city's purview by inputting the information about this variables:

Table 1. Surveillance Variables

No	Surveillance Variables
1	Up to date news or stories about city
2	Information about city social service program
3	Information about schools/education program, services
4	Information about city housing program, services
5	Information about city transportation program, services
6	Information about city garbage collection, environment program, services
7	Information about city recreation, sports programs, services
8	Information about city health program, services

According to the result, *Kabupaten Karawang*, *Kabupaten Cirebon*, *Kota Cirebon*, *Kabupaten Indramayu*, and *Kabupaten Bekasi* are on the "lower" category in the provision of information surveillance function. Based on the "nodes" of the ladder, *Kabupaten Karawang*, *Kabupaten Cirebon* and *Kabupaten Indramayu* should improve the availability of variables point 1-5,7,8 on Table 1. While *Kabupaten Bekasi* and *Kota Cirebon* should improve the availability of variables point 1-8 on Table 1.

Table 2. Schallogram Ladder: Surveillance Function

NO	CITIES	HIGH (3)								MIDDLE(2)								LOW(1)								TOTAL	RANGE
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
1	Kota Bogor	X	X				X							X						X	X		X	X	X	24	H
2	Kota Bandung		X	X		X	X											X			X			X	X	23	H
3	Kabupaten Kuningan						X	X		X								X		X	X	X	X			18	M
4	Kabupaten Karawang													X				X	X	X	X	X	X	X	X	11	L
5	Kabupaten Cirebon													X				X	X	X	X	X	X	X	X	11	L
6	Kabupaten Indramayu													X				X	X	X	X	X	X	X	X	11	L
7	Kota Cimahi			X			X											X	X	X		X	X	X	X	11	L
8	Kabupaten Bandung													X				X	X	X	X	X	X	X	X	8	L
9	Kabupaten Bekasi																	X	X	X	X	X	X	X	X	8	L
10	Kabupaten Majalengka								X									X		X	X	X	X	X	X	8	L
11	Kabupaten Sumedang								X									X		X	X	X	X	X	X	8	L
12	Kabupaten Bandung Ba								X									X		X	X	X	X	X	X	8	L
13	Kota Bekasi																	X	X	X	X	X	X	X	X	8	L
14	Kota Cirebon																	X	X	X	X	X	X	X	X	8	L
15	Kota Depok																	X	X	X	X	X	X	X	X	8	L
16	Kabupaten Purwakarta																	X	X	X	X	X	X	X	X	8	L
17	Kota Depok																	X	X	X	X	X	X	X	X	8	L

3.2 Schallogram analysis of coordination function

Coordination Function measures the extent to which the website provides audiences with information or opportunities to contact city departments or officials or to participate in official business by attending public meetings by inputting the information about the variables:

Table 3. Coordination Variables

No	Coordination Variables
1	Provide information for contacting city departments
2	Solicits citizen initiatives to report problems online
3	Provides information for contacting mayor
4	Provides information for contacting city council reps
5	Provides information on where, when how to attend, speak at council's meetings

According to the result, *Kabupaten Cirebon* and *Kabupaten Indramayu* are on the “High” category in the provision of coordination function, but they need to improve the availability of variables point 2,3 and 5 on the Table 3. *Kota Cirebon* is on the “Middle” Category, but this city need to improve the provision of variables point 2-4 on the Table 3. Kabupaten Bekasi and *Kabupaten Karawang* are on the “Lower” Category, they need to improve the provision of variables 2-5 (Kab.Bekasi) and variables 1-5 (Kab.Karawang) variables on Table 3.

Table 4. Schallogram Ladder: Coordination Function

NO	CITIES	HIGH (3)					MIDDLE(2)					LOW(1)					TOTAL	RANGE
		5	4	3	2	1	5	4	3	2	1	5	4	3	2	1		
1	Kota Bogor	x	x		x	x								x			15	H
2	Kabupaten Bogor	x	x			x				x				x			15	H
3	Kota Depok		x	x		x						x			x		14	H
4	Kabupaten Cirebon		x			x						x		x	x		14	H
5	Kabupaten Indramayu		x			x						x		x	x		14	H
6	Kota Bandung			x		x						x	x		x		13	H
7	Kota Cirebon						x				x		x	x	x		10	M
8	Kota Cimahi									x	x	x	x	x	x		7	L
9	Kabupaten Bekasi										x	x	x	x	x		6	L
10	Kabupaten Kuningan		x									x		x	x	x	5	L
11	Kabupaten Majalengka					x						x	x	x	x		5	L
12	Kabupaten Bandung			x								x	x		x	x	5	L
13	Kota Bekasi					x						x	x	x	x		5	L
14	Kabupaten Purwakarta							x				x		x	x	x	5	L
15	Kabupaten Sumedang											x	x	x	x	x	5	L
16	Kabupaten Bandung Barat											x	x	x	x	x	5	L
17	Kabupaten Karawang											x	x	x	x	x	5	L

3.3 Schallogram analysis of socialization function

Provided residents, potential residents, and visitors with historical information about the city and its culture by inputting variables:

Table 5. Socialization Function

No	Socialization Variables
1	Statistics about city
2	Information about regional development
3	Information about spatial urban planning
4	Link to spatial and development planning department
5	Website's social media account
6	Website's link share

According to the result, *Kabupaten Cirebon* is on the "High" category in the provision of coordination function, but this city needs to improve the availability of variables 3-5 on the Table 5. *Kabupaten Bekasi*, *Kabupaten Indramayu*, *Kota Cirebon*, and *Kabupaten Karawang* are on the "Lower" category. They need to improve the provision of variable 1,3,4,5,6 (*Kab.Bekasi*), variables 3-5 (*Kab.Indamayu*), variables 1-5 (*Kota Cirebon*) and variables 1,2,3, and 5 (*Kab.Karawang*) on the Table 5.

Table 6. Schallogram Ladder: Socialization Function

NO	CITIES	LOW(1)						MIDDLE (2)						HIGH (3)						TOTAL	RANGE
		1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6		
1	Kabupaten Bandung Bar	x	x	x	x	x							x							6	L
2	Kota Cimahi	x	x	x	x	x													x	6	L
3	Kota Cirebon	x	x	x	x	x							x							6	L
4	Kabupaten Karawang	x	x	x		x											x		x	6	L
5	Kabupaten Bandung		x	x	x		x							x				x		7	L
6	Kabupaten Majalengka		x	x	x	x	x													7	L
7	Kabupaten Bekasi	x		x	x	x	x	x												8	L
8	Kabupaten Indramayu			x	x	x		x					x	x						8	L
9	Kabupaten Kuningan			x		x	x	x						x			x			8	L
10	Kota Depok			x	x	x		x						x					x	8	L
11	Kabupaten Purwakarta			x	x	x		x	x				x							8	L
12	Kota Bekasi			x	x	x		x						x					x	8	L
13	Kabupaten Sumedang			x	x	x		x	x										x	8	L
14	Kabupaten Cirebon			x	x	x		x					x	x						13	M
15	Kabupaten Bogor				x	x							x	x	x	x				17	H
16	Kota Bandung					x		x		x				x		x			x	18	H
17	Kota Bogor		x		x	x								x		x			x	18	H

3.4 Schallogram analysis of Entertainment Function

Entertainment Function reflects whether the municipal websites provided residents with entertainment via such venues as fun photos of community highlights or provided information about community entertainment/activities that would fulfill this function externally by inputting variables:

Table 7. Entertainment Variables

No	Entertainment Variables
1	Provides gallery/set of city photos and videos
2	Information about city recreation
3	Provides information about lodging in city for visitors

According to the result, *Kota Cirebon* is on “Middle” category but this city needs to improve the provision of variable 1-2 on the Table 7. *Kabupaten Bekasi*, *Kabupaten Karawang*, *Kabupaten Cirebon* and *Kabupaten Indramayu* are on the “Lower” category. They need to improve the provision of variable 2-3 (Kab.Bekasi), variables 1 and 3 (Kab.Karawang), variables 1-3 (Kab.Cirebon and Kab.Indramayu) on the Table 6.

3.5 Schallogram analysis of mass communication function

Mass Communication Function aims to know whether the municipal websites provided link to another mass communication channel by inputting variables:

Table 8. Mass Communication Variables

No	Mass Communication Variables
1	Links to local metro newspapers
2	Links to local television stations
3	Links to local radio stations
4	Links to local cable television systems
5	Links to community/non-metro newspapers

According to the result, *Kabupaten Cirebon* is on “Middle” category but this city needs to improve the provision of variables 1,3,5 on the Table 8. *Kabupaten Bekasi*, *Kabupaten Karawang*, *Kabupaten Cirebon* and *Kabupaten Indramayu* are on the “Lower” category. They need to improve the provision of variables 2,3,5 (*Kota Cirebon*), variables 1,2,3,5 (*Kab.Indramayu*, *Kab.Karawang* and *Kab.Bekasi*) on the Table 9.

Table 9. Schallogram Ladder: Mass Communication

NO	CITIES	HIGH (3)					MIDDLE (2)					LOW (1)					TOTAL	RANGE
		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5		
1	Kota Cimahi	x			x							x	x	x			15	H
2	Kota Bogor		x	x	x	x						x					13	H
3	Kota Bandung				x	x						x	x	x			12	H
4	Kabupaten Bandung					x	x					x	x	x			10	M
5	Kabupaten Cirebon					x	x	x	x	x	x	x	x				9	M
6	Kabupaten Majalengka						x					x	x	x	x		8	L
7	Kabupaten Bogor				x			x	x	x	x						7	L
8	Kota Cirebon	x						x				x	x	x	x		7	L
9	Kabupaten Purwakarta		x						x			x	x	x	x		7	L
10	Kabupaten Bandung Barat							x	x	x	x	x					7	L
11	Kabupaten Indramayu								x	x	x	x	x	x			7	L
12	Kabupaten Sumedang			x								x	x	x	x		5	L
13	Kota Depok			x								x	x	x	x		5	L
14	Kabupaten Karawang			x								x	x	x	x		5	L
15	Kota Bekasi			x								x	x	x	x		5	L

3.6 Schallogram analysis of local government function

Local Government describes the extent to which municipal websites provided information about elected officials, representation and election processes, government organization, formal lines of authority and offices, and links between officials and constituent by inputting variables:

Table 10. Local Government Variables

No	Local Government Variables
1	Provides information for contacting city mayor
2	Provides map and/or list of wards and city council reps
3	Provides information for contacting city council reps
4	Provides information on where, when, how to attend, speak at city council meetings
5	Provides information about Act and Law
6	Provides city council agenda
7	Provides information about city budget

According to the result, *Kabupaten Cirebon* is on “Middle” category but this city needs to improve the provision of variable 1,3,5 on the Table 10. *Kabupaten Bekasi*, *Kabupaten Karawang*, *Kabupaten Cirebon* and *Kabupaten Indramayu* are on the “Lower” category. They need to improve the provision

of variable 1-3 (Kab.Cirebon and Kab.Indramayu), variables 1,2,3,5 (Kab.Karawang), and variables 1-5 (Kab.Bekasi) on the Table 11.

Table 11. Schallogram Ladder: Local Government

NO	CITIES	LOW (1)							MIDDLE (2)							HIGH (3)							TOTAL	RANGE
		1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
17	Kabupaten Bekasi	x	x	x	x	x	x	x															7	L
16	Kota Cirebon	x	x		x	x	x	x		x													7	L
15	Kabupaten Indramayu	x	x		x	x	x	x		x													7	L
14	Kabupaten Bandung Barat	x	x		x	x	x			x					x								7	L
13	Kabupaten Cirebon	x	x		x		x	x		x								x					7	L
12	Kabupaten Sumedang	x	x		x		x	x			x						x						7	L
11	Kota Bekasi	x	x		x	x	x	x									x						7	L
10	Kota Cimahi	x	x		x	x	x										x				x		7	L
9	Kabupaten Karawang	x	x		x	x	x										x				x		7	L
8	Kabupaten Bandung		x	x	x	x	x	x															8	L
7	Kabupaten Majalengka		x	x	x		x	x	x									x					8	L
6	Kota Depok		x		x	x	x	x							x	x							8	L
5	Kabupaten Kuningan	x		x	x	x	x	x	x														8	L
4	Kabupaten Purwakarta	x			x	x	x	x		x							x						9	L
3	Kabupaten Bogor	x						x		x	x					x	x		x				16	M
2	Kota Bandung	x								x	x	x				x	x				x		17	H
1	Kota Bogor		x			x		x								x	x	x	x				21	H

3.7 Schallogram analysis of public service provider function

Public Service Provider indicates the extent to which municipal websites provided information about the traditional city services—from police and transportation to garbage collection, schools, and health—and solicited feedback about the delivery of such services to the public by inputting variables:

Table 12. Public Service Provider Variables

No	Public Service Provider Variables
1	Solicits citizen initiatives to report problems
2	Provides information about city garbage collection/environment, programs, services
3	Provides information about city transportation programs, services
4	Provides government's Apps
5	Provides information about city health programs, services
6	Provides information for contacting city council reps
7	Provides information about city housing programs, services
8	Provides information about school, education programs
9	Provides information about city social service programs
10	Provides information about city recreation/sports programs
11	Provides information about taxes

According to the result, all the coastal cities are on “Lower” category. They need to improve the provision of variables 1,2,3,4,6,7 (*Kabupaten Karawang*), variables 1,2,3,5,6,7,8,9 (*Kabupaten Bekasi*), variables 1,3,5,6,7,8,9 (*Kabupaten Cirebon*), variables 1,2-10 (*Kabupaten Indramayu*) and variables 1-10 (*Kota Cirebon*) on the Table 13.

Table 13. Schallogram Ladder: Public Service Provider

NO	CITIES	HIGH (3)											MIDDLE (2)											LOW (1)											TOTAL	RANGE	
		1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11			
1	Kota Bandung	X	X	X	X				X		X											X						X	X	X	X				33	H	
2	Kota Bekasi				X						X	X		X										X	X		X	X	X	X	X	X			30	H	
3	Kota Bogor								X	X	X		X	X								X		X	X		X	X							26	H	
4	Kabupaten Bogor										X	X										X		X	X	X	X	X	X	X	X	X			16	L	
5	Kota Depok							X			X	X										X		X	X	X	X	X	X	X	X				14	L	
6	Kabupaten Karawang					X			X	X												X		X	X	X	X	X	X				X		14	L	
7	Kabupaten Bekasi														X							X	X	X	X	X	X	X	X	X	X	X			13	L	
8	Kabupaten Cirebon				X						X	X										X		X	X	X	X	X	X	X	X	X			13	L	
9	Kabupaten Indramayu										X	X										X		X	X	X	X	X	X	X	X	X			13	L	
10	Kota Cimahi													X									X	X	X	X	X	X	X	X	X	X			12	L	
11	Kota Cirebon																						X	X	X	X	X	X	X	X	X	X	X		12	L	
12	Kabupaten Kuningan						X		X															X	X	X	X	X	X	X	X	X	X		11	L	
13	Kabupaten Majalengka										X													X	X	X	X	X	X	X	X	X	X		11	L	
14	Kabupaten Sumedang														X									X	X	X	X	X	X	X	X	X	X		11	L	
15	Kabupaten Bandung Bar																							X	X	X	X	X	X	X	X	X	X		11	L	
16	Kabupaten Purwakarta																						X		X	X	X	X	X	X	X	X	X		11	L	
17	Kabupaten Bandung																							X	X	X	X	X	X	X	X	X	X	X		11	L

3.8 Schallogram analysis of economic developer function

Economic Developer profiles whether municipal websites performed their economic roles by soliciting businesses and acting as an entrepreneur forming partnerships among and with private entities in addition to appealing to tourists and potential residents by inputting variables:

Table 14. Economic Developer Variables

No	Economic Developer Variables
1	Provides information about doing business with city
2	Provides online services/forms for business permits, licenses
3	Provides information/services for potential businesses, developers
4	Solicits investments in city, promotes city for development
5	Provides statistics about city
6	Provides information about lodging in city for visitors
7	Provides information about activities for tourists

According to the result, *Kabupaten Cirebon* is on “High” category but this city needs to improve the provision of variable 1,5,6,7 on the Table 14. *Kabupaten Bekasi*, *Kabupaten Karawang*, *Kota Cirebon* and *Kabupaten Indramayu* are on the “Lower” category. They need to improve the provision of variable 1-5 (*Kota Cirebon*), variables 1-4,6 (*Kab.Karawang*), and variables 1-7 (*Kab.Bekasi* and *Kab.Indramayu*) on the Table 15.

Table 15. Schallogram Ladder: Economic Developer

NO	CITIES	HIGH (3)							MIDDLE (2)							LOW (1)							TOTAL	RANGE
		1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
1	Kota Bandung	x	x				x						x					x	x			x	21	H
2	Kabupaten Cirebon		x	x	x											x				x	x	x	19	H
3	Kota Bogor							x				x				x	x	x		x	x		15	M
4	Kabupaten Kuningan					x		x						x		x	x	x	x				9	L
5	Kota Cirebon													x		x	x	x	x	x		x	9	L
6	Kabupaten Karawang					x		x								x	x	x	x		x		7	L
7	Kabupaten Bandung			x												x	x		x	x	x	x	7	L
8	Kota Depok								x							x		x	x	x	x	x	7	L
9	Kabupaten Bekasi															x	x	x	x	x	x	x	7	L
10	Kabupaten Bogor															x	x	x	x	x	x	x	7	L
11	Kabupaten Indramayu															x	x	x	x	x	x	x	7	L
12	Kabupaten Majalengka															x	x	x	x	x	x	x	7	L
13	Kabupaten Sumedang															x	x	x	x	x	x	x	7	L
14	Kabupaten Bandung Barat															x	x	x	x	x	x	x	7	L
15	Kota Bekasi															x	x	x	x	x	x	x	7	L
16	Kota Cimahi															x	x	x	x	x	x	x	7	L
17	Kabupaten Purwakarta															x	x	x	x	x	x	x	7	L

3.9 Schallogram Analysis of Community Identifier

Community Identifier pinpoints the extent to which municipal websites provided their residents information that would facilitate cultivation of community identity by inputting the web visitor number from *www.statshow.com*.

According to the result, all the coastal cities are on “Lower” category. *Kab.Cirebon* is on 6th place with 215,715 visitors, *Kab.Indramayu* is on 10th place with 136,145 visitors, *Kab.Bekasi* is on 12th place with 93,440 visitors, *Kab.Karawang* is on 13th place with 93,440 visitors and *Kota Cirebon* is on 15th place with 70,650 visitors. The website visitor's data collected for this research was the data during 2015.

Table 16. Municipal Website Visitor

NO	CITIES	WEB VISITOR	RANGE	NO	CITIES	WEB VISITOR	RANGE
1	Kota Bandung	1,533,730	T	10	Kabupaten Indramayu	136,145	R
2	Kota Depok	688,390	S	11	Kabupaten Sumedang	135,050	R
3	Kota Bogor	342,735	R	12	Kabupaten Bekasi	109,865	R
4	Kota Bekasi	316,820	R	13	Kabupaten Karawang	93,440	R
5	Kabupaten Bogor	275,210	R	14	Kabupaten Bandung Barat	73,365	R
6	Kabupaten Cirebon	215,715	R	15	Kota Cirebon	70,650	R
7	Kota Cimahi	204,765	R	16	Kabupaten Majalengka	70,445	R
8	Kabupaten Bandung	172,280	R	17	Kabupaten Kuningan	54,020	R
9	Kabupaten Purwakarta	155,490	R				

3.10 Schallogram Analysis of Community Mobilizer Function

Community Mobilizer depicts whether municipal websites exhorted residents to get involved and to assert an impact on city government and development, in addition to whether they provided information about neighborhood organizations and how to activate citizen participation by inputting variables:

Table 17. Community Mobilizer Variables

No	Community Mobilizer Variables
1	Provides information on where, when, how to attend, speak at city council meetings
2	Provides information about community planning programs
3	Provides list of individual neighborhood organizations
4	Solicits citizen initiatives to report problems
5	Number of neighborhood websites
6	Website's social media account
7	Provides information about getting a job with city/career center

According to the result, all the coastal cities are on “Lower” category. They need to improve the provision of variables 1-5 (*Kab.Cirebon*, *Kab.Inramayu*, *Kota Cirebon*, and *Kab.Bekasi*), and variables 1,2,3,5,7,8 (*Kab.Karawang*) on the Table 18.

Table 18. Schallogram Ladder: Community Mobilizer

NO	CITIES	HIGH (3)								MIDDLE (2)								LOW (1)								TOTAL	RANGE
		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
1	Kota Bogor	X			X	X	X	X										X	X							24	H
2	Kota Bandung		X				X	X	X						X			X	X	X						23	H
3	Kota Bekasi					X	X	X							X	X	X	X	X	X						19	H
4	Kabupaten Bogor	X					X	X					X	X				X	X	X						16	M
5	Kota Cimahi					X	X					X			X	X	X	X	X	X						12	L
6	Kabupaten Cirebon					X	X					X			X	X	X	X	X	X						11	L
7	Kabupaten Indramayu					X	X					X			X	X	X	X	X	X						11	L
8	Kota Cirebon					X						X			X	X	X	X	X	X						11	L
9	Kabupaten Bekasi														X	X	X	X	X	X	X	X				9	L
10	Kabupaten Bandung																	X	X	X	X	X	X	X		8	L
11	Kota Depok					X	X											X	X	X	X	X	X			8	L
12	Kabupaten Kuningan		X												X	X	X	X	X	X	X	X				8	L
13	Kabupaten Majalengka						X								X	X	X	X	X	X	X					8	L
14	Kabupaten Sumedang					X									X	X	X	X	X	X	X	X				8	L
15	Kabupaten Karawang					X						X			X	X	X	X	X	X	X	X				8	L
16	Kabupaten Purwakarta											X			X	X	X	X	X	X	X	X				8	L
17	Kabupaten Bandung Barat											X			X	X	X	X	X	X	X	X				8	L

3.11 Hierarchy Analysis on Public Information Services per Website Function

Hierarchy analysis aims to determine the hierarchy of public information services among cities in metropolitan areas. It also emphasizes to compare the coastal cities rank to another city. The data input for this analysis derive from all “range” resulted in schallogram ladder per website function. This “range” will be analyzed further on the combined schallogram analysis.

Table 19. The result of “range” from all schallogram ladder per website function

NO	CITIES	Website Function									
		1	2	3	4	5	6	7	8	9	10
1	Kabupaten Bandung	L	L	L	L	M	L	L	L	L	L
2	Kabupaten Bekasi	L	L	L	L	L	L	L	L	L	L
3	Kabupaten Bogor	L	L	M	L	L	M	L	L	H	H
4	Kabupaten Cirebon	L	L	L	M	L	L	L	L	H	M
5	Kabupaten Indramayu	L	L	L	L	L	L	L	L	H	L
6	Kabupaten Kuningan	L	L	L	H	L	L	L	L	L	L
7	Kabupaten Majalengka	L	L	L	L	L	L	L	L	L	L
8	Kabupaten Sumedang	L	L	L	L	L	L	L	L	L	L
9	Kabupaten Bandung Bar	L	L	L	L	L	L	L	L	L	L
10	Kota Bandung	H	H	H	H	H	H	H	H	H	H
11	Kota Bekasi	L	L	H	L	L	L	H	M	L	L
12	Kota Bogor	H	L	H	L	H	H	H	L	H	H
13	Kota Cimahi	L	L	L	L	H	L	L	L	L	L
14	Kota Cirebon	L	L	L	L	L	L	L	H	M	L
15	Kota Depok	L	M	L	L	L	L	L	L	H	L
16	Kabupaten Karawang	M	L	L	L	L	L	L	L	L	L
17	Kabupaten Purwakarta	L	L	L	L	L	L	L	L	L	L

These all variables of website function will be analyzed further by schallogram analysis. The result of the analysis will give us information about the rank among cities in the provision of public information, determine how coastal areas rank influence on their development and provide information about what variables need to be improved. So that it can be used as inputs, advice and recommendation to the government in order to improve publication of public information services on the municipal website of each city.

Table 20. All Website Function Variables

No	Website Function Variables
1	Surveillance function
2	Entertainment function
3	Mass Communication function
4	Local Government function
5	Public Service Provider function
6	Economic Developer function
7	Community Identifier function
8	Community Mobilizer function
9	Coordination function
10	Socialization function

Hierarchy of public information service is important to know so that we can know how the distribution and the availability of public information at each city. It also supports the implementation of good governance, especially in terms of public disclosure, society should be given the easiest to consume public information.

According to the analysis, cities that has the highest public information service are Bandung City followed by Bogor City. Even it has a “high” category on providing public information, Bogor City still has shortcomings which need to be improved such as entertainment function, local government function, and community mobilizer function.

According to the result, *Kabupaten Cirebon* is on 4th rank “Hierarchy 2” on providing public information. But although it’s on 4th rank, this city need to improve the information availability of all website function except local government function, coordination function and socialization function which already has a good performance. Among all cities located in Cirebon Metropolitan Area, *Kabupaten Cirebon* is the best in the provision of public information. According to West Java Spatial Plan 2009-2029 (*RTRW Provinsi Jawa Barat*), *Kabupaten Cirebon* is directed to be a part of National Activity Center (*PKN/Pusat Kegiatan Nasional*) with integrated facilities and infrastructure, and directs the main activity in industrial sector, *marine business* and agriculture and mineral mining activities. In terms of public information availability, *Kabupaten Cirebon* needs support its role in supporting the PKN region in Cirebon Metropolitan Area and development of West Java.

Tabel 21. Hierarchy Analysis on Public Information Services per Website Function

NO	CITIES	LOW (1)										MIDDLE (2)										HIGH (3)										TOTAL	RANGE	RANK
		10	9	8	7	6	5	4	3	2	1	10	9	8	7	6	5	4	3	2	1	10	9	8	7	6	5	4	3	2	1			
17	Kabupaten Bekasi	X	X	X	X	X	X	X	X	X	X																				10	L	10	
16	Kabupaten Purwakarta	X	X	X	X	X	X	X	X	X	X																				10	L		
15	Kabupaten Majalengka	X	X	X	X	X	X	X	X	X	X																				10	L		
14	Kabupaten Sumedang	X	X	X	X	X	X	X	X	X	X																				10	L		
13	Kabupaten Bandung Barat	X	X	X	X	X	X	X	X	X	X																				10	L		
12	Kabupaten Karawang	X	X	X	X	X	X	X	X	X									X												10	L	9	
11	Kabupaten Bandung	X	X	X	X	X		X	X	X	X						X														10	L		
10	Kota Cimahi	X	X	X	X	X		X	X	X	X																X				10	L		
9	Kabupaten Indramayu	X	X	X	X	X	X	X	X	X	X											X					X				10	L	8	
8	Kabupaten Kuningan	X	X	X	X	X	X	X	X	X																	X				10	L		
7	Kota Depok	X		X	X	X	X	X	X	X									X			X									10	L	7	
6	Kota Cirebon	X			X	X	X	X	X	X													X								11	L	6	
5	Kota Bekasi	X	X			X	X	X	X	X			X										X			X			X		12	L	5	
4	Kabupaten Cirebon				X	X	X	X	X	X	X							X				X									17	M	4	
3	Kabupaten Bogor			X	X		X	X		X	X				X		X				X	X									20	M	3	
2	Kota Bogor				X				X	X												X	X		X	X	X	X	X	X	30	H	2	
1	Kota Bandung																					X	X	X	X	X	X	X	X	X	30	H	1	

Kota Cirebon is on 6th rank or “Lower” category than *Kabupaten Cirebon*. This city needs to improve the provision of information on all website function except community mobilizer function and coordination function which already has a good performance. According to West Java Spatial Plan 2009-2029 (*RTRW Provinsi Jawa Barat*), *Kota Cirebon* is directed as the core city of National Activity Center (*PKN/Pusat Kegiatan Nasional*) in West Java with facilities and infrastructure that is integrated with the sphere of influence (hinterland), as well as being the main node services and trade and industry area to the east, as well as for cultural and religious tourism activities. With all the role embedded on Cirebon City, then public information service should be improved in order to support the spreading of information related with its roles.

Kabupaten Indramayu is on 9th rank or “Lower” category in providing public information on municipal website. This city needs to improve the information availability of all website function except coordination function which already has good performance. According to West Java Spatial Plan 2009-2029 (*RTRW Provinsi Jawa Barat*), *Kabupaten Indramayu* directed as the *center of region activity* (PKW/Pusat Kegiatan Wilayah) in West Java with integrated facilities and infrastructure and the main activities of sustainable wetland agriculture, fisheries and *marine business*, industry, mining (oil, gas, agribusiness) and agro-industries. With all the role embedded on *Kabupaten Indramayu*, then public information service should be improved in order to support the spreading of information related with these roles.

Kabupaten Karawang is on 12th rank or “Lower” category in providing public information on municipal website. This city needs to improve all the information availability of all website function except surveillance function which already has a good performance. According to West Java Spatial Plan 2009-2029 (*RTRW Provinsi Jawa Barat*), *Kabupaten Karawang* is directed as a supported node of PKN (National Activity Center) development of Bodebek (Bogor, Depok and Bekasi) urban area for sustainable agricultural wetland activities, *marine business*, non-polluting industry and non-

extractive which does not interfere with irrigation and water supply as well as agro-industrial activities. In terms of public information availability, *Kabupaten Karawang* needs support its role in supporting the node PKN development of Bodebek and its own role in developing West Java.

Kabupaten Bekasi is on the last rank, 13th on “lower” category in providing public information on municipal website. This city needs to improve all website function because it shows a worse performance than other cities in Metropolitan West Java. According to West Java Spatial Plan 2009-2029 (*RTRW Provinsi Jawa Barat*), *Kabupaten Bekasi* is directed to be a buffer zone in the National Activity Center (*PKN/Pusat Kegiatan Nasional*) center system of Jabodetabek (Jakarta, Bogor, Depok, Tangerang, Bekasi) urban areas. With all the role embedded on *Kabupaten Bekasi*, then public information service should be improved in order to support the spreading of information related with its roles.

4. Conclusion

The importance of delivering coastal information on the municipal website to the society needs to be highlighted. The provision of public information on municipal website for citizen by the coastal city government is very important. It can create a critical, educated, well informed society which lead to the active participation of society in development of coastal area. In addition, information service via municipal website shows the competitiveness of the city in terms of the utilization of the ICT in stimulating regional development in information age.

Considering as maritime country, Indonesia needs to highlight its marine role in order to plan coastal cities. According to the West Java Spatial Plan 2009-2029 the coastal territories play an important role in the development of West Java. The north coastal territories which metropolitan cities are located, has several development directions, for instance the development of tourism in coastal regions to develop the tourism area of the north coast with development priority of Cirebon coastal cultural tourism zone, development of residential area of north coastal area that include basic facilities and infrastructure which located outside the coastal damage and disaster-prone coastal area, the development of marine business district coastal area, marine and small islands, and provincial strategic area PANTURA (*KSP/Kawasan Strategis Provinsi Coastal PANTURA*).

The availability of public information on the municipal websites metropolitan West Java shows the openness of the government in disseminating public information to the society. In delivering the public information on municipal website, each coastal city needs to adjust the communication channel with the characteristics of its own society. Based on hierarchy analysis of public information services, the information availability of coastal cities shows a poor performance and needs improvement in all website function aspects. It means, the information availability has not been able to support the roles that embedded in each city yet and has not been able to stimulating and encouraging the development of West Java in terms of utilizations of ICT in developing West Java through public information on municipal website.

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