CHAPTER V

RESULT AND DISCUSSIONS

Chapter V presents the results and discussion from the data gathered from a 98 sample population of the official admin of social media in Surabaya's government city. The data is analyzed quantitatively with using a PLS application (smartPLS 3) and showing the patterns in social media especially on facebook using gephi (version 0.9.2).

This chapter is also divided into fourth parts, and each section has subsections to provide a clear and cohesive presentation of results. For the first part is present the descriptive statistics, followed by the analysis of the structural model. The second part discusses the results of the evaluation of the outer model to ensure that the indicators used are all valid and reliable. The third part shows the results of the analysis of the validity of the structural model based on R2, Q2, VIF, and Model Fit Analysis. The last part is to describe the regression analysis where a discussion on the previous performance of the network is discussed before the actual assessment of the hypotheses.

5.1 Description of Respondents Profile

The general description of respondents in this study is included gender, institution, and the most used social media. For a detailed description of each respondent's profile as follows.

1. Gender

    The description of the characteristic of respondents based on gender is presented in figure of 5.1.

**Figure 5.1 Characteristic of Respondents by Gender**
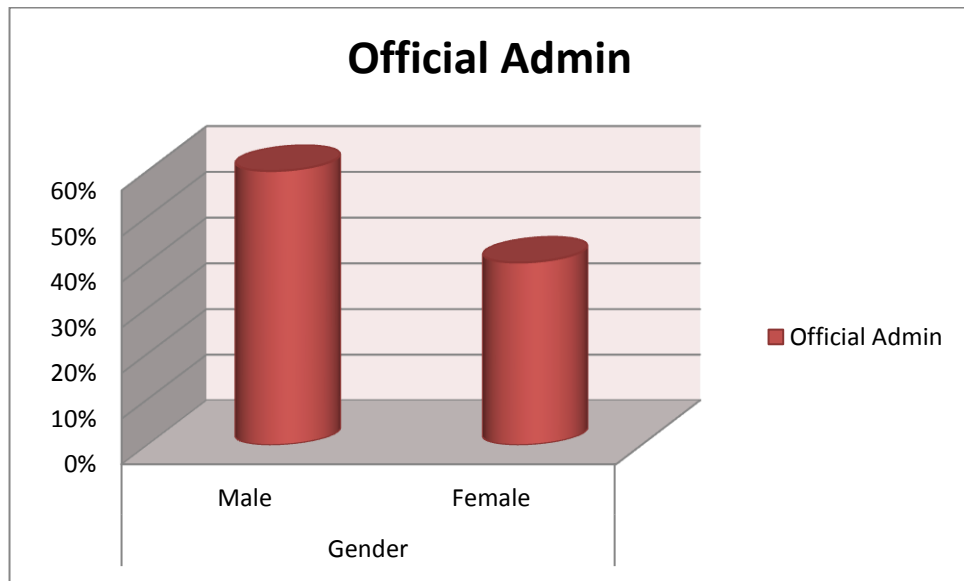
Source: The data is compiled from primary data, 2018

Graph 5.1 shows that most of the respondents were male is 60% from 59 people, and the remaining 40% were female are 39 people. It can be concluded that most of the study respondents were male from the 89 respondent official admins.

1. Education

As head section of public information mention above that education level is the one manner to increased a better performance of the employees itself in order for increasing a better quality of the government itself especially in Social media as the one tools to access a public information between government and citizens.

Figure 5.2 Characteristic of Respondents by Education
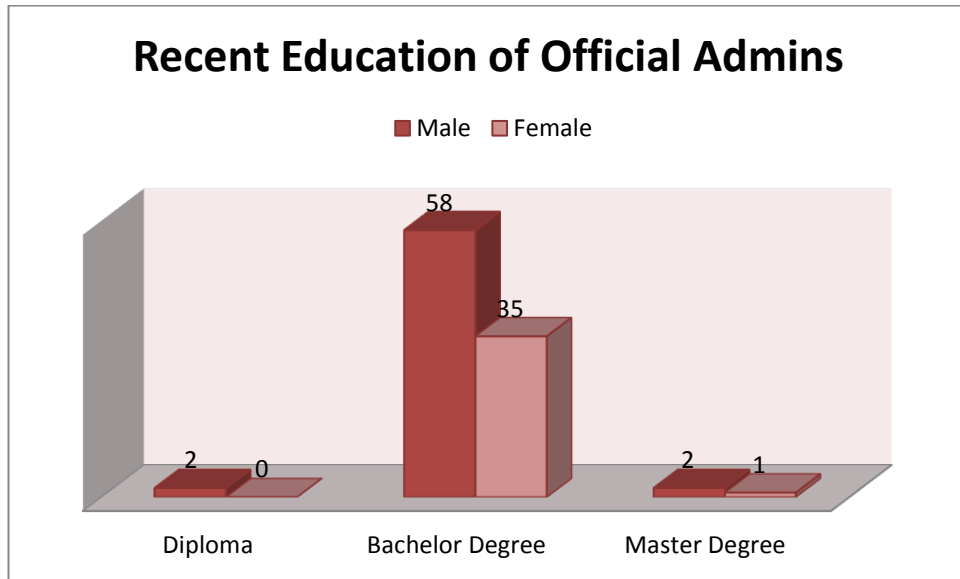
Source: The data is compiled from primary data, 2018

In table below is the procentation of education level of the official admins of social media in each department of surabaya's government city.

Tabel 5.1 The Procentation Of Education Level Of The Official Admins Of Social Media

No	Educational Level	Male	Female	Total/people	Precentation
1	Diploma	2	0	2	2%
2	Bachelor Degree	55	37	92	95%
3	Master Degree	2	2	4	3%
	TOTAL	59	39	98	100%

Source: based on result of research questioners, 2018

In the table above show that the level of education owned by the everage employees is bachelor degree around 95% and the table show that male official admins is 55 employees more than female official admins is 37 employees. The

table also show that the diploma level is low just around 2% is 2 employees and for master level around 3% is 4 employees. The master level is not common yet as the official admins in each department of surabaya's government city.

2. Institutions

The decription of the characteristic of respondents based on institution is presented in figure 5.3.

Figure 5.3 Characteristic of Respondents by Institutions
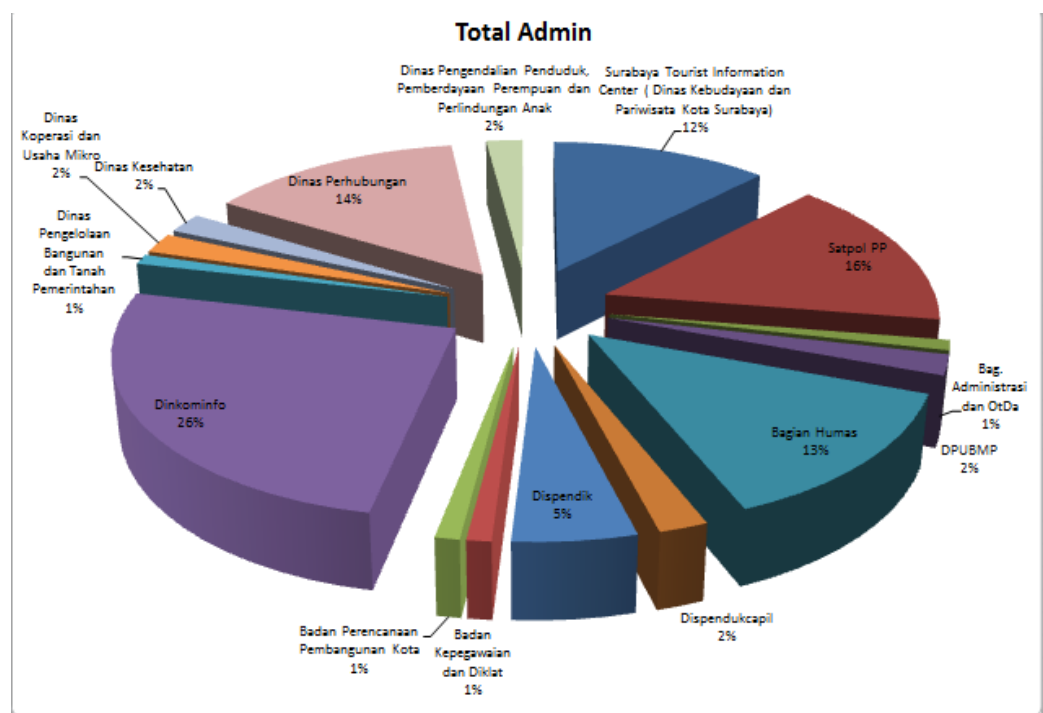
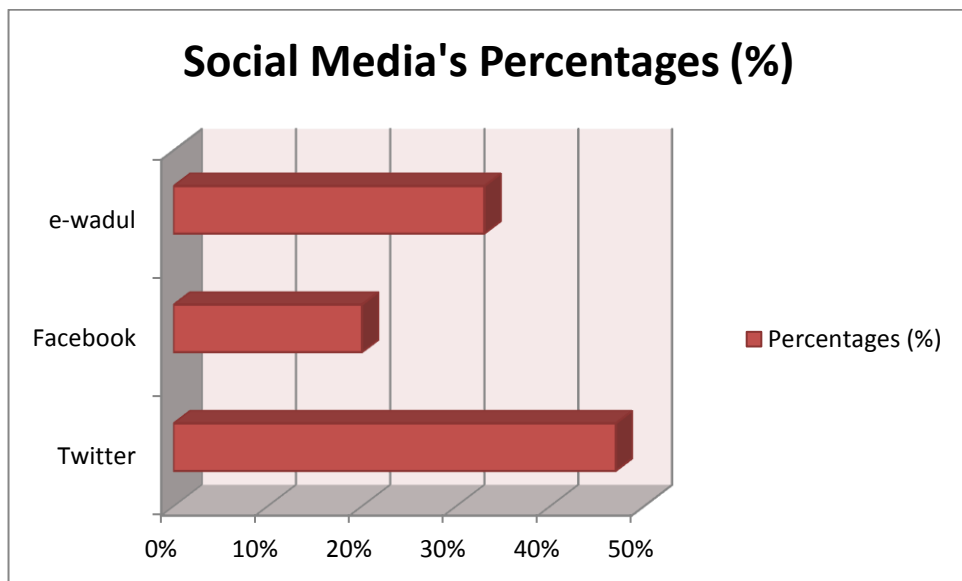Source: The data is compiled from primary data, 2018

Figure 5.3 is showed that Department of Communication and Information (*dinkominfo*) occupies the first position with the number of official admins were 26% from 25 official admin. In the second position occupied by Municipal Police (*Satpol PP*) as much as 16% from 15 official admin. In the third position is the department of transportation

(*Dinas Perhubungan)* were 14% of 14 official admins. The fourth position is the Public Relation Department (*Bagian Humas)* were 13% of 13 official admins. Also, the top fiveth posistion is tourism Service (*Dinas Pariwisata)* were 12% for 12 official admins. Through the confirmation for tenth other institutions beside top fiveth above are official admins have not a significant role in the process of disseminating information through social media and only receive information in social media.

3. The most used social media in each departments

   The decription of the characteristic of respondents based on social media mostly used is presented in figure 5.4.

Figure 5.4 Social Media widely Most Used

Source : The data is compiled from primary data, 2018

   Based on the social media used by the Surabaya's government city, Twitter is the first social media that is most often used by the government in disseminating information to the citizen and receiving responses from

the citizen were 47%. The second one is e-wadul were 33%, mostly for the department that do not used Twitter and Facebook is also used e-wadul. E-Wadul (electronic- *wadah pengaduan dan laporan warga kota surabaya)*is a form for the citizens for giving a complaints and notification informations to the Surabaya's government city. The last one the mostly used social media is Facebook were 20%.

5.2 The Outer Model : Validity and Reliability of the Indicators

The analysis of the outer model ensures that the model with its variables and indicators are worthy to be measured considering that these are valid and reliable. Thus, analysis of outer model measures constructs validity utilizing convergent validity and discriminant validity as its indicators among others.

Table 5.2 Discriminant Validity – Heterotrait- Monotrait Ratio of

Correlations (HTMT)

	Enacted Social Media	Human Resource	Institutional Arrangement	Institutional Coordination Form	Management	Objective Information Technology	Output	Task
Enacted Social Media								
Human Resource	0,377							
Intitutional Arrangement	0,710	0,274						
Institutional Coordination Form	0,860	0,407	0,601					
Management	0,892	0,704	0,808	0,880				
Objective Information Technology	0,718	0,565	0,593	0,656	0,719			
Output	0,388	0,235	0,346	0,467	0,486	0,380		
Task	0.389	0,762	0,245	0,340	0,574	0,378	0,153	

Source : primary data of this research (Kasiwi, 2018)

As shown in Table 5.2, the highest HTMT value among the variables is 0,153. Hence, it is lower than the established 0,89 value. Moreover, the same findings hold for HTMT inference criterion which was defined by running the bootstrapping routine. The bootstrapping routine showed the values of the variables under the confidence interval and confidence bias interval corrected. All

the values are significantly different from 1. Therefore, dicriminant validity is established for outer model utilized in this study.

The value for both reliability and validity test in Table 5.3 are all acceptable. Condisering that this study is exploratory in nature, the values lower than 0.70 under the indicator reliability is deemed valid and reliable. Furthermore, the values on Cronbach's Alpha are all greater than 0,60 which strengthens the validity and reliability of the variables. Sinificantly, to increase the values of the outer loading and Average Variance Extracted (AVE), indicators with lower scores were deleted

Table 5.3 Factor Analysis

Latent Variable	Indicators	Outer Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Task	1. Type of Task 2. Interactions with the online community 3. Openness 4. Office hour 5. Confidential information	0.899 0,725 0,764 0,818 0,917	0,888	0,916	0,686
Human Resource	1. Number of employees 2. Official admins 3. Ability 4. Specifically of admin	0,708 0,744 0,845 0,690	0,743	0,836	0,561
Management	1. Saving cost 2. Coordination 3. Integrated system	0,713 0,804 0,885	0,724	0,845	0,646
Objective Information Technology	1. The system operation 2. Hardware composition 3. Software integratied 4. Abiity of the user	0,794 0,797 0,618	0,752	0,779	0,569

		0,792			
Institutional Coordination Form	1. Trusting employee 2. Knowledge ability of IT 3. Integrated System 4. Platform accessibility	0,876 0,933 0,739 0,813	0,865	0,907	0,712
Institutional Arrangement	1. Government Form, culture and Socio Structure	1,000	1,000	1,000	1,000
Enacted Social Media	1. Efficiency value 2. User generated 3. Information system	0,776 0,856 0,854	0,773	0,869	0,688
Output	1. Performance of Public Organization	1,000	1,000	1,000	1,000

Source: data primary of research, 2018

To strengthen the arguments built in table 5.3. Based on the results of the test data using Cronbach's Alpha and the reliability value shown also the influence of each variable and obtain a valid reliability value. Table 5.3 show that eighth variables has reliable because the score for each variable more than 0,7.

5.3 The Inner Model : R Square, Q2, VIF, and F2

Table 5.4 Assessment of the Structural Model

Endogenous Variables	R Square	Predictive Relevance (Q2)	Collinearity Statistics(VIF)
Task	0,34	0,0	1,000
Human Resource	0,46	0,00	1,000
Management	0,40	0,00	1,000
Objective Information Technology	0,31	0,15	1,000
Institution	0,14	0,08	1,000

|			
Coordination Form			
Institution Arrangement	0,49	0,46	1,000
Enacted Social Media	0,61	0,38	1,000
Output	0,12	0,02	1,000

Before regression analysis, the structural model of this research is assessed using the values of R2, Q2 and Collinearity Statistics (VIF) to ensure further that the structural model is valid. Primarily, the value of R2 ranges between 0 and 1, the higher level, the higher predictive accuracy. According to (Henseler, 2010) R2 value have an indicate range which are, a range of 0.33-0.67 indicated a moderated effect, R2 between 0,19- 0,33 indicate low effect, while the R2 value below 0,19 considered unacceptable (the exogenous variable unable to explain the endogenous dependent variable). While the Q2 value of greater than zero for a particular reflective endogenous latent variable indicates the path model's predictive relevance for a specific dependent construct (Hair, Ringle, & Sarstedt, 2011). Prediction relevance (Q square) or known as Stone-Geisser's. This test was conducted to determine the predictive capability with the blindfolding procedure. If the value obtained is 0.02 (small), 0.15 (medium) and 0.35 (large). Only can be done for endogenous constructs with reflective indicators.

Moreover, multicollinearity is a problem that occurs with regression analysis when there is a high correlation of at least one independent variable with a combination of the other independent variables. In multiple regression, the variance inflation factor (VIF) is used as an indicator of multicollinearity. Hence,

the ideal value of VIF is 1.000 while a value less than 6 or 10 are acceptable by under favorable conditions. As revealed in Table 5.4, the structural model has low pre predictive accuracy based on the values of R2 and Q2. Further, the R2 values of the institutional coordination form and output are considered unacceptable which suggests that the independent variable is unable to explain the endogenous dependent variables.

Regression models with low R-squared values can be perfectly reasonable, models for several reasons. Therefore, (high or low) R-squared, is not sufficient by itself (Walker, Jackson, & Frost, 2017). Hence, despite the low predictive capacity of the structural model, essential conclusions about the relationships between the variables can still be derived from the statistically significant predictors.

Figure 5.5 The structural model showing the corresponding p-value
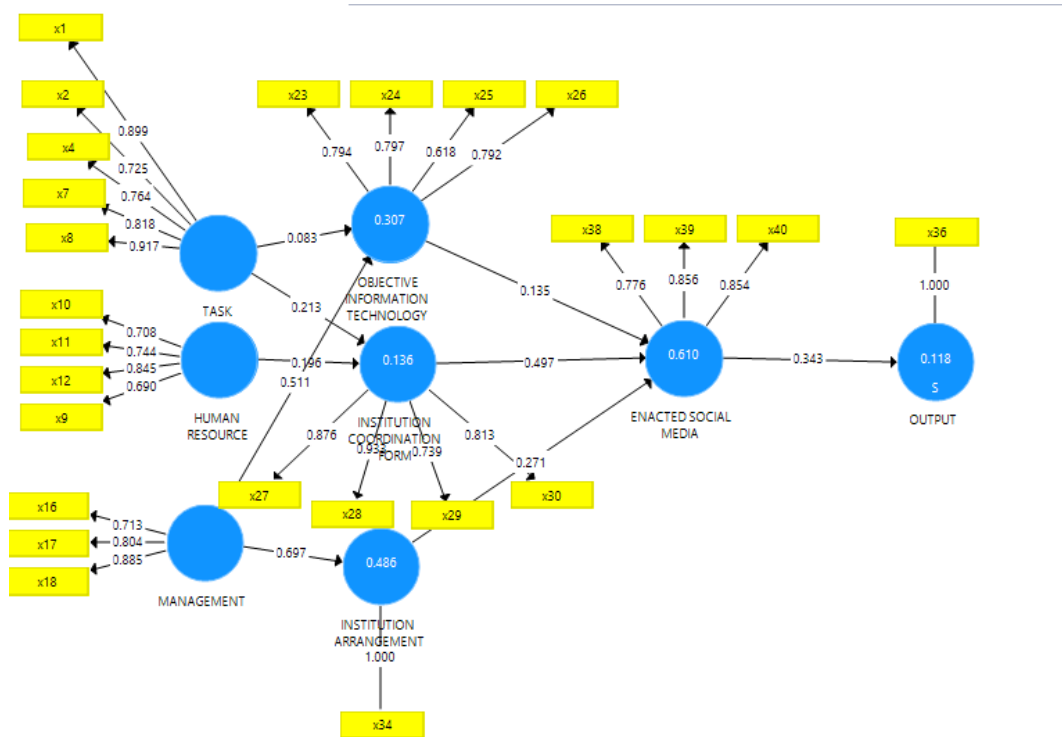
On the other hand, despite the low predictive capacity, the structural model is deemed fit for this study based on the result of the Model Fit Analysis. Model Fit Analisis is utilized to examine if the model fits the measurements of the constructs used in this study. With partial least squares (PLS), the model fits analysis for this study considers some of the indicators, which are: SRMR, d_ULS, d_G and NFI. Table 5.5 showing the result of the exact model fit test.

Tabel 5.5 Model Fit Analysis

Indicators	Suggested Value	Actual Value	Assessment
SRMR	< .10 or .08	0.012	The model is fit
d_ULS	>.05	6.50	The model is fit
d_G	>.05	4.53	The model is fit
NFI	Less than or closer to 1	0,42	The model is fit

The result of SRMR is 0,012 which is less than 0,10 or 0,08 and implies that the model is fit. Moreover, the results of exact model fit tests (d_ULS and d_G) are 6.50 and 4.53 respectively. Lastly, the value for NFI is 0,420 which is less than 1 and therefore implies a better fit for the model. By these tests, the structural model in Figure 5.5 is deemed fit for this study.

5.4 Hypotheses Testing : Regression Analysis

For providing a more explicit analysis of the results generated from the PLS Software, tables and discussion of the analysis are presented in the succeeding paragraphs. Table 5.6 below shows the hypotheses test results.

Table 5.6 Hypothesis Relationship

No	Hypothesis Relationship	Effect size (f2) > 0,02	P value of path coefficient < 0,05	Assessment of Hypothesis
H1	Task -> Objective Information Technologies	0.021	0.00	Accepted
H2	Task -> Institutional Form	0.021	0.03	Accepted
H3	Human Resources -> Institutional Form	0.030	0.03	Accepted
H4	Management -> Objective Information Technologies	0,764	0.00	Accepted
H5	Management -> Institutional Arrangement	0.960	0.00	Accepted
H6	Objective Information Technologies -> Enacted Social Media	0.031	0.00	Accepted
H7	Institutional Form -> Social Media	0,104	0.00	Accepted
H8	Institutional Arrangement -> Social Media	0,360	0.38	Rejected
H9	Social Media -> Output	0,017	0,33	Rejected

The hypothesis relationships are indicated by standardized regression weights/path coefficients which should be significant (p-value) at a level of 0,05 (Henseler et al., 2009). Concerning the table above, the seventh of the ninth hypotheses were supported by the data and the findings of the research.

As shown in Table 5.2 the highest HTMT value among the variables is 0,153. The HTMT Value is the one point to guide how to indicate the acceptance of the hypothesis. Based on the data attached to table 5.6 and figure 5.5 it is known that variable crowdsourcing includes task, human resource, and

management that has a relationship to the variable fountain which provides for objective IT, institutional coordination form and institutional arrangement. Both of these variables have an influence and involvement on the use of social media carried out by the government of the city of Surabaya which is used to obtain information and interact with the public, but it does not have patent rights in the use of that information in a policy. A policy is not carried out using social media but obtains additional details through social media. it is proven in table 5.6 and figure 5.5 where all variables are related and related to social media but do not have a significant effect on the output variable

In brief, the results of the study revealed that only the tenth hypothesis are supported which are Hypothesis1,2,3,4,5,6, and 7 are accepted. In the Crowdsourcing Variable have Task, Human Resources, and Management. The three of the variable of crowdsourcing is affected with the objective Information technologies and Institutional Form. In the result above, we can see that the institutional arrangement is not concerned with the information that comes from social media, we also see in the output. The output of the instrument is not accepted because as the confirmation, the production of crowdsourcing in social media is not available to be a decision, just for the gathering data to make some decision in conditional.

5.3 Discussion

Social media is the one related concepts of Web 2.0, user-generated content and consumer generated media. Social media builds upon different technologies including blogs, web pages, networking sites, and digital forums
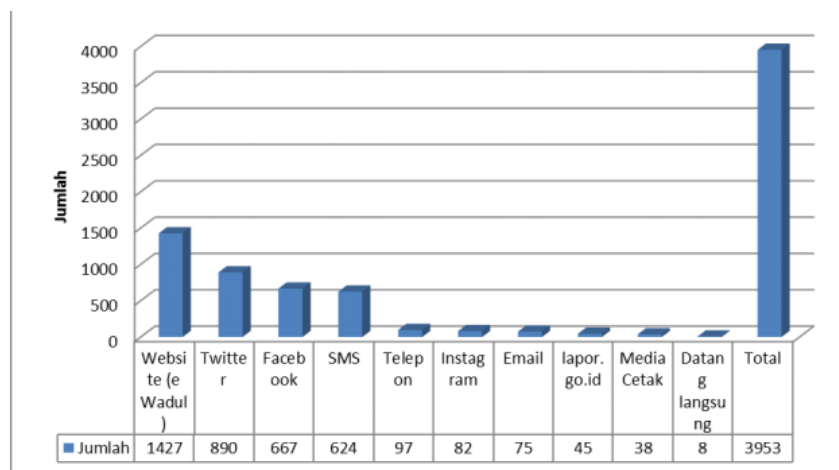
among others to allow interaction and communication between users. Social media is a group based on internet applications that build on the ideological and technological foundation of Web 2.0 as mentioned before in the first line of this paragraph (Haelein, 2010). Social media has several building blocks with implications on a function which are (Kietzman, Hermkens, & McCarthy, 2011) :

a.   Identify : the implications of the Data privacy controls and tools for user self promotion.

b.   Conversation : the communication for each form communities.

c.   Sharing : the extent to which users exchange, distribute and receive content which is content management system and social graph

d.   Presence : the extent to which users know if others are available. Its seem like creating and managing the reality, intimacy and immediacy of the context.

e.   Relationships : the extent to which users relate to each other. Managing the structural and flow properties in network of relationships.

f.   Reputation : the extent to which users know the social standing of others and content. Reputation in order to monitoring the strength, passion, sentiment and reach of users and brands

g.   Groups : the extent to which users are ordered or form communities. Groups membership will running the rules and protocols.

5.3.1 Crowdsourcing is adopted for social media in local government

Social media can also be summarized with big data and crowdsourcing. The existing of crowdsourcing in social media is the process of getting information with a big data in digital. In some cases, crowdsourcing is used for the institution to filtering the data in negative information and positive information to get good advise or input from the citizens. Since 2014, Surabaya has made an effort to filter information through social media every month and also carried out precipitation. The dissemination of information evidence this through the Department of Communication and Information (dinkominfo) website related to the analysis of information obtained through social media and classified based on the type of data, associated with the institutions, related social media and also the amount received from crowdsourcing. The following is an example of information analysis through social media and other media owned by the Surabaya city government in the year 2017.

Figure 5.6 Media User in Surabaya's Government

	Websi te (e Wadul)	Twitte r	Faceb ook	SMS	Telep on	Instag ram	Email	lapor. go.id	Media Cetak	Datan g langsu ng	Total
Jumlah	1427	890	667	624	97	82	75	45	38	8	3953

Source: Department of information and communication Surabaya, 2017

The picture above is a comparison table of media use of public complaints monitored by the Surabaya City Government. The media, among others, through website e wadul (www.surabaya.go.id), twitter @SapawargaSby, Sapawarga City of Surabaya facebook, SMS, Phone, Instagram @sapawargasby, email, portal: report.go.id, print media and come directly. In the January period up to December 2017, the most media use of public complaints is through the Website (e wadul), which amounts to 1427 pieces and social media (Twitter), which stands to 890 parts.

5.3.2 Objective Information Technology espose social media in local Government.

The organizational context surrounding the development and use of information technology continues to attract the attention of the citizen especially in branding the performance of government (Teng S, 2012). With the rapid development of computer and communication technology, human society has entered into the information age, and the ubiquitous information systems have brought tremendous changes to government style and also for the citizens. The main component of the objective information technology are (Zhong, 2013):

      a. Hardware;

      b. Software; and

      c. User

In the Surabaya's Government, an increase in collaborative activity is being driven by many factors. Three aspects of technology are essential for Surabaya's Dinkominfo. There has been significant growth in the base of

techniques that agencies might use. Many new services instruments combine disparate techniques such as (Rini, 2018):

    a. electronic of complaint for the citizens in surabaya, namely is E-Wadul (apps store)

    b. performance analysis by the government for the civil servant, namely e-performance

    c. letter of invitation by message for the civil servant

    d. community satisfaction assesment, provided in many department who have a program or service always with citizen.

    e. Command center, to knowing the current situation in Surabaya with CCTV and Police integrated.

To increasing all of that programs, surabaya's government also facilitate the services with a good hardware and software as below:

Tabel 5.7 Facilitaties in Government Agencies

No	Hardware	Software
1	Computer With 16 Inch With Microsoft Windows 8.1.64 Bit	Web Hosting
2	Processor Core I3	Tower And Infrastructure Provider
3	Processor Cooling: MAINGEAR EPIC 120 Supercooler	Memory: 32 GB Corsair® Vengeance™ DDR4- 2666 (4x8gb)

Source: this compail by author (Kasiwi, 2018)

The hardware, software, and ability of user are considering for the system which applied in government agencies. Table 5.7 is one part to make good telecommunication system in government agencies running well. As we know, Surabaya's government aims to increase the excellent government in their office to the citizen.

5.3.3 Crowdsourcing influence Coordination of Institutional Form in enacted social media.

In the organizational factors that occur here led to the existence of trust, knowledge and face-to-face meetings. This organization factor is built on the cognitive and affective components of the interconnected parties. In this case, an organizational form will also be influenced by the active participation of both parties, whether corporate or public organization.

The focus of this research in social media by government office scattered in 15 agencies in Surabaya city. This research to know how are 15 agencies can work together for integrating social media system in Surabaya city. In each agency have social media and have an admin to operate the social media system. But all the agencies who have social media can be connected under by Department of Information and Communication service, especially in the Sub-department of Information and Public Communication for making it simple to integrate. But in another hand, it is not working yet as well because the integrating system for social media still used a manually working by the employee who handles it, not by the system again (Rini, 2018). This is also as an effort to realize one of the missions of the Surabaya city under the leadership of Tri Rismaharini,

which is to recognize integrated spatial planning and pay attention to the carrying capacity of the city.

Nowadays, social media has opened up unprecedented new possibilities of engaging the public in a government office. Many organizations are adopting social media systems and expect to gain improved employee engagement, internal communication and the formation of internal and external communities for more effective business. Also, a significant portion of the government's use of social media is for illustrative and presentational purposes. Social media are not only tools for democratic transparency and citizen participation, but also tools for self-presentation, the exchange of symbolic gestures and even the marketing of products and services (De Paula, Dincelli, & Harrison, 2018). One of the most visible uses in the using of social media in Surabaya is democratic transparency and citizen participation to connected the products and services between government and citizens. So, between government and citizens have an excellent relationship to realizing democracy transparency through social media.

One of the results of this research found that the level of education's employees in Surabaya city is also a determining factor for operating social media in each department. This has been carried out since the leadership of Surabaya's mayor who was known as a mayor who is visionary and decisive in acting. Another fact is applied in the Department of Communication and Information Services has formed and recruited specialized employees to manage all about Information Technology that related with the government especially about e-government and social media in Surabaya's government. Novi implied this acknowledgment as the Head Section of Public Information that the role of mayor in Surabaya's government had a very affected and impacted on increasing effectiveness and efficiency for the performance of employees in Surabaya's Government. The below is a description of the interview part with a head section of public information:

"dulu ini belum inisiasi bikin team khusus untuk mengelola TIK di pemkot mbak. Ya hanya saja beberapa orang saja yang ngurusin, kalau sekarang kan udah ada ruangan sendiri. Memang ada yang hanya magang, ada yang kontrak,

ada juga yang PNS tapi ya sebetulnya ini juga menjadi memudahkan kita sih mbak. Jadi ada ruangan administrasi sendiri, ada ruangan yang khusus media sosial. Jadi saat emang informasi apa-apa langsung bisa dieksekusi, karena jobdesnya juga udah jelas. Ruangan ini difasilitasi juga belum genap 2 tahun sih mbak. Kadang kalau memang kita kerjanya gak beres, ya nanti bisa-bisa ibu langsung turun dan langsung inspeksi mendadak di kantor mbak. Apa yang tergambarkan di media,seperti TV dan juga media sosial itu bener seperti itu ibu mbak. Jadi saya disini juga selaku Ka.seksi Informasi publik juga harus memastikan ini bener-bener berjalan. Kebanyakan disini anak-anak muda yang emang gemar dan expert dibidang IT mbak" **(Interview with Novi as Head of Section Public Information, October 10, 2018)**.

Figure 5.7 Command Centre of Surabaya's Government

Source: Surabaya's Government Office

Surabaya's government make collaboration on social media for each department to open innovation that represents the needs of the organization to access new knowledge. Based on the proven by Gephi netvizz, show that Surabaya's government indeed make a collaborative social media on Facebook

and Twitter. First, on the Facebook page of Surabaya's government namely
Sapawarga Surabaya show like in graph below.
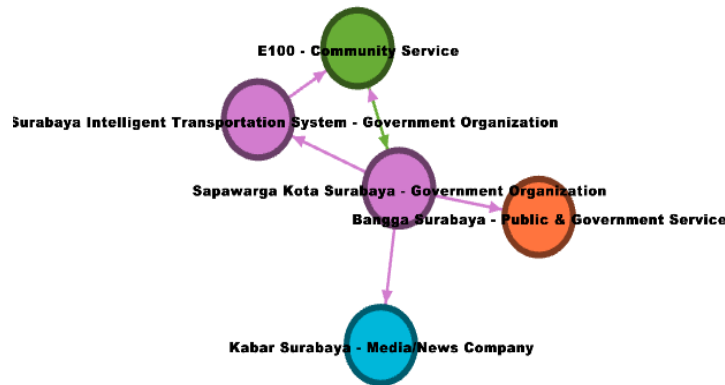
Source: Analyze by Author with Gephi Application, (Kasiwi,2018)

Figure 5.18Facebook Page Analysis by Gephi Application

Based on the figure above shows the Category of nodes on Surabaya's
government facebook page which is Sapawarga Kota Surabaya, E100
(Community Service), Surabaya Intelligent Transportation System (SITS),
Bangga Surabaya and Kabar Surabaya. Each of the categories has a partition on
the social media as below :

Category	Partition (%)	Name of Nodes
Government Organization	40	SITS and Sapawarg kota Surabaya
Community Service	20	E100
Public & Government Service	20	Bangga Surabaya
Media/News Company	20	Kabar Surabaya

Source: Analyze by Author with Gephi Application, 2018

Tabel 5.8 Facebook Analysis Partition by Gephi Application

For the result in facebook, analysis has found that government
organization has a 40%. Government organization in facebook pages always

discussed by the citizens who always send a comment, like and post on the facebook pages. Sapawarga Kota Surabaya has access and collaboration with SITS, E100, Bangga Surabaya and Kabar Surabaya, its the reason why the partition of Government Organization is more significant than another category. For the separation of Community Service is 20% such as figure 5.8 show that community service has an interaction with SITS and Sapawarga Kota Surabaya and have not communicated with Bangga Surabaya and Kabar Surabaya. But in the Edges show that Sapawarga Kota Surabaya has a connection with SITS and SITS have an interaction just for E100 (Community Service).

For the Public & Government Service has a 20% because Bangga Surabaya just received the information comes from Sapawarga Kota Surabaya. As well as the Media/News Company namely with Kabar Surabaya pages that has a 20% because Kabar Surabaya just received the information comes from Sapawarga Kota Surabaya. There is such crowdsourcing information that has interaction on each facebook pages of Surabaya's Government official. Sapawarga Kota Surabaya is managed directly by the Surabaya's government under the auspices of Department of Information and Communication. Although this number is just a little, the gephi application is significant to know how much partition is happening on Surabaya's facebook pages.

Sarmandi as an admin social media in Satpol PP(civil service police Unit) told that many information every day come with reasons such as demonstration, riot, homeless and many more related to Satpol PP. Not infrequently there are also people who send fake news. Its make social media as the new source for the

generation of new ideas which contribute to organizational learning and its used to share, re-use, recombine and accumulate knowledge to achieve external and internal innovation. The below is the conversation with Sarmandi that happened:

"dengan adanya social media ini sebetulnya banyak membantu sekali ya mbak karena kita akan mudah untuk menjaring mana-mana hal yang harus kami lakukan dilapangan. Dulu kan agak susah ya karena kita harus muter-muter dulu untuk menemukan kasus dan gak sering juga bisa tertangkap. Misalnya ada keributan di titik A, kalau dulu kan ya pas misal baru perjalanan kesana nanti udah pada bubar. Kalau sekarang kan meskipun kita tetep ke lokasi TKP Cuma info itu ada yang ngeshare di social media lalu biasanya ada foto yang dilampirkan nah itu kan akan memudahkan kita juga siapa siapa saja yang disitu, siapa tau dia jadi korban atau dia malah tersangka keributan disitu. Lebih sangat membantu lah mbak adanya sosial media. Kita juga mudah share ke masyarakat, kita juga mudah mendapatkan informasi dari masyarakat juga" **(Interview with Sarmandi, admin of Satpol PP; October 10, 2018).**

Institutions that are always discussed by the public in 2017 are Public Works Agency of Highways and the city of Surabaya, Green Cleaning and Open Space Service, Population and Civil Registration Agency, Transportation Agency and Municipality of Waterworks.

Figure 5.9 Top Fifth Institutions Got an assessment from Citizen
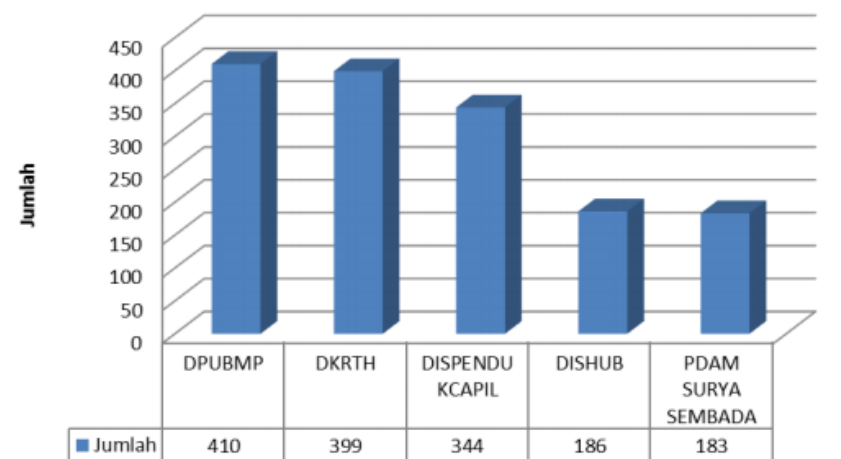
Source: the data from Department of Communication and Information, 2017

The figure above shows a comparison of the top 5 departments that get complaints from a citizen in Surabaya in whole 2017. In the year 2017, the department most frequent complaints from the citizen of Surabaya city are the Public Works Agency of Highways and the city of Surabaya which reached 410 complaints.

Although the Surabaya's government still have not a new specify technology to filter the information in social media. But in this new era, have so many platforms that can be used to drag and filter the information which comes. The crowd information which comes in social media name with crowdsourcing. Crowdsourcing information in Surabaya's government builds the collaborative initiative as a coordination and collaboration mechanism. The collaboration mechanism that occurs in the Surabaya government is to solve the problem in the citizen's life. The government performance depends on the firms social or trustworthy relations with society through government identity and reputation. Within the social media shapes the firms brand and reputation of Surabaya's government. With the proliferation of internet access and mobile technologies, social media and crowdsourcing offer a wide range of possibilities for Surabaya's government. As the Surabaya's mayor, Tri Rismaharini have a significant power for improving Surabaya's administration with the right leadership and management, and her innovation can lead to successful, progressive outcomes, increased profits and even inspire employees to take the initiative and innovate within their roles (Rini, Department of Information and Communication of

Surabaya's Government, 2018). The below is the conversation with Rini that happened:

*"sebetulnya semua ini tidak hanya datang begitu saja mbak, sejak bu risma menjadi walikota banyak sekali perubahan-perubahan yang terjadi misalnya aja dimulai dari management birokrasi, adanya perbaikan gedung dan pengefektifan dan efisiensian pegawai sampai masuknya teknologi. Tidak sedikit juga pegawai yang hampir kewalahan sama kemauan ibu, khusus nya Diskominfo ini mbak. Sekarang hampir semua sosial media punya admin masing-masing yang pegang. Apalagi semuanya sekarang sudah harus berkembang dari jaman tidak menggunakan teknologi sampai semua sekarang ini menggunakan teknologi seperti adanya absen online, surat online, penilaian kinerja juga online dan saat rapat juga surat undangannya dalam bentuk Online. Beberapa pegawai yang sudah tua usianya juga nggak jarang ada yang bisa, hampir semuanya kesulitan. Tapi ya dari diskominfo yang akhirnya memberikan sosialisasi pelatihan. Segala sesuatu yang memang dirasa Ibu Risma kurang beres itu langsung dieksekusi sendiri mbak, sampai datang ke setiap instansi pun dilakukan"(**Interview With Rini, admin of Sapawarga Surabaya, October 10, 2018**).*

On the fact, to make new ideas and improvement, it's not easy to need significant power to change the better future, especially on bureaucracy. The growth of the government also need the strength of their leader; it's not happening in many cities in Indonesia, Surabaya is the one of not much city that has been improved their bureaucracy management (Bloch & Bugge, 2013).

5.3.4 Institutional arrangement espose by crowdsourcing.

The institutional arrangement is a mechanism that considered in the process of integrating a system or management by emphasizing social or normative values in the context of harmonizing the existence of underlying assumptions that are jointly raised between institution and citizens. Some existing policies and arrangements referred to formal institutional arrangements made by the government in providing the relevant framework.

In the process of absorbing information through social media, the Surabaya's Government city has integrated and coordinated between systems and their organization in managing data from the citizens set by Department of information and communication. This part is appealing because the government will easily access and reach what is informed, complained of and reported directly by the public in real time. Although indeed in managing information through social media it has not reached a high level of system capability. The Surabaya city government in achieving out and maintaining the social media system is assisted by software that is used to detect the reported grouping of information and distributed monthly through the official Department of Communication and Information website namely dinkominfo.surabaya.go.id.

The institutional arrangements carried out by the Surabaya's Government city in using social media have achieved user integration, where Department of Communication and Information (dinkominfo) has a virtual network in the Whatsapp application which is intended as a means and forum for discussion and coordination between official admin in each government agency. The following are the results of discussions obtained through Department of Communication and Information (dinkominfo) related to coordinating complaints services, reporting and information from the public through social media whose purpose is to find out what is needed by the community and what happens to the environment in the city of Surabaya.

Figure 5.10 Crowdsourcing Process in Social Media of Surabaya's Government
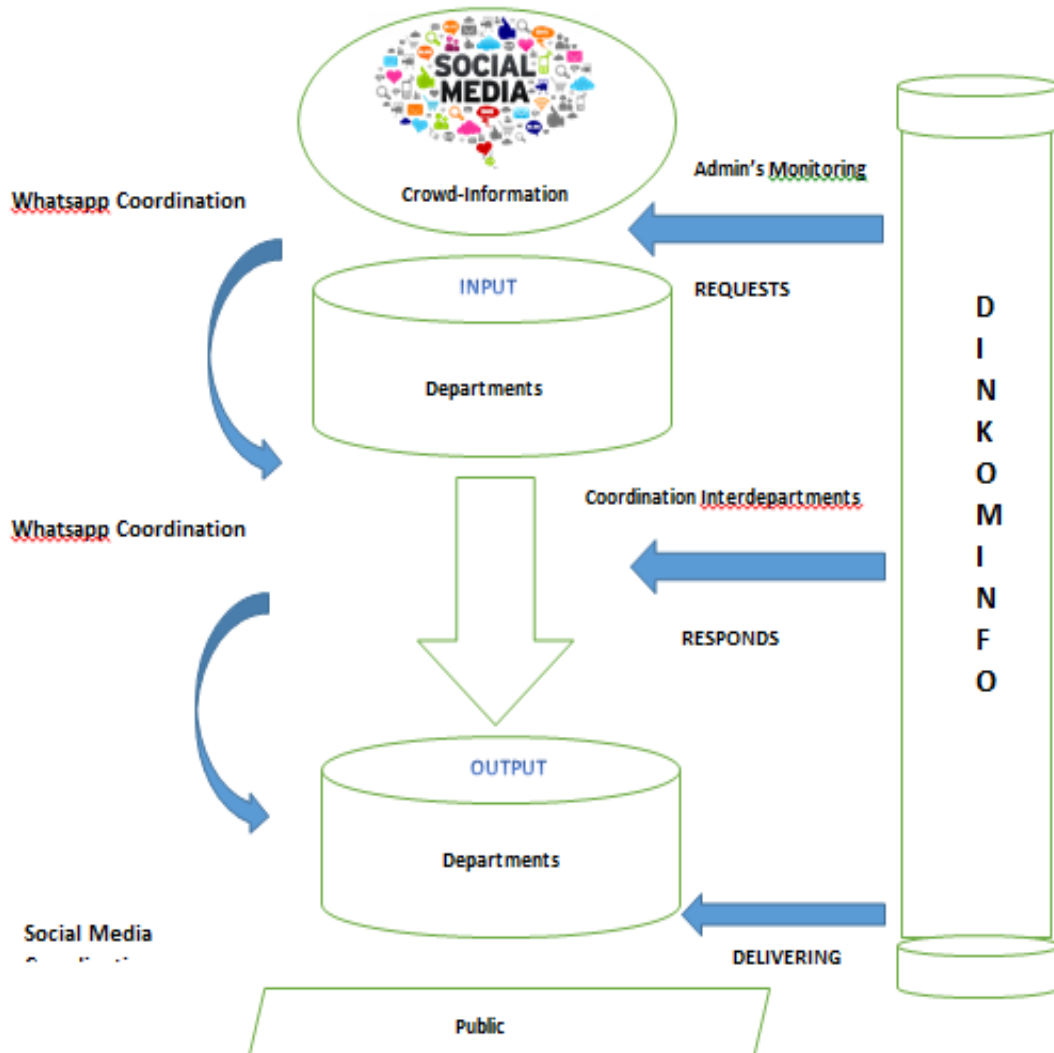
Source : this compail by author (Kasiwi, 2018)

According to Dorward and Kydd (2005) explain that the aims of institutional arrangement are not about minimizing cost transaction but for reducing the risk of the operation itself. Also, for understanding the visual perception for each department in the organization especially for Surabaya' Government city (Dorward, Kydd, & Poulton, 2005). Although indeed according to the results of the hypothesis, the institutional arrangement has not a significant strength in crowdsourcing arrangements that appear on social media.

5.3.5 The information contained in crowdsourcing has effect in policy making.

Based on the results that appear in the hypothesis this research is related to the output obtained from the use of social media. The hypothesis shows the value that the existence of information collected through social media does not have the power of value in influencing or making public policy. It's just that with the arrangement of crowdsourcing and carried out by the city of Surabaya it has an impact both to be used as advice and input in the policy-making process even though what is issued is not in the form of policy but rather a suggestion, recommendation and also material in the policy formation process.

According to the Tabel 5.6 showed that social media is not used for making and roles or decision for the government. Based on the confirmation in the department of information and communication, social media is used to get the information; interaction with citizen; and live report for the situation. Its also describe in the Tabel 5.6 showed that the effect size between social media and output is 0,017 and its rejected and the p-value is 0.33, the hypothesis is also

denied. This has also received confirmation from Department of Information and Communication as a home base that manages and collected information obtained through social media.

> *"sejauh ini memang belum ada laporan, keluhan atau bahkan hacker gitu sih mbak dikami, khsuusnya pada sistem social media yang kami miliki ya. Sejauh ini ya memang social media yang dimiliki oleh pemerintah kota surabaa kan sudah saling terintegrasi satu sama lain dengan SKPD yang emang terlibat dalam proses penyebaran dan pengelolaan informasi melalui media social, karna kan emang gak semua SKPD harus ada social media, kalau memang tidak diperlukan ya gak akan buat, misalnya bagian otda, mereka gak punya social media tapi mereka punya admin untuk menerima informasi yang kami collectingkan. Tujuan dibuatnya seperti itu sih ya karena memang setiap dinas wajib bisa mendapatkan maupun mengaskses informasi dari masyarakat. Dan akhirnya kembali lagi, informasi yang didapatkan oleh pemerintah kota surabaya ini hanya digunakan sebagai dasar maupun cara pemerintah untuk dapat menjangkau apa yang dibutuhkan oleh masyarakat melalui social media"* **Interview with Novi as Head of Section Public Information, October 10, 2018**

Therefore, the purpose of this social media owned by the Surabaya city government is integrated to connect every government agency in managing and accessing information from the public to the government through social media. The data obtained by the Surabaya city government is used as a basis as well as the way the government can reach what is needed by the community through social media.