

UDC 331

ANALYSIS OF DISTRICT INFORMATION MANAGEMENT IN BELU REGENCY, EAST NUSA TENGGARA PROVINCE, INDONESIA

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ABSTRACT

This research aimed to identify and analyze district information management in Belu Regency. A qualitative approach was employed with a case study design. The focus was the district information management in Belu Regency to be viewed based on three sub-focuses, namely: (1) Functionalization, (2) Integration, and (3) Professionalism. Conducted in Belu Regency, this research involved informants determined using a purposive sampling technique. Data were collected using interviews, documentation, and observation techniques from primary and secondary data sources. The data were then analyzed using a technique from Miles and Huberman, covering data reduction, data presentation, and conclusion drawing. The analyzed data were further validated using a triangulation technique. The research results suggest that: (1) the first dimension, Functionalization has not run well in the district because no division of duties is compatible with the main duties and functions of officers in the districts of Belu Regency. The division of duties does not have a clear command unit corresponding to the applicable Standard Operating Procedure (SOP); (2) the second dimension, Integration shows that the information in Belu Regency has not been managed properly. In other words, all the data collected, inputted, and presented has not been regulated in an integrated manner. The information existing in the regency may vary depending on the needs of each institution/ agency requiring data and the output or outcome produced also depends on the party processing the information; (3) The third dimension, Professionalism indicates that existing Human Resources (HR) have not been well prepared to work professionally, especially in managing information in the districts as the main source of providing information.

KEY WORDS

Management, information, information management.

Based on the authority granted by the Regent of Belu, districts are expected to be able to provide data on governance in the districts accordingly to the main duties and functions that have been delegated to the districts. One of the most frequently needed information in districts is information on population, such as population data based on gender, age, occupation, education, and religion, which are general data that should be available in districts. However, such information in the districts of Belu Regency is still limited, inaccurate, not qualified, and not original (tends to come from other organizations). For example, population data in the districts still depends on the availability of Central Statistics Agency (*BPS*) data of Belu Regency. The data are updated every five years and often not similar to other data sources, such as data from Belu Regency's Population and Civil Registration Service which are often confusing. Moreover, many other basic data are still not taken directly from the district level, indicating that the districts are still dependent on providing data which are supposed to be always updated accurately and with good quality.

Some of the data supposed to be available accordingly to the delegation of authority from the Regency available in the districts does not exist and is difficult to trace, for example, data on the number of people receiving assistance from certain organizations or parties to avoid doubling of assistance or inaccuracy in the targeted assistance recipients. It is highly important to consider that the government should be aware of utilizing data and information as significant material both for cross-sectoral collaboration and a center for publication to the

public. Lack of awareness of the availability of information at every level of government can be a weakness burdening developmental goals and achieving the government's program targets. In practice, of course, there is still no proper information management at the district level even though the district has the authority to regulate this matter.

The existing information management should also include arrangements for managing the information itself, where there must be a professional aspect of officers working in the district and the staff assigned to manage information must know the basics of information management to produce beneficial output for further policies. It can also be achieved by training workers to become professionals who are responsible for managing information at the district level. However, the practice has not met expectations. The absence of training to develop the potential of a professional workforce makes the implementation of information management in the district less optimal.

The description above indicates that the district government does not yet have databases and information system management that are ready to render data and information to a superior program to be presented as highly important information for the community and organizations that need information quickly, accurately and openly. Regarding this fact, the development of district organization and management is seen as one of the important agendas in the administration of regional government, especially Belu Regency. This idea is what prompted us to conduct this research with the title: "Analysis of District Information Management Analysis in Belu Regency, East Nusa Tenggara Province". The purpose of this research was to find out and analyze district information management in Belu Regency.

LITERATURE REVIEW

Information Management

Management Information System (MIS) is a computer-based system providing information to users who have similar needs (McLeod and Schell in Zakiyudin, 2011). Meanwhile, Murdick and Ross (quoted by Sutabri, 2005) defined SIM as a communication process in which input information is recorded, stored, and processed to produce output in the form of decisions about planning, operation and supervision. According to Laudon and Laudon, an Information System is a component working mutually to collect, process, store and disseminate information for supporting the activities of an organization, such as decision-making, coordination, control, problem analysis, and also visualization of the organization. Laudon and Laudon (in Sungkono's (2008) translation) identified and explained two dimensions of management information system as follows: (1) The dimension of a management information system includes leadership, strategies, and management behavior and (2) The dimension of technology consists of hardware, computer software, data management technology and network technology/ telecommunication (including the internet).

The duties and functions of the Management Information System according to Jondhy (2013) consists of: (1) Management Information System duties, including (a) Data Collection, (b) Data Retention, (c) Data Processing, (d) Data Programming; (2) Management Information System functions, including: (a) increasing the accessibility of data presented in a timely and accurate manner for users, without requiring an information system intermediary, (b) ensuring the availability of quality and skills in critically utilizing information system, (c) developing an effective planning process, (d) identifying the needs for supporting skills of information systems, (e) determining the investment to be directed to information systems, (f) anticipating and understanding the economic consequences of information systems and new technologies, (g) improving productivity in the application of system maintenance and development, (h) processing transactions, reducing costs and generating revenue as one of their products or services, and (i) processing transactional documents.

Administration of Regional Government

Rasyid (in Labolo, 2015) stated that regional government has some functions, including public services, regulation, development, and empowerment. These four functions of regional

government can be further explained as follows: (1) Service function is the root of the government function itself, namely efforts to provide public needs; (2) Regulation function is in the form of regulations to ensure the creation of a solid foundation for the state in providing protection and services so that the fulfillment of public needs can be ascertained; (3) Development function is significant to the ability of the government to prepare facilities and infrastructure for the benefit of its citizens. Besides, the development function includes physical development (realizing the needs of citizens to grow and develop naturally to achieve their needs) and spiritual development (realizing public needs for freedom of expression to obtain spiritual modal as a result of vertical meditation with the Creator). (4) Empowerment function is related to government efforts in reinforcing the limitations of some communities in the political, economic and social aspects.

The administration of regional government affairs is carried out based on the principles of decentralization, deconcentration and co-administration. According to Law Number 23 of 2014, Decentralization is the transfer of government affairs by the central government to the autonomous regions based on the principle of autonomy. Deconcentration is the delegation of some governmental affairs which are the authority of the central government to the Governor as the representative of the central government, to vertical agencies in certain areas and to Governors and Regents/ Mayors who are responsible for general government affairs. The co-administration duty is an assignment from the central government to an autonomous region to carry out some of the government affairs which are the authority of the provincial region.

Law Number 23 of 2014 has regulated and grouped several affairs or authorities that must be delegated to regional governments (both provinces and regencies/ cities). The affairs intended include concurrent government affairs, which become the basis for implementing regional autonomy. Concurrent government affairs consist of mandatory and optional government affairs. (1) The mandatory government affairs are divided into two, namely basic services-related affairs (including Education, Health, Public Works and Spatial Planning, Public Housing and Residential Areas; Public Order and Community Protection, and Social Sector and basic services-unrelated affairs (including Labor, Women's Empowerment and Child Protection, Food, Land, Environment, Population Administration and Civil Registration, Community and Village Empowerment, Population Control and Family Planning, Transportation, Communication and Informatics, Small and Medium Business Cooperatives, Capital Investment, Youth and Sports, Statistics, Encryption, Culture, Library, and Archives. (2) The optional government affairs include Maritime Affairs and Fisheries, Tourism, Agriculture, Forestry, Energy and Mineral Resources, Trading, Industry and Transmigration.

Regional Heads act as an element of the regional governments leading the implementation of government affairs which are the authority of the autonomous region. Meanwhile, the Regional People's Representative Council is an institution of Regional People's Representatives positioned as an element of regional government administration. Regional Heads and Regional People's Representative Councils (*DPRD*) in carrying out government affairs are assisted by regional officers of Regencies/ Cities, consisting of Regional Secretariats, *DPRD* Secretariats, Inspectorates, Services, Agencies and Districts.

District Heads are delegated with part of the authority of Regents/ Mayors to carry out some government affairs which are the authority of regencies/ cities and undergo the co-administration duty. Some of the delegated government affairs consist of licensing and non-licensing services. This illustrates that in addition to all the decentralization duties, District Heads also carry out the deconcentration duty. Thus, District Heads should have accurate data and information so that all the duties and responsibilities given can be carried out on target and following the goals of the district organization.

METHOD OF RESEARCH

This research used a qualitative approach with a study case design. The focus was the district information management in Belu Regency to be viewed based on three sub-focuses

namely: (1) Functionalization, (2) Integration, and (3) Professionalism. This research was conducted in Belu Regency, covering Belu Regent's Office, the Regional Construction, Research and Development Planning Agency Office of Belu Regency, Atambua City's District Office, and East Tasifeto's District Office in Belu Regency. Determined using a purposive sampling technique with a certain consideration, the informants involved in this research were officers working in the predetermined research location. Data were collected using interviews, documentation, and observation techniques from primary and secondary data sources. The data were then analyzed using a technique from Miles and Huberman covering data reduction, data presentation, and conclusion drawing. The analyzed data were further validated using a triangulation technique.

RESULTS AND DISCUSSION

District Information Management in Belu Regency

The discussion of this research focused on existing information management at the district level in Belu Regency. Regional government management, as demanded by changes in legislation, should be transformed in line with the demands of globalization. In other words, traditional feudal management patterns that have been run so far is replaced with modern and democratic government management patterns as the implementation of global values. However, in practice, there are still many challenges and adaptations to be made as a form of change for the better.

The implementation of information itself in organizations sometimes experiences problems, where information is not properly recognized as a strength that should be owned in every organizational management, especially government organizations that have a wide reach. This is what happened in the districts in Belu Regency, where the information is still not optimally provided because data were not regularly updated and not always available. In the world of librarianship and information, the need for information is a complicated condition – a combination of personal and psychological characteristics that tend not to be easily expressed. In addition, this need is also often vague and can be hidden under the conscious mind. This is consistent with the results of observation carried out in the districts, where the implementation of information management is influenced by many things.

According to Hamalik (2003), the Management Information System Dimensions cover: (1) Functionalization, (2) Integration, 3) Professionalism, (4) Quality, (5) Equity, and (6) Coordination. Among these six dimensions of management information systems, this research only focused on the dimensions of (1) Functionalization, (2) Integration, and (3) Professionalism, which in this research refers to the conditions to be met in managing management information systems. The results of the analysis based on Hamalik's dimensional approach are presented in Table 1 below.

Table 1 – Research Results Based on the Information Management Dimensions
Adapted from Hamalik (2003)

No.	Information Management Dimensions (Hamalik (2003))	District Achievement in Belu Regency According to the Research Results	Description
1.	Functionalization	Less	Has not run well
2.	Integrity	Less	Has not run well
3.	Professionalism	Less	Has not run well

Source: Processed by Researchers.

Each dimension and its implementation in the districts are further explained as follows:

Functionalization of Information Management in the Research Locations

Functionalization implies that management information systems carried out by an organization or sub-organization must be adapted to the functions and areas of expertise of each employee. Based on the results of interviews with the district officers, the division of

duties and functions at the district level was still influenced by several factors even though there has been a distribution of SOPs for each position in the research locations. The division of duties and responsibilities needs to be determined to form good management. However, the results of observations and interviews occurring in the field showed that a clear division of duties for managing information has not been carried out properly and correctly.

Similar to the two other research locations, the requested data and information will be managed by different officers according to the ability to operate computers, the presence of officers when data are needed, the availability of personal facilities (laptops), and the types of data needed. The data provided will be then stored and aggregated only as needed to be then collected together if they are annual data. Meanwhile, if they are only the institution's request-based data, they are only available temporarily according to the needs of the related agency.

The results of interviews from each research location that has implemented the division of duties to manage information from the village/ subdistrict level and district level are shown in the following table.

Table 2 – Division of Duties for Data Management in Districts and Villages/ Sub-districts

No.	Regions	The Availability of Division of Work System
1.	Atambua City District	None
	Fatubena Subdistrict	Available
2.	East Tasifeto District	None
	Bauho Village	None

Sources: *Processed by the Researchers.*

From Table 2 above, only Fatubena Subdistrict has carried out the division of duties to manage information properly. The duty of collecting and inputting the data provided by the Neighborhood Unit (*RT*) has been handed over to the subdistrict secretary assigned. Meanwhile, in the other three research locations, the collection and processing of data into information were still carried out by all existing officers or assigned to someone who happened to be there to input the existing data.

Seen from the functionalization dimension of district information management (Table 2), the divisions of duties to manage data at the district and village/ subdistrict levels, East Tasifeto district and Atambua City district have not carried out a division of duties despite the availability of a division of positions for each officer. According to Henry Fayol (in Follet, 1997), a good management system should have patterns that can be identified and analyzed, one of which is the Division of Labor. This pattern specialized humans in their works to make it more efficient as if there is a conveyor belt. Meanwhile, the results found at the research location showed that the correct division of duties and responsibilities was only carried out in the Fatubena subdistrict by giving responsibilities to the Subdistrict Secretary to coordinate all data collection and information to be archived accordingly to the applicable SOPs.

The four research locations also experienced obstacles related to human resources in managing the existing information. There has been no workforce training for both district officers and village/ subdistrict officers specialized in the management of data and information in Belu Regency. Each officer still filled out the existing data in a manual form, wrote in a notebook and inputted it into a computer in the form of an Excel table (the results can be seen manually) to be processed into annual information at the village/ subdistrict level and further reported to the district, the Community Empowerment Agency, and Village Government of Belu Regency. The lack of adequate workforce training and preparation in the districts was one of the reasons for the non-functioning officers in the districts related to better provision and updating of data.

The results of the interviews also showed that the duties and responsibilities at the district level are assigned by the District Head. The District Head chooses who is responsible for collecting data to be processed into information. Besides, the availability of facilities and infrastructure also affects the performance of the district officers. The District Head used his

authority rights to carry out management. Similarly, one of the identifications of management expressed by Fayol (1997) states that authority and responsibility are obtained through orders, and orders must be given with formal authority. However, personal authority can compel the obedience of others.

Functionalization at the district level has not been implemented properly because no division of duties was compatible with the main duties and functions of officers in the district. The division of duties did not have a clear command unit corresponding to the applicable Standard Operating Procedure (SOP). Data collection should be coordinated by the secretary through the District Head's command and coordination. The existing duties were handed over to officers who were present at the time information was needed, not based on the positions of officers responsible for the availability of information services. Human Resources selected to undergo the duties are those who can operate computers, not based on positions of district officers and those who have personal inputting facilities (Laptops), depending on the duties and responsibilities given by the District Head.

Follet (1997) believes that employees have a harmonious relationship with management based on common goals, but distinguishing superiors as order givers from subordinates as order recipients is not entirely justified. Leadership positions in an organization should not only be determined by the power of formal authority, but also by managerial knowledge and capabilities. This indicates that assignments given by the District Head should be rooted in managerial capabilities taking into account the structure and management of good human resources in the district, not just giving temporary and situational assignments that can affect the availability of long-term information in the district.

Integration

The integration of data and information at the district level is in the form of basic data collected from village/ subdistrict profiles and updated once a year. The data collected are those needed by the institutions/ agencies. Based on the results of interviews in the districts, each institution commonly requested information from the district. However, if the data requested is not available, the institution will directly engage in the village/ subdistrict by bringing its format. But now, the data needed by the institution can be directly requested from the village/ subdistrict, and sometimes they are requested from the district accordingly to the needs of institutions in the regency.

The districts do not collect data directly. All the data needed by the institution sometimes do not go through the district first but are directly requested from the related village/sub-district. The same thing happened in East Tasifeto District and Bauho Village, where the district collects annual data in the form of village/ subdistrict profiles while other data needed depends on the needs of the requesting institution, adjusted to the format provided by the institution.

It can lead to differences in data existing in each institution, depending on who manages it because the district itself does not collect quality data regularly. Moreover, the format provided by institutions to villages/ subdistricts can be different.

It also can affect the filling in of existing data in the subdistrict, and when submitted to the regency institution, each data collector manages them in their ways of measurement, ultimately influencing the integration of available data and information at the district level.

Integration implies that a management information system is carried out in an integrated manner according to its level. The implementation of information management in districts is a combination of data and information collected from villages/ subdistricts to be then given to the institutions at the regency level as material for preparing plans based on the conditions of each region.

Integration of data and information from the analysis results in the districts of Belu Regency is in the form of basic data collected from village/ subdistrict profiles, updated once a year, and not processed into one in the form of an annual report so that the information stored is in the form of village/ subdistrict profiles collected as archives in the district. According to Jogiyanto (1991), information is the result of data processing in a more useful and meaningful form for recipients, which describes an actual event used to make decisions.

In general, an information system is constructed by input, processing and output. The information collected from the village/ subdistrict profiles in this research is not continued to be processed (processing) so as not to produce output that can be stored as basic information material in the districts. The information stored in the districts is currently in the form of certain information needed only if there is a data request, such as data for assistance distribution, data on the number of poor people, and others.

In performing the information management function, a manager must be able to manage data and information for the needs of planning, decision-making, job evaluation, and monitoring and control systems. Data must be collected, compiled, and stored regularly so that they can be easily obtained when needed. Information management is now crucial to the success of an organization and therefore a Management Information System (MIS) is highly necessary (Keban, 2008). The available information in the districts of Belu Regency has not been managed properly to meet the integration dimension consisting of rules enabling all the data to be collected, inputted, and presented in an integrated manner. The information existing in the regency also may vary depending on the needs of each institution/ agency requiring data and the output or outcome produced also depends on the party processing the information. Even though the basic information in the form of district profiles is already included, the districts have not followed up the information management properly, and the absence of regularly updated district profiles makes information dissemination still not properly accessible from the districts even though the authority to carry out the duties has been handed over by the Regent to the District Head.

Professionalism

The implementation of information management in the districts is still experiencing several problems related to the professionalism of the district officers. Based on the analysis of the functionalization of information management in the districts, only one research location has undergone the division of duties and responsibilities for their officers accordingly to the applicable SOPs, namely Fatubena Subdistrict. Officers in the other research locations that have not carried out the division of duties and responsibilities tend to show unprofessional and undirected working performance.

It indicates that the placement of employees accordingly to their positions, duties and responsibilities in the districts is highly important for the functioning of the organizational system in the district, according to secondary data on the education level of the district's human resources. Viewed from the number of human resources working in the two districts (research locations) supporting the officer performance to carry out their duties and responsibilities in the implementation of information management, it can be learned that the number of human resources existing in Atambua City's District Office was 14 officers, covering 1 officer with a master's degree (S2), 4 officers with a bachelor's degree (S1), 1 officer with an associate's degree (D3), 7 Senior High School (SMA)-graduated officers and 1 junior high school (SMP)-graduated officer. Based on the above data, it can be seen that 50% of the total officers have finished Senior High School (SMA) education and the other 40% have finished undergraduate education. Meanwhile, the number of human resources working in East Tasifeto's District Office was 21 officers, covering 6 officers with a bachelor's degree (S1), 1 officer with an associate's degree (D3), and 14 Senior High School (SMA)-graduated officers. The above data showed that 66% of the total officers have finished Senior High School (SMA) education and the rest 44% are bachelor's and diplomas 3.

These results indicate a lack of professionalism in meeting the need for existing information, both at the village and district levels. It also happened in Atambua City's District, where the officers were always waiting for a guide prepared to be filled in as information stored in the districts and villages/ subdistricts and the initiative from the source of the data provider itself is still lacking. However, in 2020, there was an update carried out in Atambua City's District, namely periodic data requests by Neighborhood Units (RT) as updating materials both included in the district and subdistricts. Meanwhile, in East Tasifeto District, each Neighborhood Unit already has a special book reported to the villages to be then reported to the district in the form of village profiles.

The performance of officers responsible for managing information can also be improved by providing special training to officers. However, the results of interviews conducted in the research locations revealed that there has never been any training on information management for officers either at the district or village/ subdistrict levels. Everything is still carried out manually and provided as report data collected and presented in the form of village/ subdistrict profiles. Meanwhile, the profile of the district itself is not available.

The concern and awareness of managing data at the district and village/ subdistrict levels are still very low. In addition, the informant said that the previously planned special application has never been realized.

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Professionalism implies that the management information system should be run by skilled personnel, both leaders and executing staff. Professionalism is a reflection that the skills and expertise of the officers can run effectively if it is supported by suitable education levels based on educational background with the carried workload. Professionalism also reflects the officer's self-potential, both from the aspect of capability and behavior including loyalty, innovation, productivity and creativity (Widodo, 2005).

According to Fayol, one of the analysis identifications of good management is discipline, in the sense of organizational members' compliance with regulations and opportunities. Good leadership plays an important role in this compliance and also in existing agreements, such as rewarding employees for their achievements and applying fair legal sanctions to those who deviate. Based on the analysis results, one of the causes of the absence of professionalism in implementing management is the lack of discipline applied to leaders and executors of information management in the districts. Also, the lack of significant division of duties, reward and strict sanctions in the implementation of management causes the officers not to work professionally following their duties and responsibilities in managing good information in the district.

CONCLUSION

Information management carried out in the districts of Belu Regency was analyzed using three dimensions of information management proposed by Hamalik (2003). It can be concluded as follows:

1. The first dimension: Functionalization.

Functionalization at the district level has not been implemented properly because no division of duties was compatible with the main duties and functions of officers in the district. The division of duties did not have a clear command unit corresponding to the applicable Standard Operating Procedure (SOP).

2. The second dimension: Integration.

The information in the districts of Belu Regency has not been managed properly to meet the integration dimension consisting of rules enabling all the data to be collected, inputted, and presented in an integrated manner. The information existing in the regency also may vary depending on the needs of each institution/ agency requiring data and the output or outcome produced also depends on the party processing the information.

3. The third dimension: Professionalism.

The existing Human Resources are still not well-prepared to work professionally, especially to manage information in the districts as the main source of the information provider.

Suggestions

Based on the conclusions above, suggestions that can be given to improve information management in the districts of Belu Regency are as follows:

a) For the Regional Government of Belu Regency

1. Improvement of Regulations

- a) Setting regulations in the districts regarding a clear Information Management Process so that each officer has clear duties and responsibilities.
- b) Ensuring that the districts have the authority to carry out information-providing services.
- c) Ensuring that every service provided has an SOP
- d) Ensuring that there must be details of Information Management Services in the districts to determine the output that should be achieved in providing reliable and regularly updated information.

2. Procurement of special funds for information management both at the district and village/ subdistrict levels

3. Improvement of both internal and external control functions

4. Improvement of the officers' competence through special training and education programs on Information Management at the district and village/ subdistrict levels

5. Improvement of facilities and infrastructure related to service information and service complaints to stakeholders to create public control over the quality of serving information in the districts of Belu Regency

6. Maximum utilization of information technology on types of services and management of information at the district and village/ subdistrict levels

b) For the District Officers

1. Increasing awareness of the need for information, especially in maximizing information management at the district and village/ subdistrict levels

2. Enhancing innovation and professionalism in carrying out the assigned duties and responsibilities accordingly to the positions and ruling out personal interests to reach common prosperity and achieve good and quality information management goals in the districts

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