

Analysis of Factors Affecting The Quality of Regional Development Information on The Teluk Bintuni Regency Government Website

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Abstract

This research was conducted to find out why the quality of development information on the Teluk Bintuni Regency local government website is not optimal and what factors affect the lack of quality of development information on the Teluk Bintuni Regency government website. This research method is descriptive research to depict or describe the problem regarding the quality of regional development information on the website of the local government of Teluk Bintuni Regency. The subject of this research is the Department of Transportation, Informatics, and Communication. The results of observations indicate that the quality of regional development information on the website is not optimal, as evidenced by the infrequent updating of development news content and ineffective technical management from data collection to information presentation. The factors contributing to this suboptimal management include inadequate budget allocation, the absence of standard operating procedures (juklak/juknis) as implementation guidelines, poor inter-agency coordination, limited government attention, unsystematic work schedules, insufficient facilities and infrastructure, a shortage of management personnel, low staff competency, and a lack of understanding regarding website management. This study concludes that human resources, competence, and motivation significantly influence the quality of regional development information on the Teluk Bintuni Regency Government website.

INTRODUCTION

The development of information and communication technology has driven a transformation in the administration of government toward a system that is more transparent, accountable, and responsive to the needs of the community. One form of implementation of digital transformation is the use of government websites as a medium for disseminating public information and a means of communication between the government and the public (Budiarto et al., 2024). The local government website not only functions as a publication medium for government activities but also as a strategic instrument to convey accurate, relevant, and easily accessible regional development information to the public. Therefore, the quality of information presented through government websites is an important factor in supporting good governance (Akgül, 2024; Elahi & Ahmed, 2023; Rasool et al., 2020; Sofyani et al., 2020).

In Indonesia, efforts to improve the quality of digital-based public services continue to be encouraged through the implementation of the Electronic-Based Government System (SPBE) and the One Data Indonesia program. Both policies emphasize the importance of the availability of quality data and information as a basis for decision-making, development

planning, and increased community participation in the development process (Abas et al., 2023; ElMassah & Mohieldin, 2020; Sivarajah et al., 2016). In this context, local government websites have a strategic role as a media provider of development information that can be accessed by various stakeholders. However, various studies show that the quality of information on local government websites still faces various obstacles, such as information that is not updated regularly, low data completeness, website navigation that is not user-friendly, and limited human resources in its management.

The quality of information is one of the main indicators of the success of government website management. Quality information must meet the aspects of accuracy, relevance, completeness, timeliness, and ease of access (Abd Aziz et al., 2024; Fu et al., 2024). Information that is not updated regularly will lose its value for the community as well as other stakeholders (Crane, 2020). On the other hand, information that is presented in a complete, accurate, and up-to-date manner can increase public trust in the government and support the creation of transparent and participatory governance (Ihlen et al., 2022; Nulhusna et al., 2017).

Human resources are the main factor that determines the success of the management of local government websites. The availability of employees who have abilities in the fields of information technology, digital content management, journalism, and public communication is needed to produce quality information. However, in many local governments, the limitation in the number and quality of human resources is still a problem that is often encountered. The low capacity of human resources can have an impact on the suboptimal process of data collection, information processing, and presentation of information to the public (Teklegiorgis et al., 2016; Yazdi-Feyzabadi et al., 2015). As a result, the government website is not able to carry out its function effectively as a medium for regional development information.

In addition to human resources, the competence of website managers is also an important factor that affects the quality of information. Competencies include the knowledge, skills, experience, and technical abilities required in managing web-based information systems. Government website managers are required to have the ability to develop, maintain, and update website content on an ongoing basis. Various studies show that high digital competence contributes positively to the effectiveness of information management and the quality of electronic-based public services. Thus, improving the competence of website managers is a need that cannot be ignored in supporting the successful implementation of e-government.

Another factor that is no less important is work motivation. Motivation is an internal and external drive that affects an individual's enthusiasm and commitment in carrying out their duties. In the management of local government websites, work motivation plays a role in encouraging employees to update information regularly, maintain the quality of published content, and develop innovations in presenting information to the public. Employees who have high motivation tend to show better performance compared to employees who have low motivation. Therefore, organizational support through awards, incentives, and competency development opportunities is a factor that can increase the motivation of website managers.

Previous research has generally focused on evaluating the quality of government websites from the aspects of technology, design, and user satisfaction. Amaya et al. (2024) evaluated the quality of information on the South Jakarta City Government website and found that information quality needs improvement in terms of content update frequency and information completeness. Jabnabillah et al. (2023) examined the effectiveness of government

websites as secondary data sources for teaching materials, concluding that government websites have great potential but require better management to be effectively utilized. Meanwhile, research by Ashdaq & Mandasari (2022) focused on the effect of digital competencies and job placement on work effectiveness in public institutions. Studies on human resource competence and motivation have been conducted by Anjani (2019), Ramadhania & Novianty (2020), and Haeruddin et al. (2021), but these studies generally focus on employee performance in general organizational contexts rather than specifically on government website management. Research specifically examining the influence of human resources, competence, and motivation on the quality of regional development information on government websites is still relatively limited, especially in the context of local governments in eastern Indonesia. Therefore, this research has novelty value by integrating these three factors in analyzing the quality of regional development information on the Teluk Bintuni Regency Government website.

Teluk Bintuni Regency, as one of the regions that seek to develop digital-based public services, also faces challenges in managing its local government website. Based on the results of initial observations, the quality of development information available on the Teluk Bintuni Regency Government website is still not optimal. Development information has not been updated regularly, coordination between regional apparatus organizations has not run effectively, and there are still limited human resources who have competence in the field of information technology. This condition causes the local government website to be unable to function optimally as a medium for disseminating development information to the public.

Based on this description, this study aims to analyze the influence of human resources, competence, and motivation on the quality of regional development information on the Teluk Bintuni Regency Government website. The results of the research are expected to make a theoretical contribution to the development of e-government studies and public information management, as well as provide practical recommendations for local governments in improving the quality of website management and digital-based public information services.

METHOD

Research Type

The approach of this research is qualitative descriptive. This research technique describes, explains, and validates events. Qualitative descriptive research can accurately describe people, organizations, or situations based on observed events, facts, and data.

The variables used in this study are factors that affect the quality of regional development information on the Teluk Bintuni Regency Government website, including:

1. Human Resources
2. Competencies
3. Motivation

The steps used in this study are:

1. Literature studies that have been carried out since the beginning by collecting concepts related to research titles.
2. The field study targets agencies, institutions within the Communication, Informatics, Sandi, and Statistics Office of Teluk Bintuni Regency as well as authorized employees on the government management website through direct field reviews.

Resources

In this study, the researcher seeks information sources from secondary data collected from other parties from internal and external organizations, especially at the Communication, Informatics, Cryptography and Statistics Office of Teluk Bintuni Regency as an agency whose function is to manage the Regional Government website.

Secondary data used as research materials include:

1. Profile data of the Teluk Bintuni Regency Government
2. Organizational Structure at the Communication, Informatics, Cryptography and Statistics Office of Teluk Bintuni Regency
3. Data on the Number of Employees at the Teluk Bintuni Regency Communication, Informatics, Cryptography and Statistics Office
4. Employee data at the Teluk Bintuni Regency Informatics and Statistics Office based on position and education
5. Data on honorary employees at the Communication, Informatics, Cryptography and Statistics Office of Teluk Bintuni Regency based on the latest education.

Research Instruments

According to Sugiyono (2013) (in Rahman, A., Arsyad, N., Rusli, R., Ahmar, A. S., & Musa, H. 2023), a research instrument is an instrument that is used to measure natural and social phenomena that are being observed.

Purwanto (2010) (in Rahman, A., Arsyad, N., Rusli, R., Ahmar, A. S., & Musa, H. 2023) defines research instruments as data collection tools based on measurement and theory objectives.

This study measures the quality of information on the Teluk Bintuni Regency Government's website, which is influenced by human resources, competence, and motivation.

Data Collection Procedure

The steps to collect data for this study are:

1. Literature research

Literature research to learn theories, opinions and laws and regulations by reading through books, literature, magazines, newspapers, e-books and also the internet.

2. Field research

Field research was carried out at the Communication, Informatics, Cryptography and Statistics Office of Teluk Bintuni Regency to obtain data and facts in the field with data collection techniques and tools.

Data Analysis Methods

The data analysis method in this study is qualitative descriptive that describes phenomena with facts or data obtained as they are.

In this study, the researcher tries to reveal the facts that occur in the management of the Teluk Bintuni Regency Government website where the Teluk Bintuni Regency Informatics and Statistics Office with its functional duties is based on the secondary data obtained.

RESULTS AND DISCUSSION

From the SWOT (*Strengths, Weaknesses, Opportunities, Threats*) analysis of factors that affect the quality of regional development information on the Teluk Bintuni Regency Government website:

1. *Strengths*

Internal factors that support information quality:

- a. Availability of sectoral data from various OPDs through cross-sector coordination.
- b. The commitment of local governments in digitizing information and public openness.
- c. There is an official website management team that can update the content regularly.
- d. Support for national and regional regulations on public information disclosure and Electronic-Based Government Systems (SPBE).
- e. The basic ICT infrastructure is already in place, such as local servers and official domains (.go.id).

2. *Weaknesses*

Internal factors that are inhibiting:

- a. Limited human resources of data managers who have technical capacity in the field of statistics and informatics.
- b. Lack of integration between Regional Apparatus data, causing inconsistencies or redundancy of information.
- c. The lack of metadata or methodological explanations makes the data difficult for the public to understand.
- d. The frequency of data updates is irregular, causing information to quickly become obsolete.
- e. Website design and navigation are not user-friendly, especially for the general public.
- f. Lack of Facilities and Infrastructure
 - 1) Limited Technology Infrastructure
 - 2) Lack of Data Automation Support System
 - 3) Unavailability of Collaboration Facilities between OPDs
 - 4) Weak Data Security and Information Backup Systems
 - 5) Absence of a Regional Data Center

3. *Opportunities*

External factors that can be utilized:

- a. Advances in information technology and digital platforms that support real-time data disclosure.
- b. The national program One Data Indonesia (SDI) encourages the improvement of the quality and interoperability of regional data.
- c. The high need of stakeholders for development data for planning, evaluation, and policy making.
- d. Possibility of collaboration with BPS, universities, and NGOs in the preparation and validation of data.
- e. Funding support from international centers or donors to improve the quality of public information services.

4. *Threats*

External factors that can hinder:

- a. Cybersecurity risks, such as hacking or data manipulation.
- b. Dependence on data from agencies that do not have good data management capacity.
- c. Changes in national policies or regional heads that have an impact on information management priorities.

- d. The lack of interest or digital literacy of the community makes information not used optimally.
 - e. Limited regional budget for the development and maintenance of quality information systems.
5. Strategic Recommendations:
- a. Strengthening the institution of regional data guardians and increasing the capacity of regional apparatus human resources in data management.
 - b. Improve system interoperability between OPDs so that information is consistent and up-to-date.
 - c. Ensure the sustainability of data updates with clear schedules and quality standards.
 - d. Utilize national programs (SDI, SPBE) and external partnerships for funding and development.
 - e. Improving system security and public awareness of the importance of access to development information.

There are several elements that must be fulfilled in the development and management of information on the Regional Government website, including:

In terms of human resources

The Communication, Informatics, Cryptography and Statistics Office of Teluk Bintuni Regency has several State Civil Apparatus (ASN) personnel and honorary personnel who each carry out their duties and functions in accordance with the positions and responsibilities given.

Likewise, in the development and management of the Teluk Bintuni Regency Government website which is one of the services to the wider community that needs human resources to manage it. From the data and facts obtained, human resources at the Teluk Bintuni Regency Communication, Informatics and Statistics Office in the development and management of the Teluk Bintuni Regency Government website do not exist. The website of the Bintuni Bay Regency Government is managed by outsourcing personnel who are not domiciled in Bintuni Bay.

In terms of competence

In developing and managing the Regional Government website, human resources are needed who have special skills or abilities in the development and management of the website, including:

- a. Web developer

1) Definition

A web developer, or web developer, is a person who does the work of building and maintaining a website. They work behind the scenes to make the website look attractive and fast-paced.

The process of creating a website includes designing the display, creating content, writing code for the front and back of the site, and setting up network protection.

2) Types of Web Development

a) Frontend Web Development

Frontend development is the part of web development that deals with the appearance of a website. For example, such as navigation menus, page layouts, images, and more. This task is performed by a frontend web developer.

Frontend web developers are in charge of creating a website interface so that users can use the website and find information more easily.

To become a frontend web developer, you must master three programming languages: HTML, CSS, and JavaScript.

In addition, frontend web developers must also ensure that the appearance of the website can adapt to various devices. That way, the website will still look neat and comfortable, regardless of the screen size of the device used.

b) Backend Web Development

If web frontend development is concerned with things that users can see, then web backend development is the opposite. The frontend and backend must work together to make the website run smoothly.

Web backend development is the process of building a website from parts that are invisible to the user.

This process includes databases, servers, operating systems, security, and Application Programming Interfaces (APIs).

To develop a website from the backend side, you need to master server programming languages such as PHP, Python, and SQL.

On the backend side, there are also various frameworks that developers need to master, such as Django, CodeIgniter, and Rails.

c) Fullstack Web Development

The next type of web development is fullstack web development. Here, the developer is in charge of managing the front and back of the website at the same time. This means that a fullstack web developer must be able to create the look and features of the website, while ensuring that the website runs safely and quickly from the server side.

Developers working in the field of fullstack web development must master several programming languages and frameworks.

In addition, fullstack web developers also need to be able to debug, develop applications, solve technical problems, and design and create new features.

b. Graphic Designer

1) Definition

Designer graphics or graphic design is an art form that involves creating or arranging elements such as illustrations, photographs, or lines on a medium. The goal is to convey a message in the form of art. The artwork is usually made by a graphic designer, who is someone who is an expert in understanding and displaying messages through the form of images, both in the form of paintings and digital designs.

2) The Duties of a Graphic Designer

The duties of a graphic designer in addition to thinking and creating design concepts, there are several other things they must do when working as a graphic designer in a company. Some of its duties are as follows:

- a) Gather all the materials needed to turn them into visual forms
- b) Create plans and concepts based on the information provided by the client
- c) Draw illustrations by making initial sketches and related writings
- d) Completing projects and arranging cooperation with external parties such as agencies, design services, printing, and others
- e) Coordinate with the team to achieve project goals
- f) Meeting with clients to get to know the project to be worked on.

- g) Participate in discussions about ideas with clients and provide suggestions on suitable designs for the intended market.
- h) Create different types of graphic images such as illustrations, logos, and website designs.
- i) Selection of Images, colors, and typefaces used
- j) Convey the finished design results to the client.

c. Journalist

1) Definition

A journalist is a person who has the duty and responsibility to do journalistic work. For example, they write, analyze, and report various events to the public through the mass media on a regular basis. According to the Great Dictionary of Indonesian Language (KBBI), a journalist is someone who works by collecting and writing news, both in the form of print and electronic media.

2) Duties of Journalists

a) Provide information in various ways, such as news, articles, reports, or other works. The information provided can affect the way a person thinks, change views, and even encourage people to take an action, both positive and negative. Therefore, a journalist is obliged to convey useful and educational information. This can help improve the quality of life of readers.

b) Providing entertainment to the community

In addition to providing information in the form of knowledge, work in the media sector can also provide pleasure for the community. For example, by displaying journalistic works such as features or comments that explain people's daily lives.

c) Interpreter

Not all events that occur can be immediately understood easily by the public. Therefore, the job of a journalist is to interpret and explain the meaning of the event. For example, through analysis in news reports or opinions in headlines.

d) Public Representative and Advocacy

The last task of a journalist is to protect the interests of the public. Therefore, news must reflect the voice of the people. A journalist can act to criticize government policies or actions that are considered detrimental to society.

d. Content Creator

1) Definition

A Content Creator is someone who creates content that can entertain or provide information according to what the audience wants. The type of content created can be photos, videos, podcasts, writing, digital art, and a variety of others. The content can be disseminated on various social media platforms such as YouTube, Twitter, TikTok, Instagram, Facebook, or blogs.

2) Content Creator's main tasks

The main job of a content creator is to create content. The content creation process is quite long and time-consuming. Starting from exploring ideas, conducting research, drafting, writing texts, shooting processes, editing, to promoting the content.

e. Computer operator

1) Definition

A computer operator is someone who has the responsibility to monitor, inspect, and control computer systems, especially the mainframes used in a company or organization.

Computer operators need to have the right skills and experience according to the task they are doing.

2) Computer operator duties

A computer operator is someone who is in charge of managing various equipment in a computer system. Their main duties are as follows:

- a) Inspect and use computers and their supporting equipment.
- b) Understand how to test and operate a computer according to its function.
- c) Ensure unused equipment is not neglected or malfunctioning.
- d) Keep records of the programs you run and the schedule of computer usage.
- e) Make backup copies of files and monitor the existence of them.
- f) Ensure that the computer room remains clean and tidy.

1. In terms of motivation

Each ASN has different competencies according to the *basic* knowledge they have. Because the management of local government websites requires human resources with *more specific basic knowledge, it is very necessary to increase income for the manager.*

In addition to funds to motivate local government website managers, the website also needs maintenance, both systemically and administratively which also requires funds for its continuity.

CONCLUSION

This study aims to determine the impact of human resources, abilities, and work spirit on the quality of regional development information available on the Teluk Bintuni district government website. The results of the study show that these things have an influence on the quality of the information: The number of employees owned by the Teluk Bintuni Regency Communication, Informatics, Encryption and Statistics Office is limited, especially those who have an educational background in the field of technology. This minimal amount greatly affects services to the community related to information services needed by the community. The competence of the compilers greatly affects the quality of development information contained on the website of the local government of Teluk Bintuni Regency. The competence of human resources, especially in the field of technology, owned by the Teluk Bintuni Regency Communication and Informatics Office is still relatively lacking. This issue also has an impact on the quality of information available on the Local Government website. Motivation in the form of additional income for State Civil Apparatus (ASN) in the management of the Regional Government website needs to be provided. Why is it considered necessary? Because in the management of local government websites, special skills are needed who understand information technology. Each ASN has its own duties and functions. By managing the Regional Government website, it means giving additional tasks to ASN who are given the task of managing it. That means the ASN exerts all its resources to manage the Regional Government website. Thus, this can increase the morale and enthusiasm to innovate in the management of local government websites.

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