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# Regional Government Information System Program at the Regional Secretariat Bitung City

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#### ABSTRACT

This study aims to (1) find out how SIPD is implemented in the Bitung City Regional Secretariat, especially in the Planning and Finance Section, and (2) find out and describe the implementation of SIPD in the Bitung City Regional Secretariat. This study uses a descriptive method with a qualitative approach, where what is collected is opinions, responses, information, concepts, and descriptions in the form of descriptions in expressing problems. Denzin and Lincoln (2021), qualitative research with descriptive methods now emphasizes more on the contextualization and localization of the phenomena being studied. Research not only aims to describe phenomena in general but also to understand how these phenomena play a role in certain local contexts. This is important to provide relevant and applicable insights for certain communities or regions. The results of the study show that the Implementation of the Regional Government Information System (SIPD) in the Bitung City Government has been running since 2021 following applicable regulations. Planning and organizing have been carried out well through training and technical assistance. However, there are still several obstacles, such as data input errors due to human error, limited SIPD application features, and inadequate internet networks and devices. The implementation of SIPD also faces obstacles in data input, which is often delayed due to application maintenance and a lack of routine training for new personnel. Supervision has been carried out through monthly meetings and monitoring based on communication groups, but its effectiveness still needs to be improved. To support more optimal implementation, routine training, improving infrastructure quality, and improvements to the SIPD

application by the central government are needed to make it more stable and functional. This is important to ensure smooth planning, budgeting, and reporting following the objectives of the system.

**Keywords:** Policy Implementation, Information System, SIPD

#### INTRODUCTION

The Regional Government Information System (SIPD) is designed to improve transparency and efficiency in managing regional government data. However, SIPD reporting at the Bitung City Secretariat still faces several unresolved problems. Here are some of the problems that are often faced: (1) Technical and Infrastructure Constraints: Slow internet networks and inadequate hardware hinder SIPD operations. (2). Lack of Training: Employees do not receive sufficient training, making it difficult to use SIPD properly. (3). Limited Human Resources: The lack of experts in the field of information technology exacerbates reporting problems. (4). Policy Misalignment: Central government policies are often inconsistent with conditions in the regions, causing difficulties in implementing SIPD. (5). Lack of Coordination: Ineffective support and coordination between work units results in incomplete or inaccurate reported data.

These issues cause data delays and inaccuracies, affect planning and decision-making, and reduce government transparency and accountability, which negatively impacts public trust. The obligation to use the SIPD Application by the Central Government to the Regional Government will have a positive impact on the implementation of regional government in the future. According to JAA Goni et al. (2022), The available information system can assist regional governments in collecting and analyzing the necessary information, as well as in monitoring the implementation of planned activities. Where accountability, transparency, and integration from the Village/Sub-district Government, District Government, Regency Government Central Government, and Regional Government can be implemented related to Planning and Budgeting to support the creation of Good Government and Good Governance According to Tahulending, F et al. (2023) Good Governance is a very important factor in public services, as well as a gateway to achieving a predetermined goal. However, there are still obstacles to the implementation and use of SIPD in the Regional Government. So, good policy implementation is needed to maximize the use of this SIPD.

Various improvements have been made by the government to improve performance and increase services to the community. One of the sectors targeted for improvement is the field of government bureaucracy, which is expected to be more effective, efficient, and accountable. This can be seen with the issuance of Presidential Regulation (Perpres) Number 95 of 2018 concerning the Electronic-Based Government System (SPBE). Based on the mandate of Law Number 23 of 2014 concerning Regional Government in Article 274, Regional Development Planning is based on data and information managed in the Regional Development Information System. Further explained in Article 391 paragraph (1), the Regional Government is obliged to provide Regional Government information consisting of Regional development information and Regional financial information. Paragraph (2) Regional Government

Information, as referred to in paragraph (1), is managed in a regional government information system. Following the mandate of the Law, the Regional Government Information System (SIPD) is formed as an instrument that provides information on the management of development planning and finance in the Regional Government.

In 2019, the Ministry of Home Affairs of the Republic of Indonesia encouraged Regional Governments to accelerate the implementation of the Regional Government Information System by issuing the Regulation of the Minister of Home Affairs (Permendagri) Number 70 of 2019 concerning the Regional Government Information System while simultaneously revoking the previous SIPD regulation, namely Permendagri Number 98 of 2018. Following up on the policy of using SIPD, the Bitung City Government conducted Technical Guidance on e-Planning for the Use of the Bitung City Regional Government Information System (SIPD) Application in October 2020 to provide an understanding for the Head of Regional Apparatus and Planning Apparatus in the context of implementing SIPD within the Bitung City Government. The implementation of the Regional Government Information System (SIPD) in the Regional Government for the planning of the 2021 Fiscal Year Regional Revenue and Expenditure Budget in Bitung City is one of the steps taken by the Bitung City Government to support the central government program through the Directorate General of Regional Financial Development of the Ministry of Home Affairs.

#### **RELATED WORKS**

#### 1. Public Policy

According to Cairney and Oliver (2020), the approach based on proof in making policy is more emphasized. Effective policies must be based on strong data and comprehensive research. This includes the use of analysis statistics, trial random controlled trials (RCTs), and meta-analysis to ensure policy based on evidence valid. According to Fischer, Torgerson, Durnova, and Orsini (2022), modern public policy must be inclusive and participatory, involving various stakeholders' interests, including communities, non-governmental organizations, and private sectors in the manufacturing process. This ensures that policies reflect the needs and aspirations of the public. According to Sachs (2020), the policy public must consider the sustainability of the environment and society. Good policies focus on Not only the growth economy but also sustainability term length, including preservation sources, Power nature, and social well-being.

Based on the study literature above, the concept of public has experienced significant developments. An approach based on evidence, inclusive, adaptive, and sustainable becomes more important in making policy. Modern public policy must be transparent, accountable, and responsive to change dynamics in the environment, social and economic. In addition, the policy must be designed to overcome problems complex with a holistic and integrated approach. Thus, the policy effectively public can reach the desired goal better and make sure welfare term long for the public.

Based on the opinions of various experts, we can conclude that policy public is a series of actions taken or not carried out by a goal-oriented government certain use solve problems - problems public

or for the sake of the public. Policy for doing something is usually poured out in terms and conditions or regulation legislation made by the government so that own binding and coercive nature.

#### 2. Good Governance

According to Kuhlman and Farrington (2020), modern governance must enter the aspect of sustainability and protection environment. The government expected to develop policies that focus on not only the growth economy but also a sustainable environment to ensure long welfare terms. According to Kuhlman and Farrington (2020), good governance must also covers principle of sustainability. The government must ensure that policies and practices are not only effective in the short term but also sustainable in term length. This includes management sources Power and a caring nature to impact the environment from the public policy.

From the statement, it's clear that Good Governance is defined as a process and guiding structure of politics and relations to social economy and refers to several characteristics or indicators such as participation: supremacy law, transparency, responsiveness, and accountability. Perspective citizens of good governance are repaired structure service public and administration.

#### 3. System Information

A system is a network of interrelated procedures gathering together for an activity to finish a certain target. Information is the result of data processing that has benefits or does not yet have a useful meaning. Data is facts, estimates, or opinions that do not yet have a useful meaning. A procedure is an order from procedures that involves some people inside One or more departments to finish a problem.

System Information is network Work from interrelated procedures relate/work the same for doing an activity use finish a problem that has benefit or mark used for those who need it. System information moment is more complex and encompasses new technology such as big data, intelligence artificial intelligence (AI), and the Internet of Things (IoT). According to Laudon and Laudon (2021), the system's modern information does not only manage data but also analyzes and interprets data in real-time to support making more decisions quickly and accurately. System information now also must be more adaptive to change environment dynamic business.

In context company moment, system information must also be capable of integrating with digital platforms and cloud computing. According to Valacich and Schneider (2020), system information must support remote work and virtual collaboration, as well as be capable of integrating various data sources from different systems to give a comprehensive and integrative picture to management.

#### 4. System Information Regional Government (SIPD)

Based on trust from Constitution Number 25 of 2004 concerning System National Development Planning and Law Number 32 of 2004 concerning Regional Government, that has changed with Constitution Number 23 of 2014. Policy This was then formed in A Regulation of the Minister of Home Affairs Number 70 of 2019 concerning System Information Regional Government (SIPD), which is a guideline for the government in its implementation.

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System information moment This develops rapidly and is increasingly worth tall in an organization. System information that can walk online makes it easier for users to access data where only and when. The system information that is built appropriately will describe a performance-accurate organization for its users in making decisions. That's what it's about. This is utilized by the government to monitor development government with building A, the system called System Information Local Government.

System Information Regional Government or SIPD is a management information development area, information finance area, and information Other Regional Governments that cooperate connected for utilized in an organization development area. (Minister of Home Affairs Regulation 70 of 2019).

#### **METHOD**

## A. Research Approach

This research uses a descriptive method with a qualitative approach, where what is collected is opinions, responses, information, concepts, and explanations in the form of descriptions in expressing problems. Denzin and Lincoln (2021), qualitative research with descriptive methods now places more emphasis on contextualization and localization of the phenomena being studied. Research does not only aim to describe phenomena in general but also to understand how these phenomena play a role in a particular local context. This is important to provide relevant and applicable insights for a particular community or region.

#### B. Research Location

The location of the research is at the Regional Secretariat of Bitung City. This research was conducted for 3 months which was carried out in stages and started from research preparation, initial survey, conducting relevant literature review, compiling proposals, proposal seminars, proposal improvements, making research instruments, data collection, data analysis, compiling a complete thesis, revising the thesis with consultation with the supervisor and thesis examination.

#### C. Focus Research and Description Focus Study

This research focuses on the implementation of SIPD in the Regional Secretariat, the main object of which is the use of SIPD in one of the Sections in the Bitung City Regional Secretariat, namely the Planning and Finance Section of the Bitung City Regional Secretariat, especially in the regional financial information system.

In general, the functions and features contained in SIPD are divided into three parts, namely Regional Development Information for planning, Regional Financial Information for budgeting, and other Regional Government Information for reporting or evaluation.

#### D. Data source

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The types and sources of data in research are divided into two, namely primary data and secondary data. The data sources used in this research come from:

#### 1) Primary Data

Primary data is data obtained directly by researchers by going directly to the field in the form of results from informants through interviews and direct observations containing responses and perceptions related to this research. The informants in this study are:

#### a. Regional Secretary

This informant is the Head of the Regional Secretariat to obtain information on the use of SIPD in the Regional Secretariat in general.

#### b. General Administration Assistant

This informant is hierarchically the superior of the Head of Planning and Finance to obtain further information regarding SIPD at the Regional Secretariat.

#### c. TAPD Bappeda

This informant is one of the SIPD users who regulates planning in SIPD and coordinates SIPD planning.

#### d. TAPD Finance

This informant is one of the SIPD users who regulates budgeting in SIPD and coordinates SIPD budgeting.

# e. SIPD Operator

This informant is a SIPD user in SKPD, this study, is specifically focused on SIPD operators in the Planning and Finance Section of the Regional Secretariat, namely the Head of the Section, Head of the Planning Sub-Section, and Head of the Finance Sub-Section.

#### 2) Secondary data

Secondary data is data that comes from other available sources, but is directly related to the object being studied. The secondary data in this study comes from literature studies which include: laws and regulations, books, journals, theses and articles.

#### E. Data collection technique

There are 3 data collection techniques used by researchers in this research, namely:

# 1) Observation

In this study, the researcher used a type of non-participant observation because the researcher only observed from the outside and did not actively participate in the activity. The researcher was physically present at the scene but only observed and systematically recorded the information obtained. Some of the information obtained from the observation results are space (place), actors, activities, objects, creation, events or incidents, time, and feelings. The reason the researcher conducted the observation was to answer questions, to help understand human behavior, and for evaluation, namely measuring certain aspects and providing feedback on the measurements related to SIPD management at the Bitung City Regional Secretariat.

# 2) Interview

The interview is a method of data collection conducted by holding a question-and-answer session with people who are closely related to the research problem, both in writing and verbally, to obtain information about the problem being studied by the research. The type of interview used in this study is an in-depth interview. In-depth interviews, in general, are the process of obtaining information for research purposes using face-to-face questions and answers between the interviewer and the informant or person being interviewed, with or without using an interview guide. Interviews are conducted with easy questions, starting with factual information, not on multiple questions, not asking personal questions before building a report, repeating answers for clarification, and giving a positive impression.

#### 3) Documentation

In this study, documentation was obtained from letter archives reports related to SIPD management at the Regional Secretariat, especially in the Planning and Finance Section. Other documentation is in the form of photo archives during interviews and interview transcripts obtained from this research activity.

## F. Data Analysis Techniques

In producing objective and accurate data, the data obtained from the location, both in the form of primary data and secondary data, will be compiled and analyzed using qualitative description in the form of an explanation, which will then be narrated according to the problem being studied.

Data analysis in this study, using Huberman data analysis. In the Miles and Huberman model, it is said that activities in conducting qualitative data analysis are carried out interactively and continuously until completion so that the data is saturated. Huberman's qualitative data analysis consists of three stages, namely data reduction, data presentation, and verification.

#### **RESULTS AND DISCUSSION**

Research results show that the implementation of SIPD in Bitung City Government has already implemented the start Year 2021 budget as per the Regulation of the Minister of Home Affairs Number 70 of 2019 concerning System Information Local Government (SIPD). Bitung City Government has to start preparing the Implementation of SIPD in Bitung City by the end of 2020. Terry, in his book Principles of Management (Sukana, 2011), reveals that planning is selection and related to facts and manufacture and use of assumptions about the future in visualization and formulation for proposed activation believed required to reach desired results. Bitung City Government Already plans to use SIPD for a year to carry out Training / Technical Guidance to all existing SKPDs, especially to officials who have task main points and functions in the field planning. Special For Regional Secretariat, This Technical Guidance is followed by the Planning and Finance Section. In line with principle management by Terry namely, Organizing is defined as the entire process of grouping people, tools, responsibilities, and authorities such that appearance creates an organization that can moved as a unity in frame achievement of the goals that have been determined. Bitung City Government, specifically The Regional Secretariat, has organized the following field of duties.

SIPD Management at the Bitung City Regional Secretariat, especially in the Planning and Finance Section, sees that planning is running well, but some factors cause input delays First, there is the human error factor where there is an error in input in planning in SIPD; Second, there are errors in the SIPD application, namely in accordance results SIPD interviews frequently undergoing maintenance so that application No can be opened and the data input process must wait application walk with fluent back. To overcome factor The first obstacle, the Regional Secretariat has sent the relevant operator for follow-up Training / Technical Guidance however, it still found input error in SIPD. Training internally regarding SIPD at the Regional Secretariat has not yet been implemented. However matter this, in anticipation with mentoring in a way direct for SKPDs that experience constraint in the input process. Next, For factor the second obstacle, the party, The Regional Secretariat, has coordinated with the Regional Development Planning Agency as guarantor answer in field planning. However, due to the error in the SIPD application, the Regional Secretariat can only wait until the system can run normally again.

Organizing also involves allocator facilities and infrastructure To support those people's tasks in the organization, as well as arrange a mechanism for their work so that they can ensure the achievement of objective organization in the implementation of SIPD. From the results of the research, it was also found that there were obstacles in terms of facilities and infrastructure, where poor internet network good also causes delays in SIPD input. From the results, the research found that For support, the New Head of the Planning Section is assisted by staff. However, it was found also that There are users on the Regional Secretariat SIPD that have not been done update.

Terry, quoted by Sukarna (2011), stated that Implementation (actuating) is to arouse and encourage all member groups so that they are willing and try hard To reach objectives with sincere as well as harmonious planning and efforts organizing from party leadership. Implementation without planning No will walk effective Because planning that's it determines objectives, budget, standards, methods, work, procedures, and programs. Based on the results of research, implementation planning, and budgeting at SIPD, the Regional Secretariat has walked with good. However, To support the implementation of SIPD, the Regional Secretariat implemented Regular technical training/guidance to anticipate mistakes input and also anticipate the existence of change personnel who frequently happened to ASN.

The implementation of SIPD by the Regional Government seems forced by the Central Government to meet several problems. The local government is required to carry out planning, budgeting and reporting processes through SIPD, which has not been perfectly confronted with the implementation of the activity program that must be quickly implemented. Therefore, The Central Government should be more improve and optimize the performance of the SIPD application.

The results of the interview above show that the implementation of SIPD management at the Bitung City Regional Secretariat, from the aspect of Power implementation (actuating), is lacking walk maximum, the thing the Bitung City Regional Secretariat late in data input in SIPD, it is known that For good data entry planning and budgeting it is set and if pass specified time No Can implemented input into the system and must be opened or scheduled return with addition time by the TAPD Bappeda and TAPD Finance accounts. This is because SIPD is an application based on technology or online; the

process uses an internet server network, and then the data input process sometimes experiences problems as the SIPD application is currently under maintenance. The next scene from the aspect means that the infrastructure is not adequate. In a way, quality and quantity matter to the computer whose capacity is not adequate besides That, the poor internet network is Good so, which impacts the obstruction of the data input process in the SIPD application.

More carry-on supervision (controlling) as defined by Terry quoted by Sukarno (2011) Control can be defined as a process of determining What should be achieved, that it is standard, and what is going on achieved. That's it. Performance, evaluate performance, and if required, apply size corrective so that performance is in progress by a plan that is by standards. Based on the results of research, one form of supervision carried out by the Planning and Finance Section Bitung City Regional Secretariat is an implementation meeting, which is carried out regularly every month to evaluate activities carried out in the month before and prepare activities that will be implemented in the month walk including in SIPD. It was also found that reporting through SIPD at the Regional Secretariat is yet to be implemented, a consequence of the SIPD application does not yet provide full feature reporting. Reporting to SIPD when This is only limited to Report Realization Integrated budget with application other namely SIPANDA. As a supervisor, the Regional Secretariat also makes Whats App Group monitor data input into the Regional Secretariat SIPD.

#### **CONCLUSION**

Based on data analysis and findings in the field, they can conclude as follows: Planning in system information Government Regional Planning (SIPD) is a planning process carried out by the government area with the use of system-available information. The purpose of planning in SIPD is To determine directions and necessary steps To reach an objective government area. In the planning process in SIPD, the government area will identify the desired goal achieved, collect and analyze the necessary information, as well as determine necessary strategies and actions taken To reach the objective. System-available information can help the government area collect and analyze the necessary information, as well as monitor implementation activities that have been planned. Planning in SIPD is also part of the management process of government more area-wide. With the use of systemavailable information, the government area can manage activity government more effectively and efficiently, as well as ensure that the goals that have been set can achieved. Budgeting in system information government regional planning (SIPD) is a planning and management process budget carried out by the government area with the use of system-available information. The purpose of budgeting in SIPD is To ensure that the available budget can used in a way that is effective and efficient For reaching objective government area. In the budgeting process in SIPD, the government area will identify the needs required budget To reach the goals that have been determined. Then, the government area will determine sources available budget and allocate the budget to various activities that are considered important. With the use of system-available information, the government area can manage the budget in a way more effectively and efficiently, such as by following the development use

of the budget in real-time and monitoring implementation activities that use the budget. System information can also help the government area in manage associated risks with a budget, such as monitoring level expenditure budgets that are not by plan. Evaluation in system information government area (SIPD) is the process of evaluating the success of activity in a government area that is done with the use of system-available information. The purpose of evaluation in SIPD is To determine how far the activity government has reached the goals that have been set, and To identify success and failure that occurred during implementation activities. In the evaluation process in SIPD, the government area will collect and analyze related data with activities the government has done. The data can be in the form of quantitative data, such as the activities that have been implemented or the number of people involved in the activity, or qualitative data, such as the level of satisfaction of the public or the level of effectiveness of activities. With the use of system-available information, the government area can manage and analyze evaluation data more effectively and efficiently. The evaluation results can also be used as a base For compiling plan development activity in the government area in the future.

#### REFERENCES

- Ansell, C., Sørensen, E., & Torfing, J. (2022). Co-Creation and Co-Production in Public Services: Lessons from the Field. Policy Press.
- Bovens, M., Goodin, R.E., & Schillemans, T. (2021). The Oxford Handbook of Public Accountability. Oxford University Press.
- Cairney, P., & Oliver, K. (2020). How Should Academics Engage in Policymaking to Achieve Impact?. Political Studies Review.
- Denzin, N. K., & Lincoln, Y. S. (2021). The SAGE Handbook of Qualitative Research. SAGE Publications.
- Ekaputra, Nanda Dias. (2021). Effectiveness Implementation Application System Information Regional Government (SIPD) in Preparation RKPD Documents in the Regency Nganjuk. Journal Autonomy Vol.21 Number 1 April 2021 Edition
- Fischer, F., Torgerson, D., Durnova , A., & Orsini, M. (2022). Handbook of Critical Policy Studies. Edward Elgar Publishing.
- Fung, A. (2021). Democracy and the Digital Public Sphere. Cambridge University Press.
- Goni, JAA, Sendouw, RHE, & Mandagi, M. (2022). Management of Regional Government Information Systems (SIPD) at the Regional Secretariat of District Minahasa. International Journal of Information Technology and Education (IJITE), 2(1), 165-175.
- Head, B. W., & Alford, J. (2019). Wicked Problems: Implications for Public Policy and Management. Administration & Society.
- Hill, M., & Hupe, P. (2020). Implementing Public Policy: An Introduction to the Study of Operational Governance. SAGE Publications.
- Kuhlman, T., & Farrington, J. (2020). What is Sustainability? Sustainability.

- Regional Government Information System Program at the Regional Secretariat Bitung City Inriani Christy Mawuntu, Recky H E Sendouw, Sisca Beatrix Kairupan
- Laudon, K.C., & Laudon, J.P. (2021). Management Information Systems: Managing the Digital Firm. Pearson.
- Mergel, I., Edelmann, N., & Haug, N. (2019). Defining Digital Governance: Definitions and Conceptual Dimensions. Public Administration Review.
- McKinney, E. H., Kroenke, D. M., & Boyle, R. J. (2022). Using MIS. Pearson.
- Mergel, I., Edelmann, N., & Haug, N. (2020). Defining Digital Transformation: Results from Expert Interviews. Government Information Quarterly.
- Miles, M.B., Huberman, A.M., & Saldaña, J. (2020). Qualitative Data Analysis: A Methods Sourcebook. SAGE Publications.
- Nabatchi, T., & Leighninger, M. (2020). Public Participation for 21st Century Democracy. Wiley.
- O'Toole, L. J., & Meier, K. J. (2019). Public Management: Organizations, Governance, and Performance. Cambridge University Press.
- Regulation President Number 95 of 2018 concerning System Government Electronic Based (SPBE).
- Regulation of the Minister of Home Affairs Number 70 of 2019 concerning System Information Regional Government (SIPD)
- Regulation of the Minister of Home Affairs Number 84 of 2022 concerning Guidelines Compilation Budget Regional Income and Expenditure Year 2023 Budget
- District Regional Regulation Minahasa Number 4 of 2016 concerning Formation and Composition District Regional Apparatus Minahasa
- Pressman, J. L., & Wildavsky, A. B. (2021). Implementation: How Great Expectations in Washington are Dashed in Oakland. University of California Press.
- Rainer, R. K., Prince, B., & Watson, H. J. (2023). Introduction to Information Systems: Supporting and Transforming Business. Wiley.
- Sachs, J.D. (2020). The Age of Sustainable Development. Columbia University Press.
- Circular Letter of the Minister of Home Affairs of the Republic of Indonesia Number 137/736/SJ dated January 27, 2020, concerning Acceleration Implementation SIPD System
- Siagian, Sondang P. 2010. Management Human Resources. Jakarta: Bumi Aksara
- Tahulending, F., Kairupan, S., Siwij, D., & S, MR (2023). Implementation Principles of Good Governance at the UPTD Samsat Manado Office. Journal Scientific Administration Local Government, 15(1), 49-61.
- Terry, George R. and Leslie W Rul. 1999. Basics Management. Jakarta: Bumi Aksara.
- Constitution Number 25 of 2004 concerning System National Development Planning
- Constitution Number 32 of 2004 concerning Regional Government Law Number 23 of 2014 concerning Local government
- Usman, Husain. (2008). Management, Theory, Practice, and Research of Education. Jakarta: Bumi Aksara.
- Valacich, J. S., & Schneider, C. (2020). Information Systems Today: Managing in the Digital World. Pearson.
- Walker, B., Holling, C.S., Carpenter, S.R., & Kinzig, A. (2020). Resilience, Adaptability, and Transformability in Social-Ecological Systems. Ecology and Society.