SYSTEMATIC LITERATURE REVIEW ON THE APPLICATION OF DYNAMIC SYSTEMS IN ORGANIZATIONAL PERFORMANCE TO ENHANCE SERVICE QUALITY

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Abstract: *The application of dynamic systems provides a robust framework for understanding, modeling, and enhancing organizational performance through continuous change. Several organizations have attempted to implement various approaches and methods to improve service quality, but the challenges faced are often complex and dynamic. Rapid changes in the business environment, technological developments, and shifts in customer preferences are some factors that can influence organizational performance. Therefore, an adaptive and responsive management approach to these changes is necessary. Currently, there is a considerable amount of research examining public service quality. Hence, a review of journal papers addressing this topic is essential. The methodology employed in this research is Systematic Literature Review (SLR) focusing on journal papers published from 2010 to 2023. Three Research Questions (RQ) were defined for this study. The final results obtained indicate that the most common data collection method is through questionnaires, the frequently used data analysis technique is linear regression, and the most influential factor on public service quality is organizational performance. The findings of this research are expected to provide insights for public institutions to continually enhance their service quality through continuous improvement of organizational performance.*

Keywords: *Service Quality, Organizational Performance, Systematic Literature Review*

INTRODUCTION

The rapid growth in information technology and dynamic changes in the business environment are compelling organizations to seek more adaptive approaches. The application of Dynamic Systems provides a robust framework for understanding, modeling, and enhancing organizational performance through continuous change. This research focuses on how the implementation of Dynamic Systems can improve service quality in the context of organizational performance. Service quality has become a critical factor influencing the success of an organization in achieving its strategic goals. Improving service quality is not only a customer requirement but also a necessity in facing the increasingly intense competition in the global market. Public services are fundamentally manifested in terms of serving, encouraging, facilitating, simplifying, and being open to everyone (Parawansa, 2015).

Essentially, public service is a requirement delineated in Law Number 25 of 2009 regarding Public Service, as articulated in Article 1, paragraph (1). This article asserts that public service is an endeavor directed at meeting the service needs, in accordance with regulations, for every citizen and resident. These needs encompass goods, services, or administrative services delivered by public service providers. Paragraph (7) further underscores the significance of service standards, serving as benchmarks to guide service providers and evaluate service quality. This is seen as the obligation and commitment of service providers to the community, ensuring the provision of quality, timely, accessible, affordable, and measurable services. Numerous organizations have endeavored to adopt diverse approaches and methods to enhance service quality, yet the challenges encountered are frequently intricate and ever-changing. Rapid changes in the business environment, technological developments, and changes in customer preferences are some factors that can influence organizational performance. Therefore, an adaptive and responsive management approach to these changes is necessary. The implementation of dynamic

systems as a framework for managing and improving organizational performance offers a holistic and change-oriented approach. Dynamic systems enable organizations to model and understand the internal and external dynamics that influence their performance. By understanding the relationships and dependencies among variables, organizations can identify trigger points for change, design adaptive strategies, and optimize processes to achieve high service quality.

However, despite the promising nature of this concept, there has been limited research specifically exploring the implementation of dynamic systems in the context of improving service quality. Therefore, this study aims to fill this knowledge gap by investigating how the implementation of dynamic systems can help organizations navigate the dynamics of the business environment and respond to changes in a way that enhances service quality. The results of this research are expected to provide new insights and make a significant contribution to management and business literature.

This study utilizes the Systematic Literature Review method to review previous research on organizational performance in improving public services. The findings of this research are expected to serve as a reference for further studies in enhancing public services through improved organizational performance. Data related to articles discussing organizational performance in improving public services are collected, analyzed, identified, and systematically reviewed at each stage in accordance with predetermined steps (Triandini et al., 2019), based on the SLR (Systematic Literature Review) method. This ensures avoidance of subjective identification and aims to contribute to the literature on the utility of the SLR method in article identification (Aprillia et al., 2021).

METHOD

The approach utilized in this study is a Systematic Literature Review (SLR), entailing a thorough examination of specific discussions concentrated on recognized and systematically categorized issues. This method includes assessment, conclusion drawing, and literature selection based on pre-defined criteria, relying on evidence and facts from high-quality and relevant research to address the research questions (Latifah & Ritonga, 2020).

The data used in this research are derived from literature articles with an ISSN (International Standard Serial Number) or E-ISSN (Electronic International Standard Serial Number), considered as secondary data. The data search process was conducted using the Google Chrome search engine through the http://scholar.google.co.id/ site. The use of this search engine was chosen for its simplicity in exploring scholarly works with broad coverage and being the largest publication database.

The study focuses on improving public services by maximizing organizational efficiency through dynamic systems. The choice to center the research on public services is motivated by the varied factors that impact them. This is regarded as crucial for relevant public institutions to consider, ensuring that public service satisfaction aligns with the expectations of the general public.
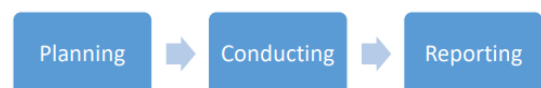

Figure 1. Research Stages

Diagram 1 above illustrates a series of stages in this research. The initial stage is called the planning stage, which includes initial planning for the implementation of the Systematic Literature Review (SLR). Next, we enter the implementation stage, which is called the SLR implementation stage. This stage involves the conductive

process of the SLR itself. The final stage is called the reporting stage, which is the stage of writing the SLR results report.

Research Question

At this stage, questions are determined that are appropriate to the research topic. The following is the research question in this study:

1. RQ1 : What data collection methods are used in research on improving public services through organizational performance?
2. RQ2 : What are the methods of data analysis in decision making related to research on improving public services through organizational performance?
3. RQ3 : What factors have an influence on public services through improving organizational performance?

Search Process

The search process, also known as the 'search process,' is the initial step in obtaining sources relevant to the research questions. Source searches are conducted through the website https://scholar.google.co.id/.

Inclusion and Exclusion Criteria

At this juncture, specific criteria are devised to assess the suitability of identified data for utilization as research data sources. The following criteria are employed to ascertain whether data can be deemed suitable as research data sources:

1. The obtained data has a time range from 2010 to 2023.
2. The data is obtained sources https://scholar.google.co.id/.
3. The utilized data comprises solely of academic papers from journals that are associated with the enhancement of public services.

Quality Assesment

At this stage, the found data will be assessed by referring to the available research questions:

1. QA1 : Was the journal paper published within the time range of 2010-2023?
2. QA2 : Does the journal paper discuss public services?
3. QA3 : Does the journal paper describe the research data collection and analysis methods?

And each paper will be assigned a score based on the above questions.

1. Yes: Pertaining to journal papers that align with the questions posed in the quality assessment.
2. No: in the case of journal papers that do not correspond to the questions outlined in the quality assessment.

Data Collection

During this phase, the necessary research data is gathered, and the data collection steps are executed as follows:

1. Visit the site https://scholar.google.id/
2. Enter the keywords "public services, organizational performance, dynamic systems"
3. Enter the specific research range according to the period specified in the previous criteria.

Data Analysis

In this phase, the data gathered in the prior stage will be subjected to analysis. The results obtained from this analysis will address the predetermined research questions comprehensively.

Documentation

At this stage, the process of writing research results is carried out according to the format that has been prepared for compiling the paper.

RESULT AND DISCUSSION

The results of the search process and the application of inclusion and exclusion criteria showed that only 25 journal papers met the specified criteria and were consequently chosen. These criteria included papers published within the period of 2010-2023 and those addressing discussions on both "quality of public services" and "organizational

performance." The results of the quality assessment are presented in tabular form as follows.

Table 1. Result of Quality Assesment

Author	Year	QA1	QA2	QA3	Result
Tony Boland and Alan Fowler	2015	Yes	Yes	Yes	Accepted
Rahajang & Manahan	2021	Yes	Yes	Yes	Accepted
West Martz	2013	Yes	Yes	Yes	Accepted
Sebastián Villa-Rincón and Milton M. Herrera	2019	Yes	Yes	Yes	Accepted
Lesmana Rian Andhika	2019	Yes	Yes	Yes	Accepted
Anto & Erma	2012	Yes	Yes	Yes	Accepted
Helwinda	2022	Yes	Yes	Yes	Accepted
Widiaswari	2012	Yes	Yes	Yes	Accepted
Debby & Kania	2018	Yes	Yes	Yes	Accepted
Effendi	2022	Yes	Yes	Yes	Accepted
Emil	2020	Yes	Yes	Yes	Accepted
Teni	2011	Yes	Yes	Yes	Accepted
Mananeke & Rares	2019	Yes	Yes	Yes	Accepted
Pettatolo	2019	Yes	Yes	Yes	Accepted
Ester	2021	Yes	Yes	Yes	Accepted
Yunyun	2021	Yes	Yes	Yes	Accepted
Andi	2021	Yes	Yes	Yes	Accepted
Hesty	2021	Yes	Yes	Yes	Accepted
Juhria	2019	Yes	Yes	Yes	Accepted
Widuri	2023	Yes	Yes	Yes	Accepted
Adrianto	2020	Yes	Yes	Yes	Accepted
Yenny	2020	Yes	Yes	Yes	Accepted
Robbi	2010	Yes	Yes	Yes	Accepted
Satria	2020	Yes	Yes	Yes	Accepted
Trong	2020	Yes	Yes	Yes	Accepted

In this step, the data will be investigated, and the findings will provide answers to the previously established Research Questions (RQ). Additionally, recurring aspects of the quality of public services from 2010 to 2023 will be examined and discussed.

Result RQ1

Based on Research Question 1 or RQ1 regarding the data collection methods used in the research, the categories shown in the following table were generated.

Table 2. Categories Based on RQ1

No	Method of collecting data	Number of Paper	Percentage
1	Questionnaire Instrument	16	64%
2	Literature Review	4	16%
3	Interviews, Historical Data and Observations	5	20%
	Total	25	100%

Based on these results, it was found that the majority of papers used research methods using questionnaire instruments which were distributed directly to research respondents, namely 16 papers (64%).

Result RQ2

Based on Research Question 2 or RQ2, the data analysis method used in the research paper is shown in the following table.

Table 3. Categories Based on RQ 2

No	Data Analysis Methods	Number of Paper	Percentage
1	Dynamic Systems Simulation	5	20%
2	Path Analysis	4	16%
3	Linear Regression	9	36%
4	Correlation Analysis	2	8%
5	Etc	5	20%
	Total	25	100%

Researchers have not extensively employed dynamic system concepts in enhancing service quality, as indicated by the findings from literature searches. In general, research related to service quality was found to predominantly use linear regression analysis.

Result RQ3

Based on Research Question 3 or RQ3, the factors that influence the quality of public services in the research paper are shown in the following table.

Table 4. Categories Based on RQ3

No	Factors or Variables	Number of Paper	Percentage
1	Organizational Performance	21	84%
2	Job Satisfaction	2	8%
3	Management Organization	3	12%
4	Model Evaluation	1	4%
5	Stc	9	36%

The table above illustrates that organizational performance predominantly influences service quality, as indicated by the reviewed papers.

Summary of Data Analysis Results

From the findings related to each Research Question (RQ), insights have been gathered regarding data collection techniques, analysis methods, and factors influencing the quality of public services. Researchers, in the span from 2010 to 2023, have explored and identified these aspects in their studies.

Table 5. Most Frequency Categories of RQ

RQ	Aspect	Categories
1	Method of collecting data	Questionnaire Instrument
2	Data Analysis Methods	Linear Regression
3	Influential Factors	Organizational Performance

CONCLUSION

The Systematic Literature Review (SLR) results allow for the formulation of a conclusion based on the findings of the conducted research. The predominant data collection method identified is the utilization of questionnaire research

instruments. The most frequently used analysis methods include linear regression, path analysis and dynamic systems. And the factor that most influences the quality of public services is organizational performance. Apart from that, several other factors were found which were considered to have an influence on the quality of public services.

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