

# ANALYSIS OF BUSINESS SERVICE INNOVATION STRATEGIES ON SUSTAINABLE BUSINESS PERFORMANCE THROUGH THE “SIKOMPAK” APPLICATION (STUDY ON PERUMDAM TIRTA KENCANA REGION 1 SAMARINDA CITY)

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## Abstract

This study aims to analyze service innovation strategies through the “SiKompak” application in supporting sustainable business performance at PERUMDAM Tirta Kencana, Regional Service Unit 1, Samarinda City. The focus includes evaluating the application's usefulness in enhancing service delivery and identifying internal and external factors to formulate strategies that influence business sustainability. This research uses a descriptive qualitative approach with an interactive analysis model by Miles and Huberman, which involves data collection, reduction, presentation, and conclusion drawing. Data were obtained through in-depth interviews with five informants from various organizational levels, providing a comprehensive perspective on the application's implementation. IFAS and EFAS analyses were conducted to develop the SWOT matrix. The findings show that SiKompak contributes positively to service effectiveness and employee performance. The application is operationally integrated, supported by adequate devices and relevant features, thereby improving efficiency, data accuracy, and response speed to customer complaints. From a sustainability perspective, SiKompak promotes economic efficiency, equitable workload distribution, and reduction of physical waste. However, technical challenges such as network disruptions and data synchronization still need to be addressed. The SWOT analysis places the innovation strategy of SiKompak in Quadrant II, recommending a defensive diversification strategy that focuses on strengthening internal capacity to address external challenges and ensure long-term sustainability. The novelty of this research lies in the integration of digital innovation strategies with a sustainability approach, as well as the use of a multi-level interview method within the organization.

**Keywords:** SiKompak, Service Innovation, Digital Transformation, Employee Performance, Sustainability.

## INTRODUCTION

The use of information technology today is an essential and integral aspect of business processes, especially in the era of digital transformation (Laudon & Laudon, 2003). The implementation of technology is no longer an option but a necessity in order to maintain service quality, customer satisfaction, and business sustainability.

For a company, delivering excellent service is a key instrument to achieve a competitive advantage, retain customer loyalty, and enhance its image (Kotler & Armstrong, 2017). Grönroos, (2007) states that service quality directly affects customer satisfaction and loyalty, thereby having a significant impact on business performance.

Regional-Owned Enterprises (BUMD) are mandated by the local government to provide essential services, such as clean water, which in turn contributes to the community's quality of life (UU No. 23 TAHUN 2014). In this context, Perumdam Tirta Kencana Samarinda is a BUMD responsible for delivering clean water services to the community (Suherman et al., 2019).

However, Perumdam Tirta Kencana is faced with several challenges, including limited resources, conventional service processes, and poor coordination, which may undermine customer satisfaction (Sari & Indarto, 2024). In an effort to optimize service delivery, Perumdam Tirta Kencana has undergone digital transformation by launching the Customer Communication Information System “SiKompak” (Gultom et al., 2024) to enable the community to check bills, apply for new connections, and submit complaints — making service delivery more efficient, transparent, and more responsive to customer needs.

Furthermore, the implementation of technology also helps improve business performance and maintains operational sustainability (Azzahra & Firdaus, 2024). Through technology, employees can access information more easily, make decisions faster, and provide higher service quality (Waris et al., 2020).

Therefore, based on the background described above, the main issue to be addressed in this study is: How can the implementation of service innovation strategies at Perumdam Tirta Kencana Regional 1 support sustainable business performance through the use of the SiKompak application? This analysis will apply the SWOT approach and DeLone & McLean's Information System Success Model (2003), which includes dimensions of system quality, information quality, service quality, usage, user satisfaction, and net benefits.

## METHODOLOGY

The type of research used in this study is **descriptive qualitative research**. Creswell & Bacz, (2020) explain that a qualitative approach aims to understand how individuals or groups make sense of a phenomenon or social issue. Furthermore, descriptive research, according to Sinambela, (2014), is used to provide a more comprehensive view of social conditions while exploring and describing the phenomenon or reality that occurs.

The focus of this study is to analyze the implementation of service innovation strategies at Perumdam Tirta Kencana Regional Office 1 and their impact on sustainable business performance, based on the SWOT Analysis and Delone & Mclean, (2003) Model of Information System Success, which includes the following aspects:

- System Quality
- Information Quality
- Service Quality
- Use
- User Satisfaction
- Net Benefits

The data used in this study comes from two sources: primary data and secondary data.

### a. Primary Data

According to Sinambela, (2014), primary data refers to the original data directly collected by the researcher using previously designed instruments. In this study, primary data were collected through interviewing key informants and direct observation at Perumdam Tirta Kencana Regional Office 1, Service Division.

### b. Secondary Data

Meanwhile, Azwar, (2018) states that secondary data refers to information that comes from other sources and is not directly collected by the researcher. The secondary data used includes case studies of similar technology implementation in other areas and additional information that supports the research process.

The data collection techniques used in this study are as follows:

### a. Interview

According to Sugiyono, (2016), interviewing is a data collection technique used to obtain in-depth information about the problems under study. In this study, the key

informant is the Assistant Manager of the Meter and Service Division at Perumdam Tirta Kencana Regional Office 1, who was selected due to their competence and involvement in service innovation. In addition, 3 employees who actively use the SiKompak application and 1 customer were also involved as supporting informants.

**b. Observation**

Jaya, (2020) explains that observation is a method of collecting data by directly observing the object of study in the field, thereby providing more accurate and reliable data related to the implementation of service delivery and the impact of the SiKompak application at Perumdam Tirta Kencana Regional Office 1.

**c. Documentation**

According to Widodo, (2018), documentation is a data collection technique that involves retrieving documents, texts, images, or other materials related to the aspects under study, such as documentation of the SiKompak application usage, interview results, and observation findings.

The data analysis techniques used in this study are as follows:

**a. Descriptive Analysis**

Descriptive analysis is a process of describing events based on the data collected and then organizing them in a systematic narrative (Faizin & Haerussaleh, 2020). In this study, the data analysis process refers to Miles & Huberman's (1992) interactive model, which includes data collection, data reduction, data display, and conclusion drawing (Afrizal, 2017).

**b. SWOT Analysis**

After collecting the data, the researcher performs a SWOT analysis to formulate business strategies that can support the development of the SiKompak application at Perumdam Tirta Kencana, Samarinda. The analysis starts by identifying internal strengths and weaknesses using IFAS (Internal Factor Analysis Summary) and external opportunities and threats using EFAS (External Factor Analysis Summary). Based on these results, several strategies are formulated:

- S-O (maximizing strengths and opportunities),
- W-O (minimizing weaknesses while utilizing opportunities),
- W-T (overcoming weaknesses and threats),
- S-T (maximizing strengths to reduce the impact of threats).

This analysis is also complemented by a SWOT diagram to provide a more comprehensive view.

## RESULTS AND DISCUSSION

### a. Business Service Innovation on Sustainable Business Performance through Sikompak Application at PERUMDAM Region 1 Samarinda City

In evaluating the quality of service provided through the SiKompak application, the researcher refers to the principles and indicators found in Delone & Mclean, (2003) information system quality model. The explanation for each indicator is presented in the following section:

#### - System Quality

Based on the research results, the system quality of SiKompak is quite good and able to support service delivery. This is evident from the availability of complete hardware (PCs, printers, and other equipment) and improvements made to make the application more user-friendly, thereby increasing employee work efficiency. Employees also appreciate its ease of use and faster service delivery.

However, there are some technical issues, such as occasional printer jams, slow computers, and network problems, which may cause bugs or erroneous customer data displays. These issues are not significant and can be addressed, allowing the overall service quality to remain strong and adequately meet community needs.

#### - Information Quality

In addition to system quality, information quality also contributes to the effectiveness of service delivery at Perumdam Tirta Kencana Region 1. The SiKompak application is considered to provide complete, accurate, and relevant information in accordance with operational needs. This is evident in the availability of customer data, billing details, and water meter photos, which aid employees in serving customers.

Furthermore, the application's features are **adjusted** to match each employee's responsibilities and tasks, making its use more practical and appropriate to their respective roles. This adjustment helps improve service efficiency and quality, enabling SiKompak to better meet internal needs and support smooth business processes.

- Service Quality

In addition to system and information quality, service quality also contributes to the effectiveness of SiKompak's utilization at Perumdam Tirta Kencana Region 1. The SiKompak application is considered to provide fast and responsive service, especially when technical issues arise, ensuring smooth service delivery. This is evident from the IT team's prompt response in addressing problems, regular updates and improvements, as well as training sessions and discussions provided by management for employees on how to use the application effectively.

Furthermore, its development involves collaboration with external vendors, while the internal IT team is responsible for installation, operation, and server maintenance. This synergy helps maintain the quality of IT services, allowing SiKompak to provide maximum support for customer service processes. Thus, the service quality offered by SiKompak contributes to improving service effectiveness, user satisfaction, and the operational performance of Perumdam Tirta Kencana Region 1.

- Use

The use of the SiKompak application at Perumdam Tirta Kencana Wilayah 1 is considered to be highly active and extensive, both by employees who work in the office and those in the field. The application serves as a key tool in supporting service delivery and operational processes, enabling them to be carried out more efficiently and optimally. This is evident from its frequent usage, strong integration, and significant role in employees' daily routines.

Additionally, SiKompak has been in use for more than ten years, allowing both senior and newer employees to become familiar and comfortable with its operation. This extensive experience further supports the process of technology adoption and implementation, enabling SiKompak to make a significant contribution to the quality of service and the performance of Perumdam Tirta Kencana Region 1.

- User Satisfaction

The level of user satisfaction with the SiKompak application at Perumdam Tirta Kencana Region 1 is considered quite good. This is evident from its ease of use, faster service delivery, smoother coordination, and reduced reliance on physical documents, all of which contribute to improving operational performance. Employees also prefer using SiKompak over the previous system, as it is considered more advanced, comprehensive, and better aligned with their work needs.

However, some obstacles remain, particularly related to occasional network instability, which can disrupt service delivery, data entry, and responses to customer complaints. Despite these issues, user satisfaction is still maintained, and SiKompak is regarded as able to provide more optimal and consistent support for service delivery at Perumdam Tirta Kencana Region 1.

- Net Benefits

The use of the SiKompak application brings significant benefits to employees, customers, and the management of Perumdam Tirta Kencana Wilayah 1. The application helps improve service quality, especially in terms of response to complaints and customer requests, thereby increasing community satisfaction.

Additionally, the availability of complete and integrated data facilitates coordination, transparency, and decision-making. Officers can provide more accurate and detailed information, strengthening customer trust. Management can also monitor complaint trends, water consumption, and service performance to support ongoing improvements and more effective planning. Thus, SiKompak is not only useful for daily operations but also serves as a key tool for enhancing the company's overall effectiveness and efficiency.

#### **b. Implementation of Sustainable Business Performance through SiKompak Application at Perumdam Tirta Kencana Region 1**

The implementation of the SiKompak application at Perumdam Tirta Kencana Wilayah 1 reflects the application of digital transformation in a manner that aligns with sustainable business principles. This step not only improves service quality and operational efficiency but also brings positive impacts from financial, social, and environmental perspectives, in accordance with Elkington, (1994) Triple Bottom Line framework.

- Profit

Based on field findings, SiKompak operates responsively, is easy to access, and helps simplify service processes. This contributes to greater operational efficiency while reducing paper usage, in line with ***SDG 9: Industry, Innovation, and Infrastructure***.

- People

From a social perspective, the implementation of SiKompak helps to distribute workloads more evenly, promote collaboration, and increase employee productivity, in keeping with ***SDG 8: Decent Work and Economic Growth***. The application's features, tailored to each employee's responsibilities, enable a more human-centric,

fair, and satisfying work process, thereby strengthening the quality of service provided to the community.

- Planet

Additionally, reducing paper usage helps conserve resources and supports **SDG 12: Responsible Consumption and Production**. Digitalization also cuts down processes that consume energy and resources, thereby positively contributing to environmental preservation and reducing the enterprise's ecological footprint.

While there are some technical obstacles, such as occasional network instability, application bugs, and data synchronization issues, SiKompak still provides significant and integrated support for operational processes, customer service, and management decision-making. Thus, the digital transformation implemented serves as a strong foundation for creating a more resilient, responsible, and adaptable enterprise in the future.

**c. SWOT Analysis of SiKompak Application at Perumdam Tirta Kencana Region 1**

- IFAS (*Internal Factor Analysis Summary*) Matrix Analysis

The following presents the results of the IFAS matrix on the use of the SiKompak Application at Perumdam Tirta Kencana Service Unit Region 1.

**Table 1.** IFAS Matrix Analysis

Internal Factors	Amount ( <i>n</i> )	Weight	Rating	Score ( <i>B × R</i> )
<b>Strength</b>				
Improve speed of service to customers	30	0,14	3,75	0,52
Facilitate coordination between employees and other divisions	27	0,13	3,37	0,43
Reduce paper usage & manual labor processes	31	0,15	3,87	0,58
Routinely make updates that are needed for employees	26	0,12	3,25	0,39
<b>Subtotal</b>	<b>114</b>	<b>0,54</b>	<b>14,24</b>	<b>1,92</b>
<b>Weakness</b>				
Network constraints that disrupt work	25	0,11	3,12	0,34
Occasional bugs in the app (meter photos not showing up, etc.)	26	0,12	3,25	0,39
Existence of old customer data that has not been synchronized with the SiKompak system	26	0,12	3,25	0,39
Application display that is less attractive and interactive	22	0,10	2,75	0,27
<b>Subtotal</b>	<b>99</b>	<b>0,45</b>	<b>12,37</b>	<b>1,39</b>
<b>TOTAL</b>	<b>213</b>	<b>0,99</b>	<b>26,61</b>	<b>3,31</b>

Source: Data processed by researchers, 2025.



So based on the calculation of the IFAS matrix above, it can be seen that the subtotal strength factor is 1.92 and the subtotal weakness factor is 1.39. This shows that the internal strengths possessed by the SiKompak Application at Perumdam Tirta Kencana Region 1 are more dominant than its weaknesses.

- EFAS (*External Factor Analysis Summary*) Matrix Analysis

The following presents the results of the EFAS matrix on the use of the SiKompak Application at Perumdam Tirta Kencana Service Unit Region 1.

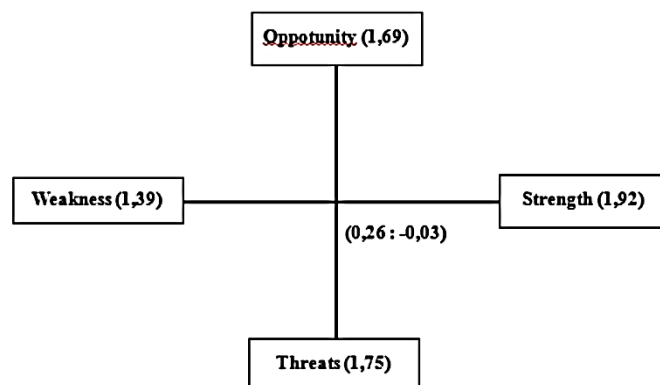
**Tabel 2.** EFAS Matrix Analysis

External Factors	Amount ( <i>n</i> )	Weight	Rating	Score ( <i>B × R</i> )
<b><i>Opportunity</i></b>				
The impact of using this system is considered by the board of directors for the development of the company	29	0,13	3,62	0,47
Can improve the Company's image as a modern and innovative agency	26	0,11	3,25	0,35
Can be an example of service digitization for other agencies in Samarinda City	27	0,12	3,37	0,40
Opportunity to increase revenue through digital administration efficiency	29	0,13	3,62	0,47
<b>Subtotal</b>	<b>111</b>	<b>0,49</b>	<b>13,86</b>	<b>1,69</b>
<b><i>Threats</i></b>				
Digital-based service innovations that are getting more sophisticated every day	31	0,14	3,87	0,54
Changes in regulations from the board of directors or local government	26	0,12	3,25	0,39
There is no alternative solution if there is a disruption in the network	25	0,11	3,12	0,34
Possible cybersecurity threats to the SiKompak system	30	0,13	3,75	0,48
<b>Subtotal</b>	<b>112</b>	<b>0,5</b>	<b>13,99</b>	<b>1,75</b>
<b>TOTAL</b>	<b>223</b>	<b>0,99</b>	<b>27,85</b>	<b>3,44</b>

Source: Data processed by researchers,2025.

So based on the calculation of the EFAS matrix above, it can be seen that the subtotal of opportunity factors is 1.69 and the subtotal of threat factors is 1.75. This shows that the influence of threats from the external environment is slightly greater than the opportunities.

- SWOT Matrix Analysis Results



**Gambar 1.** SWOT Analysis Quadrant  
Source: Data processed by researchers, 2025.

Based on SWOT analysis, the implementation of SiKompak at Perumdam Tirta Kencana Region 1 falls into Quadrant II, indicating significant internal strengths alongside strong external pressures. In this context, the S–T (Strength–Threat) strategy is most relevant, leveraging internal strengths to mitigate external threats. Consequently, a Defensive Diversification strategy is implemented to minimize weaknesses while maintaining performance amid ongoing digital transformation.

## CONCLUSION AND RECOMMENDATIONS

Based on the study results, the implementation of the SiKompak Application at Perumdam Tirta Kencana Region 1 has significantly improved service effectiveness and employee performance. The system is well integrated into daily operations, with features tailored to each unit's tasks, enhancing efficiency, accuracy, and inter-divisional coordination, while supporting managerial decisions.

Aligned with the Triple Bottom Line approach, SiKompak contributes to business sustainability across economic, social, and environmental aspects. Economically, it streamlines services and work processes; socially, it promotes fair workload distribution and productivity through training and updates; environmentally, it reduces paper use and physical waste.

Despite its benefits, challenges such as network issues, system bugs, and suboptimal data synchronization persist. SWOT analysis places the app in Quadrant II, indicating strong internal capacity but considerable external threats. Thus, a defensive diversification strategy is recommended, using internal strengths to mitigate risks.

To ensure long-term sustainability, Perumdam should enhance its technological infrastructure, improve data synchronization, respond swiftly to technical issues, and maintain active collaboration with external vendors. Strengthening HR capacity and operational oversight is also key to sustaining SiKompak's role in the company's digital transformation.

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