



Parking Management and Contribution to the Regional Original Revenue of Makassar City

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Abstract. Perumda Parkir Makassar Raya is a part of the regional revenue sources that play a central role in financing the development programs and activities of the region. This research analyzes parking management by Perumda Parkir Makassar Raya and its impact on contributions to Makassar City. The method used is descriptive qualitative. Data collection techniques include passive participation observation on parking attendants, in-depth interviews with the Makassar City Revenue Agency as the PAD manager, Perumda Parkir Makassar Raya as the BUMD managing the parking system, the Department of Transportation as the UPT supervising the parking and traffic system, and literature studies. Informants were selected using snowball technique. Data analysis used the Miles and Huberman model, which includes data reduction, data presentation, and conclusion drawing. The results showed that parking management has not been maximized, resulting in dividend contributions that are not balanced with their potential. To increase the effectiveness and efficiency of dividends to Makassar City PAD, the concept of the Parking- CES adaptive model is proposed.

Keywords: Perumda Parkir Makassar Raya, Regional Revenue, parking management, Parkir-CES, Makassar City.

1 Introduction

Indonesia implements a decentralization system that grants local governments the authority to manage resources and make decisions independently. This decentralization aims to enhance public services by bringing the government closer to the community and strengthening community control over the government [1]. With regional autonomy, local governments are expected to maximize the potential within their regions to improve community welfare, including through increasing Local Revenue (PAD) [2].

One important source of PAD is parking fees, which contribute directly to local revenue. To manage parking fees effectively, Makassar City established Perumda Parkir Makassar Raya. This local company is tasked with managing the city's parking and increasing its contribution to local revenue. However, despite the signifi-

cant potential revenue from parking, management still faces various operational constraints, such as illegal parking, unclear tariffs, and a lack of effective supervision [3]. These issues indicate that many aspects of the parking management system still require improvement.

In line with this, The importance of strict supervision to ensure that parking levies do not leak due to fraudulent practices [4] and [5]. When supervision is weak, the potential for revenue leakage increases, particularly in the presence of uncontrolled illegal parking. Furthermore, the role of technology is becoming increasingly crucial in supporting parking management. The implementation of digital systems, such as parking applications and cashless payments, can significantly improve transparency and efficiency in parking management [6].

Although the financial audit of PD Parkir shows an increase in net profit from IDR 856,298,323 in 2021 to IDR 937,047,126 in 2022, this increase is not proportional to its potential. The growth in the number of parking spots managed by PD Parkir Makassar Raya should have led to a significant increase in revenue. However, weak supervision and unregulated practices, such as non-transparent tariff collection, remain major obstacles to achieving optimal management [6].

Moreover, Regional Regulation No. 17/2006, which governs the management of public roadside parking, has provided a clear regulatory framework [14]. However, its implementation still encounters various obstacles, such as a lack of transparency in the collection of fees and the existence of individuals who exploit the situation for personal gain [5]. Also emphasizes the importance of enforcing strict sanctions against violators of parking management rules, but the implementation of these sanctions in the field is far from effective [7].

Based on these issues, this study aims to analyze the implementation of parking management by PD Parkir Makassar Raya, evaluate its contribution to the PAD of Makassar City, and develop an adaptive model to address parking problems in the city. With this approach, it is anticipated that parking management can become more effective and efficient, thereby significantly increasing local revenue.

2 Literature Review

2.1 Intergovernmental Revenue Theory

Intergovernmental revenue, or balancing funds, is one of the sources of regional revenue that makes a significant contribution to the regional expenditure budget [8]. Intergovernmental revenue refers to funds sourced from APBN revenues, allocated to regions to meet their needs in the context of decentralization. The concept of intergovernmental revenue between the Central Government and Regional Governments is regulated in Article 279 of Law Number 23 of 2014 concerning Regional Governments [15]. State that intergovernmental revenue reflects the degree of local governments' dependence on the central or provincial government to finance regional needs.

Intergovernmental revenue can be measured by comparing total balancing funds with total revenue [9].

In line with this, reveal that if regional management is conducted properly and in accordance with established regulations, it will improve local government performance [8]. Intergovernmental revenue, as described in Article 285 Paragraph (2) letter a of Law Number 23 of 2014 concerning Regional Government, consists of special autonomy funds, village funds, and equalization funds, which are further divided into categories under Article 288 of Law Number 23 of 2014: the General Allocation Fund (DAU), the Special Allocation Fund (DAK), and the Revenue Sharing Fund (DBH) [15].

2.2 Regional Company Concept

Regional companies are one of the sources of regional original income [4]. In this case, the profits of regional companies are expected to be a source of income for the region. The terms "company" and "business entity" are often used interchangeably, but they are not the same. A business entity is a company whose primary objective is to generate maximum profit, while a company is not solely focused on profit but has other objectives, primarily serving the interests of the community. A regional company is a company in which part or all of the capital is owned by the regional government, either from separated regional assets or from the Regional Income and Expenditure Budget (APBD).

3 Research Method

The research design used to answer the research objectives is descriptive qualitative. The researchers aim to understand individual or group behavior [10] and explain the realities of parking management as practiced by Perumda Parkir Makassar Raya, using a phenomenological approach. This approach allows for an exploration of phenomena based on field realities in parking management and the model applied by Perumda Parkir Makassar Raya, with informants selected using the snowball sampling technique, where one informant leads to another [11].

This research employs a descriptive qualitative design with a phenomenological approach, chosen to understand the phenomena occurring in parking management in Makassar City based on real-world conditions and the perspectives of various stakeholders, including parking attendants, users, and managers. In analyzing the data, the researchers apply an empirical approach to examine how the law operates and is implemented within the community [12]. The research was conducted over a four-month period, involving three stages: pre-research, research implementation, and the final research stage.

During the pre-research stage, a proposal was prepared, permits were obtained, and research equipment was assembled. The research stage involved passive participant observation and in-depth interviews. The passive participant observation technique was utilized to observe interactions in the field between parking attendants and park-

ing users, in order to gain insight into the complexities of the issues at hand. In-depth interviews were conducted with five key informants, including representatives from the Makassar City Regional Revenue Agency (BAPENDA), Perumda Parkir Makassar Raya, the Makassar City Transportation Agency, and relevant experts.

Additionally, literature reviews were conducted to support concept development by identifying gaps in previous research and providing relevant theoretical frameworks to undeIDRin this study.

Data were analyzed using the analysis model developed by Miles and Huberman [13], employing a snowball sampling technique. The data analysis process included data collection, data reduction, data presentation, and conclusion drawing. Data reduction involved filtering out irrelevant information, while data presentation was organized systematically to facilitate inteIDRretation. Conclusions were drawn by identifying patterns that emerged from the reduced and analyzed data, resulting in findings that were relevant to the research objectives.

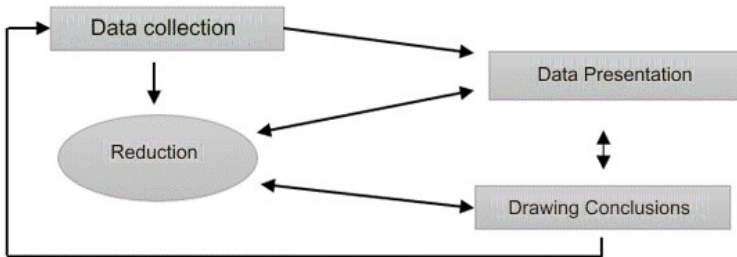


Fig. 1. Data Analysis Model by Miles & Huberman (1992)

4 Result and Discussion

4.1 Implementation of Parking Management by PD Parkir Makassar Raya

Based on the in-depth analysis conducted by the researcher and supported by the findings in the field, it has been identified that one of the main obstacles in parking management by Perumda Parkir Makassar Raya is the aspect of supervision. The researcher found a significant imbalance in the proportion of human resources (HR) responsible for supervisory functions. With the number of parking attendants reaching 1,172 and only 10 field supervisors available, it can be concluded that the existing supervision system is not operating optimally.

This situation is exacerbated by the collusion between illegal parking attendants, who dominate several parking spots, and official parking attendants from Perumda. In an effort to avoid conflict and maintain a positive image of Perumda Parkir, this collusion often materializes in the form of cooperation in collecting parking fees for personal gain. This illegal practice not only undermines local revenue but also creates further challenges, as individuals within Perumda, who should be curbing illegal parking, collaborate with law enforcement officials and illegal parking attendants for protection.

From a technical perspective, the determination of parking spot locations seems to be based solely on measurable revenue potential, without being supported by scientific studies and adequate professional resources. The situation is further complicated by the lack of synergy with the Makassar City Transportation Agency, which has the authority to enforce traffic regulations. For instance, one of the parking spots on Jl. Pengayoman is located in an area marked with yellow lines, which, according to Minister of Transportation Regulation No. PM 34 of 2014, indicates that the location should not be used as a parking lot [15].

The excessive focus on financial gain allows Perumda Parkir Makassar Raya to neglect its core duty of providing quality public services in accordance with applicable regulations. As a result, this oversight triggers significant negative impacts, including traffic congestion, environmental issues, public safety concerns, and limited synergy between agencies in providing public services.

One of the main responsibilities of Perumda Parkir is to ensure that parking attendants have adequate knowledge of Standard Operating Procedures (SOPs). However, based on field observations, it appears that Perumda Parkir does not optimally implement this training. This is evident in the misuse of parking vests by unauthorized individuals, the application of insufficiently strict sanctions that fail to provide a deterrent effect, and the implementation of progressive parking rates that do not comply with existing regulations. For example, on Jl. Boulevard in front of Panakkukang Mall, parking attendants charge IDR 15,000 for cars parked beyond the specified time, even though the applicable rate at that location should be a flat rate of IDR 5,000.

The complexity of these issues suggests that Perumda Parkir needs to undertake significant reforms to enhance its contribution to Makassar City's own-source revenue (PAD) and ensure that the parking management system can function effectively and sustainably.

4.2 Contribution of PD Parkir to the Regional Original Revenue (PAD) of Makassar City

Table 1. Potential Income of Parking Attendants per Day

No.	District	Number of Potential Parking Spots by Vehicle Type		Total Potential Income (in IDR)	
		Cars	Motorcycles	Cars	Motorcycles
1.	Bontoala	46	46	IDR 5,046,000	IDR 17,110,000
2.	Biringkanaya	34	34	IDR 10,248,00	IDR 21,200,000

3.	Makassar	42	42	IDR 9,489,000	IDR 11,252,000
4.	Mamajang	32	32	IDR 5,163,000	IDR 8,358,000
5.	Manggala	24	24	IDR 2,592,000	IDR 4,856,000
6.	Mariso	62	62	IDR 7,392,000	IDR 13,888,000
7.	Panakkukang	97	97	IDR 70,710,000	IDR 50,642,000
8.	Tallo	16	16	IDR 13,629,000	IDR 14,714,000
9.	Tamalanrea	69	69	IDR 51,489,000	IDR 38,568,000
10	Tamalate	44	44	IDR 42,369,000	IDR 39,678,000
11	Ujung Tanah	9	9	IDR 1,524,000	IDR 1,372,000
12	Wajo	37	37	IDR 26,091,000	IDR 20,128,000
13	Rappocini	47	47	IDR 15,879,000	IDR 20,234,000
14	Ujung Pandang	145	145	IDR 66,627,000	IDR 64,998,000
Total		704	704	IDR 328,248,000	IDR 327,088,000
IDR 46,809,714.29					

Source: Secondary Data, processed (2024).

Based on the data obtained, the total potential daily income that can be achieved by parking attendants is approximately IDR 46,809,714 (see Attachment 2, pages 11-12). This amount represents the accumulation of two-wheeled and four-wheeled vehicles parked at 704 parking spots distributed across 14 sub-districts in Makassar City. The potential monthly income could reach IDR 1,474,506, while the potential annual income may amount to IDR 17,694,072,000, not including the distribution of operational funds and tantiem.

Referring to the profit distribution percentage for Perumda Parkir Makassar Raya, 20% is allocated for reserve funds and 5% for tantiem funds.

$$\text{IDR } 17,694,072,000 - 20\% = \text{IDR } 14,155,257$$

$$\text{IDR } 14,155,257 - 5\% = \text{IDR } 13,447,494 \quad (1)$$

Furthermore, the remaining funds must be deposited into the Makassar City PAD at a rate of 55%.

$$\text{IDR } 13,447,494 - 55\% = \text{IDR } 6,051,372,624$$

As a result, the potential dividends that should enter the regional treasury can amount to IDR 6,051,372,624.

Table 1. Realization of Dividend Deposit of PD Parking Makassar City

Fiscal Year	Realization of PD Parking Dividends	Realization of Makassar City PAD	Percentage of PD Parkir Contribution to PAD (%)
2023	702.785.360,00	1.965.695.699.807,00	0,04
2022	470.964.078,00	1.410.813.774.025,23	0,03
2021	650.973.952,45	1.140.328.483.697,93	0,06
2020	443.631.541,00	1.078.328.561.269,15	0,04
2019	762.993.082,00	1.303.316.337.553,94	0,06

Source: Primary Data, BKAD Makassar City (2024).

Based on the results of these calculations, there is a significant discrepancy in the deposits. The realization of dividend deposits entering the local treasury amounts to only hundreds of millions, indicating inefficiencies in the monitoring system for collecting parking service tariffs. This directly impacts the loss of revenue for the Makassar City regional treasury, which should be utilized for the provision of public facilities and services to enhance economic activity in the area (Siwi et al., 2021). Furthermore, it highlights the harsh reality that the management of the parking system by Perumda Parkir Makassar Raya has not achieved optimal results.

4.3 Adaptive Model for Addressing Parking Problems in Makassar City

Based on the analysis of the first and second problems, the researchers concluded that there is a significant gap between the potential deposits of Perumda Parkir Makassar Raya and the actual deposits made to the Makassar City PAD. This discrepancy is caused by inefficiencies in the parking tariff collection system implemented by parking attendants, which leads to substantial leakage of deposit funds, as well as a weak monitoring system within Perumda Parkir Makassar Raya.

To address these issues, the researchers developed a concept for an adaptive model in the form of the Parking-CES (Convenient, Efficient & Smart) application, which will facilitate parking management, including payment processing and monitoring.

This application aligns with the vision of Perumda Parkir Makassar Raya to transform and digitize the modern parking system [3]. Previously, Perumda Parkir Makassar Raya developed a parking application to help users locate parking spots; however, payments were still made in cash to the parking attendants, thus failing to resolve the inefficiencies in collecting parking fees. Therefore, the researchers proposed the Parking-CES application, which allows for direct payments through the application using a cashless system. This payment will be deposited directly into the treasury of Perumda Parkir Makassar Raya, thereby allowing parking attendants to focus solely on overseeing parking operations in the field.

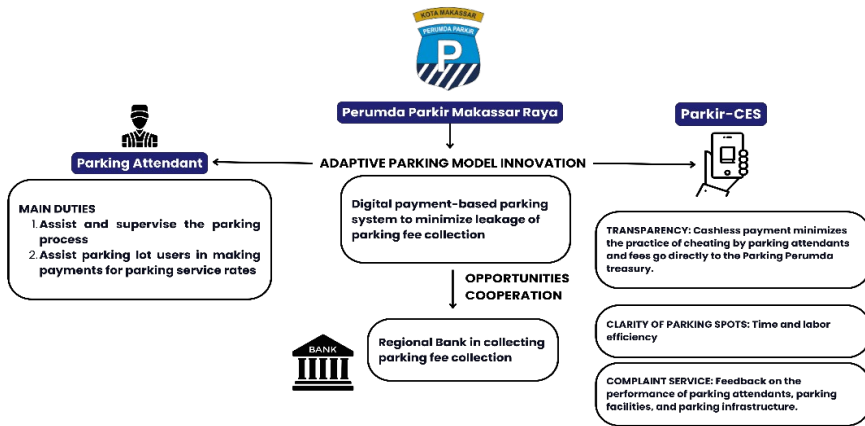


Fig. 1. Scheme of the Adaptive Parking Model Innovation

Source: Process data (2024).

Through the adaptive model scheme, a one-stage parking payment system is expected to reduce the leakage of parking service tariff deposits. Perumda Parkir Makassar Raya, as a business entity, can explore strategic partnership opportunities with regional banks to facilitate the collection of parking service tariff deposits. This approach ensures that the deposit process is efficient and does not involve multiple parties, allowing parking attendants to focus solely on assisting with payment processing and supervising the parking operations.

5 Conclusion

This research demonstrates that parking management by PD Parkir Makassar Raya is not optimal. The main findings include:

Suboptimal Management, Supervision conducted by PD Parkir Makassar Raya over parking attendants in the field is ineffective. The shortage of supervisory personnel compared to parking attendants results in inadequate supervision. Additionally, the lack of guidance for parking attendants negatively impacts parking management in the field; in fact, some parking attendants do not understand the standard operating

procedures (SOPs). Contribution to Regional Original Revenue (PAD), The contribution of PD Parkir Makassar Raya to the PAD of Makassar City is suboptimal. The revenue-sharing system in place tends to be ineffective because the deposit process involves multiple stages, starting from the collector, then the coordinator, and finally reaching the PD Parkir cashier. Adaptive Model, There is a need to develop an adaptive model capable of addressing various issues within the parking system in Makassar City. This model is expected to enhance the efficiency and effectiveness of parking management and provide practical recommendations that can be implemented by PD Parkir Makassar Raya.

The conclusion of this research confirms that improving supervision and developing an adaptive model are crucial steps toward enhancing the parking management system in Makassar City. The implementation of the recommendations generated from this research is anticipated to significantly increase the contribution of the parking sector to the PAD of Makassar City.

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