

TAPPING BOX UTILIZATION FOR FOOD AND BEVERAGE PBJT COLLECTION IN MADIUN CITY: CHALLENGES AND STRATEGIES

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Abstrak

BAPENDA Kota Madiun menerapkan Tapping Box sejak 2019 untuk mendukung pencatatan transaksi dalam pemungutan PBJT atas makanan dan minuman. Penelitian ini bertujuan menganalisis implementasi, tantangan, dan strategi optimalisasi penggunaan Tapping Box dalam meningkatkan penerimaan pajak daerah. Penelitian menggunakan pendekatan kualitatif deskriptif dengan teknik wawancara, observasi, dan dokumentasi di BAPENDA Kota Madiun. Hasil penelitian menunjukkan bahwa dari 127 unit Tapping Box, penggunaannya baru menjangkau 97 dari 764 wajib pajak PBJT makanan dan minuman. Tantangan yang dihadapi meliputi gangguan jaringan, habisnya kuota GSM, perangkat offline, indikasi underreporting, dan keterbatasan petugas monitoring. Strategi optimalisasi dilakukan melalui monitoring dan sampling bill, sosialisasi, pengembangan kapasitas SDM, serta perluasan pemasangan perangkat pada wajib pajak berpotensi tinggi.

Kata Kunci: *Tapping Box*, Pajak Barang dan Jasa Tertentu (PBJT), Pajak Daerah, Optimalisasi Penerimaan Pajak.

Abstract

BAPENDA Madiun City has implemented Tapping Boxes since 2019 to support the recording of transactions in the collection of PBJT for food and beverages. This study aims to analyze the implementation, challenges, and strategies for optimizing the use of Tapping Boxes in increasing regional tax revenue. The research uses a descriptive qualitative approach with interview, observation, and documentation techniques at BAPENDA Madiun City. The results of the study showed that of the 127 units of Tapping Box, their use only reached 97 out of 764 food and beverage tax payers. The challenges faced include network disruptions, exhaustion of GSM quotas, offline devices, underreporting indications, and limited monitoring officers. The optimization strategy is carried out through monitoring and sampling bills, socialization, human resource capacity development, and expanding the installation of devices for high-potential taxpayers.

Keywords: *Tapping Box*, *Specific Goods and Services Tax (PBJT)*, *Local Tax*, *Tax Revenue Optimization*.

A. INTRODUCTION

Taxes are the main source of state revenue which has an important role in financing the administration of government, the implementation of public functions, and supporting sustainable national development (Cucumandalin & Arsadi, 2021). Based on Law Number 28 of 2007 concerning General Provisions and Tax Procedures, taxes are defined as mandatory contributions to the state owed by individuals or entities that are coercive under the law by not receiving direct rewards (Malik *et al.*, 2022). In addition to central-level taxation, the implementation of fiscal decentralization also authorizes local governments to collect regional taxes based on Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (HKPD) (Tulungen *et al.*, 2024). In the structure of Regional Original Revenue (PAD), the Certain Goods and Services Tax (PBJT) on food and beverages has a very strategic role. The rapidly growing culinary industry has made a significant contribution to the regional revenue of Madiun City. Data on food and beverage PBJT receipts for the 2019-2025 period shows a very positive trend in contributing to PAD.

Table 1. PBJT Contribution to Food and Beverages to Madiun City PAD

Year	Food & Beverage PBJT	PAD Madiun City	Contribution
2019	Rp 12.986.705.054	Rp 252.048.754.413	5,15%
2020	Rp 11.403.756.266	Rp 248.944.404.487	4,58%
2021	Rp 12.191.757.300	Rp 265.920.295.216	4,58%
2022	Rp 19.278.495.104	Rp 264.212.229.517	7,30%
2023	Rp 23.343.654.772	Rp 255.554.493.407	9,13%
2024	Rp 27.722.629.419	Rp 279.229.358.932	9,93%
2025	Rp 30.386.899.368	Rp 323.295.954.446	9,40%

Source: Madiun City Bapenda

The collection of PBJT is carried out with a self-assessment system, where taxpayers are entrusted to calculate, calculate, deposit, and report the tax owed themselves. However, this system has the potential to cause inaccurate reporting gaps (underreporting) (Chandra *et al.*, 2023). Therefore, BAPENDA Madiun City has implemented an electronic transaction

recorder, namely the Tapping Box since 2019 as a follow-up to the KPK's mandate in the Online Tax Information System (SIPO).

Table 2. Target and Realization of PBJT for Food and Beverage in Madiun City

Year	Target APBD	Realization	Percentage
2019	Rp 10.750.000.000	Rp 12.986.705.054	120,81%
2020	Rp 10.100.000.000	Rp 11.403.756.266	112,91%
2021	Rp 11.000.000.000	Rp 12.191.757.300	110,83%
2022	Rp 17.129.550.000	Rp 19.278.495.104	112,55%
2023	Rp 20.230.000.000	Rp 23.343.654.772	115,39%
2024	Rp 24.200.000.000	Rp 27.722.629.419	114,56%
2025	Rp 25.750.000.000	Rp 30.386.899.368	118,01%

Source: Madiun City Bapenda

Although revenues continue to increase and exceed the APBD target (Table 2), the implementation of Tapping Boxes faces various operational constraints. Of the 764 PBJT Food and Beverage Taxpayers registered in Madiun City, only 97 taxpayers have Tapping Boxes installed. In addition, it was found that there was potential for transaction manipulation through the double bookkeeping/off-system bill mechanism and limited supervisory personnel. Based on this background, this study formulates problems regarding: (1) how to implement the use of Tapping Boxes, (2) what are the challenges faced, and (3) how to optimize the use of Tapping Boxes in Madiun City.

Grand Theory

1. Technology Acceptance Model

The Technology Acceptance Model (TAM) developed by Davis (1989) describes user acceptance of information systems based on two main constructs: Perceived Usefulness and Perceived Ease of Use (Hidayatullah *et al.*, 2024). In the context of Tapping Box, the ease of operation of the tool and the perception that Tapping Box makes it easier to record transactions encourages awareness and compliance of taxpayers (Hantono *et al.*, 2023).

2. Tax Compliance Theory

Tax compliance theory was first introduced by Allingham and Sandmo (1972) emphasizing that taxpayer behavior is influenced by internal factors (moral awareness) and external factors (audit risk, sanctions, and supervisory effectiveness) (Zaikin *et al.*, 2023). The use of Tapping Boxes strengthens real-time external monitoring, increasing the probability of detecting reporting discrepancies, thereby significantly increasing taxpayer compliance levels.

B. METHOD

This study uses a descriptive qualitative approach in the form of a case study (Sugiyono, 2023). The research was carried out at the Regional Revenue Agency (BAPENDA) of Madiun City from February to July 2026. Primary data was obtained through in-depth interviews with employees of the sub-field of collection and tax supervision of the Madiun City BAPENDA and field observations. Secondary data was obtained through official documents of the APBD target and realization report, PAD contributions, and taxpayer registers. Qualitative data analysis uses the Miles and Huberman model which consists of several stages, namely: data collection, data reduction, data presentation, and drawing conclusions or verification (Sugiyono, 2023).

C. RESULTS AND DISCUSSIONS

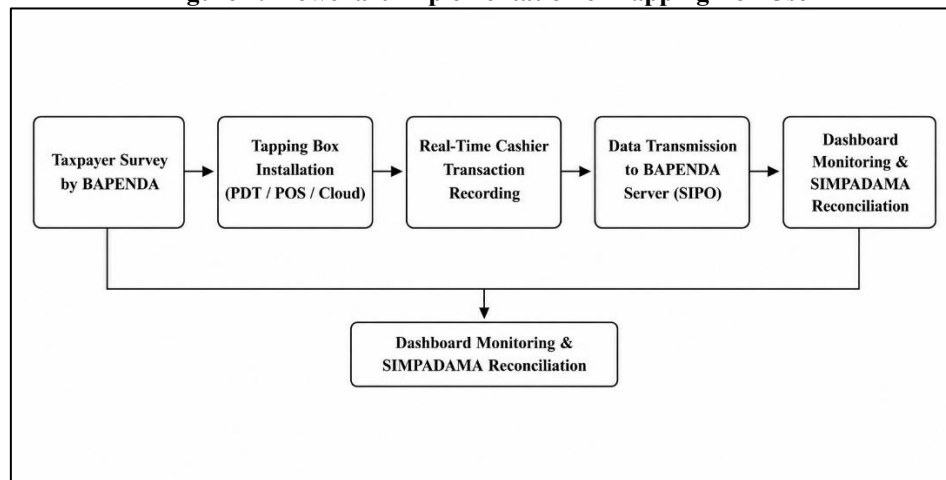
RESULTS

1. Implementation of the Use of Tapping Boxes in Food and Beverage PBJT Collection in Madiun City

The Certain Goods and Services Tax (PBJT) collection system for food and beverages in Madiun City implements a self-assessment system, where Taxpayers (WP) are given the authority to calculate, collect, deposit, and report their tax obligations independently. In order to strengthen supervision of taxpayer turnover reporting, the Regional Revenue Agency (BAPENDA) of Madiun City has implemented the use of Tapping Boxes since

2019 as a fulfillment of the mandate of the Corruption Eradication Commission (KPK) through the Online Tax Information System (SIPO).

Figure 1. Flowchart Implementation of Tapping Box Use



Source: Data processed by author, 2026

In its implementation, BAPENDA determines the criteria for installing Tapping Boxes for Taxpayers who have a minimum monthly turnover of IDR 20,000,000 or restaurants/cafes with high transaction volumes. Until 2025, there are 127 units of Tapping Boxes installed in all PBJT sectors in Madiun City, with 97 units of which are specifically allocated to the PBJT sector for Food and Beverages. The integration methods used are adjusted to the Taxpayer's cashier infrastructure, including:

- Portable Data Terminal (PDT),
- Cloud Server, and
- Tapping Server that is directly integrated with the business actor's internal Point of Sales (POS) system.

The recorded daily and monthly transaction data is sent in real-time to BAPENDA's Tapping Box Main Dashboard system. This dashboard functions to detect device activity; Yellow indicates the device is offline or has no transactions for 3 days, and red indicates the device has been inactive for more than 1 week.

Table 3. Target, Realization, and Contribution of Food & Beverage PBJT to the PAD of Madiun City (2019-2025)

Year	Target APBD	Realization	Capaian Target	PAD Madiun City	PBJT Contribution
2019	10.750.000.000	12.986.705.054	120,81%	252.048.754.413	5,15%
2020	10.100.000.000	11.403.756.266	112,91%	248.944.404.487	4,58%
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2024	24.200.000.000	27.722.629.419	114,56%	279.229.358.932	9,93%
2025	25.750.000.000	30.386.899.368	118,01%	323.295.954.446	9,40%

Source: Data processed by author, 2026

Based on the Table, the realization of PBJT revenue for food and beverages consistently exceeds the APBD target every year (above 110%). Revenue grew meaningfully from IDR 12.98 billion (2019) to IDR 30.38 billion (2025), and provided an increasingly solid contribution to the PAD of Madiun City from 5.15% in 2019 to reach a peak of 9.93% in 2024 and 9.40% in 2025.

2. Challenges of Using Tapping Boxes in the Collection of PBJT on Food and Beverages in Madiun City

Although the realization of the Food and Beverage PBJT has consistently exceeded the APBD target (>110% annually), the study found four main challenges on the ground:

a. Technical Constraints of Infrastructure

Internet network disruptions, running out of GSM quota on devices, offline device conditions, and the use of the closing bill method by taxpayers that cause transaction data not to be sent in real-time.

b. Indication of Transaction Non-Conformity (Underreporting)

The discovery of the practice of recording transactions outside the system (off-system bill). Through the bill sampling technique, it was found that the consumer payment note number was not recorded in the Dashboard Tapping Box.

c. Limitations of Device Coverage

The installation of the new tool reached 97 out of 764 registered taxpayers (about 12.7%). In addition, the existence of taxpayers who close their businesses without reporting causes devices to be held up and slow to be transferred to other taxpayers.

d. Limited Human Resources (HR)

The supervision and maintenance of 127 Tapping Box units throughout Madiun City is only handled by 2 personnel (1 from BAPENDA and 1 from the vendor PT Subaga Mitra Solusi).

3. Strategy for Optimizing the Use of Tapping Boxes in the Collection of PBJT on Food and Beverages in Madiun City

In order to overcome these various obstacles, BAPENDA Madiun City implemented a number of optimization strategies:

a. Periodic Transaction Monitoring and Supervision

Pairing daily/monthly data on the dashboard with SIMPADAMA reports and following up on reconciliation if there is a difference in turnover.

b. Field Inspection and Sampling Bill

Carry out random supervision outside working hours (sampling bill) to verify whether consumer spending receipts enter the system.

c. Socialization and Education

Providing a continuous understanding to taxpayers that PBJT is not a business operational burden, but a tax deposit from consumers.

d. Human Resources Development and Supporting Facilities

Increase the technical capacity of officers and modernize recording methods from PDT/tapping printers to an integrated system based on Tablet POS.

DISCUSSIONS

1. Implementation of the Use of Tapping Boxes in Food and Beverage PBJT Collection in Madiun City

The results of the study prove that the implementation of the Tapping Box has had a positive impact on the growth of regional tax revenue in Madiun City. The increase in realization from IDR 12.98 billion in 2019 to IDR 30.38 billion in 2025 shows that with the availability of electronic transaction data, the supervision process does not only depend on the reporting submitted by taxpayers. The officer has a comparative data source that can be used to assess the suitability between the transactions that occur and the tax reporting submitted. The contribution of the Food and Beverage PBJT, which reached a peak of 9.93% of the total PAD (2024), proves that the culinary business sector has a very strategic role in supporting the fiscal independence of the Madiun City region.

2. Challenges of Using Tapping Boxes in the Collection of PBJT on Food and Beverages in Madiun City

The use of Tapping Boxes in the collection of food and beverage tax in Madiun City faces technical obstacles and data inconsistencies. Internet outages, depleted quotas, offline status, and bill closing methods hinder real-time monitoring. According to the concept of Perceived Ease of Use (TAM), the effectiveness of monitoring is highly dependent on the stability of the system (Davis, 1989 in Hidayatullah *et al.*, 2024). In addition, BAPENDA utilizes Tapping Box and sampling bill data as a comparison of reports at SIMPADAMA to detect differences in turnover. Another challenge lies in the limited number of devices and human resources. Of the 764 registered taxpayers, the Tapping Box has only been installed on 97 taxpayers, so digital-based supervision does not cover all transactions in the culinary sector. On the other hand, monitoring and follow-up activities for technical obstacles are only handled by two officers (internal BAPENDA and a third party). These personnel limitations hamper the speed of surveillance responses, proving that technological success still requires adequate human resource support.

3. Strategy for Optimizing the Use of Tapping Boxes in the Collection of PBJT on Food and Beverages in Madiun City

BAPENDA Madiun City implements a number of strategies to optimize the use of Tapping Boxes, starting with routine monitoring of the SIPO dashboard to monitor transaction activities, minimize technical obstacles, and detect differences in turnover early. The results of this monitoring are strengthened through field examinations and sampling bills to verify system data with evidence of physical transactions at the Taxpayer's location. In addition to direct supervision, socialization and education are held on an ongoing basis to foster taxpayers' understanding that PBJT is a consumer tax that does not burden business operations, in line with Tax Compliance Theory (Zaikin et al., 2023).

The synergy between system monitoring, field inspections, and education has been proven to strengthen the self-assessment function and encourage taxpayer compliance in accurately reporting turnover. This optimization step extends to internal pillars through increasing the capacity of data management human resources and modernizing supporting facilities, such as updating recording methods to the Point of Sale (POS) system and providing POS tablets. The expansion of the scope of device installation for high-potential taxpayers is also carried out to maintain the effectiveness of supervision and sustainability of the collection of Food and Beverage PBJT in Madiun City.

D. CONCLUSIONS

The implementation of Tapping Box in the collection of food and beverage tax in Madiun City has succeeded in shifting tax supervision from just self-reporting (self-assessment) to digital data-based. Through PDT, cloud server, and Point of Sale (POS) methods connected to the monitoring dashboard and SIMPADAMA, BAPENDA Madiun City can verify turnover in a measurable manner to increase transparency and accuracy of reporting. However, its effectiveness is still hampered by technical constraints (internet disruptions, exhausted quotas, and offline tools), indications of underreporting due to bills that are not recorded by the

system, limited scope of tools (only 97 out of 764 taxpayers are registered), and lack of supervisory personnel.

In order to optimize regional revenue, BAPENDA Madiun City carries out a strategy to strengthen supervision through periodic monitoring, field inspections, and targeted sampling bills. This strategy is refined with continuous socialization to suppress taxpayer resistance, increase human resource capacity, modernize POS-based recordkeeping, and expand the installation of devices in high-potential businesses. The synergy between data-based supervision, taxpayer compliance, and the readiness of supporting infrastructure is the main key to minimizing tax leakage and maximizing PBJT revenue in Madiun City.

E. SUGGESTIONS

1. BAPENDA Madiun City needs to expand the installation of Tapping Boxes for high-potential taxpayers, strengthen the infrastructure and capacity of supervisory human resources (including an early warning system feature for offline devices), and organize continuous socialization to foster taxpayer awareness.
2. Taxpayers are expected to be cooperative in the use of the Tapping Box and report business turnover accurately and transparently according to the actual transaction conditions.
3. Furthermore, it is recommended to expand the scope of other PBJT regions and sectors, as well as apply a quantitative approach or mixed method to measure the amount of influence of Tapping Box on regional revenues and the level of compliance of taxpayers empirically.

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