

Implementation of a Web-Based Accounting Information System for Management of Consumable Goods Inventory Case Study: Banjarbaru City Regional Revenue Service Unit

Nadia Puteri Utami

Politeknik Negeri Banjarmasin

Email: nadiaputeri_utami@poliban.ac.id

Muhammad Bahit

Politeknik Negeri Banjarmasin

Email: bahit@poliban.ac.id

Tiara Regita Cahyani

Politeknik Negeri Banjarmasin

Email: D020320051@akuntansipoliban.ac.id

Corresponding author: nadiaputeri_utami@poliban.ac.id

Abstract. An Accounting Information System (AIS) for inventory of consumable goods is important in inventory management, transaction recording and financial reporting. A consumables inventory AIS helps in monitoring stock, calculating inventory costs, and ensuring proper accountability within the company. The problems that occur in the inventory recording system for consumable goods, namely that the recording that is still being carried out is not in accordance with applicable accounting so that the physical entry and exit of goods cannot be known periodically and there is no SIA for the Banjarbaru City Regional Revenue Service Unit. This research aims to create a Web-based SIA for inventory of consumables at the Banjarbaru City Regional Revenue Service Unit. This research method uses the case study method. The results of the research found that web-based AIS for managing supplies of consumables at the Banjarbaru City Regional Revenue Service Unit runs more effectively and efficiently.

Keywords: Accounting Information Systems, Consumables, Accounting Application Programs.

INTRODUCTION

Technology has developed rapidly and can support government, including the management of Regional Property in government agencies. Adoption of a computerized accounting information system is a very important step to increase effectiveness in management of Regional Property and to maximize local revenue. In order to achieve maximum management of Regional Property management effectiveness, it is important to invest in appropriate hardware and software infrastructure and provide adequate training to the staff who will use them (Wibowo, Kusmintarti, and Eltivia 2022). In this way, local governments can increase transparency, accountability and efficiency in management of Regional Property, which in turn can contribute to increasing local original income (Turini, Septian, and Lestari 2021).

Accounting information systems play a key role in the management of Regional Property including (1) Fast and Accurate Data Processing: Accounting information

systems can process data quickly and accurately, avoiding human errors that may occur in manual management (Wulandari, Bahit, and Ananda 2021). (2) Real-Time Monitoring: With a computerized accounting information system, monitoring of Regional Property Stock can be done in real-time (Najla, Supriyati, and Dewi 2022). This allows quick and accurate decision making related to planning and procurement of Regional Property. (3) Better Internal Controls: These systems can integrate strong internal controls, including user authentication and authorization, to prevent unauthorized access and policy violations (Muhammad Fahmi 2022). (4) Easier Reporting: This system allows for easier and more accurate creation of financial and performance reports. This report can be used for accountability to authorities and stakeholders (Iskandar and Yanuar 2023). (5) Data Analysis: Accounting information systems can assist in analyzing Regional Property data, such as usage trends, operational costs and potential profits. This can be the basis for strategic planning (Haratua et al. 2021). (6) Data Security: It is important to ensure the security of sensitive Regional Property management data. Accounting information systems can provide a strong layer of security and protect data from security threats (Desriani et al. 2023). (7) Integration with Other Systems: This system can be integrated with other systems in government, such as personnel management systems or procurement systems, to ensure efficient coordination between departments. (8) Time and Cost Savings: Automating the Regional Property Management process can save time and costs previously spent on repetitive manual tasks (Handayani, Bahit, and Najman 2023) and (9) Legal and Regulatory Compliance: Accounting information systems can be designed to ensure that local governments comply with all laws and regulations relating to the management of Regional Property.

The management cycle for consumable goods in the form of office stationery is part of the regional property management cycle which consists of needs planning and budgeting, procurement, receiving, storage, distribution, reporting and write-off. (Bahit, Intan, and Artha 2021) (Handayani, Bahit, and Lutfita 2023). Distribution is the main objective in managing these goods at a good stage to fulfill goods needs (Haq and Bahit 2021).

The Banjarbaru City Regional Revenue Service Unit is a technical implementing element of the South Kalimantan Province Regional Financial Agency which carries out some of its main tasks and functions in the City/Regency area of South Kalimantan

Province. Activities for recording supplies of consumable goods in the form of office stationery at the Banjarbaru Regional Revenue Service Unit still use a manual system by recording the collection of goods in books, thus allowing recording errors to occur and it does not rule out the possibility that the books used will be damaged or lost due to several factors. which allows this risk to occur. Therefore, it is necessary to have an accounting information system for managing regional property, namely a computerized inventory of consumables as an effort to improve performance that is more effective and efficient as well as minimizing errors in reporting and avoiding the accumulation of excessive amounts of inventory.

Based on the problems above, there is a need for a web-based accounting information system that can meet the inventory needs of the Banjarbaru City Regional Revenue Service Unit. A web-based inventory management accounting information system can simplify recording and reporting activities. Another convenience is that it makes it easier for application users to access the information they want.

RESEARCH METHOD

This research is a case study research and development (R&D) (Handayani, Sunarya, and Bahit 2022) untuk development of a Web-based Accounting Information System for consumable goods for the Banjarbaru City Regional Revenue Service Unit. The steps used in research on the development of a consumable goods accounting information system are as follows (Hertati* et al. 2022):

Identify Needs

Identify accounting information needs at the Banjarbaru City Regional Revenue Service Unit related to inventory management of consumable goods with the aim of increasing inventory efficiency, increasing recording accuracy, or optimizing cost management (Sari, Wulandari, and Bahit 2021).

Study of literature

Conduct a literature study on the existing accounting information system at the Banjarbaru City Regional Revenue Service Unit regarding the inventory of consumables.

Conceptual Design

Carrying out a conceptual design for an accounting information system at the Banjarbaru City Regional Revenue Service Unit which is planned to consist of a database structure, data flow, main features and user interface.

Prototype Development

Create a prototype accounting information system at the Banjarbaru City Regional Revenue Service Unit and test the design concept.

Data collection

Collect data needed to test the accounting information system at the Banjarbaru City Regional Revenue Service Unit, such as historical inventory data, cost data, and transaction data related to inventory.

Software Development

Software development based on the conceptual design of the accounting information system at the Banjarbaru City Regional Revenue Service Unit in accordance with the waterfall method.

Trial and Evaluation

Testing the accounting information system at the Banjarbaru City Regional Revenue Service Unit with existing data and evaluating system performance, accuracy and compliance with predetermined requirements.

FINDINGS AND DUSCUSSION

Implementation of the Accounting System for Management of Consumable Goods Inventory in the Banjarbaru City Regional Revenue Service Unit

1. Principal Description

Recording the expenditure and entry of supplies of consumable goods is a process of implementing activities at the Banjarbaru City Regional Revenue Service Unit. Recording inventory of consumable goods at the Banjarbaru City Regional Revenue Service Unit is currently actually done manually and computerized. This manual recording is carried out specifically for recording inventory expenditure, while the

existing application still has several shortcomings, namely the presence of several features that are not included in the application..

2. Information Used

Information used in the inventory accounting system at the City Regional Revenue Service Unit, namely: (1) List of Goods, (2) Goods Purchase Note and (3) Inventory Card.

3. Related Functions

Functions related to the inventory accounting system at the Banjarbaru City Regional Revenue Service Unit, namely the operational function which is responsible for recording the income and expenditure of goods, as well as making minutes regarding consumable inventory at the end of each period.

4. Network of Procedures that Form a System

The network of procedures that form the system in the Banjarbaru City Regional Revenue Service Unit include, namely:

a) Item List Request Procedure

This procedure is used when the Banjarbaru City Regional Revenue Service Unit wants to procure goods.

b) Payment Procedure for Purchase of Goods

This procedure is used when the Banjarbaru City Regional Revenue Service Unit makes payments after purchasing goods.

c) Procedure for Final Recording of Purchase Notes

This procedure is used by the Banjarbaru City Regional Revenue Service Unit to record the final total of purchases along with the list of items contained in the purchase receipt.

5. Documents Used

Documents used in the inventory accounting system at the Banjarbaru City Regional Revenue Service Unit, namely:

a) Item Data List

This list aims to facilitate control activities for the procurement of consumable goods and provide data and information as a guide for the procurement of consumable goods in the form of office stationery.

b) Goods Purchase Note

This goods purchase note functions as proof of transaction needed to record SIA purchase transactions.

c) Dashboard

The Dashboard Form is the initial form that is seen after successful login. This form contains data information that can only be accessed by the admin.

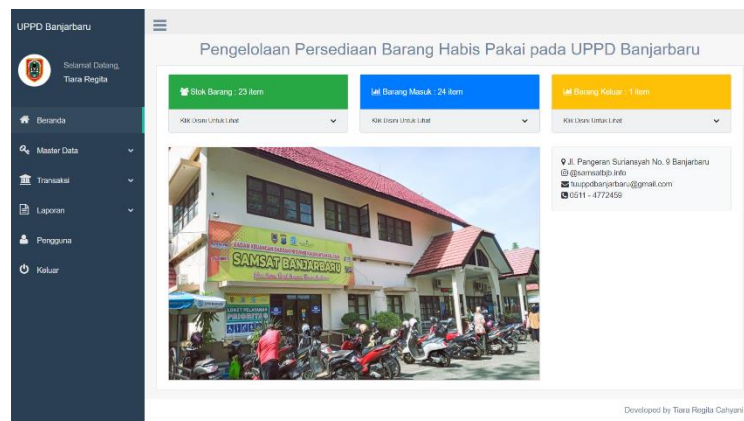


Figure 1. Dashboard

d) Section Form in Master Data

Section Form is a form that contains information regarding existing sections in the Banjarbaru City Regional Revenue Service Unit. In this form the admin can add data, change data, and delete data.

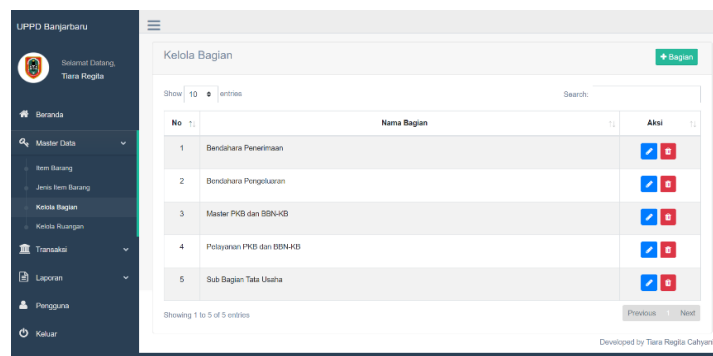


Figure 2. Section Form

e) Room Form in Master Data

Room Form is a form that contains information about rooms in the Banjarbaru City Regional Revenue Service Unit. In this form the admin can add data, change data, and delete data.

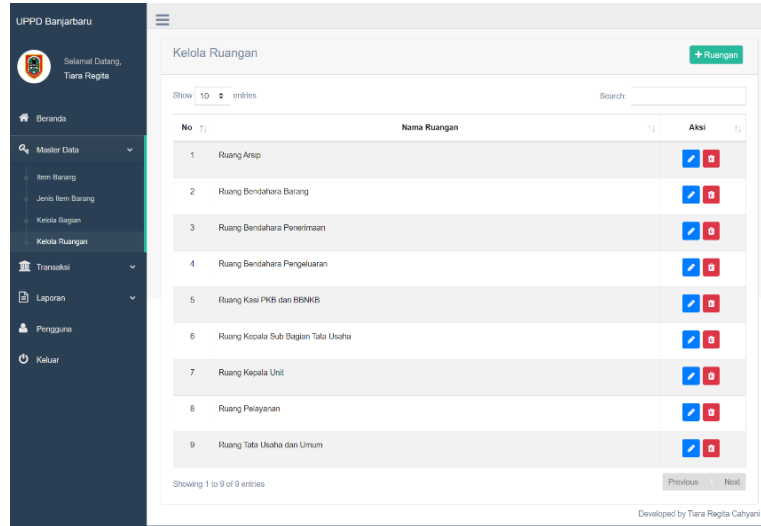


Figure 3. Room Form

f) Item Item Form in Master Data

Goods Item Form is a form that contains information regarding the list of goods items in the Banjarbaru City Regional Revenue Service Unit. This list of goods items can be selected based on the type of goods item. In this form the admin can add data, change data, and delete data.

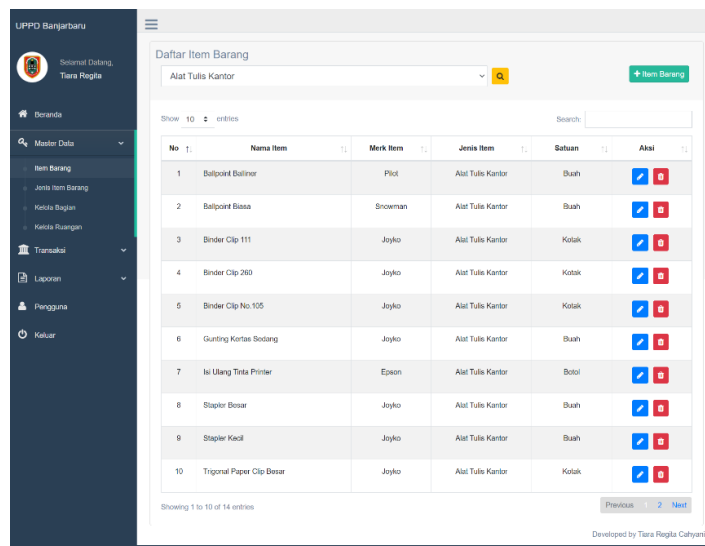


Figure 4. Item Form

g) Goods Item Type Form in Master Data

The Goods Item Type Form is a form that contains information regarding the types of goods and their respective descriptions in the Banjarbaru City Regional Revenue Service Unit. In this form the admin can add data, change data, and delete data.

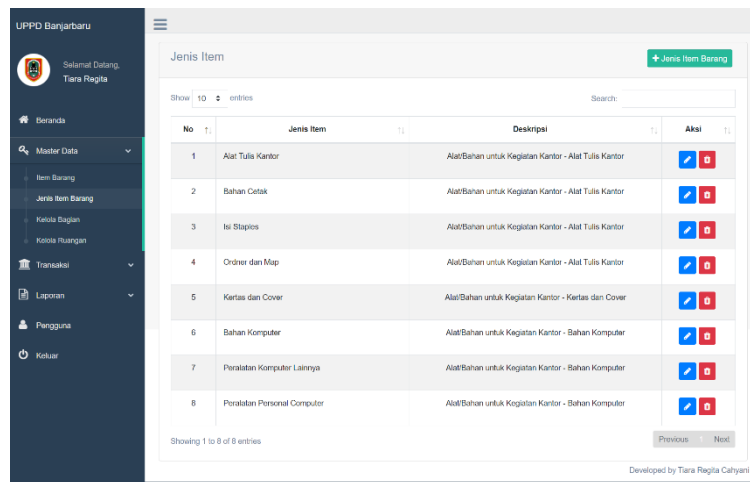


Figure 5. Goods Item Form

h) Outgoing Goods Form

Outgoing Goods Form is a form that contains information about outgoing goods. In this form the admin can change data and delete data. Meanwhile, to remove goods, you must first go through a receipt for taking the goods.

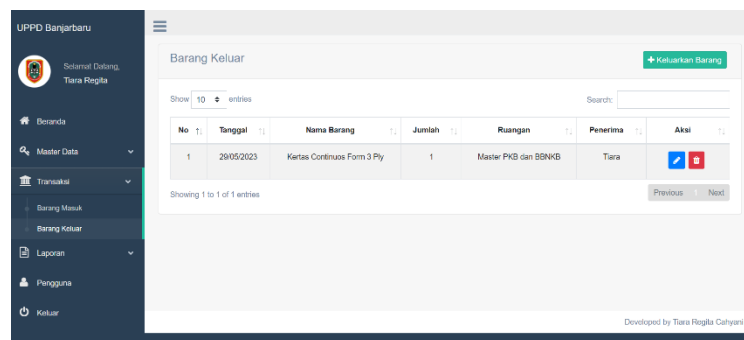


Figure 6. Outgoing Goods Form

i) Incoming Goods Form

The Incoming Goods Form is a form that contains information regarding incoming goods when the goods we request from the South Kalimantan Province Regional Financial Agency have been sent to the Banjarbaru City Regional Revenue Service Unit and have been received. In this form the admin can add data, change data, and delete data.

No	Tanggal	Nama Barang	Jumlah	Merk	Satuan	Harga	Aksi
1	23/05/2023	Ballpoint Balliner	42	Pilot	Buah	Rp 27.500	<input checked="" type="checkbox"/> <input type="checkbox"/>
2	23/05/2023	Ballpoint Biasa	103	Snowman	Buah	Rp 4.500	<input checked="" type="checkbox"/> <input type="checkbox"/>
3	23/05/2023	Binder Clip 111	20	Joyko	Kotak	Rp 11.900	<input checked="" type="checkbox"/> <input type="checkbox"/>
4	23/05/2023	Binder Clip 280	16	Joyko	Kotak	Rp 29.400	<input checked="" type="checkbox"/> <input type="checkbox"/>
5	23/05/2023	Binder Clip No. 105	20	Joyko	Kotak	Rp 3.000	<input checked="" type="checkbox"/> <input type="checkbox"/>
6	23/05/2023	Cetak Spanduk	142	Custom	m2	Rp 35.000	<input checked="" type="checkbox"/> <input type="checkbox"/>
7	23/05/2023	Gunting Kertas Sedang	20	Joyko	Buah	Rp 35.900	<input checked="" type="checkbox"/> <input type="checkbox"/>
8	23/05/2023	HVS Foleo 70 Gram	145	SIDU	Rim	Rp 65.000	<input checked="" type="checkbox"/> <input type="checkbox"/>
9	23/05/2023	HVS Foleo 80 Gram	7	SIDU	Rim	Rp 74.100	<input checked="" type="checkbox"/> <input type="checkbox"/>
10	23/05/2023	Isi Stapler Besar No. 380	20	Joyko	Buah	Rp 2.000	<input checked="" type="checkbox"/> <input type="checkbox"/>

Figure 7. Incoming Goods Form

j) Incoming Goods Report

Incoming Goods Report is a report that contains a list of incoming goods.

No	Tanggal	Nama Barang	Jumlah	Merk	Satuan	Harga
1	23/05/2023	Ballpoint Balliner	42	Pilot	Buah	Rp 27.500
2	23/05/2023	Ballpoint Biasa	103	Snowman	Buah	Rp 4.500
3	23/05/2023	Binder Clip 111	20	Joyko	Kotak	Rp 11.900
4	23/05/2023	Binder Clip 280	16	Joyko	Kotak	Rp 29.400
5	23/05/2023	Binder Clip No. 105	20	Joyko	Kotak	Rp 3.000
6	23/05/2023	Cetak Spanduk	142	Custom	m2	Rp 35.000
7	23/05/2023	Gunting Kertas Sedang	20	Joyko	Buah	Rp 35.900
8	23/05/2023	HVS Foleo 70 Gram	145	SIDU	Rim	Rp 65.000
9	23/05/2023	HVS Foleo 80 Gram	7	SIDU	Rim	Rp 74.100
10	23/05/2023	Isi Stapler Besar No. 380	20	Joyko	Buah	Rp 2.000
11	23/05/2023	Isi Stapler No. 10	40	Kenko	Kotak	Rp 26.000
12	23/05/2023	Isi Ulang Tinta Printer	35	Epson	Botol	Rp 150.000
13	23/05/2023	Kertas Continuous Form 3 Ply	25	Paperline	Kotak	Rp 400.000
14	23/05/2023	Kertas Continuous Form 3 Ply A3	12	Paperline	Kotak	Rp 800.000
15	23/05/2023	Kertas Thempor 80x80 mm	125	E-Print	Kotak	Rp 35.000
16	23/05/2023	Kuarto A4 70 Gram	30	SIDU	Rim	Rp 65.700
17	23/05/2023	Map Ordner	20	Bantex	Buah	Rp 20.300
18	23/05/2023	Map Ordner Besar	30	Bantex	Buah	Rp 48.800
19	23/05/2023	Staplektor Plastik	10	BIG	Lusin	Rp 137.000
20	23/05/2023	Stapler Besar	20	Joyko	Buah	Rp 91.700
21	23/05/2023	Stapler Kecil	25	Joyko	Buah	Rp 47.000
22	23/05/2023	Trigonal Paper Clip Besar	20	Kenko	Kotak	Rp 31.400
23	23/05/2023	Trigonal Paper Clip Kecil	50	Kenko	Kotak	Rp 5.300
24	23/05/2023	Trigonal Paper Clip Sedang	25	Kenko	Kotak	Rp 20.500

Figure 8. Incoming Goods Form

k) Outgoing Goods Report

Outgoing Goods Report is a report that contains a list of outgoing goods.

No	Tanggal	Nama Barang	Jumlah	Ruangan	Penerima
1	28/05/2023	Kertas Continuous Form 3 Ply	1	Master PKB dan BBNKB	Tira

Figure 9. Outgoing Goods Report Form

CONCLUSION AND RECOMMENDATION

Based on the analysis, design, implementation and testing that has been carried out in this research, it can be concluded that the Web-based Accounting Information System (AIS) for the inventory of consumables at the Banjarbaru City Regional Revenue Service Unit can be used well in a computerized database and can speed up the process. search for new and old data. This research also provides suggestions for improving the inventory accounting system for consumable goods at the Banjarbaru City Regional Revenue Service Unit by making item data/reports per month provided in graphical form, in order to find out what items are often requested by employees of the City Regional Revenue Service Unit. Banjarbaru.

REFERENCES

- Bahit, Muhammad, Paraswati Intan, and Wulandari Phaureula Artha. 2021. 'Sistem Informasi Akuntansi Perhitungan Insentif Operator Berbasis Web Pada Terminal Petikemas Banjarmasin Pt. Pelabuhan Indonesia III (Persero) Regional Kalimantan'. *Seminar Nasional Manajemen, Ekonomi Dan Akuntansi* 6(1):640–44.
- Desriani, Neny, Harsono Edwin Puspita, Aulia Ramadina Salsabila, Mutiasari Nur Wulan, and Hilda Ratna Dewi. 2023. 'Web Based Accounting Information System Application Design with Prototype Method (Study on The National Flagship Cooperative of Prosperous Green Farmers)'. Pp. 606–14 in. Atlantis Press.

- Handayani, Monika, Muhammad Bahit, and Hana Lutfita. 2023. 'Cash Receipt and Disbursement Accounting Information System: A Case Study at the Muhammadiyah AT Tanwir Mosque Banjarmasin'. *Proceeding of The International Conference on Economics and Business* 2(2):16–27.
- Handayani, Monika, Muhammad Bahit, and Muhammad Najman. 2023. 'Management Accounting Information System: Case Study at the Kusan Hilir Pagatan District Office'. *Proceeding of The International Conference on Business and Economics* 1(2):122–31.
- Handayani, Monika, Muhamad Hendra Sunarya, and Muhammad Bahit. 2022. 'Visualization of Fintech Research Trends (Financial Technology) Using VOSViewer'. Pp. 3–10 in. Atlantis Press.
- Haq, Ahsanul, and Muhammad Bahit. 2021. 'Visualization and Bibliometric Analysis of FinTech Trend Research'. Pp. 80–84 in. Atlantis Press.
- Haratua, Justin A., Andree E. Widjaja, Kusno Prasetya, and Hery Hery. 2021. 'Web-Based Inventory Application Development for PT. Palugada Indonesia'. *IJNMT (International Journal of New Media Technology)* 8(1):70–78.
- Hertati*, Lesi, Asmawati Asmawati, Lili Syafitri, Meifida Ilyas, and Otniel Safkaur. 2022. 'Implementing Management Accounting Information Systems Using Software Applications and Its Implications on Individual Performance'. *Jurnal Ilmu Keuangan Dan Perbankan (JIKA)* 12(1):104–16..
- Iskandar, Dwi, and Andre Tantri Yanuar. 2023. 'Inventory Information System Integration at CV. XYZ Web-Based'. *International Journal of Computer and Information System (IJCIS)* 4(1):8–13.
- Muhammad Fahmi, Zulkarnain. 2022. 'Implementation Of Internal Control Procedures That Enable Cost Savings In Dealing With Threats Cycles : Revenu Cycle: Tradional Vs Digital Accounting Information System Era In Pharmaceutical Sector'. *Journal of Pharmaceutical Negative Results* 3566–71.
- Najla, Najla, S. Supriyati, and Deshinta Arrova Dewi. 2022. 'Design of Sales Accounting Information System Using EMKM Accounting Standard'. *@is The Best: Accounting Information Systems and Information Technology Business Enterprise* 7(2):166–80.
- Sari, Marshelina Putri Permata, Phaureula Artha Wulandari, and Muhammad Bahit. 2021. 'Perancangan Sistem Informasi Perhitungan Perjalanan Dinas Pada Balai Wilayah Sungai Kalimantan III Berbasis Web'. *Seminar Nasional Manajemen, Ekonomi Dan Akuntansi* 6(1):780–85.
- Turini, Turini, Willy Eka Septian, and Widya Jati Lestari. 2021. 'Accounting Information System for Spare Parts Cash Sales Using The Cash Basis Method At The Vie Jaya Motor Workshop Cirebon'. *Global Conference on Business and Management Proceedings* 1(1):85–95.
- Wibowo, Aldo Wicaksono, Anik Kusmintarti, and Nurafni Eltivia. 2022. 'Analysis And Design of Inventory Accounting Information System Applications To Improve Internal Control In MSMES Filo CR Malang'. *International Journal of Multidisciplinary Research and Literature* 1(6):660–69.

*IMPLEMENTATION OF A WEB-BASED ACCOUNTING INFORMATION SYSTEM FOR
MANAGEMENT OF CONSUMABLE GOODS INVENTORY CASE STUDY: BANJARBARU CITY
REGIONAL REVENUE SERVICE UNIT*

Wulandari, Phaureula Artha, Muhammad Bahit, and Riski Emmilia Ananda. 2021. 'A Web-Based Direct Labor Cost Accounting Information System Case Study of PT. Giri Mera Banjarmasin'. Pp. 234–37 in. Atlantis Press.