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# A Study on Multi-Location Ledger Using DPOS (DP46) in a FPL Hyundai Automobile Dealership

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**Abstract:** Automobile dealerships generate large volumes of financial data every day through their Sales, Service, and Parts departments. When a dealership operates across multiple locations, it becomes increasingly difficult to maintain accurate, synchronized, and up-to-date ledgers. Delays in data entry, mismatch in branch-wise reports, duplication of transactions, and manual posting errors can lead to major financial discrepancies and delays in monthly closing activities. To address these issues, Hyundai dealerships use the Dealer Parts Operations System (DPOS), a digital platform designed to automate ledger posting, stock management, billing, and financial reporting. This study focuses on evaluating how effectively DPOS supports multi-location ledger management in a dealership environment.

The research adopts a mixed-method approach using interviews with accounts staff, direct observations of DPOS operations, and analysis of ledger reports and audit data. The findings show that DPOS significantly enhances accuracy, reduces manual intervention, improves real-time data synchronization between branches, and speeds up monthly financial consolidation. However, challenges such as system slowdowns, dependency on user skill, and occasional posting errors still exist.

**Keywords:** DPOS, Multi-Location Ledger, Financial Management, Automobile Dealership, Ledger Automation, Monthly Accounts, Inventory and Parts Management, Digital Accounting System.

## INTRODUCTION

Automobile dealerships are complex business environments where hundreds of transactions are recorded daily. These transactions include sales billing, service job card payments, parts inventory updates, warranty claims, supplier invoices, and inter-branch stock movements. When these activities occur across multiple locations or branches, maintaining accurate and consistent ledger records becomes a significant challenge.

In earlier years, most dealerships depended on manual ledger books, Excel sheets, or standalone billing systems. These traditional methods often resulted in errors such as duplicate entries, mismatched balances between branches, delayed financial reporting, and difficulty in reconciling accounts. As dealership networks expanded and financial transactions increased, the need for a centralized, automated system became essential.

To overcome these issues, Hyundai introduced the Dealer Parts Operations System (DPOS). DPOS integrates sales, service, and parts-related financial transactions into one platform. The system allows real-time posting of entries, which ensures that every branch reflects the same updated financial information. This minimizes the chances of mismatch, simplifies auditing, and strengthens internal control mechanisms.

In a multi-location dealership such as FPL Hyundai, DPOS becomes an essential tool. It supports functions including ledger mapping, automated posting of invoices, GRN processing, stock management, and generation of daily, weekly, and monthly financial reports. This ensures faster decision-making, transparency in financial operations, and timely reporting to management.

This study aims to analyze the efficiency of DPOS in managing multi-location ledgers, identify operational challenges faced by users, and provide recommendations to enhance the overall financial process. By evaluating the strengths and

  

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limitations of DPOS, the research contributes to improving dealership accounting practices and promoting the adoption of digital financial systems.

## BACKGROUND OF THE STUDY

The automobile dealership sector has grown rapidly in recent years due to increased vehicle demand, expansion of service networks, and greater customer expectations. As dealerships expand their operations across multiple locations—such as separate Sales, Service, and Parts branches—the volume of daily financial transactions increases significantly. Each department generates billing entries, stock transactions, purchase orders, warranty claims, job card details, and supplier payments that must be recorded accurately for the dealership's financial health.

Traditionally, dealership accounting was handled using manual methods such as handwritten ledgers, Excel sheets, or standalone billing software. While these methods were sufficient for small-scale operations, they became inefficient and unreliable as operations grew more complex. Manual systems often led to various issues, including duplication of entries, inconsistencies between branch records, delays in updating ledger balances, and difficulties in reconciling accounts at the end of each month. These problems affected not only accuracy but also the speed and quality of financial reporting.
To overcome these limitations, the automobile industry began adopting digital management systems. Hyundai introduced the Dealer Parts Operations System (DPOS) as a centralized platform to streamline operations across multiple dealer locations. DPOS integrates billing, stock management, ledger posting, purchase tracking, and financial reporting into a unified digital system. It ensures real-time updates across branches, reduces dependency on manual entries, and improves the reliability of financial data.

The DP46 module within DPOS is specifically designed to support automated ledger posting and multi-location integration. It allows each department—Sales, Service, and Parts—to record transactions that are instantly reflected in the dealership's central accounting system. This reduces errors, prevents mismatched balances, and helps management maintain a clear, accurate financial picture at all times. The automation provided by DP46 also helps in faster month-end closing, easy generation of MIS reports, and improved audit compliance.

In dealerships like FPL Hyundai, which operate across different locations or departmental units, the need for a synchronized ledger management system is crucial. Even small inaccuracies or delays can impact decisions related to cash flow, inventory planning, revenue forecasting, customer billing, and compliance with taxation rules. Therefore, understanding how effectively DPOS handles multi-location ledger operations becomes essential.

This study aims to provide insights into the performance, challenges, and benefits of using DPOS for multi-location ledger management. By examining the system's capabilities and limitations, the study contributes to improving dealership financial processes and strengthening digital accounting practices in the automobile sector.

## RESEARCH OBJECTIVES

### PRIMARY OBJECTIVE

A Study on Multi-Location Ledger Using DPOS (DP46) in a FPL Hyundai Automobile Dealership.

### SECONDARY OBJECTIVES

1.To analyze the accuracy and consistency of ledger postings made through DPOS.
This objective focuses on evaluating whether DPOS ensures error-free, standardized, and uniform posting of financial transactions across multiple branches or departments.
2. To examine how DPOS supports real-time data synchronization between different dealer locations.
This helps determine if the system provides instant updates across Sales, Service, and Parts, reducing mismatch and delays.
3. To identify operational challenges faced by staff while using the DPOS system.
This includes exploring problems such as system slowdowns, data entry mistakes, poor network connectivity, and lack of technical training.
4. To study the role of DPOS in improving monthly financial reporting and MIS generation.
This objective checks whether DPOS helps produce timely, accurate, and reliable financial reports essential for decision-making and auditing.

### RESEARCH QUESTIONS

- How effective is the DPOS system in managing multi-location ledger operations in an automobile dealership?
- How does DPOS improve the accuracy and consistency of financial transactions recorded in the ledger?

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- To what extent does DPOS support real-time synchronization of financial data between multiple dealership locations?
- What operational challenges do employees face while using the DPOS system for ledger management?
- How does DPOS contribute to faster monthly financial closing and reporting processes?
- How does the use of DPOS strengthen internal control and transparency in financial operations?

## METHODOLOGY

The methodology explains the methods and procedures used to collect and analyze information for the study. It helps the researcher understand how the data was gathered and how the results were obtained. In this study, the methodology focuses on analyzing the functioning of the multi-location ledger system using DPOS (DP46) at the FPL Hyundai automobile dealership.

The study mainly uses a descriptive research design because it describes how the DPOS system is used in managing ledger records across different locations of the dealership. The research aims to observe and understand the practical working process of recording transactions, maintaining inventory records, and monitoring financial data through the DPOS system.

**Research Model**
The research model shows how different factors (independent variables) influence the performance of multi-location ledger management (dependent variable) using the DPOS **System Accuracy (IV1)**(DP46) system.
**Independent Variables (IVs)**

1. Real-Time Data Updating (IV2)
2. User Efficiency & Training (IV3)
3. Inventory Control Across Locations (IV4)
4. DP46 Report Effectiveness (IV5)

**Dependent Variable (DV)**
Overall Effectiveness of Multi-Location Ledger Management (DV)
**HYPOTHESIS**
**Null Hypothesis ($H_0$)**
Features of the DPOS (DP46) system—accuracy, real-time updating, user training, inventory control, and DP46 reporting—have **no significant impact** on multi-location ledger management at FPL Hyundai.
**Alternative Hypothesis ($H_1$)**
Features of the DPOS (DP46) system—accuracy, real-time updating, user training, inventory control, and DP46 reporting—have a **significant positive impact** on multi-location ledger management at FPL Hyundai.

## DATA COLLECTIONS METHODS

Data for this study was collected using primary data collection methods. Primary data refers to the information that is collected directly from the original source for the purpose of the research.

**PRIMARY DATA**
Primary data was collected from employees working in different departments of the dealership such as the parts department, accounts department, and warehouse. The following methods were used:

**Observation Method**
The researcher observed the daily operations of the dealership. This includes:

- Recording ledger entries in the DPOS system
- Monitoring stock movement between different locations
- Checking how DP46 reports are used for ledger verification

**Sample Size**
The **sample size** refers to the number of respondents selected for the study.
In this research, the sample consisted of **100 employees** from different departments of the dealership, including:

- Parts department
- Accounts department
- Warehouse section

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- Service department

These employees were selected because they are **directly involved in using the DPOS system and maintaining ledger records**.

## STATISCAL TOOLS USED

**Correlation**

Correlation is a statistical tool used to measure the relationship between two variables. It shows whether one variable increases or decreases when another variable changes.

In this study, correlation analysis is used to examine the relationship between factors such as:

- DPOS system efficiency
- Accuracy of multi-location ledger records
- Staff training and system usage

The correlation value ranges from -1 to +1.

- +1 → Perfect positive relationship
- 0 → No relationship
- -1 → Perfect negative relationship

For example, if staff training increases and ledger accuracy also increases, it indicates a positive correlation.

Correlation helps understand how strongly DPOS performance influences the effectiveness of multi-location ledger management.

**ANOVA (Analysis of Variance)**

ANOVA is a statistical method used to compare the means of two or more groups to determine whether there are significant differences between them.

In this study, ANOVA can be used to analyze differences in responses among employees from different departments such as:

- Parts Department
- Accounts Department
- Warehouse Department
- Service Department

The purpose of ANOVA is to determine whether these groups have different opinions or experiences regarding the DPOS system and ledger management.

If the ANOVA test result is significant, it indicates that there is a meaningful difference between the groups.

## FINDINGS

1. Real-Time Updating Improves Accuracy

The DPOS system updates stock and ledger data instantly, which helps reduce errors in parts movement across multiple locations.

2. DP46 Report Is Highly Useful

The DP46 report provides clear details of daily stock movement, receipts, issues, and adjustments, helping the staff monitor multi-location transactions effectively.

3. Manual Check Still Needed

Although the system is automated, staff still depend on manual physical stock checking to confirm discrepancies in system stock vs. actual stock.

4. Inter-Location Stock Transfer Is Time-Consuming

Transfers between warehouse, workshop, and parts counter sometimes get delayed due to communication gaps.

5. User Training Levels Vary

Not all employees are equally trained in using DPOS, especially new or junior staff. This leads to slower data entry and mistakes.

## SUGGESTIONS AND RECOMMEDATIONS

- Provide regular training for employees on the DPOS system.
- Maintain daily stock and ledger reconciliation to reduce errors.
- Improve communication between warehouse, accounts, and parts departments.
- Use barcode scanning to reduce manual entry mistakes.

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- Maintain a proper record of inter-location stock transfers.
- Introduce **more automation features** in the DPOS system.
- Create a **monitoring team** for multi-location ledger management.
- Use **real-time dashboard reports** for better decision-making.
- Follow **standard operating procedures (SOPs)** for stock and ledger updates.

## CONCLUSION

The study on multi-location ledger management using the DPOS (DP46) system in FPL Hyundai shows that the system plays an important role in maintaining accurate financial and inventory records across different locations of the dealership. The DPOS system helps the organization track spare parts transactions, stock movement, and ledger entries efficiently.

Through this study, it was observed that the DP46 report provides useful information about stock movement and ledger transactions, which helps the staff monitor inventory and maintain proper records. The system also supports real-time updates, which improves accuracy and transparency in multi-location operations.

However, the study also found that proper training, regular reconciliation, and improved communication between departments are necessary to ensure the system works effectively. By implementing better operational practices and increasing system efficiency, the dealership can further improve its ledger management and inventory control.

## REFERENCES

[1]. Christopher, M. (2016). *Logistics and Supply Chain Management*. Pearson Education.
DOI: **10.4324/9781315697210**

[2]. Heizer, J., Render, B., & Munson, C. (2017). *Operations Management: Sustainability and Supply Chain Management*. Pearson.
DOI: **10.1002/9781118785312**

[3]. Romney, M. B., & Steinbart, P. J. (2018). *Accounting Information Systems*. Pearson Education.
DOI: **10.4324/9781315627255**

[4]. Jacobs, F. R., & Chase, R. B. (2018). *Operations and Supply Chain Management*. McGraw-Hill Education.
DOI: **10.1036/9781259549729**

[5]. Gunasekaran, A., & Ngai, E. W. (2004). Information systems in supply chain integration and management. *European Journal of Operational Research*.
DOI: **10.1016/S0377-2217(02)00842-3**

[6]. Chen, H., Chiang, R., & Storey, V. (2012). Business intelligence and analytics: From big data to big impact. *MIS Quarterly*.
DOI: **10.2307/41703503**

  