Strategic Optimization of Depreciation in Hospital Fixed Assets

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INTRODUCTION

Hospitals rely on high-value assets—medical equipment, buildings, and IT systems. Depreciation helps allocate the cost of these assets over their useful life. However, Indian hospitals often follow outdated depreciation practices, leading to inaccurate financial statements, poor tax planning, and reduced audit readiness. This research explores how depreciation can be strategically optimized in a hospital environment.

BACKGROUND

Fixed assets form the backbone of healthcare infrastructure. The way depreciation is recorded affects not only accounting but also tax efficiency and planning of capital expenses. Currently, many hospitals use a single-method depreciation (e.g. SLM) for all asset types, which can be inaccurate. This study addresses this gap and proposes data-driven improvements.

PURPOSE OF THE STUDY

To critically examine and optimize the existing depreciation practices in hospitals, with a focus on enhancing:

- Financial transparency
- Tax savings
- Capital budgeting
- Asset lifecycle planning

AIM & OBJECTIVES

Aim:

To analyze and optimize depreciation practices of fixed assets in private hospitals for better financial accuracy and tax efficiency.

Objectives:

i) to evaluate the current depreciation practices for fixed assets in hospitals.

ii) to assess the impact of depreciation strategies on financial reporting.

iii) to identify inefficiencies and gaps in current fixed asset valuation and depreciation.

RESEARCH QUESTIONS

- What workflows are used for fixed asset verification and depreciation?
- Where do inefficiencies exist in depreciation and valuation?
- How can these inefficiencies be resolved through strategic interventions?

SCOPE OF STUDY

- Conducted at Sahyadri Hospitals Pvt. Ltd., Pune
- Covered 11 hospital units under centralized financial system
- Focused on Finance, IT, Biomedical, and Operations departments
- Analyzed records and personnel insights over a 3-year period

LITERATURE REVIEW HIGHLIGHTS

Studies from India, UK, China, Spain, and the U.S. show that:

- Uniform depreciation causes misreporting
- ERP and asset-specific depreciation improve audits and tax savings
- Hospitals with updated asset tracking systems show stronger financial health

METHODOLOGY OVERVIEW

Design: Descriptive, mixed-method approach
Location: Sahyadri Hospitals, Pune
Participants: 20 staff across departments
Tools: Interviews, surveys, Excel records, audit reports
Data was both quantitative and qualitative

DATA COLLECTION

Primary Data Collection:

- Conducted 20 structured interviews
- Used Google Forms and in-person formats
- Covered asset tagging, depreciation methods, ERP usage, and maintenance updates
- Explored staff perceptions of FAR accuracy and tracking

Secondary Data Collection:

- Fixed Asset Register (FAR)
- Capital Work-in-Progress (CWIP) reports
- ERP-generated financial reports
- Audit summaries and insurance records

ANALYSIS

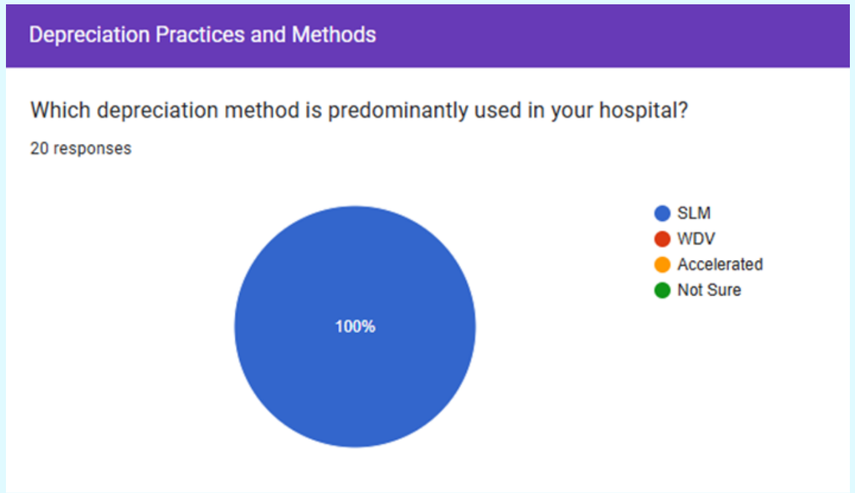
Quantitative Analysis Tools

- Used descriptive statistics (Mean, SD, Range)
- Asset-wise depreciation trends
- Asset lifecycle tracking
- Gross block to accumulated depreciation ratio analysis

Qualitative Analysis

- Thematic insights from staff:
  - Lack of training on DDB vs. SLM
  - Uniform SLM distorts valuation of fast-depreciating tech assets
  - Asset misclassification due to manual registers
  - CWIP delays affect tax planning

KEY FINDINGS – DEPRECIATION PRACTICES



THE PIE CHART CLEARLY SHOWS THAT 100% OF THE RESPONDENTS UTILIZE THE STRAIGHT-LINE METHOD (SLM) FOR DEPRECIATING FIXED ASSETS.

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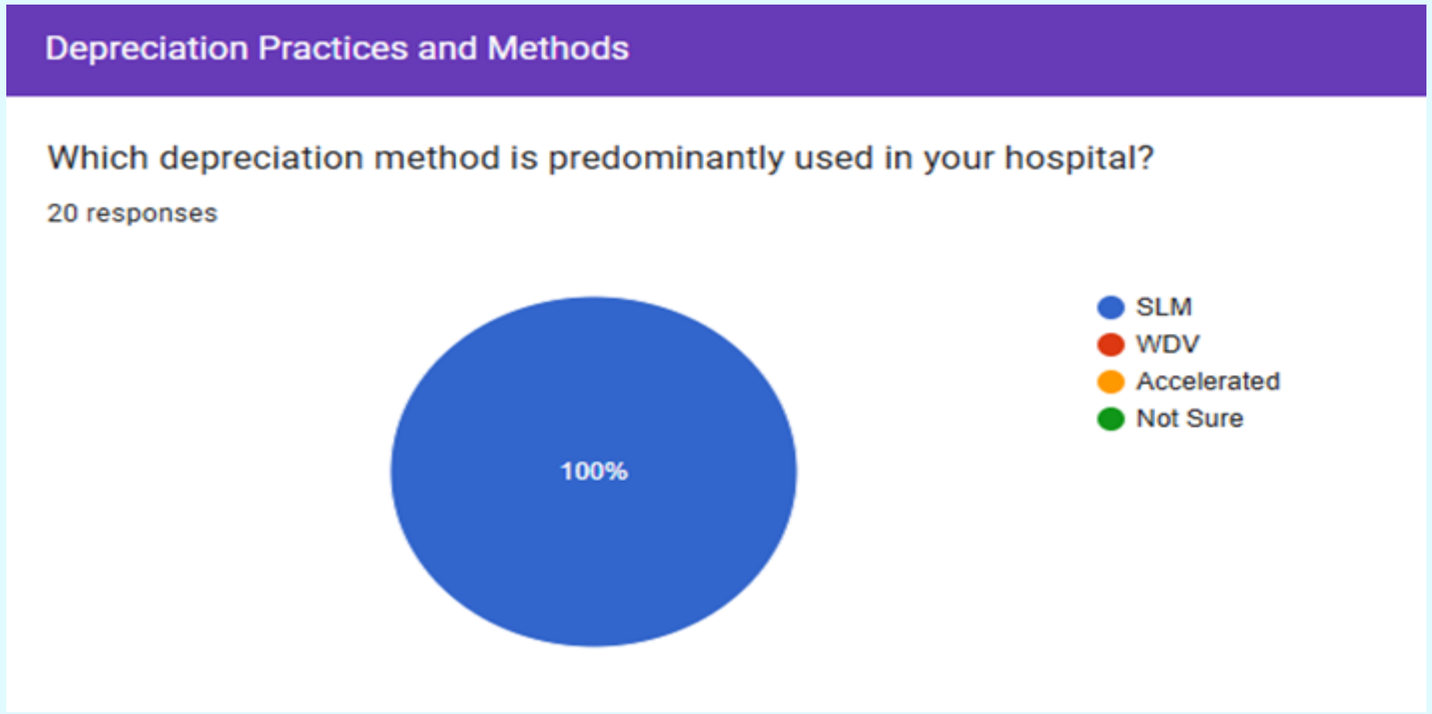

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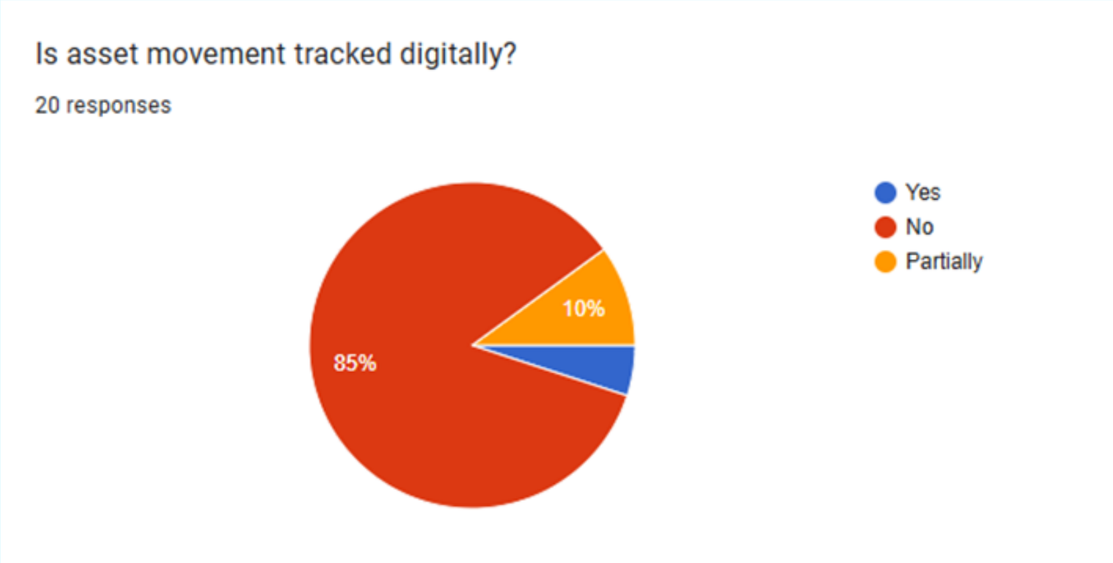
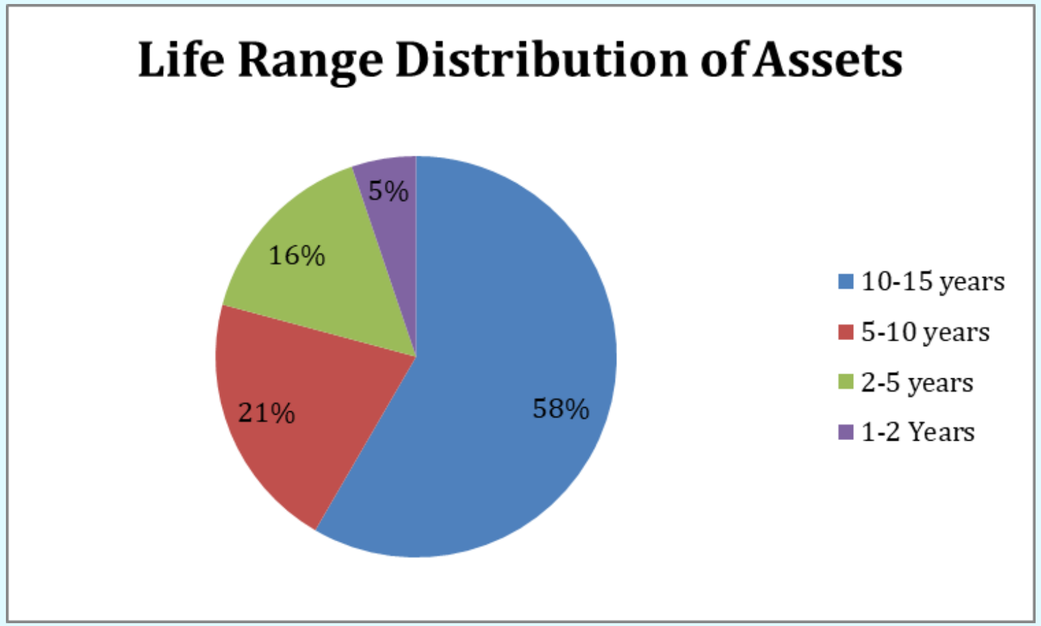
KEY FINDINGS – ASSET TRACKING



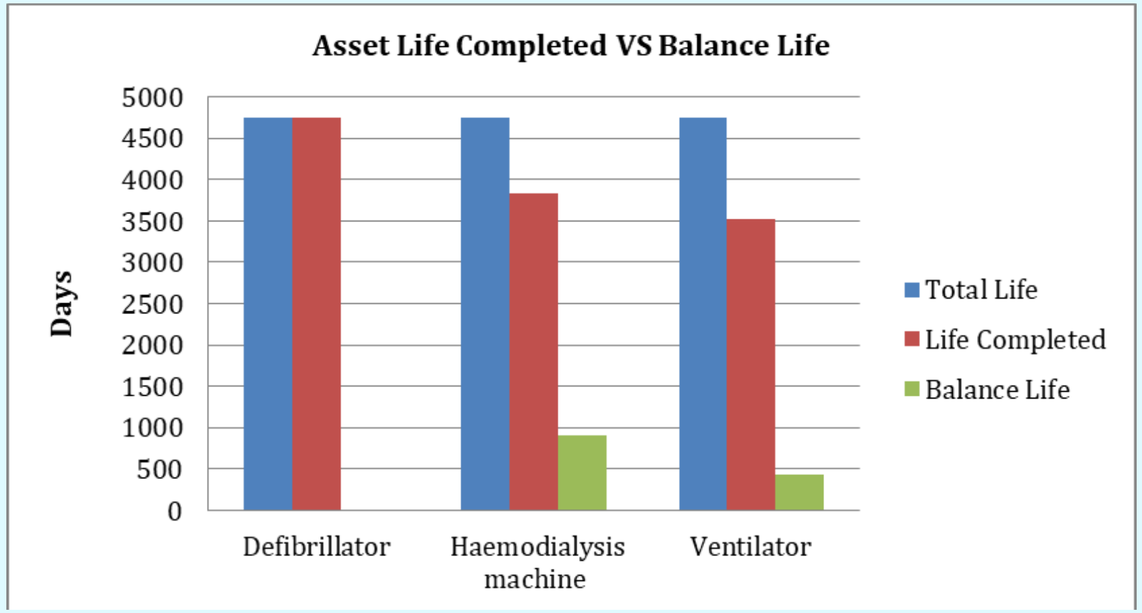
ONLY 5% OF HOSPITALS SURVEYED CONFIRMED DIGITAL TRACKING, WHILE THE GREAT MAJORITY (85%) DO NOT TRACK ASSET MOVEMENT. FINDING ASSETS, CONFIRMING THEIR STATUS, AND KEEPING CORRECT RECORDS IN THE FIXED ASSET REGISTER CAN BECOME CHALLENGING DUE TO AN INCREASING DEPENDENCE ON NON-DIGITAL MEANS FOR ASSET MOVEMENT TRACKING.

ASSET LIFECYCLE ANALYSIS



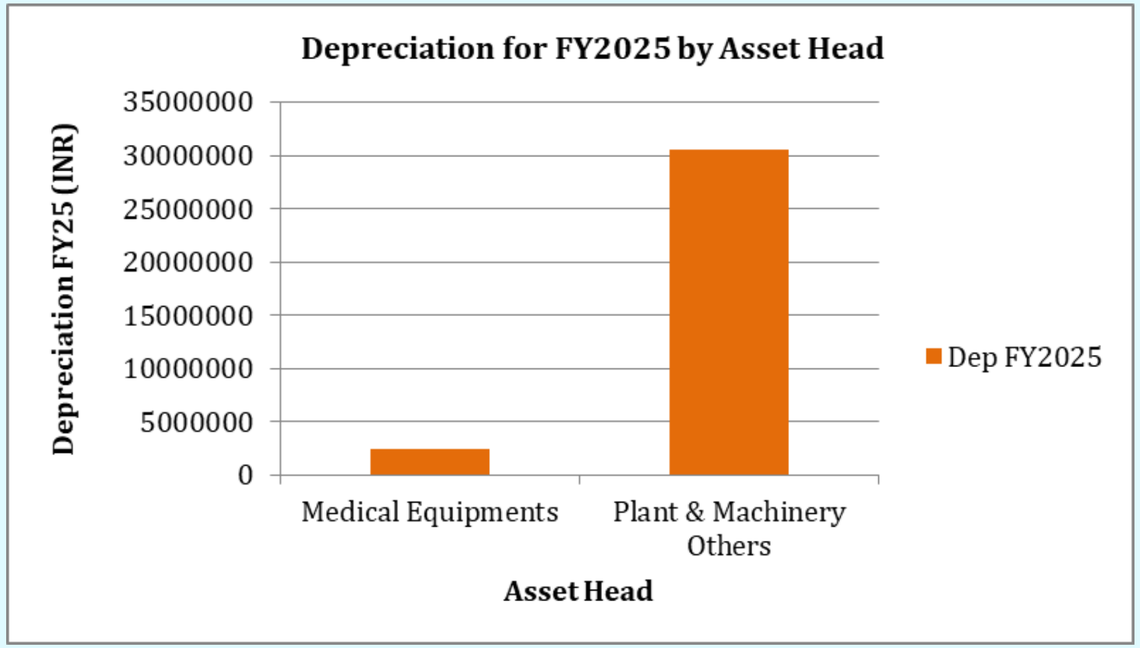
- MAJORITY ASSETS IN 10–15 YEAR LIFE RANGE
- SOME MEDICAL EQUIPMENT HAS COMPLETED ITS LIFECYCLE BUT STILL IN USE
- INDICATES LACK OF TIMELY REPLACEMENT OR UPGRADES
- SIGNALS POTENTIAL RISKS TO CLINICAL SERVICE QUALITY

ASSET LIFECYCLE ANALYSIS (LIFE COMPLETED VS. TOTAL LIFE)



- DEFIBRILLATOR HAS COMPLETED 100% OF ITS LIFE – NEEDS REPLACEMENT.
- HAEMODIALYSIS MACHINE & VENTILATOR ARE NEARING END-OF-LIFE.
- INDICATES URGENCY FOR EQUIPMENT UPGRADE PLANNING.
- HIGHLIGHTS LACK OF REGULAR IMPAIRMENT REVIEWS.
- ESSENTIAL FOR STRATEGIC CAPITAL PLANNING AND UNINTERRUPTED PATIENT CARE.

DEPRECIATION EXPENSE BY ASSET HEAD (FY2025)



- PLANT & MACHINERY (OTHERS): ₹30.53 MILLION
- MEDICAL EQUIPMENT: ₹2.49 MILLION
- MAJOR DEPRECIATION BURDEN LIES WITH PLANT & MACHINERY.
- INDICATES HIGHER VALUE OR VOLUME OF NON-SPECIALIZED INFRASTRUCTURE.
- DESPITE FAST OBSOLESCENCE, MEDICAL EQUIPMENT SHOWS LOWER EXPENSE.
- HIGHLIGHTS NEED FOR CATEGORY-SPECIFIC DEPRECIATION STRATEGIES.

Gap Analysis

Aspect	Current State (Observed)	Ideal Practice	Identified Gap
Depreciation Method	Uniform use of SLM across all asset types	Asset-specific depreciation (e.g., DDB for medical equipment)	Misaligned asset valuation; tax inefficiency
Fixed Asset Register (FAR)	Maintained manually in Excel	ERP-integrated, automated FAR	Prone to human error; no real-time updates
Asset Tagging	75% of assets untagged or inconsistently labeled	100% standardized barcoded tagging	Poor traceability; audit compliance risk
CWIP Capitalization	Delays >2 years for some assets	Capitalization within defined project closure timeline	Missed depreciation entries; delayed tax deductions
Digital Tracking	Only 5% asset movements tracked digitally	Real-time digital tracking via MIS or ERP	Incomplete records; weak asset control
Impairment Reviews	Rarely conducted	Annual or periodic impairment reviews	Overstated asset values; inaccurate net book values

DISCUSSION

- Findings align with Deloitte (2024) and Singh & Prasad (2023)
- Manual FAR = poor reconciliation
- SLM = overvaluation/undervaluation of different asset types
- CWIP delays and poor tracking undermine audit and tax planning

CONCLUSION

- The study met its objectives by identifying key inefficiencies in depreciation and asset valuation.
- Major gaps found:
- Overuse of SLM for all assets
- Manual FAR with no ERP integration
- Delays in CWIP capitalization
- Poor asset tagging and digital tracking
- These issues affect financial accuracy, tax planning, and audit readiness.
- Strategic improvements like asset-specific methods, ERP-based FAR, and routine reviews are essential.
- Optimizing depreciation is vital for hospital financial health and long-term sustainability.

RECOMMENDATIONS

- Develop a centralized MIS for real-time digital asset tracking
- Implement standardized asset coding & barcoding
- Replace Excel FAR with ERP-integrated system
- Conduct annual impairment reviews
- Designate Asset Governance Committee

THANK YOU