Designing a Financial Planning Framework for Managing SLOB and Write-Off Risk in Fast-Moving Consumer Goods (FMCG)

JOHN OLUWASEUN OLAJIDE[1], BISAYO OLUWATOSIN OTOKITI[2], SHARON NWANI[3], ADEBANJI SAMUEL OGUNMOKUN[4], BOLAJI IYANU ADEKUNLE[5], JOYCE EFEKPOGUA FIEMOTONGHA[6]

[1]*Lipton, USA*

[2]*Department of Business and Entrepreneurship, Kwara State University*

[3]*Bank of Industry –Ogun, Nigeria*

[4]*Prosperis Holding Company Limited, Nigeria*

[5]*Data Analyst, Federal Ministry of Mines and Steel Development, Nigeria*

[6]*Independent Researcher, Lagos, Nigeria*

Abstract- ***Managing Slow-Moving and Obsolete Inventory (SLOB) and write-off risks poses significant financial challenges for Fast-Moving Consumer Goods (FMCG) companies due to their high-volume, rapid turnover nature. This paper presents a comprehensive financial planning framework designed to address these risks by integrating inventory management practices with financial risk assessment and mitigation strategies. Utilizing a mixed methods research design, the study combines quantitative analysis of inventory and financial data with qualitative insights from industry experts to develop a practical, adaptable framework. Key components include systematic identification and categorization of SLOB items, using financial metrics and KPIs for ongoing risk monitoring, and implementing targeted inventory optimization and write-off prevention techniques. The framework further emphasizes seamless integration into existing financial planning cycles and continuous improvement through real-time monitoring and feedback. Practical implications for FMCG firms highlight improved financial decision-making, reduced capital lockup, and enhanced operational resilience. Finally, the paper outlines future research opportunities including the application of advanced analytics and customization for diverse market contexts. This framework offers a robust tool for FMCG companies aiming to manage inventory risks and safeguard financial performance proactively.***

Indexed Terms- ***Slow-Moving and Obsolete Inventory (SLOB), Write-Off Risk, Financial Planning Framework, Inventory Management, Fast-Moving Consumer Goods (FMCG), Risk Mitigation Strategies***

I. INTRODUCTION

1.1 Background

The fast-moving consumer goods industry operates in a highly competitive and dynamic environment characterized by rapid product turnover and evolving consumer preferences [1]. Companies in this sector must manage large volumes of inventory that move quickly through supply chains to meet consistent demand [2]. However, despite the rapid pace, challenges related to inventory management persist, especially concerning the balance between maintaining adequate stock levels and minimizing excess [3]. Effective inventory management is critical to ensuring operational efficiency, customer satisfaction, and profitability. It involves precise forecasting, timely replenishment, and regular inventory review to avoid holding costs and obsolescence [4].

Inventory management holds particular importance as it directly impacts working capital and cash flow in FMCG firms [5]. Poor inventory practices can lead to increased holding costs and, more critically, the

accumulation of slow-moving and obsolete stock, which ties up capital and reduces profitability. Thus, managing inventory is not only about product availability but also about safeguarding financial health and strategic agility [6].

The complexity of managing inventories in FMCG firms is compounded by factors such as product perishability, seasonality, and frequent product launches. The risk of stock becoming obsolete or slow-moving is high, especially in categories with short product life cycles [7]. This necessitates a comprehensive approach to inventory oversight that integrates financial planning to mitigate risks associated with excess and non-performing stock effectively [8].

1.2 Problem Statement

One of the significant challenges faced by FMCG companies is managing slow-moving and obsolete inventory, which represents products that do not sell within the expected time frame or become outdated [9]. Such inventory accumulates due to inaccurate demand forecasting, changes in consumer behavior, or product lifecycle shifts. This results in capital being tied up in stock that contributes little to revenue but incurs storage and handling costs, often leading to financial write-offs [10].

Write-offs, which occur when inventory is deemed unsellable and removed from financial records, pose a considerable risk to FMCG firms. They negatively affect profitability and distort financial statements, making it difficult to assess the true financial position [11]. High levels of write-offs can undermine investor confidence and restrict the firm's ability to invest in growth opportunities. The unpredictability of these risks adds to the complexity of financial planning and necessitates specialized frameworks to address them systematically [12].

Moreover, the lack of structured financial strategies to forecast, monitor, and manage SLOB risks often results in reactive decision-making rather than proactive risk mitigation. This gap in financial planning creates inefficiencies and missed opportunities for optimizing inventory turnover and reducing losses. Addressing these challenges requires a robust framework tailored to the unique operational and financial realities of FMCG firms [13].

1.3 Research Objectives and Scope

This study aims to design a financial planning framework specifically focused on managing the risks associated with slow-moving and obsolete stock in FMCG companies. The objective is to develop a systematic approach that integrates inventory management with financial risk assessment to reduce write-offs and improve capital efficiency. The framework intends to provide actionable guidelines for identifying risk factors early and implementing mitigation strategies within financial planning cycles.

The scope of this research encompasses inventory risk management from a financial perspective, targeting FMCG firms operating in competitive markets. It excludes operational aspects such as supply chain logistics or marketing strategies except where they directly influence financial planning for inventory risks. The study will consider various financial metrics and inventory data to create a practical and adaptable framework.

While the focus is on FMCG companies due to their unique challenges with rapid inventory turnover, the proposed framework could have broader applications in industries facing similar risks. However, limitations include potential variability in data availability across firms and evolving market conditions that may require periodic framework adjustments.

II. LITERATURE REVIEW

2.1 Inventory Management in FMCG

Inventory management in the Fast-Moving Consumer Goods (FMCG) sector involves overseeing the flow of goods from manufacturers to warehouses and ultimately to retail outlets [14]. Due to the rapid turnover and high volume of products, effective inventory management is crucial for maintaining supply chain efficiency and meeting consumer demand without excess stock buildup [15]. Key concepts in FMCG inventory management include demand forecasting, reorder point calculation, safety stock determination, and inventory turnover

optimization [16]. These concepts help firms balance product availability against the costs of holding inventory, such as warehousing and depreciation [8].

Various practices have been adopted to improve inventory management in FMCG, including just-in-time (JIT) inventory, vendor-managed inventory (VMI), and automated replenishment systems. JIT aims to minimize stock levels by synchronizing supply with demand, reducing carrying costs and obsolescence risk [17]. VMI involves suppliers taking responsibility for inventory levels at customer sites, improving responsiveness and reducing stockouts. Automated systems leverage data analytics and real-time monitoring to provide accurate inventory visibility, enabling timely decision-making [18].

Several existing models specifically address inventory turnover in FMCG. The Economic Order Quantity (EOQ) model calculates optimal order sizes to minimize total inventory costs. The ABC analysis segments inventory based on value and turnover rates, focusing managerial attention on critical stock [18]. More recent approaches integrate predictive analytics and machine learning to forecast demand more accurately and optimize reorder points dynamically. These models provide foundational tools but often lack integration with financial planning needed to mitigate risks from slow-moving or obsolete inventory [19].

2.2 SLOB and Write-Off Risks

Slow-Moving and Obsolete Inventory (SLOB) refers to stock items that remain unsold for extended periods or have lost their market value due to factors such as changing consumer preferences, product expiry, or technological advancements [20]. The causes of SLOB are multifaceted, including inaccurate demand forecasting, overproduction, seasonality, and poor inventory visibility. FMCG firms face unique challenges as product lifecycles tend to be short, and consumer tastes evolve rapidly, increasing the likelihood of inventory becoming obsolete or slow to sell [21].

The financial consequences of SLOB are significant. Holding excess or obsolete inventory ties up working capital that could otherwise be deployed for growth initiatives. It also incurs additional carrying costs such as storage, insurance, and deterioration, which erode profit margins [22]. When inventory is ultimately written off, firms must recognize these losses in their financial statements, which can distort profitability and reduce asset value. Frequent or high write-offs may also impact company valuation and investor confidence [23].

Operational consequences include the inefficiency of warehouse space utilization and the disruption of supply chain processes. Managing SLOB requires additional labor and resources to identify, segregate, and dispose of such inventory [24]. Moreover, write-offs necessitate internal controls to ensure accurate accounting and compliance with financial regulations. The combined financial and operational risks make managing SLOB a critical priority for FMCG firms, necessitating frameworks that proactively address these issues [25].

2.3 Financial Planning Frameworks in Risk Management

Financial planning frameworks provide structured approaches for organizations to anticipate, evaluate, and mitigate financial risks. These frameworks typically include components such as risk identification, risk quantification, strategy formulation, implementation, and continuous monitoring [26]. In the context of inventory risk management, financial planning integrates data from operational units with financial metrics to align inventory decisions with broader organizational financial goals [27].

Traditional financial planning approaches focus on budgeting, forecasting, and variance analysis. These methods aim to predict future cash flows and expenses, allowing companies to allocate resources efficiently [28]. However, managing risks related to inventory write-offs requires more specialized frameworks that incorporate scenario analysis, sensitivity testing, and contingency planning. Such advanced frameworks help firms prepare for uncertainties in demand and supply, reducing unexpected financial impacts [29].

The application of financial planning to SLOB and write-off risk involves identifying inventory items with potential financial exposure, quantifying the probable losses, and integrating these risks into overall financial forecasts [26]. Some frameworks utilize risk-adjusted performance metrics and decision support systems to enable proactive management. This approach enhances the ability of FMCG companies to forecast write-offs accurately, optimize inventory levels, and allocate capital more effectively, reducing overall financial risk [30].

III. METHODOLOGY

3.1 Research Design

This study adopts a mixed methods research design to leverage the strengths of both qualitative and quantitative approaches. The quantitative component focuses on analyzing numerical inventory and financial data from FMCG companies to identify patterns related to SLOB and write-off risks. Statistical techniques and data analytics will be used to measure correlations between inventory turnover rates, financial write-offs, and associated risk factors. This data-driven analysis provides empirical evidence to underpin the development of the financial planning framework.

Complementing this, the qualitative aspect involves gathering insights from industry experts and practitioners through interviews and focus groups. This helps capture nuanced understanding about operational challenges, risk mitigation strategies, and decision-making processes that quantitative data alone may not reveal. The integration of qualitative findings enriches the contextual relevance of the framework, ensuring it addresses real-world complexities faced by FMCG firms.

By combining both research paradigms, the study achieves a comprehensive perspective, enabling the design of a robust, practical framework. This mixed methods approach enhances validity through data triangulation and supports the development of solutions grounded in both empirical evidence and expert judgment.

3.2 Data Collection

Data collection will involve multiple sources to ensure breadth and depth. Primary data will be gathered from FMCG companies through structured surveys and semi-structured interviews with financial managers, supply chain analysts, and inventory controllers. These participants will provide firsthand insights into inventory management practices, risk factors, and the financial implications of SLOB and write-offs. Additionally, internal company reports, such as inventory turnover records, financial statements, and write-off logs, will be collected to provide quantitative data for analysis.

Secondary data sources include industry reports, academic publications, and market analyses relevant to FMCG inventory risk and financial planning. These materials will provide contextual background and help validate findings from primary data. Publicly available financial data from listed FMCG companies may also be reviewed to benchmark typical write-off levels and inventory turnover metrics.

Data collection tools will include online survey platforms for broad quantitative data gathering and digital recording devices for interviews to ensure accurate transcription and analysis. Data confidentiality and ethical considerations will be maintained through informed consent and anonymization procedures.

3.3 Framework Development Process

The development of the financial planning framework will follow a structured, iterative process. Initially, key components and criteria will be identified based on literature review and empirical data analysis. These components will include risk identification metrics, financial indicators, and inventory categorization methods relevant to FMCG operations. The integration of these elements aims to provide a cohesive system for managing SLOB and write-off risks.

Following the design phase, the preliminary framework will be subjected to validation through expert review sessions involving practitioners and academics specializing in FMCG finance and supply

chain management. Feedback will be systematically gathered and incorporated to refine the framework's usability, relevance, and accuracy. Additionally, a case study approach will be employed where the framework is applied retrospectively to inventory and financial data from an FMCG firm to assess practical applicability and outcomes. This validation phase ensures the framework is not only theoretically sound but also operationally feasible. The iterative revisions based on real-world feedback will enhance its robustness and adoption potential within the FMCG sector.

IV. PROPOSED FINANCIAL PLANNING FRAMEWORK

4.1 Framework Components

A critical component of the proposed financial planning framework is the systematic identification and categorization of Slow-Moving and Obsolete Inventory (SLOB) items. This process involves setting clear criteria based on inventory turnover rates, aging analysis, and product lifecycle stages to distinguish slow-moving stock from obsolete items. Categorizing inventory into segments—such as active, slow-moving, and obsolete—allows for targeted financial analysis and risk prioritization. Integration of real-time inventory data enhances accuracy in identifying potential risks early.

The framework incorporates essential financial metrics and key performance indicators (KPIs) to assess SLOB risk effectively. Metrics such as inventory turnover ratio, days inventory outstanding (DIO), and write-off rates are employed to quantify risk exposure. Additionally, financial KPIs including carrying cost percentages and impact on working capital provide a comprehensive view of how inventory risks translate into financial challenges. These indicators enable ongoing risk monitoring and inform decision-making.

To ensure holistic risk assessment, the framework aligns inventory data with financial reporting and forecasting processes. By doing so, it creates a dynamic interface where operational inventory insights are integrated directly into financial risk models. This alignment supports proactive management of SLOB risks and facilitates strategic financial planning that mitigates potential losses.

4.2 Risk Mitigation Strategies

The framework emphasizes inventory optimization techniques as primary risk mitigation strategies. These include demand forecasting improvements using historical sales data and market trends, lean inventory practices like just-in-time (JIT) replenishment, and periodic inventory reviews to adjust stock levels proactively [31]. Employing inventory segmentation (e.g., ABC or XYZ analysis) allows companies to focus resources on high-value or high-risk items, reducing the likelihood of excess stock accumulation [32].

Write-off prevention measures are incorporated to minimize financial losses due to obsolete stock. The framework advocates for timely markdowns, product promotions, and redistribution strategies to clear slow-moving items before obsolescence occurs [33]. Collaboration between sales, marketing, and finance teams is encouraged to align inventory decisions with market demand and financial objectives. Additionally, establishing thresholds for write-offs and formal approval processes increases accountability and enhances control [34].

Technological solutions, such as inventory management software integrated with financial systems, support these strategies by providing real-time visibility and predictive analytics [35]. Automation of alerts for slow-moving stock and write-off triggers enables swift intervention, reducing write-off frequency and severity. Together, these strategies form a comprehensive approach to mitigating SLOB and write-off risks [36].

4.3 Implementation Guidelines

Successful implementation requires seamless integration of the framework into existing financial planning cycles. This involves embedding SLOB risk assessment and mitigation processes within budgeting, forecasting, and financial reporting routines. Establishing clear roles and responsibilities across finance, supply chain, and operations teams ensures coordinated efforts and accountability. Regular cross-

functional meetings should be scheduled to review inventory risks and adjust plans accordingly.

The framework also highlights the importance of continuous monitoring and improvement. Ongoing data collection and analysis enable firms to track KPIs and respond to emerging trends or deviations promptly. Incorporating feedback loops and performance reviews allows the framework to evolve in response to changing market conditions and internal processes. This adaptive approach enhances resilience against inventory-related financial risks.

Training and change management initiatives are recommended to familiarize relevant personnel with the framework's components and processes. Encouraging a culture of proactive risk management and data-driven decision-making supports sustainable adoption. Overall, the framework's success hinges on embedding it as a living part of the financial planning ecosystem rather than a one-time project.

V. CONCLUSION AND RECOMMENDATIONS

This study has developed a comprehensive financial planning framework tailored for managing Slow-Moving and Obsolete Inventory (SLOB) and write-off risks in the FMCG sector. The framework's components emphasize systematic identification and categorization of SLOB items, the use of financial metrics and KPIs for precise risk assessment, and integration with existing financial planning processes. These elements collectively enable FMCG companies to quantify, monitor, and mitigate inventory-related financial risks effectively.

A significant insight is the framework's dual focus on operational and financial dimensions. By aligning inventory management data with financial forecasting and risk analysis, the framework addresses gaps often seen in traditional inventory control practices. This holistic approach ensures that inventory risks are managed not just as operational issues but as critical financial concerns that directly impact working capital and profitability.

Additionally, the proposed risk mitigation strategies—including inventory optimization, write-off prevention, and leveraging technology—are grounded in both theoretical and practical considerations. The framework promotes proactive risk management, reducing the likelihood and financial impact of obsolete inventory. Overall, the study confirms that integrating financial planning with inventory risk management offers a robust path to improved decision-making and organizational resilience.

FMCG companies can apply this framework to enhance their inventory and financial risk management practices significantly. The systematic identification of SLOB items allows firms to focus their attention and resources on high-risk inventory, preventing unnecessary capital lockup and reducing storage costs. By incorporating financial KPIs into regular reporting cycles, companies gain timely insights into inventory health and can take corrective actions before losses accumulate.

Implementing the recommended risk mitigation strategies can lead to more efficient inventory turnover and minimized write-offs. Firms are encouraged to adopt data-driven demand forecasting, lean inventory techniques, and coordinated cross-functional efforts to maintain optimal stock levels. The framework's emphasis on technology integration means companies can automate risk detection and monitoring, increasing responsiveness and operational efficiency. Moreover, the framework supports strategic financial planning by embedding inventory risk considerations into budgeting and forecasting processes. This ensures that potential losses from SLOB are anticipated and managed within the broader financial context. The framework's continuous improvement component encourages companies to adapt to evolving market conditions and internal dynamics, fostering long-term sustainability.

While this study provides a foundational framework, future research can explore several avenues to refine and expand its applicability. One potential direction is to investigate the impact of emerging technologies such as artificial intelligence and machine learning on predictive accuracy for SLOB risk identification. Research could focus on developing more sophisticated algorithms that integrate multiple data sources for enhanced inventory risk analytics.

Another area for further study is the customization of the framework for different FMCG sub-sectors or geographic markets. Variations in consumer behavior, regulatory environments, and supply chain structures may influence risk factors and mitigation strategies. Comparative studies could identify best practices tailored to specific contexts, enhancing the framework's relevance and effectiveness. Lastly, longitudinal studies assessing the long-term outcomes of implementing the framework in FMCG companies would provide valuable insights. Such research could measure financial performance improvements, reductions in write-offs, and operational efficiencies over time. These empirical validations would strengthen the case for widespread adoption and continuous enhancement of the financial planning framework.

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