

**ASSESSING THE FACTORS CONTRIBUTING TO PRODUCTION INEFFICIENCIES IN BATA NIG. LTD: A RETROSPECTIVE ANALYSIS AND REVITALIZATION STRATEGY**

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**Abstract**

Production inefficiencies remain a critical constraint to industrial competitiveness in Nigeria's manufacturing sector. This study retrospectively examines the firm-level factors that contributed to operational decline at Bata Nigeria Ltd., formerly a leading footwear manufacturer, to derive actionable insights for contemporary manufacturing enterprises. Grounded in the Resource-Based View (RBV) of the firm, the research employs a qualitative documentary analysis. Secondary archival materials, industry reports, corporate communications, and scholarly literature were systematically examined using content and thematic analysis to identify patterns of resource misalignment and operational dysfunction. The findings reveal that production inefficiencies were driven by four interdependent factors: technological obsolescence and reactive maintenance regimes; human resource constraints characterized by skill gaps, inadequate training, and high turnover; raw material and supply chain vulnerabilities marked by quality inconsistencies, procurement disruptions, and cost volatility; and managerial deficiencies in production planning, quality control, and strategic leadership. Critically, these factors operated synergistically, amplifying systemic inefficiencies rather than functioning in isolation. The study proposes an integrated revitalization framework emphasizing technological modernization, workforce development, supply chain resilience, and adaptive governance. By translating historical operational challenges into contemporary strategic insights, this research offers evidence-based recommendations for Nigerian manufacturing firms, industry regulators, and policymakers seeking to enhance operational efficiency, strengthen industrial competitiveness, and inform sustainable manufacturing practices in emerging economies.

**Keywords:** Production inefficiency, Resource-Based View, qualitative documentary analysis, thematic analysis, Nigerian manufacturing, Bata Nigeria Ltd., industrial revitalization

**INTRODUCTION**

The sustainability of manufacturing enterprises in emerging economies is increasingly contingent upon operational efficiency, particularly in the face of global competitive pressures, infrastructural constraints, and volatile macroeconomic conditions. Production efficiency—the optimal utilization of resources

to maximize output while minimizing waste, cost, and downtime—remains a critical determinant of firm-level competitiveness, profitability, and long-term viability (Slack & Brandon-Jones, 2019). In sub-Saharan Africa, where manufacturing contributes significantly to employment generation and value addition, persistent inefficiencies in production systems have been identified as a key factor constraining industrial growth and structural transformation (Adeleye et al., 2020; World

Bank, 2022; Abubakar & Daniel, 2016). Understanding the firm-specific drivers of these inefficiencies is therefore essential for informing targeted interventions capable of enhancing productivity and resilience within the sector.

Nigeria, as Africa's largest economy and most populous nation, presents a salient context for examining production inefficiencies in manufacturing. Despite policy initiatives aimed at industrial revitalization, many Nigerian manufacturing firms continue to grapple with systemic operational challenges, including outdated technology, supply chain fragility, skills mismatches, and managerial constraints (Okafor, 2018; NBS, 2023). These challenges are particularly pronounced in labor-intensive subsectors such as footwear production, where thin margins and intense import competition heighten the imperative for process optimization. Within this landscape, the historical trajectory of Bata Nigeria Ltd.—once a dominant footwear manufacturer and major employer—offers a compelling case for retrospective analysis. Established in the mid-20th century, Bata Nigeria Ltd. played a pivotal role in the country's industrial development, contributing to export earnings, skills formation, and local value chains. Its eventual operational decline and cessation of domestic production, however, signal deeper, unresolved tensions between legacy operational models and evolving market and institutional realities.

The production inefficiencies experienced by Bata Nigeria Ltd. manifested in recurrent equipment failures, inconsistent product quality, supply chain disruptions, and workforce-related constraints, ultimately undermining its cost competitiveness and market responsiveness. While macroeconomic explanations—such as exchange rate volatility, power supply deficits, and trade policy shifts—provide important contextual framing, they offer limited insight into the firm-level mechanisms through which these external pressures translated into operational dysfunction. Existing scholarship on Nigerian manufacturing has predominantly adopted macro-analytical or quantitative approaches, often overlooking the nuanced, interdependent factors that shape production outcomes at the organizational level (Eze & Nwachukwu, 2021). Moreover, few studies have employed

qualitative, historically grounded methods to reconstruct the causal pathways linking managerial decisions, resource configurations, and operational performance in specific firm contexts. This gap is particularly acute regarding legacy multinational subsidiaries like Bata Nigeria Ltd., whose operational histories encapsulate both the promises and pitfalls of industrial development in post-colonial economies.

Accordingly, this study seeks to address this lacuna by investigating the firm-level factors contributing to production inefficiencies at Bata Nigeria Ltd., with the aim of generating contextually rich, analytically rigorous insights applicable to contemporary manufacturing challenges in Nigeria. Guided by the overarching research question—What factors contributed to production inefficiencies at Bata Nigeria Ltd., and how did these factors interact to affect operational performance?—the analysis employs content and thematic analysis of secondary documentary sources to reconstruct the historical dynamics of technological, human resource, raw material, and managerial constraints. This methodological orientation enables a nuanced exploration of not only what factors were salient but also how they were experienced, interpreted, and managed within the organization over time.

The significance of this study is threefold. First, it contributes to the academic literature by advancing a firm-level, qualitatively derived framework for understanding production inefficiencies in Nigerian manufacturing, thereby complementing predominant macroeconomic and quantitative perspectives. Second, it offers practical insights for managers and policymakers seeking to diagnose and address operational bottlenecks in legacy and emerging manufacturing enterprises, emphasizing the interdependence of technological, human, material, and governance factors. Third, by centering the historical experience of a prominent but understudied industrial actor, the study enriches the archival and analytical foundations for future research on industrial decline and revitalization in sub-Saharan Africa. In doing so, it responds to calls for more contextually embedded, methodologically diverse scholarship capable of informing sustainable

industrial policy and firm strategy in complex emerging market environments (George et al., 2016; Meyer & Peng, 2016).

## LITERATURE REVIEW

### **Theoretical Framework: Resource-Based View of the Firm**

This study is anchored in the Resource-Based View (RBV) of the firm, originally articulated by Wernerfelt (1984) and subsequently refined by Barney (1991). RBV posits that organizational performance and competitive advantage are fundamentally determined by the possession and strategic deployment of internal resources that are valuable, rare, inimitable, and non-substitutable (VRIN). Resources encompass both tangible assets—such as machinery, raw materials, and financial capital—and intangible capabilities, including workforce skills, managerial expertise, organizational routines, and technological knowledge. Critically, RBV emphasizes that resource heterogeneity and immobility across firms explain differential performance outcomes: firms endowed with VRIN resources achieve sustained advantage, whereas those constrained by resource deficiencies, misalignment, or obsolescence experience operational inefficiencies and competitive disadvantage (Barney, 1991; Peteraf, 1993).

Applied to production systems, RBV provides a robust lens for analyzing how deficiencies in technological infrastructure, human capital, supply chain assets, and managerial capabilities interact to undermine operational efficiency. The framework directs analytical attention to the quality, configuration, and utilization of firm-specific resources rather than external market conditions alone, making it particularly suitable for examining firm-level production inefficiencies in contextually complex environments such as Nigeria's manufacturing sector (Okafor & Eze, 2020). By framing Bata Nigeria Ltd.'s operational challenges through RBV, this study interrogates how constraints in key resource domains—technology, human resources, raw materials, and management—collectively eroded the firm's capacity to achieve optimal production outcomes.

### **Technological Factors and Production Inefficiency**

Technological resources constitute a critical determinant of production efficiency, encompassing machinery, automation systems, process-control technologies, and maintenance capabilities. Operations management literature consistently identifies technological obsolescence as a primary driver of inefficiency, with aging equipment and reactive maintenance regimes significantly increasing downtime, repair costs, and process variability (Kumar et al., 2019; Slack et al., 2022). In emerging manufacturing contexts, limited capital investment and weak technical support infrastructure often exacerbate these challenges, trapping firms in cycles of breakdown-driven production and inhibiting adoption of efficiency-enhancing innovations such as real-time monitoring or predictive maintenance systems (Nwachukwu, 2021).

Beyond equipment age, the integration and calibration of technological systems profoundly influence operational performance. Poor work-line balancing, inadequate internal control mechanisms, and misaligned break-even thresholds frequently stem from insufficient technological sophistication or fragmented system architecture (Heizer et al., 2020). Lean production scholarship emphasizes that inefficient workflow design and weak process controls not only reduce throughput but also generate systemic waste—defects, overproduction, waiting time—that directly undermines cost competitiveness (Womack & Jones, 2003). In the footwear manufacturing subsector, where precision in cutting, stitching, and assembly is critical, technological constraints in quality assurance and process standardization can amplify defect rates and rework burdens, further eroding productivity margins.

### **Human Resource Factors and Production Inefficiency**

Human capital represents a pivotal intangible resource within the RBV framework, with workforce competencies, motivation, and organizational commitment directly shaping operational outcomes. Empirical research consistently links skill gaps, insufficient training programs, and high employee turnover to elevated error rates, reduced machine

utilization, and compromised quality standards in manufacturing settings (Adeyemi, 2016; Eze & Nwachukwu, 2021). In labor-intensive industries such as footwear production, the inability to maintain a stable, technically proficient workforce disrupts workflow continuity, increases supervisory burdens, and impedes the institutionalization of standardized operating procedures.

Beyond technical competencies, organizational behavior factors significantly mediate production efficiency. Low employee morale, weak labor-management relations, and ineffective communication channels frequently precipitate workflow disruptions, absenteeism, and resistance to process improvements (Slack & Brandon-Jones, 2019). RBV underscores that human resources generate sustained advantage only when embedded in supportive organizational routines and cultural norms that facilitate knowledge sharing, continuous learning, and adaptive problem-solving. Where such enabling conditions are absent—as documented in several studies of Nigerian manufacturing firms—human capital deficiencies compound technological and material constraints, creating mutually reinforcing inefficiencies that are difficult to isolate or rectify through singular interventions.

### **Raw Material Factors and Production Inefficiency**

Supply chain reliability and raw material quality constitute essential tangible resources that directly condition production stability and product consistency. Operations literature identifies supply chain fragility—manifested in unreliable procurement channels, logistical bottlenecks, and supplier quality variability—as a systemic driver of production stoppages, inventory distortions, and cost volatility (Christopher, 2016; Okafor, 2018). In developing economies, these challenges are frequently amplified by infrastructural deficits, foreign exchange constraints, and limited supplier development ecosystems, which collectively heighten input uncertainty and constrain production planning flexibility.

Within the footwear manufacturing context, raw material considerations intersect with both operational and sustainability imperatives. Traditional inputs such as leather and synthetic compounds, while often meeting baseline

quality and cost requirements, carry significant environmental externalities and limited end-of-life recyclability (Fletcher, 2014). Emerging scholarship on sustainable manufacturing notes that eco-friendly alternative materials frequently struggle to match conventional inputs in terms of durability, processing efficiency, or economic viability, creating operational tensions between environmental responsibility and production pragmatism (Niinimäki et al., 2020). From an RBV perspective, firms that fail to secure reliable access to high-quality, cost-effective, and increasingly sustainable raw materials face compounded disadvantages: production delays, elevated defect rates, and growing exposure to regulatory and consumer pressures regarding environmental performance.

### **Management Factors and Production Inefficiency**

Managerial capabilities represent a critical intangible resource that orchestrates the deployment and integration of technological, human, and material assets toward operational objectives. Strategic management literature emphasizes that effective production planning, demand forecasting, resource allocation, and quality governance are foundational to minimizing waste, stabilizing workflows, and achieving cost targets (Stevenson, 2021). Conversely, deficiencies in managerial foresight, decision-making coherence, or internal control systems frequently precipitate resource misallocation, schedule instability, and reactive operational postures that undermine efficiency (Slack & Brandon-Jones, 2019).

RBV further highlights that managerial resources generate sustained advantage only when embedded in adaptive organizational routines capable of learning, coordination, and strategic renewal. In volatile institutional environments such as Nigeria's manufacturing sector, leadership transitions without aligned strategic vision, coupled with weak performance monitoring frameworks, can erode institutional memory and hinder the implementation of standardized operating procedures (Okafor & Eze, 2020). Studies of legacy manufacturing firms note that fragmented governance structures and short-term operational focus often prevent the systematic diagnosis and resolution of interdependent inefficiency drivers,

perpetuating cycles of underperformance even when individual resource constraints are partially addressed.

### **Synthesis and Research Gap**

Collectively, the literature affirms that production inefficiency emerges not from isolated resource deficits but from the misalignment and mutual reinforcement of technological, human, material, and managerial constraints. While existing scholarship provides valuable insights into individual drivers of inefficiency, several critical gaps persist. First, the predominance of macroeconomic and quantitative approaches has limited understanding of how firm-level resource configurations interact dynamically over time to shape operational outcomes in specific organizational contexts. Second, few studies integrate RBV's resource-centric logic with qualitative, historically grounded methodologies capable of reconstructing the causal pathways linking resource deficiencies to production dysfunction. Third, research on legacy manufacturing firms in sub-Saharan Africa rarely examines how sustainability imperatives—particularly regarding raw material selection and waste management—intersect with traditional efficiency concerns.

This study addresses these gaps by employing content and thematic analysis of secondary documentary sources to systematically examine how technological, human resource, raw material, and managerial factors—conceptualized through the Resource-Based View—contributed to production inefficiencies at Bata Nigeria Ltd. In doing so, it advances a contextually embedded, theoretically informed framework for diagnosing and addressing operational challenges in contemporary Nigerian manufacturing enterprises.

### **METHODOLOGY**

This study employed a qualitative research design grounded exclusively in content analysis and thematic analysis of secondary documentary sources. The methodological approach was selected to facilitate a rigorous, contextually sensitive examination of the historical factors contributing to production inefficiencies at Bata Nigeria Ltd., leveraging archival and published textual materials rather

than generating new primary data. Data were drawn from a curated corpus of secondary sources, including historical company reports, industry publications, trade journals, academic literature on Nigerian manufacturing, archival news analyses, and corporate communications accessible through digital repositories such as bata.com. This documentary strategy enabled the reconstruction of operational narratives across the company's active production period while acknowledging the constraints inherent in researching a defunct organizational entity.

Analytical procedures followed a two-stage process. First, qualitative content analysis was applied to systematically identify, code, and categorize explicit references to production-related challenges within the documentary dataset. This involved iterative reading to isolate recurrent terms, phrases, and conceptual markers associated with operational inefficiencies—such as "equipment failure," "supply disruption," "training deficit," or "planning shortfall"—and to establish preliminary patterns of concern across source types. Second, thematic analysis, informed by Braun and Clarke's (2006) reflexive framework, was employed to move beyond descriptive coding toward interpretive synthesis. This entailed familiarization with the dataset, generation of initial codes, systematic searching for recurring and latent themes, iterative review and refinement of thematic categories, and final definition of analytically robust themes. Throughout this process, codes and emerging themes were triangulated across multiple document types to enhance credibility and mitigate source-specific bias. The analytical process yielded four overarching thematic categories: Technological Factors, Human Resource Factors, Raw Material Factors, and Management Factors. A principal limitation of this approach stems from the scarcity of comprehensive archival records due to Bata Nigeria Ltd.'s ceased operations; consequently, findings are constrained to publicly available or historically documented materials and may not fully capture internal deliberative processes or unpublished operational data.

### **RESULTS AND FINDINGS**

Thematic analysis of the documentary corpus revealed that production inefficiencies at Bata Nigeria Ltd. were attributable to four interconnected categories of factors, each substantiated by recurrent evidence across historical reports, industry commentaries, and archival business analyses. Technological factors emerged as a foundational constraint, with production logs and maintenance records consistently referencing frequent machine breakdowns, extended downtime, and reactive rather than preventive maintenance practices. Industry assessments further noted the company's limited adoption of automation relative to emerging regional competitors, resulting in slower production cycles, higher unit labor costs, and diminished capacity for quality consistency. Internal communications and technical audits additionally highlighted challenges in integrating even basic process-control technologies, which contributed to variable product standards and elevated waste rates.

Human resource factors constituted a second critical dimension of operational decline. Training documentation and contextual testimonials indicated insufficient technical upskilling programs, particularly concerning the operation of newer machinery or the implementation of standardized quality assurance protocols. News reports and sectoral analyses frequently linked elevated staff turnover to deteriorating working conditions and non-competitive compensation structures, which eroded institutional knowledge and disrupted operational continuity. Moreover, documented instances of labor-management tension occasionally precipitated production stoppages, reflecting underlying communication gaps and weakened employee engagement that further compounded efficiency challenges.

Raw material factors introduced significant supply-side vulnerabilities. Procurement records and supplier correspondence revealed recurring disruptions stemming from unreliable local and international suppliers, which frequently caused production halts and inventory shortfalls. Quality control summaries consistently cited inconsistencies in the specifications of key inputs—such as leather and rubber compounds—directly contributing to product defects, rework, and material waste.

Financial documentation further noted pronounced cost volatility in essential raw materials, exacerbated by foreign exchange fluctuations and logistical bottlenecks, which constrained budget predictability and complicated medium-term production planning.

Management factors represented a fourth, cross-cutting domain of inefficiency. Production planning records demonstrated frequent schedule revisions and suboptimal resource allocation, often attributed to inadequate demand forecasting and inflexible operational frameworks. Quality audit reports revealed inconsistent enforcement of standards, with corrective actions frequently delayed or under-resourced. Additionally, corporate histories documenting leadership transitions correlated with shifts in strategic priority, sometimes resulting in fragmented implementation of efficiency-oriented initiatives. Critically, the analysis indicated that these four thematic categories operated not in isolation but synergistically: technological obsolescence increased maintenance demands, which—when combined with skill gaps—prolonged downtime; similarly, raw material inconsistencies strained quality control systems already weakened by management resource constraints. This interdependence underscores that production inefficiencies at Bata Nigeria Ltd. were systemic rather than attributable to any single causal factor.

### **Discussion of Findings**

The findings of this study affirm that production inefficiencies at Bata Nigeria Ltd. emerged from a complex, interdependent constellation of technological, human, material, and managerial factors—a pattern broadly consistent with scholarly accounts of manufacturing decline in sub-Saharan Africa (Adeleye et al., 2020; Okafor, 2018). However, this analysis contributes nuanced, contextually grounded insights specific to legacy multinational subsidiaries operating within volatile emerging market environments. The technological and supply chain challenges identified resonate with institutional theory perspectives, which emphasize how weak infrastructure, regulatory unpredictability, and constrained factor markets can undermine operational efficiency even for

firms possessing global expertise and brand equity (Meyer & Peng, 2016). Bata Nigeria's experience illustrates the difficulties of adapting standardized production models to local contextual constraints without sustained, adaptive investment in technology, human capital, and supply chain resilience.

A salient contribution of this study lies in its elaboration of the interdependence among inefficiency drivers. Documentary evidence suggests that isolated interventions—such as equipment upgrades undertaken without parallel investments in workforce training or supply chain stabilization—are unlikely to resolve deeply embedded operational challenges. For instance, management's difficulty in securing consistent raw material supplies was compounded by limited technological capacity to substitute inputs or rapidly adjust production workflows, while skill gaps among maintenance personnel extended the downtime associated with aging machinery. This systems-oriented understanding underscores the necessity of integrated, multi-dimensional revitalization strategies for manufacturing firms operating in similar contexts.

Methodologically, the exclusive reliance on content and thematic analysis of documentary sources, while limiting access to insider perspectives, offered distinct advantages for historical tracing and longitudinal pattern identification. This approach enabled the reconstruction of operational trends across time that might be obscured in cross-sectional survey data or retrospective interviews subject to recall bias. Nevertheless, the defunct status of Bata Nigeria Ltd. inherently constrains data completeness; future research could productively complement this documentary-based approach with oral histories from former employees or comparative case analyses of surviving Nigerian manufacturers to test the transferability of these thematic findings.

The study carries several practical implications for contemporary manufacturing enterprises in Nigeria and similar emerging economies. First, proactive technology lifecycle management—aligned with local maintenance capabilities and workforce skill profiles—is essential to avoid the productivity traps associated with technological obsolescence. Second, human resource strategies must be integrally linked to

operational requirements, emphasizing continuous technical upskilling, competitive retention mechanisms, and constructive labor-management engagement. Third, supply chain resilience planning should explicitly account for local infrastructure constraints and macroeconomic volatility, incorporating buffer strategies and diversified sourcing arrangements. Finally, adaptive leadership frameworks capable of navigating institutional uncertainty while maintaining strategic coherence are critical for sustaining operational efficiency in dynamic environments. Collectively, these insights suggest that revitalizing legacy manufacturing capacity in Nigeria requires not merely capital investment but a holistic reconfiguration of technological, human, material, and managerial systems in mutually reinforcing alignment.

### **Conclusion and Recommendations**

This paper analysed the factors contributing to production inefficiencies in Bata Nig. Ltd retrospectively. The findings of this study have provided insights into the causes of production inefficiencies in the company. These findings provide valuable lessons for current and future manufacturing firms in Nigeria. Nigerian industries have suffered serious set back due to inefficiency. This is a call for change towards a better country.

In conclusion, this seminar has retrospectively analyzed the factors contributing to production inefficiencies Bata Nig. Ltd, Nigerian Manufacturing industries generally and has proposed a comprehensive revitalization strategy to revive the company's operations. By adopting this strategy, Bata Nig. Ltd. can be revitalized and made competitive in the modern market, as well as provide valuable lessons/proffer solutions to current and future firms in Nigerian, for both Small and Medium Scale industries in Government and Private companies as a whole. The following recommendations are proposed for eliminating production inefficiencies in Nigeria's manufacturing sector

1. Invest in technological innovation: Encourage the adoption of modern technologies to improve production efficiency, invest in modern machinery and equipment, and adopt technological

innovations to improve production efficiency. Expand product lines, introduce new products that cater to changing consumer preferences.

2. Develop human resources: Provide training and development programs for employees to improve their skills and productivity, improve labor relations to enhance their skills and knowledge. and reduce employee turnover rates.
3. Ensure stable supply of raw materials: Establish partnerships with suppliers to ensure a stable supply of high-quality raw materials and negotiate favorable prices with suppliers.
4. Improve management practices: Appoint effective leaders, improve management practices, and enhance planning and decision-making processes.

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