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Digital Working Capital Management for Cash Flow Resilience among Ghanaian SMEs in Mobile Money Ecosystems Review

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Abstract
Small and medium enterprises remain central to Ghana's economic development, yet many continue to experience profitability instability, weak liquidity control, poor record keeping, delayed receivables recovery, and limited access to formal finance. Financial management and profitability of SMEs in Ghana shows that working capital management, investment practices, and financial planning are central determinants of SME growth, with working capital management emerging as the strongest predictor of performance. Building on this evidence, this review examines digital working capital management as a contemporary pathway for improving cash flow resilience among Ghanaian SMEs operating within mobile money ecosystems. The paper focuses on how mobile money transactions, digital receivables tracking, automated payment records, real-time liquidity monitoring, supplier payment scheduling, mobile-based credit scoring, and data-driven cash conversion cycle analysis can strengthen SME financial stability. The review argues that digital financial tools can address long-standing operational weaknesses identified in Ghanaian SMEs, particularly dependence on mental records, poor separation of working capital from profit, inadequate accounting systems, and weak short-term debt management. The paper further evaluates how mobile money platforms can support cash inflow predictability, reduce transaction frictions, improve business traceability, enhance microcredit access, and strengthen financial decision-making among owner-managed enterprises. The review is theoretically anchored on contingency theory, trade-off theory, modern portfolio theory, and resource-based theory to explain how digital working capital systems interact with firm size, liquidity risk, financing structure, and managerial capability. The paper concludes that digital working capital management is not merely a payment innovation but a strategic financial resilience mechanism for Ghanaian SMEs. It recommends integrated mobile-money-based bookkeeping, digital cash flow dashboards, receivables automation, SME-specific credit analytics, and policy-supported digital financial literacy as critical interventions for improving cash flow resilience and sustainable profitability.

Keywords: digital working capital management, cash flow resilience, Ghanaian SMEs, mobile money ecosystems, liquidity management, SME profitability

1. Introduction

1.1. Background to Financial Management and Cash Flow Resilience among Ghanaian SMEs

Financial management remains a core survival mechanism for Ghanaian SMEs because liquidity shortages, weak cash control, and inadequate financial planning directly affect the ability of small firms to remain profitable under unstable trading conditions. Financial management is the process through which SMEs raise funds, allocate scarce resources among competing uses, and ensure that financial resources are applied efficiently toward business growth (Baker *et al*., 2019; Hamza *et al*., 2015).

In the context of digital working capital management, this definition becomes more operational because mobile money records, digital payment trails, and platform-generated transaction histories can convert routine cash movements into measurable financial intelligence. Ghanaian SMEs are particularly suitable for this transformation because of the reports that many owner-managers lack formal accounting systems and depend heavily on personal supervision of cash, receivables, payables, and inventory decisions (Afrifa & Padachi, 2016; Hamza *et al*., 2015). Cash flow resilience therefore refers not merely to the availability of money, but to the capacity of an SME to absorb payment delays, meet supplier obligations, replenish inventory, and continue trading during liquidity shocks. Digital finance strengthens this resilience by improving transaction visibility, reducing undocumented cash leakage, and enabling owner-managers to separate sales revenue from working capital, operating expenses, and profit. Frimpong *et al*. (2022) further show that access to digital finance improves SME performance when firms possess the financial literacy required to use digital channels productively. For Ghanaian SMEs operating in mobile money ecosystems, digital working capital management should therefore be understood as the integration of mobile payments, transaction recording, receivables monitoring, and liquidity planning into daily financial control.

1.2. Working Capital Challenges, Profitability Instability, and Digital Finance Opportunities in Ghanaian SMEs

Ghanaian SMEs face persistent working capital weaknesses that reduce profitability even when business demand exists. These weaknesses include poor bookkeeping, delayed receivables recovery, weak inventory control, inadequate separation of business cash from profit, and limited access to formal finance. Such problems are not isolated administrative defects; they are liquidity transmission failures that disrupt the cash conversion cycle and weaken the capacity of SMEs to meet short-term obligations. Marfo-Yiadom and Agyei (2011) link working capital management to the survival capacity of Ghanaian small enterprises, while Amoako (2012) emphasizes that poor record keeping limits the usefulness of financial information for decision-making. Beck (2017) further explains that financing constraints remain acute for SMEs in developing countries because small firms often lack the documentation, collateral, and transaction history required by formal lenders. These issues correspond closely with the observation that many Ghanaian SMEs still provide business figures from memory and are therefore unable to demonstrate credible liquidity performance to banks or investors. Digital finance creates an opportunity to correct these structural weaknesses by turning mobile money payments into auditable transaction records. For example, customer payments received through mobile money can support receivables ageing analysis, while supplier payments can be used to assess payables discipline and short-term debt exposure. Ledi *et al*. (2023) show that mobile money and QR-code payment systems can improve SME performance when firms possess the dynamic capabilities needed to integrate digital payment tools into operations. For Ghanaian SMEs, this means that digital working capital management must move beyond accepting mobile payments. It must support cash inflow tracking, inventory replenishment planning, payment scheduling, and liquidity forecasting so that profitability is protected from avoidable cash flow shocks.

1.3. Mobile Money Ecosystems as Emerging Infrastructure for SME Financial Management

Mobile money ecosystems are becoming an important financial management infrastructure for Ghanaian SMEs because they combine payment execution, transaction storage, liquidity movement, and informal financial inclusion within one operational channel. SMEs in Ghana struggle with access to finance, weak collateral, poor financial documentation, and limited formal accounting capacity, all of which reduce their ability to obtain bank credit and manage liquidity professionally (Abor & Biekpe, 2006; Cassar & Holmes, 2003). Mobile money responds to these constraints by creating a transaction layer that can document sales receipts, customer transfers, supplier settlements, wage payments, loan repayments, and daily operating expenses. This makes mobile money relevant not only as a payment channel but also as a working capital data system. Oduro *et al*. (2014) highlight the importance of financial management practices to Ghanaian SME growth, while Abor and Biekpe (2006) connect small business financing initiatives to the broader problem of credit access. Within the proposed review, mobile money is therefore treated as a digital working capital mechanism capable of improving traceability, reducing cash handling risk, and supporting alternative credit assessment. Ahmad *et al*. (2020) demonstrate that mobile money has become central to financial inclusion and development across Africa by expanding access to financial services outside traditional banking channels. However, digital finance also introduces risk. Abiodun *et al*. (2023) warn that digital asset flows and central bank digital currency risks can affect financial stability, which suggests that SME mobile money adoption must be supported by sound regulation, transaction security, and consumer protection. For Ghanaian SMEs, the value of mobile money lies in its ability to transform fragmented cash transactions into structured liquidity evidence that can support bookkeeping, credit scoring, and cash flow resilience.

1.4. Relationship between Working Capital Management, Liquidity Stability, and SME Profitability

The relationship between working capital management, liquidity stability, and SME profitability is central to the proposed review because findings show that working capital management has the strongest statistical effect on SME growth. Working capital management determines whether an enterprise can convert sales into usable cash, settle suppliers without liquidity stress, maintain inventory continuity, and reinvest surplus funds productively. Zeidan and Shapir (2017) explain that the cash conversion cycle is a value-relevant operational measure because firms create financial advantage when they shorten the time between cash outflows and cash recovery. Singhania and Mehta (2017) similarly show that effective working capital management improves profitability in emerging economies by optimizing receivables, payables, and inventory decisions. Boisjoly *et al*.

(2020) further demonstrate that working capital policy has direct valuation and performance implications because liquidity locked in inefficient receivables or excessive inventory reduces financial flexibility. These arguments align closely with some findings, where working capital management recorded a strong positive correlation with SME growth and a significant regression coefficient. In a mobile money ecosystem, the same relationship becomes digitally measurable. Customer payments received through mobile money can reduce receivables uncertainty, supplier payments can be scheduled to preserve liquidity, and wallet balances can support short-term cash flow monitoring. Kulu *et al*. (2022) show that mobile money transactions are associated with financial system depth, stability, and efficiency in Ghana, which supports the argument that digital transaction platforms can indirectly strengthen SME financial management. For Ghanaian SMEs, profitability is therefore not only a function of sales volume. It depends on the ability to digitally monitor the timing, reliability, and allocation of working capital flows. Digital working capital management improves liquidity stability by transforming daily transactions into actionable data for cash planning, credit readiness, and investment decisions.

1.5. Review Objectives and Questions

1.5.1. The objectives of this review are

1. To examine the financial management weaknesses that affect cash flow resilience among Ghanaian SMEs, particularly poor record keeping, weak receivables control, inefficient payables management, inventory financing pressure, and limited liquidity forecasting.
2. To evaluate how digital working capital management can improve cash inflow visibility, short-term liquidity control, transaction traceability, and profitability among SMEs operating within mobile money ecosystems.
3. To assess the role of mobile money platforms in strengthening receivables monitoring, supplier payment scheduling, alternative credit assessment, and working capital decision-making among Ghanaian SMEs.
4. To develop a review-based understanding of how digital financial tools can support cash flow resilience, reduce liquidity shocks, and improve sustainable SME growth.

1.5.2. The review is guided by the following questions:

1. What financial management and working capital weaknesses limit cash flow resilience among Ghanaian SMEs?
2. How can digital working capital management improve liquidity visibility, receivables recovery, payables discipline, and inventory financing decisions among Ghanaian SMEs?
3. In what ways do mobile money ecosystems support transaction documentation, credit readiness, and cash flow monitoring for SMEs?
4. What digital finance strategies can be recommended to improve SME profitability, liquidity stability, and long-term financial resilience in Ghana?

1.6. Significance of the Review to SME Owners, Financial Institutions, Policymakers, and Researchers

This review is significant because it translates the problem of SME financial management from a traditional accounting concern into a digital working capital resilience issue. For SME owners and managers, the review provides practical insight into how mobile money records, digital receipts, customer payment histories, supplier payment schedules, and cash flow dashboards can be used to monitor liquidity, reduce informal cash leakage, and separate operating capital from profit. For financial institutions, the review highlights how mobile money transaction histories and digital bookkeeping records can support alternative credit assessment, reduce information asymmetry, and improve SME lending decisions where conventional collateral and audited accounts are weak. For policymakers and SME development agencies, the review provides a basis for designing digital financial literacy programmes, SME-focused mobile money regulation, data protection safeguards, and digital finance interventions that address the actual liquidity problems of small businesses. For researchers, the review contributes a focused conceptual direction for future empirical studies on digital working capital management, mobile money adoption, cash conversion cycle performance, credit access, and profitability among Ghanaian SMEs. The review is therefore useful to both practice and scholarship because it connects working capital efficiency, digital finance adoption, and cash flow resilience within one coherent SME development framework.

1.7. Scope of the Review and Structure of the Paper

The scope of this review is limited to digital working capital management and cash flow resilience among Ghanaian SMEs operating within mobile money ecosystems, with emphasis on how digital transaction systems can strengthen cash management, receivables control, payables scheduling, inventory-related liquidity decisions, financial planning, credit readiness, and profitability. The review focuses mainly on SMEs in Ghana, particularly retail, wholesale, and owner-managed enterprises whose financial operations are often shaped by informal record keeping, unstable cash flows, limited access to formal credit, and dependence on short-term working capital. It does not examine large corporations, multinational firms, capital market institutions, or general digital banking adoption except where such issues directly relate to SME working capital management. The paper is structured into six sections. Section one introduces the study background, working capital problem, mobile money context, review objectives, research questions, significance, scope, and paper structure. Section two explains the conceptual and theoretical foundations of digital working capital management, cash flow resilience, liquidity stability, and mobile money-enabled SME finance. Section three reviews traditional working capital management problems among Ghanaian SMEs. Section four discusses digital working capital management within mobile money ecosystems. Section five examines cash flow resilience and profitability outcomes in digitally enabled Ghanaian SMEs. Section six presents the conclusion and recommendations for SME owners, financial institutions, fintech providers, policymakers, and future researchers.

2. Conceptual and Theoretical Foundations

2.1. Conceptualizing Digital Working Capital Management in SME Financial Operations

Digital working capital management refers to the systematic use of digital transaction records, mobile payment histories, automated bookkeeping tools, receivables tracking systems, digital payables scheduling, and liquidity dashboards to manage the short-term financial cycle of small and medium enterprises. In the context of Ghanaian SMEs, the concept is

especially important because financial management is seen as the process of raising funds, allocating limited resources among competing business needs, and ensuring that such funds are used efficiently to support enterprise objectives as represented in figure 1. This means that digital working capital management is not merely the adoption of mobile money for payment convenience; it is the conversion of everyday cash inflows and outflows into structured financial information for decision-making. Prihartono and Asandimitra (2018) emphasize the importance of financial resource use, while Njenga and Jagongo (2019) identify short-term finance, working capital, investment, and financial recording as essential managerial decisions. These ideas align directly with the current review because mobile money ecosystems can digitize the very financial activities that many SME owner-managers previously handled informally.

In practical terms, digital working capital management enables an SME trader, wholesaler, or service provider to know how much cash was received from customers, what amount remains locked in receivables, which suppliers are due for settlement, and whether available liquidity can support stock replacement without threatening operating stability. Loke (2017) reinforces the view that financial management is central to SME survival, while Ozili (2018) shows that digital finance expands financial inclusion and can improve stability when properly integrated into financial systems. Gomber *et al*. (2017) also positions digital finance and financial technology as mechanisms that reshape traditional financial services through data-driven channels. For Ghanaian SMEs, this implies that mobile money transaction histories, QR payments, wallet balances, and digital bookkeeping applications can become working capital control instruments. The conceptual shift is therefore from manual cash handling to digitally traceable liquidity management, where operational transactions become evidence for cash flow planning, creditworthiness assessment, and profitability improvement.

Fig 1: Digital Financial Dashboard for Real-Time Working Capital Monitoring and Cash Flow Decision Support in SME Operations (Neugroup, 2024).

Figure 1 visually represents the analytical foundation of digital working capital management in SME financial operations by showing a business user examining multiple financial dashboards on a desktop screen, including bar charts, pie charts, trend lines, tabular summaries, and comparative performance panels. In the context of Ghanaian SMEs operating within mobile money ecosystems, the image illustrates how raw transaction data can be converted into actionable financial intelligence for managing short-term cash flows. The displayed dashboards can be interpreted as digital representations of customer payment inflows, supplier payment outflows, receivables ageing, inventory-related cash commitments, liquidity movement, and profitability trends. This aligns with the concept of digital working capital management because SME owner-managers require real-time visibility over cash conversion processes rather than relying on informal records or memory-based cash control. The chart panels suggest that mobile money transaction histories, digital bookkeeping records, and payment confirmations can be aggregated into structured indicators such as daily net cash position, overdue receivables, supplier obligations, inventory funding exposure, wallet turnover, and available operating liquidity. Technically, the image reflects a shift from manual financial management to data-driven working capital control, where dashboards support monitoring, diagnosis, forecasting, and decision-making. For example, the owner-manager could use the bar charts to compare weekly cash inflows and outflows, the pie charts to classify expenditure categories, and the trend graphs to identify liquidity stress before it affects supplier payment or stock replenishment. Therefore, the picture captures that; digital working capital management is not merely the use of mobile money for transactions, but the integration of digital payment records, bookkeeping analytics, and financial decision-support systems into SME operations to improve cash flow resilience, credit readiness, and profitability management.

2.2. Cash Flow Resilience, Liquidity Stability, and Profitability Growth in Ghanaian SMEs

Cash flow resilience is the capacity of an SME to maintain operations, meet short-term obligations, replenish inventory,

and continue trading despite delayed customer payments, supplier pressure, credit scarcity, seasonal sales variation, and unexpected liquidity shocks. In the Ghanaian SME context, this concept is closely connected to the argument that many small firms fail not because they have no sales activity, but because they cannot manage working capital efficiently enough to remain solvent as presented in table 1. Garrison (1999) frames working capital management around the monitoring of capital available for operations and short-term finance, while Oluoch (2016) links cash management practices to SME returns. The implication for this review is that mobile money-based working capital systems can improve resilience by making liquidity movements more visible, measurable, and controllable. Rather than waiting for end-of-month manual accounts, an SME owner can use daily mobile money records to detect slow cash recovery, increasing supplier exposure, or excessive withdrawals from operating funds.

Liquidity stability becomes the operational bridge between working capital control and profitability growth. Deloof (2003) demonstrates that working capital management affects profitability because cash tied up in receivables and inventory reduces financial flexibility, while Baños-Caballero *et al*. (2012) specifically show that working capital decisions affect SME profitability. Delmar (1997) further explains that growth must be measured through indicators such as sales, employment, turnover, and financial expansion, meaning that SME growth depends on both revenue generation and internal financial discipline. Digital working capital systems can strengthen liquidity stability by reducing undocumented cash leakages, shortening receivables recovery time, improving payment discipline, and allowing small firms to distinguish sales revenue from usable working capital. For Ghanaian SMEs in mobile money ecosystems, profitability growth is therefore not only driven by selling more products. It is driven by the ability to digitally monitor the timing, reliability, and allocation of cash flows so that business liquidity remains resilient.

Table 1: Summary of Cash Flow Resilience, Liquidity Stability, and Profitability Growth in Ghanaian SMEs

Conceptual Area	Core Meaning in Ghanaian SMEs	Effect on SME Financial Performance	Digital Working Capital Response
Cash flow resilience	The ability of an SME to continue operations despite delayed customer payments, supplier pressure, seasonal sales changes, emergency expenses, or short-term debt obligations.	Helps the business avoid operational shutdown, stockout, forced borrowing, and inability to meet daily financial commitments.	Use mobile money transaction records, cash flow alerts, digital wallet summaries, and daily inflow-outflow tracking to detect liquidity stress early.
Liquidity stability	The capacity of the SME to maintain enough accessible cash for inventory replenishment, supplier settlement, wages, loan repayment, and routine operating expenses.	Improves business continuity, reduces dependence on emergency credit, and strengthens supplier and customer confidence.	Apply digital cash classification to separate operating capital, supplier reserves, inventory funds, debt repayment funds, and distributable profit.
Profitability growth	The improvement of SME earnings through better control of receivables, payables, inventory financing, and surplus cash allocation.	Increases retained earnings, reinvestment capacity, business expansion, and long-term survival.	Use digital bookkeeping dashboards to monitor receivables recovery, inventory turnover, payment discipline, and surplus cash available for reinvestment.
Cash conversion efficiency	The speed and discipline with which sales are converted into usable cash after accounting for customer payments, supplier obligations, and inventory purchases.	Shortens liquidity gaps, reduces idle working capital, and supports stronger profit realization from sales activity.	Integrate mobile money payments with receivables tracking, supplier payment scheduling, and inventory purchase records to improve the cash conversion cycle.

2.3. Mobile Money Ecosystems and Digital Transaction Infrastructure for SME Working Capital Control

Mobile money ecosystems provide a digital transaction infrastructure through which SME payments, receipts, transfers, supplier settlements, customer balances, and short-term cash movements can be captured and converted into working capital evidence. In Ghanaian SME operations, this infrastructure is particularly relevant because it identifies poor bookkeeping, weak financial documentation, and limited formal accounting systems as recurring constraints on growth and credit access. Kilonzo and Ouma (2015) show that financial management practices such as working capital control, investment practices, accounting systems, and financial reporting influence SME development. Chakraborty (2019) links receivables management to financial performance, while Kolias *et al*. (2020) emphasizes the importance of credit management systems for liquidity control. These ideas are central to the proposed review because mobile money records can serve as a practical substitute for informal memory-based cash management. When customer payments are received digitally, the SME gains a time-stamped record that can support receivables tracking, sales reconciliation, and cash flow forecasting. The relevance of mobile money extends beyond payment convenience because it reduces transaction frictions and creates a traceable financial history. Jack and Suri (2014) show that mobile money reduces transaction costs and improves risk-sharing capacity, while Suri and Jack (2016) demonstrate that mobile money can generate long-run welfare effects by expanding financial access. Applied to Ghanaian SMEs, these insights imply that mobile money can become a working capital control infrastructure when it is linked with bookkeeping applications, payment reminders, supplier ledgers, and credit analytics. For example, a retail SME can use mobile money data to compare daily receipts with inventory purchases, identify customers whose credit purchases remain unpaid, and determine whether supplier payments should be delayed, split, or settled immediately. In this way, the mobile wallet becomes more than a cash storage channel. It becomes an operational finance interface where cash inflow reliability, payables discipline, and inventory replenishment decisions can be managed in real time. Such digital infrastructure is essential for transforming Ghanaian SME working capital management from reactive cash handling into proactive liquidity control.

2.4. Theoretical Perspectives on Digital Working Capital Management through Contingency Theory, Trade-Off Theory, Modern Portfolio Theory, and Resource-Based Theory

The theoretical foundation of digital working capital management among Ghanaian SMEs can be developed through contingency theory, trade-off theory, modern portfolio reasoning, and resource-based theory. Contingency theory explains why financial management practices differ across firms depending on contextual factors such as environment, technology, professional competence, and organizational structure. This is highly relevant to digital working capital management because mobile money adoption will not produce the same effect across all SMEs. A retail SME with frequent small-value transactions, high inventory turnover, and daily customer payments will use mobile money records differently from a wholesaler with supplier credit obligations and bulk receivables. Pike (1986) and Chenhall (2003) support this contextual logic by showing that financial and management control systems must fit organizational conditions. Therefore, the effectiveness of digital working capital tools depends on the SME's transaction volume, owner-manager capability, sector, firm age, liquidity pressure, and access to digital infrastructure.

Trade-off theory explains the liquidity balance problem in digital working capital management. Zechner (1989) argues that firms seek an optimal liquidity position by weighing the cost of holding cash against the benefits of financial flexibility. In SME mobile money ecosystems, excessive wallet balances may protect against shocks but may also reduce reinvestment, while insufficient balances may expose the firm to supplier defaults, stockouts, and emergency borrowing. Modern portfolio reasoning further suggests that SMEs should allocate surplus cash between operating liquidity, inventory financing, emergency reserves, and productive investment instead of treating all cash as immediately spendable. Resource-based theory strengthens this argument by treating digital financial capability as a firm-specific resource. Wernerfelt (1984) and Barney (1991) argue that valuable, rare, and well-organized resources can produce competitive advantage. For Ghanaian SMEs, digital transaction discipline, mobile-money-linked bookkeeping, payment analytics, and owner-manager financial literacy can become strategic resources. These theories collectively show that digital working capital management is not simply a technological practice. It is a context-sensitive, liquidity-balancing, risk-aware, and capability-driven system for improving cash flow resilience and profitability.

3. Traditional Working Capital Management Problems among Ghanaian SMEs

3.1. Poor Financial Record Keeping and Informal Cash Management Practices among SME Owner-Managers

Poor financial record keeping remains one of the most persistent weaknesses affecting cash flow resilience among Ghanaian SMEs, especially where owner-managers depend on memory, informal notebooks, or unclassified cash balances to control business operations. Many SME traders give figures of their operations from memory and that the absence of proper accounting records makes it difficult to access finance, evaluate profitability, and distinguish between operating cash and business profit (Marfo-Yiadom, 2002; Peacock, 1988) as represented in figure 2. This problem is critical to the present review because digital working capital management depends on the availability of reliable transaction evidence. When sales, receivables, supplier payments, withdrawals, and inventory purchases are not recorded systematically, the SME cannot calculate its actual cash conversion cycle, determine its liquidity gap, or identify whether working capital is being consumed by household withdrawals, customer defaults, or slow stock turnover. Cordano (1991) similarly connects good record keeping with business survival, which supports the argument that digital transaction trails are not optional administrative tools but operational safeguards for SME continuity.

Within mobile money ecosystems, poor record keeping can be technically reframed as a data-capture failure. Mobile money platforms can automatically produce time-stamped records of receipts and payments, but these records only improve cash flow resilience when they are classified into sales revenue, receivables recovery, supplier settlement, inventory replenishment, debt repayment, and owner withdrawal categories. McMahon (2001) shows that financial reporting practices are strongly associated with SME performance and growth, while Marriott and Marriott (2000) argue that small firms require usable accounting information rather than complex formal systems. For Ghanaian SMEs, this means that mobile-money-linked bookkeeping can bridge the gap between informal cash handling and formal financial management. A retailer receiving daily mobile money payments, for example, can use transaction histories to reconcile sales against inventory purchases and detect cash leakage. Digital working capital management therefore transforms record keeping from a backward-looking compliance activity into a real-time liquidity control mechanism.

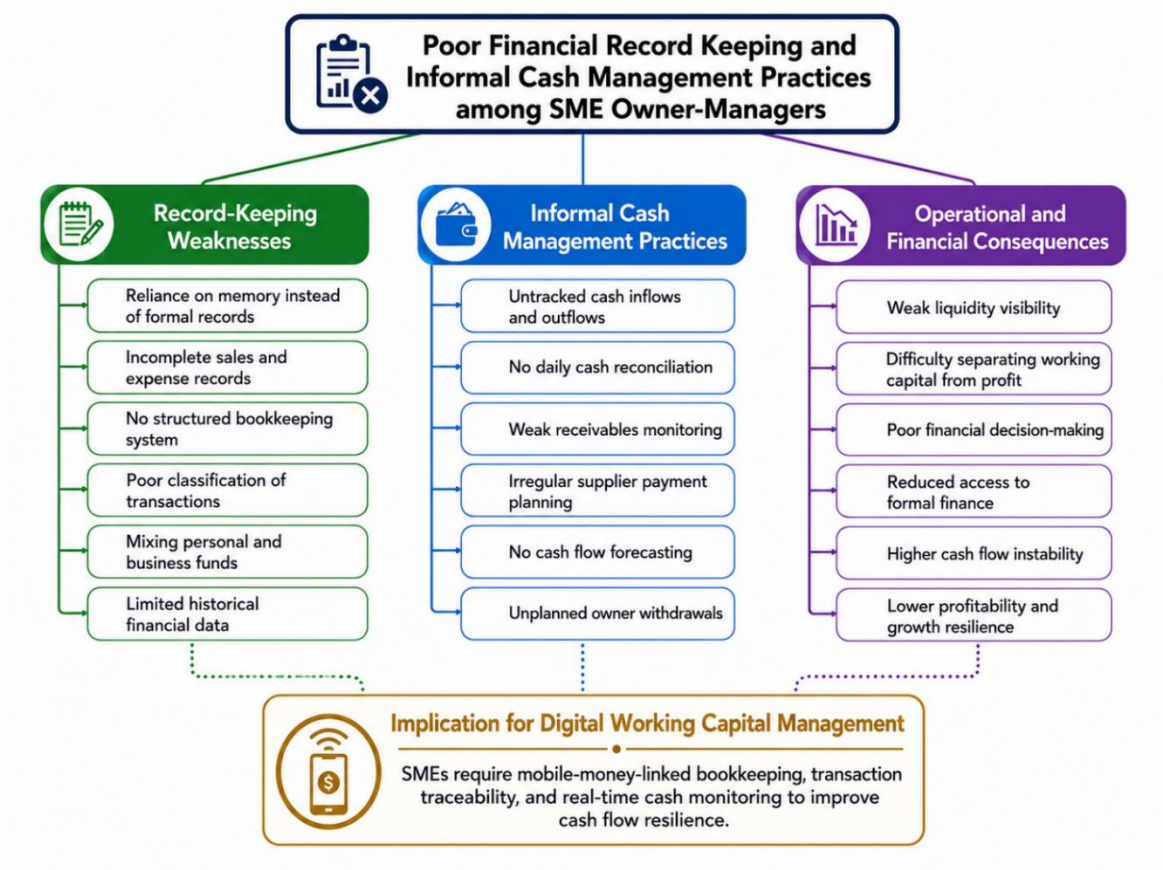

Fig 2: Diagram Illustrating Pathways from Poor Financial Record Keeping and Informal Cash Management to Digital Working Capital Resilience in SMEs.

Figure 2 illustrates how poor financial record keeping and informal cash management practices among SME owner-managers weaken cash flow resilience and create the need for digital working capital management. It is organized into three major branches: record-keeping weaknesses, informal cash management practices, and operational and financial consequences. The first branch shows that many SMEs rely on memory rather than formal records, keep incomplete sales and expense information, lack structured bookkeeping systems, classify transactions poorly, mix personal and business funds, and have limited historical financial data for analysis. These weaknesses prevent owner-managers from knowing the true financial position of the business. The second branch explains how these record-keeping gaps translate into informal cash control, including untracked cash inflows and outflows, absence of daily cash reconciliation, weak monitoring of receivables, irregular supplier payment planning, lack of cash flow forecasting, and unplanned owner withdrawals. These practices make it difficult to determine whether available cash should be used for inventory replenishment, supplier settlement, debt repayment, operating expenses, or profit withdrawal. The third branch presents the consequences of these weaknesses, including poor liquidity visibility, difficulty separating working capital from profit, weak financial decision-making, reduced access to formal finance, higher cash flow instability, and lower profitability and growth resilience. The bottom callout summarizes the technical implication of the diagram: SMEs require mobile-money-linked bookkeeping, transaction traceability, and real-time cash monitoring to convert informal cash movements into structured financial data. In practical terms, digital working capital management enables owner-managers to classify mobile money receipts and payments, monitor receivables, schedule supplier obligations, track liquidity gaps, and make evidence-based decisions that strengthen cash flow resilience and profitability.

3.2. Weak Receivables Collection, Payables Control, and Inventory Financing in Retail and Wholesale SMEs

Weak receivables collection, unstable payables control, and inventory financing pressure from the operational core of working capital fragility among retail and wholesale SMEs. Working capital management is a central determinant of SME growth and efficient financial management requires close monitoring of accounts receivable, accounts payable, and inventory turnover (Baker *et al*., 2019) as presented in table 2. In retail and wholesale enterprises, these three components are interconnected. Delayed customer payments reduce available cash, supplier obligations continue to mature, and inventory must still be replenished to avoid stockouts. When the SME lacks a structured receivables ledger, it cannot determine which customers are overdue, how much cash is trapped in credit sales, or whether supplier payments should be deferred to preserve liquidity. Musah and Ibrahim (2014) connect record quality with performance, while Uduwaka and Dedunu (2019) show that weak inventory control limits the efficient use of operating capital. These weaknesses directly justify the review's focus on digital working capital management within mobile money ecosystems.

Mobile money infrastructure can strengthen receivables, payables, and inventory financing by converting each transaction into a traceable liquidity event. For example, a

wholesaler can tag customer mobile payments against outstanding invoices, use automated reminders for overdue balances, and schedule supplier payments based on expected daily inflows. Tauringana and Afrifa (2013) show that working capital components have different levels of importance for SME profitability, indicating that receivables, payables, and inventory should not be managed as a single undifferentiated cash pool. Enqvist *et al*. (2014) further demonstrate that working capital management becomes especially important under changing business conditions, which is relevant to Ghanaian SMEs exposed to inflation, fluctuating sales, and credit scarcity. In a mobile money ecosystem, digital records can support receivables ageing, payables calendar control, and inventory purchase analysis. The key technical challenge is integration. Mobile money data must be linked with simple bookkeeping tools so that owner-managers can see how customer payment delays, supplier commitments, and stock financing decisions jointly affect cash flow resilience and profitability.

Table 2: Summary of Weak Receivables Collection, Payables Control, and Inventory Financing in Retail and Wholesale SMEs

Working Capital Area	Core Problem in Retail and Wholesale SMEs	Effect on Cash Flow Resilience	Digital Working Capital Response
Receivables collection	Customer credit sales are often poorly tracked, with overdue payments recorded informally or remembered by the owner-manager.	Cash becomes trapped in unpaid customer balances, reducing liquidity for daily operations, supplier settlement, and stock replenishment.	Use mobile money payment confirmations, digital customer ledgers, receivables ageing records, and automated payment reminders.
Payables control	Supplier obligations are frequently managed without structured due-date tracking or clear separation from available operating cash.	SMEs may delay supplier payments, damage supplier trust, face stock interruptions, or rely on costly emergency borrowing.	Use supplier payment schedules, mobile wallet balance allocation, due-date alerts, and digital payables calendars.
Inventory financing	Cash is often locked in slow-moving inventory, while fast-moving goods may suffer from underfunded replenishment.	Idle inventory weakens liquidity, increases opportunity cost, and limits the ability to respond to demand fluctuations.	Link mobile money purchase records with stock movement data to identify high-turnover and low-turnover inventory categories.
Integrated working capital control	Receivables, payables, and inventory decisions are treated separately rather than as connected cash conversion cycle components.	Weak coordination increases liquidity gaps, reduces profitability, and makes business growth unstable despite sales activity.	Integrate mobile money records with digital bookkeeping dashboards to monitor receivables recovery, payables timing, and inventory cash lock-up together.

3.3. Liquidity Constraints, Short-Term Debt Pressure, and Difficulty Separating Working Capital from Profit

Liquidity constraints among Ghanaian SMEs often arise from the poor timing of cash inflows and outflows rather than the total absence of business activity. Many profitable SMEs are forced to cease operations because they cannot meet short-term debt obligations, especially when working capital is poorly managed (Pieterson, 2012). This condition is intensified when owner-managers cannot separate working capital from profit. Sales revenue may be interpreted as disposable profit even when part of it is needed for supplier settlement, inventory replacement, rent, wages, loan repayment, taxes, or emergency liquidity reserves. Irena (2013) links SME financial problems to owner-manager financial management weaknesses, while World Bank (2014) frames financial management as essential for understanding present financial position and future obligations. In digital working capital terms, the problem is not only liquidity shortage but liquidity misclassification.

Mobile money ecosystems can reduce this problem by helping SMEs classify cash balances according to operational purpose. A digital wallet may show total available balance, but digital working capital management requires the owner-manager to separate that balance into receivables recovered, inventory replacement fund, supplier payable reserve, loan repayment amount, and distributable profit. García-Teruel and Martínez-Solano (2007) show that working capital management affects SME profitability, while Fazzari *et al*. (1988) demonstrate that financing constraints can restrict investment when firms rely heavily on internal funds. This is especially relevant to Ghanaian SMEs because liquidity shortages often force owner-managers to delay stock replenishment, postpone supplier payments, or accept expensive informal credit. Mobile money records can support daily liquidity mapping by showing the timing of customer inflows and supplier outflows. For example, an SME can use transaction records to identify whether repeated cash shortages occur after inventory purchases, customer credit extensions, or owner withdrawals. Digital working capital management therefore helps convert liquidity from an uncertain cash balance into a structured financial control system that protects resilience and profitability.

3.4. Limited Financial Management Skills, Weak Credit Documentation, and Restricted Access to Formal SME Finance

Limited financial management skills remain a major barrier to cash flow resilience because many SME owner-managers lack the technical capacity to prepare reliable records, interpret liquidity signals, manage working capital components, and document creditworthiness. Most owner-managers have no formal training in management skills, especially financial management, and that this weakness contributes to poor financial performance under uncertain business conditions. Also, Ghanaian SMEs continue to face administrative challenges, basic record keeping weaknesses, and difficulty accessing finance despite their major contribution to employment and GDP (Abor & Quartey, 2010). Agyei-Mensah (2012) links financial disclosure to institutional and firm-specific reporting quality, while Lahr and Mina (2016) connect access to finance with enterprise development and innovation. These insights are directly relevant to the review because digital working capital systems require both technology access and managerial competence. Without financial literacy, mobile money records may remain unused transaction logs rather than decision-support evidence.

Restricted access to formal finance is partly a documentation

problem. Banks and microfinance institutions require evidence of cash flows, repayment capacity, operating stability, and business continuity, but many SMEs lack audited accounts, structured receivables records, inventory reports, and payables schedules. Beck *et al*. (2008) show that small firms face financing patterns that differ from larger firms, largely because of information opacity, while Berger and Udell (2006) explain that SME finance requires relationship lending, transaction lending, collateral mechanisms, and information-based credit frameworks. Mobile money ecosystems can reduce this opacity by generating alternative financial data. For instance, consistent customer inflows, regular supplier payments, wallet turnover, and repayment histories can help lenders assess business viability where conventional documentation is weak. However, this requires fintech providers, banks, and SME agencies to design credit analytics that interpret mobile transaction data responsibly. Digital working capital management therefore has a dual function: it improves internal liquidity control for SME owners and creates external financial evidence for lenders. This makes mobile money-based financial documentation a strategic pathway for improving credit access, cash flow resilience, and profitability among Ghanaian SMEs.

4. Digital Working Capital Management in Mobile Money Ecosystems

4.1. Mobile Money Transaction Records as Digital Evidence for SME Cash Inflow and Outflow Monitoring

Mobile money transaction records can function as digital evidence for monitoring SME cash inflows and outflows because they transform ordinary business payments into time-stamped, retrievable, and classifiable financial data. Financial management is the process of raising funds, allocating limited resources, and ensuring that funds are used efficiently to accomplish business objectives, which directly supports the treatment of mobile money records as a working capital monitoring instrument (Nketsiah, 2015) as represented in figure 3. In traditional Ghanaian SME operations, owner-managers frequently handle sales receipts, supplier payments, customer credits, inventory purchases, and withdrawals manually, making it difficult to know the actual liquidity position of the business at any point. Gormoma (2014) stresses that financial management helps transactions to be undertaken in an orderly and well-managed manner, while Abani *et al*. (2013) connect financial management with the efficient use of funds for enterprise goals. Within mobile money ecosystems, this orderliness can be achieved through digital transaction logs that show when cash entered the business, where it went, and whether the balance left is sufficient for short-term obligations.

The technical value of mobile money records lies in their ability to reduce opacity in working capital flows. Each customer payment, supplier settlement, wallet transfer, cash-out, or loan repayment can be classified into operating inflow, operating outflow, receivables recovery, payables settlement, owner withdrawal, inventory financing, or debt servicing. Arner *et al*. (2016) show that financial technology reshapes financial regulation and transaction oversight, while Pousttchi, & Dehnert, (2018) demonstrate that digitalization changes the structure and use of financial services. Applied to Ghanaian SMEs, these insights indicate that mobile money platforms can help owner-managers move from informal cash handling to evidence-based liquidity control. For example, a retail SME can compare daily mobile money sales receipts with inventory purchases and supplier payments to determine whether cash flow is improving or weakening. This makes mobile money transaction records central to digital working capital management because they provide the raw evidence needed for cash monitoring, liquidity planning, and profitability protection.

Figure 3 illustrates a mobile payment transaction at the point of sale, where a customer uses a smartphone payment interface to authorize a purchase while a merchant-side payment terminal is visible in the background. In relation *to mobile money transaction records as digital evidence for SME cash inflow and outflow monitoring*, the image represents how routine customer payments can be converted into verifiable digital transaction data rather than remaining as undocumented cash exchanges. The smartphone screen showing a successful payment signal implies that the transaction generates a digital confirmation, which may include payment time, transaction reference, amount paid, sender or customer identifier, merchant wallet destination, and settlement status. For an SME, this record becomes evidence of cash inflow because it confirms that revenue has entered the business wallet and can later be reconciled with sales invoices, inventory movement, daily turnover, and customer receivables. The point-of-sale device in the background further suggests interoperability between mobile wallets, merchant payment systems, and digital sales infrastructure, allowing the business to monitor inflows from customers and outflows to suppliers, lenders, employees, or inventory vendors. Technically, such payment records support real-time liquidity visibility by helping the owner-manager classify transactions into operating revenue, receivables recovery, stock purchase, supplier settlement, loan repayment, or owner withdrawal. This reduces dependence on memory-based cash management and strengthens auditability, since each transaction creates a traceable financial footprint. For Ghanaian SMEs operating in mobile money ecosystems, the scene therefore captures the practical foundation of digital working capital management: mobile payments do not only facilitate buying and selling, they create structured evidence for cash flow monitoring, receivables reconciliation, liquidity planning, credit assessment, and profitability control.

Fig 3: Mobile Money Payment Confirmation as Digital Evidence for SME Cash Inflow Monitoring and Working Capital Traceability (Aryanti, B. R. 2019).

4.2. Digital Receivables Tracking, Customer Payment Confirmation, and Cash Conversion Cycle Improvement

Digital receivables tracking is essential to cash flow resilience because customer payment delays can convert profitable sales into liquidity pressure. Cash flow and Working capital are recurring problems among SMEs and shows that many small businesses lack the financial systems required to monitor receivables, payables, and profitability accurately (Karadag, 2015; Mbroh & Quartey, 2015) as presented in 3. In retail and wholesale SME operations, customer credit sales may increase revenue on paper while weakening actual cash availability if payments are not recovered on time. Evans *et al*. (2005) indicate that record keeping systems influence business survival because owner-managers need reliable financial information for timely decisions. Digital receivables tracking through mobile money can resolve this problem by linking each expected customer payment to a confirmation message, transaction reference, invoice amount, payment date, and outstanding balance. This allows the SME to know which customers have paid, which balances remain overdue, and how much of the firm's working capital is trapped in receivables. The cash conversion cycle improves when customer payment confirmation becomes immediate, searchable, and analytically useful. Fisman and Love (2003) show that trade credit plays an important role in firm growth where financial intermediation is weak, but unmanaged trade credit can also transmit liquidity stress to smaller enterprises. Liu, & Wang, (2023) further show that digital finance can influence enterprise trade credit behaviour by improving information flow and financial access. In the Ghanaian SME mobile money context, digital receivables tracking can shorten the interval between sale and cash recovery by enabling payment reminders, customer-level credit histories, partial payment tracking, and automatic reconciliation of mobile wallet inflows. For instance, a wholesaler supplying provisions to small retailers can use mobile money confirmations to classify payments by customer, detect repeated late payers, and adjust future credit limits. This directly supports working capital discipline because receivables are no longer treated as uncertain memory-based obligations. They become measurable cash flow assets that can be monitored, aged, recovered, and used to support creditworthiness.

Table 3: Summary of Digital Receivables Tracking, Customer Payment Confirmation, and Cash Conversion Cycle Improvement

Digital Receivables Component	Core Function in SME Operations	Effect on Cash Conversion Cycle	Practical Mobile Money Application
Digital receivables tracking	Records customer credit sales, partial payments, due dates, outstanding balances, and payment history in a structured format.	Reduces uncertainty around unpaid customer balances and shortens the period between sales and cash recovery.	Use mobile money transaction references to match each customer payment with an invoice or credit sale record.
Customer payment confirmation	Provides instant evidence that a customer has paid through mobile money alerts, wallet statements, or merchant payment notifications.	Improves reconciliation accuracy and prevents disputes over whether payment has been made.	Save or export mobile money confirmation messages and link them to customer names, invoice numbers, and payment dates.
Receivables ageing control	Classifies unpaid customer balances according to how long they have remained outstanding.	Helps owner-managers identify slow-paying customers early and recover cash before liquidity pressure increases.	Create digital ageing categories such as current, 7 days overdue, 14 days overdue, 30 days overdue, and high-risk overdue accounts.
Cash conversion cycle improvement	Converts credit sales into usable cash faster by linking sales records, payment confirmations, and collection follow-up.	Improves liquidity stability, reduces idle working capital, and supports timely supplier payments and inventory replenishment.	Combine mobile money payment records with digital bookkeeping dashboards to monitor receivables recovery speed and daily cash availability.

4.3. Supplier Payment Scheduling, Digital Payables Discipline, and Short-Term Liquidity Control

Supplier payment scheduling is a critical component of digital working capital management because payables represent both a financing source and a liquidity obligation. SME financing decisions are shaped by internal and external factors, including management objectives, capital availability, and the risks associated with different sources of funds (Cappa *et al*., 2020; Chen *et al*., 2021). In practical SME operations, supplier credit often serves as informal short-term finance, allowing the enterprise to restock goods before full customer cash recovery. However, without disciplined payables control, supplier obligations can accumulate beyond available operating cash, creating pressure that leads to emergency borrowing, stock disruption, or loss of supplier trust. Myers (1984) emphasizes that firms face complex choices between debt, equity, and internal financing. For Ghanaian SMEs, supplier credit is often a working capital substitute for formal debt, making digital payables scheduling necessary for preserving liquidity stability.

Mobile money ecosystems can improve payables discipline by creating a structured payment calendar linked to expected customer inflows, wallet balances, inventory turnover, and supplier due dates. Petersen and Rajan (1997) explain that trade credit is an important financing mechanism, particularly when firms face information and credit constraints. Aktas *et al*. (2015) further show that working capital management can enhance firm value when liquidity is managed efficiently. In a Ghanaian retail or wholesale SME, digital supplier scheduling may involve tagging each mobile payment to a supplier account, setting due-date reminders, splitting large payables into instalments, and reserving part of daily inflows for supplier settlement. This prevents the owner-manager from mistaking total wallet balance for free cash. For example, if a trader receives several mobile payments in one day, digital working capital management can identify what portion belongs to supplier obligations, stock replacement, debt repayment, and retained profit. Supplier payment scheduling therefore converts mobile money from a payment channel into a liquidity control system. It strengthens cash flow resilience by ensuring that payables are settled strategically without exhausting the cash needed for daily operations.

4.4. Integration of Mobile Money, Digital Bookkeeping, Credit Scoring, and SME Financial Decision Support Systems

The integration of mobile money, digital bookkeeping, credit scoring, and financial decision support systems is the most advanced stage of digital working capital management because it converts transaction data into managerial intelligence. Accounting information supports managerial decision-making and that financial plans may not influence SME growth unless they are executed through practical financial control mechanisms (Luoma, 1967; Mohd *et al*., 2010) as represented in figure 4. Laudon and Laudon (2009) position information systems as tools for organizing, processing, and using data in managerial operations. In the context of Ghanaian SMEs, this means that mobile money should not operate as an isolated payment wallet. It should be connected to bookkeeping applications that classify transactions, generate cash flow summaries, track receivables and payables, identify inventory-related outflows, and produce simple liquidity reports for owner-managers. Such integration would directly address the concern that weak financial records and poor managerial information limit SME performance.

Credit scoring becomes more reliable when digital transaction records are converted into structured indicators of cash flow consistency, repayment behaviour, customer inflow regularity, supplier payment discipline, and wallet turnover. Berg *et al*. (2020) show that digital footprints can provide useful predictive information for credit scoring, while Jagtiani and Lemieux (2019) demonstrate that alternative data and machine learning can improve FinTech lending decisions. Applied to Ghanaian SMEs, this suggests that mobile money histories can support alternative credit assessment where audited accounts, collateral, and formal financial statements are weak. For example, an SME with consistent mobile sales inflows, regular supplier payments, and disciplined loan repayments may be a better credit candidate than its informal records suggest. A decision support system can then translate these signals into liquidity ratios, cash flow trend alerts, receivables risk scores, and credit-readiness profiles. This integration supports the review's central argument that digital working capital management is not merely a technological upgrade. It is a strategic financial resilience system that strengthens cash flow control, improves credit access, and supports sustainable SME profitability.

Fig 4: Integrated Mobile Money, Digital Bookkeeping, and Credit Analytics Dashboard for SME Financial Decision Support (OEDC, n.d.).

Figure 4 illustrates an integrated digital financial decision-support environment in which an SME owner-manager uses both a smartphone and laptop to monitor real-time financial indicators, transaction movements, and performance trends. In relation to *integration of mobile money, digital bookkeeping, credit scoring, and SME financial decision support systems*, the smartphone represents the mobile transaction layer where customer payments, supplier transfers, loan repayments, wallet balances, and cash-out activities can be captured instantly through mobile money platforms. The laptop dashboard represents the analytical layer, where those transaction records are processed into charts, trend lines, liquidity patterns, repayment behaviour, and working capital indicators. Technically, this integration allows mobile money data to feed digital bookkeeping systems that classify inflows and outflows into sales revenue, receivables recovery, supplier payments, inventory purchases, operating expenses, owner withdrawals, and debt obligations. Once organized, the same data can support credit scoring by showing transaction regularity, wallet turnover, cash flow stability, repayment discipline, and supplier payment consistency. The charts on the laptop suggest predictive analytics and trend monitoring, which can help the SME detect declining liquidity, rising payment delays, unstable cash conversion cycles, or excessive inventory-related cash lock-up. The paper documents on the table further imply that digital records can complement traditional financial reports, making the business more transparent to banks, fintech lenders, and microfinance institutions. Overall, the picture captures the technical logic of Section 4.4: mobile money should not operate as an isolated payment channel, but as part of a connected financial intelligence system that links payment records, bookkeeping classification, credit-readiness analytics, and owner-manager decision support for stronger cash flow resilience and profitability control.

5. Cash Flow Resilience and Profitability Outcomes in Digitally Enabled Ghanaian SMEs

5.1. Digital Working Capital Visibility and Real-Time Liquidity Shock Absorption in SME Operations

Digital working capital visibility refers to the ability of an SME owner-manager to observe cash inflows, cash outflows, wallet balances, receivables recovery, supplier obligations, debt repayments, and inventory-related cash movements as they occur. This is central to cash flow resilience because insufficient cash flow and working capital are identified as recurring constraints to SME survival, a problem already recognized in small business literature since the Bolton Report and still reflected in later SME performance studies (Bolton, 1971; Sensis, 2014) as represented in figure 5. Based on some findings, working capital management has a strong positive effect on SME growth, meaning that liquidity control is not a peripheral accounting activity but a core predictor of business expansion. In mobile money ecosystems, visibility is created through transaction alerts, wallet statements, merchant payment logs, and mobile-based bookkeeping classifications that enable owner-managers to detect liquidity pressure early rather than after cash shortages have already disrupted operations.

Real-time liquidity shock absorption occurs when a business can respond quickly to sudden cash stress, such as delayed customer payments, unexpected supplier demands, emergency stock replacement, or short-term debt pressure. Doszhan *et al.* (2020) emphasize that SME financial management systems remain weaker in developing economies, while Almeida *et al.* (2004) show that firms facing financing constraints tend to preserve cash more sensitively when internal cash flow changes. Opler *et al.* (1999) similarly show that firms hold cash partly to protect themselves against risky cash flows and growth opportunities. Applied to Ghanaian SMEs, digital working capital visibility helps the owner-manager know whether today's mobile money balance is truly free cash or already committed to supplier settlement, stock replenishment, rent, loan repayment, or tax obligations. A trader who receives mobile money payments throughout the day can use digital classification to reserve part of the inflow for inventory replacement and part for supplier debt, thereby reducing the likelihood of liquidity shock. In this sense, mobile money becomes a real-time liquidity control layer rather than a simple payment channel.

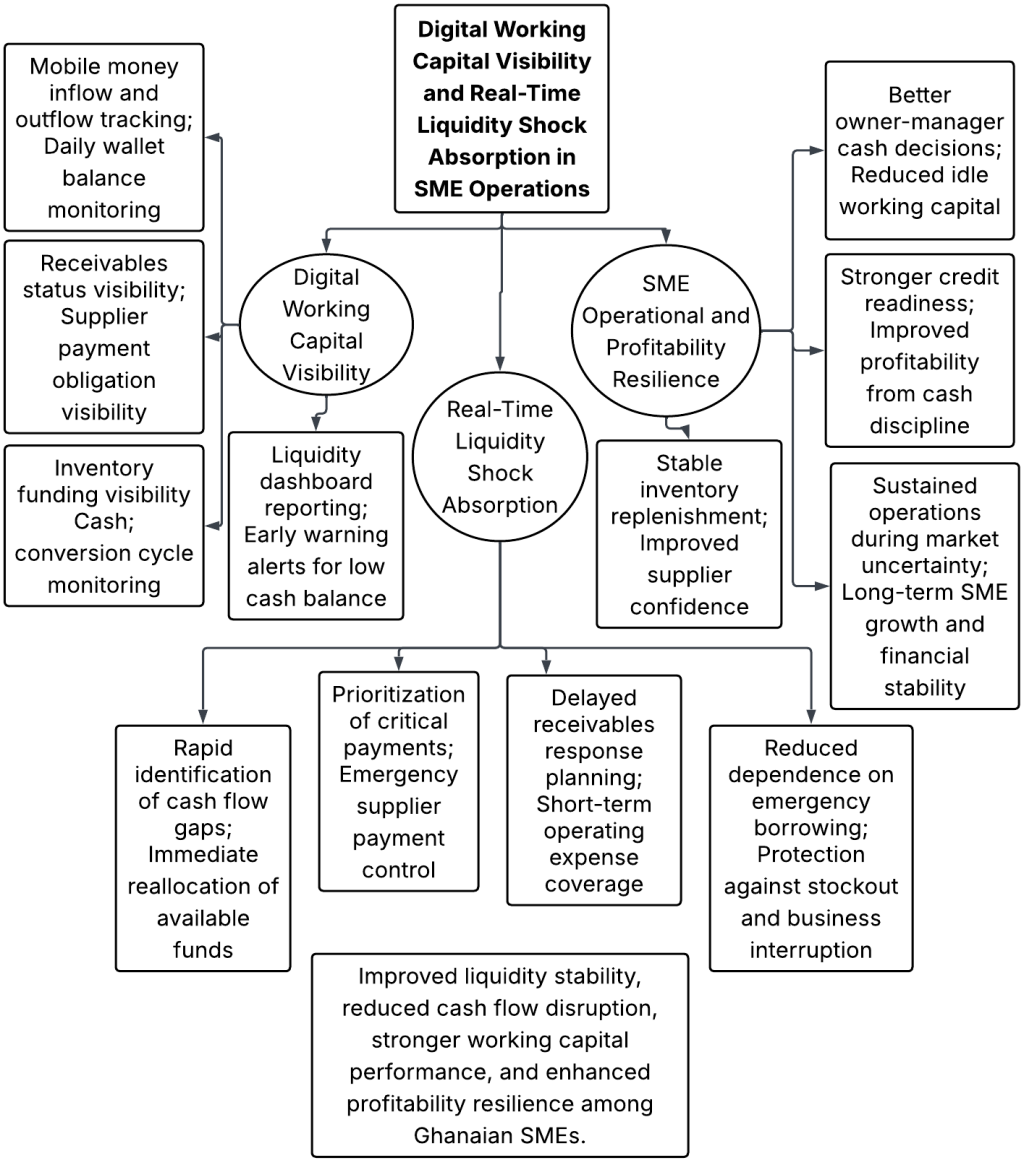

Fig 5: Digital Working Capital Visibility Framework for Real-Time Liquidity Shock Absorption and Operational Resilience in SME Operations

Figure 5 demonstrates how digital working capital visibility enables Ghanaian SMEs to absorb liquidity shocks in real time by transforming mobile money records, receivables data, supplier obligations, and inventory funding information into practical financial control signals. The central node represents the main process, which is the use of digital tools to monitor working capital continuously rather than relying on delayed manual records or memory-based cash decisions. The first branch, digital working capital visibility, shows the informational layer of the system, where mobile money inflows and outflows, wallet balances, receivables status, supplier obligations, inventory funding needs, cash conversion cycle movement, dashboard reports, and low-cash alerts are captured and monitored. This visibility allows the owner-manager to know the true cash position of the business at any moment. The second branch, real-time liquidity shock absorption, explains how the SME responds when cash stress occurs, such as delayed customer payments, sudden expenses, supplier demands, or reduced sales. Through rapid identification of cash flow gaps, reallocation of available funds, prioritization of critical payments, emergency supplier control, receivables response planning, and reduced dependence on costly borrowing, the firm can protect its operating cycle. The third branch, SME operational and profitability resilience, presents the business outcomes of this digital control process, including stable inventory replenishment, improved supplier confidence, better owner-manager decisions, reduced idle working capital, stronger credit readiness, improved profitability, and long-term financial stability. Overall, the diagram shows that digital working capital visibility is not merely a reporting function; it is a decision-support mechanism that helps SMEs detect liquidity pressure early, respond before operations are disrupted, and maintain profitability under uncertain market conditions.

5.2. Mobile Money Transaction Traceability, Alternative Credit Assessment, and Improved SME Financing Access

Mobile money transaction traceability is important for Ghanaian SMEs because restricted access to finance is repeatedly identified as one of the most serious barriers to SME growth. SMEs often face financing difficulty because they lack proper records, collateral strength, and credible financial documentation, while access to finance remains a key development constraint in Ghana and other developing economies (Lashitew, 2015; MFPED, 2017; UNEP, 2007). In this review, transaction traceability is treated as the digital conversion of mobile money inflows and outflows into verifiable evidence of business activity. Such evidence may include customer payment frequency, average wallet inflow, supplier repayment regularity, cash-out patterns, loan repayment behaviour, and seasonal revenue variation. These indicators can reduce information asymmetry between SMEs and lenders because they provide a more realistic picture of daily liquidity behaviour than memory-based financial claims.

Alternative credit assessment becomes more credible when mobile money records are combined with digital bookkeeping and analytics. Di Maggio and Yao (2021) show that fintech lenders rely heavily on hard information in credit decisions, while Fuster *et al*. (2022) demonstrate that machine learning can influence credit market outcomes by extracting predictive patterns from borrower data. Although these studies concern broader credit markets, their logic is relevant to Ghanaian SMEs because many small businesses lack audited accounts but generate repeated digital payment traces through mobile money. For example, an SME with regular mobile money receipts, consistent supplier payments, and stable wallet turnover may demonstrate repayment capacity even without conventional collateral. A mobile-money-enabled credit model could use transaction regularity, receivables recovery speed, payables discipline, and cash flow volatility to assess financing readiness. However, such systems must be transparent and fair because poor classification of informal business transactions could wrongly exclude viable SMEs. Properly designed, transaction traceability can improve financing access by replacing undocumented cash history with structured digital evidence of liquidity performance, operational continuity, and working capital discipline.

5.3. Digital Receivables Recovery, Inventory Payment Records, and Reduction of Idle Working Capital

Digital receivables recovery is central to working capital resilience because customer credit can increase reported sales while reducing available cash. Working capital control, especially receivables, payables, and inventory are important in shaping SME growth. SME investment practices and the tendency of small firms rely on simplified decision rules when allocating funds to long-term or operating assets (Foila & Agustina, 2019; Moruff, 2020; Sarwary, 2019) as presented in table 4. In mobile money ecosystems, receivables recovery becomes more measurable because each customer payment can be linked to a transaction reference, invoice balance, due date, and customer repayment history. This allows a retailer or wholesaler to identify overdue balances quickly and reduce the time between credit sale and cash recovery. Instead of relying on memory or paper notes, the owner-manager can use digital payment confirmations to classify receivables into current, delayed, doubtful, or recovered cash.

Inventory payment records are equally important because excess stock can lock cash in slow-moving goods, while inadequate stock can cause lost sales and weaken customer retention. Kieschnick *et al*. (2013) show that working capital management has wealth implications, while Molina and Preve (2009) demonstrate that distressed firms adjust trade receivables policies because of the tension between sales expansion and cash preservation. These findings align with the Ghanaian SME context because cash tied up in unpaid customer balances or idle inventory reduces the liquidity needed for supplier settlement and reinvestment. Mobile money can reduce idle working capital by creating a digital relationship between stock purchases, supplier payments, customer receipts, and replenishment decisions. For example, if a provision store notices that mobile payments for a product category are slow while supplier payments for that category remain high, the owner can reduce restocking volume and redirect liquidity to faster-moving inventory. This makes digital receivables and inventory records practical tools for shortening the cash conversion cycle, reducing liquidity leakage, and improving profitability.

Table 4: Summary of Digital Receivables Recovery, Inventory Payment Records, and Reduction of Idle Working Capital

Digital Working Capital Area	Core Function in SME Operations	Effect on Idle Working Capital	Practical Mobile Money Application
Digital receivables recovery	Tracks customer payments, overdue balances, partial settlements, and payment confirmation records after credit sales.	Reduces cash trapped in unpaid customer accounts and increases the speed at which sales are converted into usable operating cash.	Match mobile money payment references with customer names, invoice numbers, due dates, and outstanding balances.
Inventory payment records	Captures payments made for stock purchases, supplier settlements, replenishment cycles, and product-category cash outflows.	Helps identify whether too much cash is tied to slow-moving inventory or whether fast-moving stock is being underfunded.	Use mobile money supplier payment histories to compare stock purchases with sales inflows and inventory turnover patterns.
Reduction of idle working capital	Improves the allocation of cash by reducing funds locked in unpaid receivables, excessive inventory, or poorly timed supplier payments.	Releases cash for daily operations, supplier obligations, emergency liquidity, reinvestment, and profitable stock replenishment.	Use digital bookkeeping dashboards to flag overdue receivables, excessive stock purchases, and low cash availability.
Cash conversion discipline	Connects receivables recovery, inventory financing, and supplier payment timing into one working capital control process.	Shortens the cash conversion cycle, improves liquidity stability, and strengthens profitability from existing sales activity.	Integrate mobile money records with receivables ledgers, inventory purchase logs, and supplier payment schedules.

5.4. Profitability Growth through Digital Financial Planning, Surplus Cash Allocation, and Owner-Manager Decision Quality

Profitability growth through digital financial planning depends on whether financial plans are translated into executable cash control. Findings show that financial planning practices do not have a statistically significant effect on SME growth, while investment practices and working capital management had significant positive effects. This finding is conceptually important for the review because it suggests that planning alone is insufficient unless it is connected to actual liquidity monitoring, budget execution, surplus cash allocation, and investment discipline. Mohammed (2020) is presented as supporting the relevance of financial planning, while Muneer *et al*. (2017) and Rafiki (2019) support the broader view that financial management practices can influence SME growth. In mobile money ecosystems, financial planning can become more effective when digital transaction records are used to compare planned cash use against actual spending, identify unnecessary withdrawals, monitor debt repayment, and separate operating capital from profit.

Surplus cash allocation is a technical managerial function because the owner-manager must decide how much cash should remain in the wallet for daily liquidity, how much should be used for supplier settlement, how much should replenish inventory, and how much can be reinvested or withdrawn as profit. Bruhn and Zia (2013) show that business and financial training can improve managerial capital in emerging markets, while Drexler *et al*. (2014) show that simplified financial rules can improve financial practices, reporting quality, and revenues among micro-entrepreneurs. These findings are directly relevant to Ghanaian SMEs because many owner-managers require practical digital tools rather than complex accounting systems. A mobile-money-linked dashboard could provide simple rules, such as reserving a fixed percentage of daily inflows for inventory, blocking supplier payment funds from personal withdrawals, and flagging excessive cash-outs. Such digital financial planning improves decision quality by converting raw transaction data into actionable liquidity guidance. Profitability growth therefore emerges not only from higher sales but from disciplined allocation of cash surpluses, faster reinvestment cycles, reduced leakage, and better owner-manager judgment.

6. Conclusion and Recommendations

6.1. Conclusion on Digital Working Capital Management as a Cash Flow Resilience Mechanism for Ghanaian SMEs

Digital working capital management provides a practical and technically relevant mechanism for strengthening cash flow resilience among Ghanaian SMEs operating within mobile money ecosystems. The central argument of this review is that SME profitability is not determined only by sales volume, business age, or market participation, but by the ability of owner-managers to control the timing, visibility, classification, and allocation of short-term cash flows. Findings showed that working capital management had the strongest positive influence on SME growth, which confirms that receivables control, payables discipline, inventory financing, and cash monitoring are decisive drivers of business performance. In this context, mobile money platforms can transform everyday transactions into structured financial evidence that supports liquidity planning and operational decision-making. When customer payments, supplier settlements, loan repayments, cash-outs, and inventory purchases are digitally recorded, SMEs gain the capacity to monitor cash movements more accurately than through informal notebooks or memory-based accounting. Digital working capital management therefore strengthens resilience by reducing uncertainty around available cash, improving the distinction between operating capital and profit, and helping firms anticipate liquidity gaps before they become operational crises. It also improves credit readiness by creating transaction histories that can be interpreted by lenders and fintech providers. For Ghanaian SMEs, especially retail and wholesale enterprises, the most important contribution of digital working capital management lies in its ability to convert mobile money from a payment channel into a financial control system. This makes mobile money ecosystems central to the future of SME liquidity stability, financing access, and sustainable profitability.

6.2. Recommendations for SME Owners on Mobile Money-Based Bookkeeping, Receivables Control, and Liquidity Monitoring

SME owners should adopt mobile money-based bookkeeping as a core component of daily financial management rather than treating mobile money only as a convenient payment method. Every mobile money inflow and outflow should be classified into specific working capital categories, including customer receipts, supplier payments, inventory purchases, operating expenses, loan repayment, owner withdrawals, savings, and reinvestment. This classification will help owner-managers identify whether cash shortages are caused by delayed receivables, excessive withdrawals, high supplier obligations, slow-moving inventory, or poor budgeting. SME owners should also separate business wallets from personal wallets to reduce the common problem of mixing household spending with business working capital. For receivables control, businesses should maintain a digital customer payment register that records invoice dates, expected payment dates, partial payments, outstanding balances, and payment confirmation references. Mobile money payment alerts should be reconciled daily with sales records so that overdue customers can be identified quickly. For liquidity monitoring, SME owners should prepare simple daily or weekly cash flow summaries showing opening wallet balance, total inflows, total outflows, committed payables, available operating cash, and projected inventory funding needs. A basic rule-based system can also be used, such as reserving a fixed percentage of daily receipts for supplier payments and another percentage for stock replacement before profit withdrawal. Retailers, wholesalers, and service-based SMEs should further use mobile transaction histories to compare sales patterns across weeks or months. This will improve pricing, inventory planning, credit discipline, and reinvestment decisions. Properly implemented, mobile money-based bookkeeping can turn informal SME cash handling into disciplined working capital control.

6.3. Recommendations for Financial Institutions, Fintech Providers, and Mobile Money Operators on SME Credit Analytics and Digital Working Capital Tools

Financial institutions, fintech providers, and mobile money operators should develop SME-specific credit analytics that

use mobile money transaction histories as alternative evidence of cash flow strength, repayment capacity, and working capital discipline. Many Ghanaian SMEs are excluded from formal finance because they lack audited statements, fixed collateral, and standardized accounting records. However, their mobile money activities often contain valuable credit signals such as frequency of customer inflows, regularity of supplier payments, wallet turnover, repayment behaviour, transaction seasonality, average daily balance, and cash flow volatility. Financial institutions should design credit assessment models that interpret these signals carefully and combine them with business type, operating history, inventory cycle, and customer concentration risk. Fintech providers should also build simple digital working capital tools that integrate with mobile money wallets and provide dashboards for receivables ageing, payables scheduling, liquidity alerts, stock financing estimates, and surplus cash allocation. Mobile money operators can support this process by offering merchant wallet statements that are easier to export, categorize, and share with lenders under secure consent-based arrangements. These platforms should include low-literacy interfaces, automated payment tagging, invoice-linked payment references, and business cash flow summaries. Financial institutions should avoid relying only on transaction volume because high inflow does not always mean profitability or repayment capacity. Instead, credit models should evaluate net cash flow, consistency, obligation coverage, and evidence of disciplined business use. When properly designed, these digital tools can reduce information asymmetry, improve SME lending decisions, and support stronger cash flow resilience across Ghana's mobile money-driven enterprise sector.

6.4. Recommendations for Policymakers and Future Researchers on Digital Financial Literacy, Regulation, and Empirical Validation

Policymakers should strengthen digital financial literacy programmes that teach SME owners how to use mobile money records for bookkeeping, receivables control, supplier payment planning, liquidity forecasting, and credit preparation. Training should move beyond general awareness of mobile payments and focus on practical working capital routines, such as separating business and personal wallets, recording customer credit, preparing weekly cash flow summaries, interpreting wallet statements, and identifying cash leakage. SME development agencies should collaborate with mobile money operators, banks, accountants, and business associations to deliver sector-specific training for retailers, wholesalers, food vendors, artisans, agro-processors, and service providers. Regulation should also ensure that mobile money transaction data are protected, portable, transparent, and usable for responsible SME credit assessment. Consent-based data sharing should be encouraged, but safeguards must prevent exploitative lending, unfair algorithmic exclusion, hidden charges, and misuse of customer or merchant data. Policymakers should promote interoperability between mobile money platforms, bank accounts, point-of-sale systems, tax records, and digital bookkeeping tools so that SMEs can build credible financial profiles without excessive administrative burden. Future researchers should empirically test the relationship between mobile money-based working capital practices and SME outcomes such as cash flow resilience, profitability, credit access, survival rate, and growth performance. Studies should examine different SME sectors, business sizes, gender of owner-managers, regional differences, and levels of digital financial literacy. Researchers should also develop measurable indicators for digital working capital visibility, receivables recovery speed, payables discipline, wallet-based liquidity stability, and transaction-data creditworthiness. Such empirical validation will strengthen the academic and policy relevance of digital working capital management in Ghanaian SME development.

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