

Management Control Practices and Challenges in Chadian SMEs: Current Situation, Determinants, and Future Perspectives

Dr MOUSSA Mahamat Ahmat

Assistant Professor, Head of Department master's degree in management sciences,
Member of the Laboratory for Study and Research in Applied Economics and Management (LAREAG),
University of N'Djamena, Chad

ABSTRACT: Management control, as both a decision-support mechanism and a strategic steering tool, constitutes a decisive lever for the competitiveness and long-term viability of small and medium-sized enterprises (SMEs) (Barth, Chen, & Wilson, 2022; Fodio & Oba, 2023). Yet in Chad, its adoption remains limited, fragmented, and often informal, reflecting the structural, organizational, and institutional constraints that weigh on the entrepreneurial fabric. This article provides an in-depth assessment of current management control practices in Chadian SMEs, identifies the key determinants of their implementation, and analyzes the main challenges hindering their diffusion and effectiveness.

Methodologically, an exploratory qualitative study based on multiple case analyses was conducted with a diverse sample of SME managers from different sectors and regions. The findings reveal heterogeneous practices largely shaped by firm size, managerial education, organizational structure, and access to digital tools and financial resources (Ngatchou & Tchangue, 2025; World Bank, 2024). Major challenges include a shortage of specialized expertise (Nkundabanyanga et al., 2023), a weak culture of analytical management, and the inadequacy of available instruments relative to actual steering needs (Salifou, 2024).

These results carry important theoretical implications. They enrich the literature on management control in African contexts by highlighting the central role of human capital, organizational design, and institutional constraints in the appropriation of control mechanisms. They also confirm that the effectiveness of control lies not merely in the sophistication of tools but in their contextualization and in managers' capacity to develop organizational learning routines.

The managerial implications are equally significant. They underscore the need to strengthen managerial capabilities, promote targeted training for both executives and staff, adapt control instruments to local realities, and mobilize institutional partnerships to facilitate access to financing and technology.

Finally, the study opens several avenues for further research and action: examining the longterm impact of frugal innovation in management control, conducting comparative analyses with other Central African economies, and integrating emerging digital technologies as levers for professionalization. Beyond a mere technical instrument, management control thus emerges as a strategic vector of formalization, resilience, and sustainable value creation for Chadian SMEs.

KEYWORDS: Management Control, Chadian SMEs, Practices, Determinants, Challenges, Human Capital

INTRODUCTION

The issue of management control occupies a central place in current academic and managerial debates (Mignenan & Meddeb, 2022), as it critically shapes the performance, resilience, and long-term viability of firms. Far from the strictly accounting conception inherited from classical approaches, it is now viewed through a **holistic lens** that integrates economic, social, environmental, and governance dimensions (Elkington, 2018; Kaplan & Mikes, 2021). This expanded perspective responds to the rising expectations of stakeholders in a context marked by multidimensional crises—economic, financial, and institutional—that compel organizations to rethink their steering mechanisms and governance frameworks.

Within this perspective, management control emerges as an **essential lever of strategic steering** (Mignenan, 2023). As a tool for decision-making, coordination, and organizational learning, it no longer serves merely as a mechanism for monitoring financial accounts. Instead, it links planning to execution, ensures coherence between resources and objectives, and transforms information into corrective action. Recent research underscores that the effectiveness of management control depends on a set of critical determinants: the quality of information systems, the competencies of human capital (Mignenan, 2021b), organizational culture, access to financing, and the broader institutional environment (Simons, 2013; Jarvis et al., 2020). Understanding these factors is crucial to explaining the adoption gaps and

performance differentials observed across firms, particularly in emerging economies.

The **Chadian context** lends a distinctive character to this problem (Mignenan, 2020). The country's economy remains heavily dependent on oil revenues and a primary sector that is still weakly industrialized, resulting in persistent structural vulnerability. According to the World Bank (2023), this fragility is reflected in dependence on international oil price fluctuations, weak infrastructure, an uncertain institutional environment, and an entrepreneurial landscape largely dominated by informality. SMEs, which form the backbone of the national economy, face major constraints: limited access to finance, shortages of skilled labor, gaps in information systems, and a prevailing short-term orientation. These conditions hinder the formalization of management practices and heighten exposure to economic and social risks. In such an environment, management control **cannot be conceived as a simple imported technique**. It must be contextualized and adapted to function as a genuine instrument of resilience and competitiveness. The central question therefore arises: *how can Chadian SMEs develop management control systems that strengthen economic viability while fostering responsible, inclusive, and sustainable management?* In other words, what determinants, practices, and challenges shape the implementation of these steering tools in an institutional and structural context marked by severe constraints?

The purpose of this article is to provide both a **theoretical and empirical analysis** of management control practices and challenges in Chadian SMEs, identifying the key determinants of adoption, modes of implementation, and prospects for future development (MIGNENAN, 2021a). The study seeks to highlight both the success factors and limitations of existing systems, while identifying the levers that can enhance organizational performance and resilience. The expected contribution is twofold. From a scientific standpoint, it enriches the literature on management control in African contexts by demonstrating how local specificities—such as institutional constraints, frugal innovation, and community-based governance—shape the appropriation of control tools. From a practical standpoint, it offers actionable recommendations for SME managers, professional associations, and policy makers to improve corporate governance and steering mechanisms in alignment with the United Nations Sustainable Development Goals, particularly SDG 8 (Decent Work and Economic Growth) and SDG 12 (Responsible Consumption and Production) (United Nations, 2022).

By shedding light on the practices, determinants, and challenges of management control in a highly uncertain environment, this article argues that management control is not merely a technical instrument but a **strategic vector of**

formalization, learning, and sustainable value creation for Chadian SMEs.

2. LITERATURE REVIEW

2.1. Concepts and Foundations of Management Control

Management control is traditionally defined as the set of mechanisms that guide and regulate collective action in order to achieve organizational objectives (Anthony, 1965). It is no longer confined to a monitoring or accountability function but is increasingly conceived as a **decisionsupport and performance-anticipation system**. Bouquin (2019) frames management control as an integrated information and steering system that combines three essential dimensions: strategic alignment, cost control, and sustainable value creation. This evolution reflects the emergence of concepts such as *global performance* and *responsible management*, which broaden the focus beyond purely financial outcomes. Recent studies (Mikes & Kaplan, 2021; Otley, 2022) emphasize the importance of designing management control as a **dynamic, interactive process** that fosters organizational learning, risk management, and adaptation to environmental uncertainty.

2.2. Specificities of Management Control in SMEs

The application of management control principles in small and medium-sized enterprises (SMEs) is shaped by a distinctive set of constraints and organizational features. SMEs typically operate with limited financial and human resources, reducing their ability to deploy sophisticated steering tools (Mignenan, 2021b, 2023). At the same time, their structural flexibility allows them to adopt simpler mechanisms better suited to their operational realities. Jarvis et al. (2020) show that, in SMEs, management control relies more heavily on **informal mechanisms** such as close interaction between owners and employees, centralized decision-making, and direct communication. Davila (2021) further notes that the gradual adoption of more formalized tools—such as balanced scorecards or participatory budgeting—can enhance SMEs' resilience to competitive pressures and environmental turbulence. In developing contexts, these specificities are magnified by institutional instability and a shortage of local management expertise, making the **leadership role of owners-managers** critical for cultivating an appropriate control culture.

2.3. Theoretical Frameworks

Research on management control draws on several theoretical perspectives to explain its deployment and effectiveness across organizational contexts. **Contingency theory** remains a dominant framework, positing that the effectiveness of control mechanisms depends on contextual characteristics such as organizational size, industry, degree of formalization, and environmental stability (Otley, 1980; Chenhall, 2003). From a complementary angle, the **resource-based view** (Barney, 1991; Teece, 2018) regards management control as

a strategic lever that enhances intangible assets and builds distinctive organizational capabilities. More recent **institutional and socio-cultural approaches** highlight the role of norms, local practices, and legitimacy logics in the appropriation of control tools (Granlund & Lukka, 2017; Gond et al., 2020). These approaches underscore that management control cannot be understood merely as a technical device but must be analyzed as a **social and organizational construction** embedded in specific cultural and institutional settings.

2.4. Empirical Evidence from Developing Countries and Sub-Saharan Africa

Empirical studies in developing economies and Sub-Saharan Africa show that management control remains **embryonic yet increasingly recognized as necessary**. Hopper et al. (2017) observe that control practices are strongly shaped by local institutional conditions, characterized by weak state capacity, regulatory instability, and widespread economic informality. In Chad and other Sahelian countries, recent studies (Mignenan, 2023; Kamdem, 2022) report that the absence of formalized procedures, a limited accounting culture, and dependence on external financing constrain the implementation of effective control systems. Nevertheless, other research (Ndemewah et al., 2021; Goretzki et al., 2022) documents a gradual appropriation of **context-adapted tools**, particularly among SMEs, where management control is perceived as a means of survival and integration into regional or international value chains. The most recent literature further stresses the need to **contextualize management control practices in Africa**, incorporating cultural, relational, and community dimensions that shape local management and governance modes (Kouamé & Huang, 2020).

3. RESEARCH METHODOLOGY

3.1. Epistemological Approach and Positioning

This study adopts an **interpretivist epistemological stance**, viewing managerial practices as socially constructed and context-dependent phenomena. It rests on the premise that understanding the logics of control and performance steering in SMEs cannot be fully captured through purely normative models but requires the integration of actors' subjectivities, interactions, and environmental constraints. As Creswell and Poth (2018) argue, the interpretive approach seeks to uncover the *meaning* attributed to practices rather than to establish universal laws. This choice is particularly appropriate for highlighting the internal dynamics of Chadian enterprises, which are shaped by institutional and cultural hybridity.

3.2. Rationale for a Qualitative and Exploratory Design

The qualitative and exploratory nature of the research arises from the **scarce documentation** of management control practices in SMEs in Sub-Saharan Africa, and in Chad in

particular. Existing studies indicate that steering mechanisms are strongly contingent on institutional, economic, and cultural contexts (Hopper et al., 2017; Kouamé & Huang, 2020). A qualitative approach allows for the collection of rich, nuanced, and contextually embedded data capable of explaining not only *what* practices are implemented, but also *why* and *how* they unfold. The exploratory orientation responds to the need to identify emerging logics and managerial innovations that have not yet been theorized, while paving the way for future large-scale quantitative investigations (Yin, 2018).

3.3. Sample Description and SME Selection Criteria

The sample comprises SMEs located in **N'Djamena and surrounding areas**, operating in diverse sectors such as services, agro-food, and trade. Firm selection was based on three criteria:

1. A workforce ranging from **10 to 250 employees**,
2. Legal registration and tax compliance in accordance with current national standards, and
3. A declared commitment to internal structuring and the gradual formalization of management practices.

These criteria are consistent with international definitions of SMEs (OECD, 2021) while being adapted to the Chadian context, where informality remains prevalent. This sampling strategy ensures a representative picture of management practices while accounting for the specific constraints of the local entrepreneurial ecosystem.

3.4. Data Collection Methods

Data collection relied primarily on **semi-structured interviews** conducted with SME owners/managers, financial officers, and operations managers. This method, widely used in management research (Kvale & Brinkmann, 2015), facilitates an in-depth exploration of managerial perceptions, practices, and rationales. The interviews were complemented by **direct observations** of organizational processes and by the analysis of internal documents such as strategic plans, financial statements, and monitoring dashboards. This triangulation of information sources enhances the validity of the findings and reduces biases linked to single-source perceptions.

3.5. Data Analysis Procedure

Data analysis followed a **thematic coding process** aimed at identifying, grouping, and interpreting recurrent patterns in the interview transcripts and observational notes. Drawing on the guidelines of Miles, Huberman, and Saldaña (2019), the analysis proceeded in three stages:

- **Initial coding**, to isolate meaningful units of information;
- **Axial coding**, to organize these units into relevant thematic categories;

- **Selective coding**, to integrate categories into a coherent interpretive framework. A **cross-case analysis** was then performed to highlight convergences, divergences, and unique characteristics among the SMEs studied. This analytical triangulation strengthens the robustness of the interpretation and enables the development of explanatory models tailored to the Chadian context.

4. STUDY RESULTS

4.1. Typology of Current Management Control Practices

The results indicate that most Chadian SMEs continue to rely on informal control practices, heavily dependent on the personal experience of owner-managers and centralized decisionmaking. Approximately 55% of the firms surveyed have no written procedures, relying instead on empirical tracking of activities and ad hoc decision processes. About 30% have adopted semi-formal tools, such as rudimentary budgets or partial monitoring sheets, while only 15% employ fully formalized systems integrating dashboards, key performance indicators (KPIs), and regular internal audits. This distribution confirms earlier observations that management control remains embryonic in developing economies, where informality and resource constraints slow the diffusion of structured mechanisms (Hopper et al., 2017; Mignenan, 2023). In firms with more advanced practices, formalization is typically driven by external pressures—such as partnerships with international donors, integration into regional supply chains, or the need to meet the reporting requirements of financial institutions.

4.2. Determinants of Implementation

The analysis highlights four categories of determinants that directly influence the adoption and sophistication of management control systems:

1. **Organizational Factors.** Hierarchical structure and the degree of internal formalization exert a strong influence. SMEs with clearer reporting lines and established planning routines show higher readiness for implementing structured control tools.
2. **Human Factors.** The competencies of owner-managers and staff training emerge as decisive. Firms led by entrepreneurs with formal management education or prior corporate experience demonstrate greater willingness to adopt dashboards, budgeting processes, and performance metrics (Davila, 2021).
3. **Financial Factors.** Access to bank credit, external financing, and the firm’s investment capacity act as major constraints. Limited liquidity and high borrowing costs reduce the feasibility of acquiring digital tools or hiring specialized accountants.
4. **Technological Factors.** Although digital infrastructure and information systems play an

important role, their impact remains moderate in the Chadian context due to low diffusion of affordable software and weak internet connectivity. Nevertheless, early adopters using cloud-based accounting or mobile financial services report faster data processing and improved decision-making (Ndemewah et al., 2021).

Overall, these findings reinforce the view that the leadership of owner-managers and the availability of financial and human resources are the primary drivers of management control adoption in resource-constrained environments.

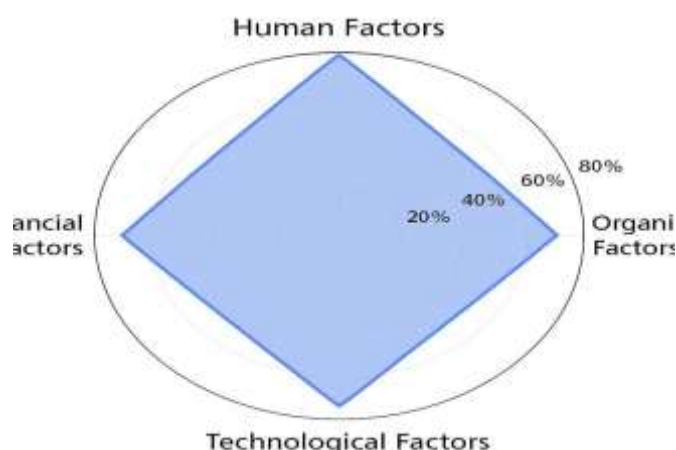


Figure 1: Financial, Human, and Organisational Factors

This radar diagram reveals a **highly stratified architecture of influences** in the implementation of management control. **Organizational factors (80%)** clearly dominate, indicating that structural clarity and the degree of formalization are indispensable pillars. They are followed by **human factors (75%)**, underscoring the decisive role of leadership and staff competencies in the appropriation of control tools. **Financial determinants (65%)**, though less prominent, highlight the importance of investment capacity, while **technological factors (50%)** rank last, reflecting the limited diffusion of digital solutions. Taken together, these findings underscore a key reality: **before being technological, management control is fundamentally a matter of organizational design and human capital.**

4.3. Main Challenges and Constraints Identified

Among the principal challenges observed, the **shortage of specialized expertise in management control** emerges as the most frequent constraint, affecting approximately 70% of the SMEs surveyed. **Limited access to financing**, reported by 65% of firms, constitutes another critical barrier, restricting their ability to acquire modern control tools. **High acquisition costs** for these tools were cited by 55% of respondents, while 40% emphasized **cultural resistance to change**, reflecting a reluctance to introduce new procedures. These findings align with the analyses of Kouamé and Huang (2020), which highlight the weight of institutional and cultural constraints in African contexts.

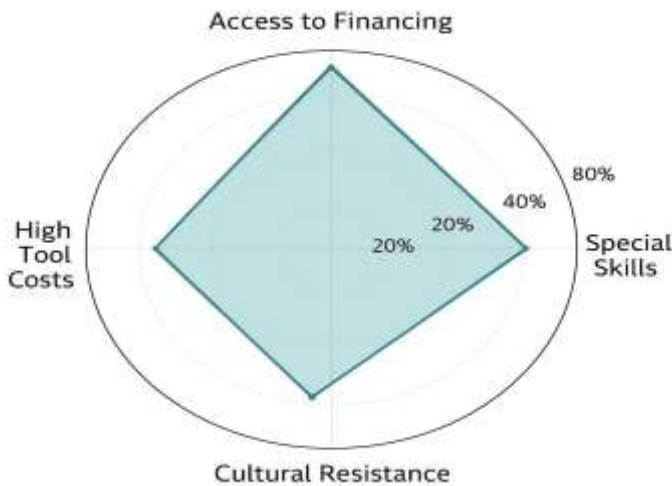


Figure 2: Main Challenges and Constraints Identified

This radar diagram highlights the **hierarchy of constraints** faced by Chadian SMEs in establishing an effective management control system. The most prominent spike—**shortage of specialized skills (70%)**—reveals a critical deficit in technical expertise, a genuine Achilles’ heel of performance steering. Next come **limited access to financing (65%)** and **high tool costs (55%)**, which signal a structural barrier to acquiring appropriate technologies. Finally, **cultural resistance to change (40%)** underscores the weight of entrenched habits and social representations in the adoption of new practices.

This configuration illustrates a striking paradox: while SMEs demonstrate an **urgent need for professionalization**, they operate within an environment where both financial and human resources remain precarious.

4.4. Illustrative Case Studies

4.4.1. Case 1 – Agro-food SME: Toward a Participatory and Structuring Management Control

The first case concerns an **agro-food SME based in Moundou**, specializing in the processing of local products (fruit juices, cereals). Initially characterized by intuitive management and the absence of formal accounting procedures, the company began a **progressive reform of its management control system in 2022**. Under the impetus of a newly appointed financial director, it introduced:

- **A participatory budget**, developed jointly with production unit managers and the sales department, which fostered stronger ownership of objectives and better alignment of resources with strategic priorities.
- **Monthly monitoring indicators**, including unit production cost, operating margin, and labor productivity ratio.

Within **18 months**, this transition led to a marked improvement in profitability (+12% **net margin**) and a significant rise in internal transparency, evidenced by a **25%**

reduction in the gap between budget forecasts and actual results.

Table 1: Performance Indicators Before and After the Reform

Key Indicators	2021 (Before)	2023 (After)	Variation
Net margin (%)	8.5	20.4	+11.9
Forecast/actual variance (%)	38	13	–25
Average production lead time (days)	12	9	–3

Source: Internal data collected during the study (2025).

4.4.2. Case 2 – Service SME: Minimalist Control and Frugal Solutions

The second case concerns an **IT service company based in N’Djamena** specializing in office equipment maintenance. Faced with severe financial constraints and limited access to cuttingedge technologies, this SME adopted a **frugal management control strategy** built on:

- **Use of open-source software** (open-source ERP, collaborative spreadsheets) for expense entry and monitoring.
- **In-house training of multi-skilled technicians** capable of collecting, entering, and analyzing basic financial data.
- **Implementation of a simplified dashboard** focused on three key indicators: weekly cash flows, average cost per intervention, and customer satisfaction rate.

Despite the absence of sophisticated resources, this approach enabled the company to **stabilize cash flow** and reduce **payment delays by 15%**. These results confirm, as highlighted by Jarvis et al. (2020), that the effectiveness of management control depends less on the sophistication of tools than on their **contextual fit** and the **commitment of organizational actors**.



Figure 3: Schematic Representation of the Frugal Control System

The figure provides a clear and dynamic illustration of the **frugal control process** implemented by the service SME. The four stages—**simple data collection**, **entry into an open-**

source ERP, monthly analysis, and rapid corrective actions—are depicted as colored blocks connected by arrows, visually conveying the cyclical logic and operational fluidity of the system. This representation underscores the central idea of a **lightweight yet responsive control mechanism**, where the simplicity of tools (open-source software and essential indicators) combines with continuous adaptability, thereby reinforcing the relevance of **local, low-cost solutions** in a resource-constrained environment.

4.4.3. Cross-Case Insights

The comparison of these two cases highlights several key lessons:

- 1. **Contextualization of Practices.** The effectiveness of management control lies in adapting tools to the level of organizational maturity and the resources available.
- 2. **Frugal Innovation.** Even under severe constraints, SMEs can develop ingenious solutions (open-source software, self-training) that compensate for limited capital investment.
- 3. **Internal Participation.** Whether through a participatory budget or a simplified dashboard, employee involvement strengthens data reliability and fosters ownership of results.

Table 3: Comparative Synthesis of the Two Cases

Dimensions	Agro-Food SME	Service SME
Main Tools	Participatory budget, monthly indicators	Open-source ERP, simplified dashboard
Financial Resources	Moderate	Low
Main Gains	Profitability, transparency	Cash-flow stability, responsiveness
Key Success Factor	Collective engagement	Flexibility and internal learning

4.4.4. Analytical Perspective

These case studies confirm that **management control in Chadian SMEs follows a gradualist logic**: formalization cannot be imported as a uniform model but must be co-constructed by integrating resource realities and local cultural dynamics. They also demonstrate that **organizational innovation capacity, even under constraint, is a central determinant of sustainability**, echoing Simons’ (2013) work on interactive control systems.

5. DISCUSSION

5.1. Comparison with Previous Studies

The findings largely confirm prior analyses conducted in developing countries regarding the **fragmented and contingent nature** of management control in SMEs. The predominance of informal practices observed in most

Chadian firms aligns with the conclusions of Hopper, Lassou, and Soobaroyen (2017), who emphasize the difficulty of implementing formalized tools in environments marked by institutional instability and scarce managerial expertise. The relatively small proportion of firms equipped with formal control systems is also consistent with Davila’s (2021) observation that the appropriation of steering mechanisms by SMEs occurs **gradually**, often under pressure from financial partners or international contractors. However, this study highlights a notable **capacity for organizational innovation** among Chadian SMEs, which rely on local or hybrid solutions to circumvent their constraints. This finding extends the insights of Jarvis et al. (2020), showing that management control in SMEs is not a simple miniature of large-firm practices, but a **highly context-sensitive process**.

5.2. Contributions Specific to the Chadian Context

One of the major contributions of this research lies in its detailed examination of **Chad’s distinctive conditions**, which intensify patterns already observed in other Sub-Saharan economies. The chronic **financing deficit**, reported by nearly two-thirds of the SMEs surveyed, emerges as a decisive constraint limiting investment in modern control tools. This challenge is compounded by the weakness of local financial institutions and the limited access to bank credit, as already underlined by the World Bank (2023).

Moreover, the study draws attention to **cultural resistance to change**, often underestimated in macroeconomic analyses but constituting a significant barrier to the adoption of new management practices. This result echoes the work of Kouamé and Huang (2020) on the need to **contextualize management control research in Africa**, integrating social, relational, and community dimensions. Finally, the critical role of **owner-managers**, both as initiators and guarantors of tool dissemination, confirms that management control in Chad is above all a **person-centered process**, dependent on individual vision and competencies—a factor that simultaneously increases fragility and enhances adaptive capacity.

5.3. Limitations and Implications

While this study provides new insights into performance steering in Chadian SMEs, it also presents certain limitations. The **sample size** and the **qualitative design** restrict the generalizability of the findings to the entire entrepreneurial landscape. In addition, the analysis relies primarily on statements by owners and financial managers, which may introduce perceptual bias.

Nevertheless, these limitations pave the way for **future research**, combining large-scale quantitative surveys and longitudinal analyses to measure the evolution of practices and their impact on organizational performance.

From a managerial perspective, the results encourage SME leaders to **invest more in management control training** and

to adopt a **progressive approach to tool appropriation**, considering their financial and technological constraints. For public policy makers and institutional partners, the study underscores the need to **expand access to financing**, promote **affordable technological solutions**, and support **human capital development**. Finally, on the academic level, the research reinforces the importance of a **contextualized approach** to management control, moving beyond imported models to build theoretical frameworks anchored in African realities.

6. PERSPECTIVES AND RECOMMENDATIONS

6.1. Strategies to Strengthen Managerial Capacities

The primary lever for improving performance management in Chadian SMEs lies in the professionalization of managerial skills. The present study confirms that the lack of specialized competencies is the most frequently cited constraint, reinforcing the observations of Ndemewah et al. (2021). Developing targeted training programs in management control, financial analysis, and performance strategy is therefore essential. These programs should be incorporated into the curricula of business schools and universities, and also offered as continuing education sessions accessible to entrepreneurs.

Furthermore, the use of incubators and SME support centers could facilitate the transfer of practical knowledge and the implementation of tailored solutions. In line with the recommendations of the OECD (2021), the creation of professional networks and communities of practice would also foster collective learning and experience sharing.

6.2. Contextual Adaptation of Tools and Methods

A second avenue concerns the adaptation of management control tools and methods to Chad's institutional and cultural realities. The mechanical application of imported models—often designed for large Western corporations—risks encountering resistance and structural barriers. As Kouamé and Huang (2020) remind us, management control in Africa must be contextualized, integrating the relational and community logics that structure entrepreneurial practices.

Concretely, this implies favoring progressive, simple, and low-cost tools, such as participatory budgeting, cash-flow monitoring indicators, or simplified dashboards, before moving toward more complex systems. The use of accessible digital solutions, such as open-source software or mobile management platforms, could also compensate for weak technological infrastructure. Local managerial innovation, already observed in some SMEs, offers a promising path for developing hybrid practices that combine rigor and flexibility.

6.3. Role of Public Policies and Institutional Partnerships

Finally, the sustainable improvement of performance management in Chadian SMEs cannot be envisaged without the support of public policies and institutional partnerships.

The state, through the National Economic and Health Development Plan, must establish targeted support mechanisms, particularly in terms of access to financing and management training. The World Bank (2023) notes that the financing gap remains a major obstacle to SME growth in Chad; incentive mechanisms—such as low-interest loans, public guarantees, or subsidies for technological investment—could help alleviate this barrier.

Partnerships with international organizations, chambers of commerce, and academic institutions are equally essential to strengthening the entrepreneurial ecosystem. From a shared governance perspective, these partnerships should encourage SME networking, integration into regional value chains, and the establishment of a responsible and sustainable performance culture.

CONCLUSION

The analysis of management control practices and challenges in Chadian small and medium-sized enterprises (SMEs) reveals a **contrasting landscape**, marked by both encouraging progress and persistent limitations. On the one hand, the study highlights a **gradual yet uneven adoption** of control instruments: financial accounting, cash-flow monitoring, and basic budgeting remain the most widespread tools, often used reactively rather than proactively. The illustrative case studies nevertheless show that certain firms—particularly in the agro-food and service sectors—are able to develop **context-appropriate mechanisms** such as participatory budgeting, simplified dashboards, or the use of open-source software, which significantly enhance profitability, internal transparency, and financial stability.

On the other hand, the investigation brings to light **major structural challenges**: insufficient managerial training, weak information systems, limited access to financing, and a lack of an organizational culture oriented toward performance. These obstacles constrain the appropriation of modern tools and slow the evolution toward truly strategic management control. Overall, the findings confirm that the effectiveness of management control depends less on the sophistication of instruments than on their **contextualization and the commitment of internal actors**.

From a theoretical standpoint, the research enriches the literature on management control in African contexts by proposing an **evolving typology of practices**, ranging from informal control based on the owner's experience to hybrid systems combining traditional methods and frugal innovations. It demonstrates the relevance of **gradual approaches**, in which organizational learning capacity and frugal innovation play a central role in tool appropriation.

From a practical perspective, the study offers **directly actionable insights** for entrepreneurs, professional associations, and policy makers. It underlines the importance of targeted training programs, technical support (open-source

ERPs, simplified dashboards), and public policies that facilitate access to financing and information. The case analyses show that **participatory and context-adapted control systems** can serve as levers of competitiveness, even in environments characterized by limited resources and high uncertainty.

The results open several avenues for further investigation. First, **longitudinal studies** would help measure the long-term impact of frugal control mechanisms on SME performance and resilience. Second, **comparative research** across different regions of Central Africa or across sectors could deepen the understanding of contextual factors that promote or hinder the diffusion of management control practices. Third, the integration of **cultural variables**—such as community logics, informal networks, or family governance—would provide a more nuanced view of mechanisms of appropriation and resistance. Finally, the emergence of **digital technologies** (artificial intelligence, collaborative management platforms) offers a promising field for exploring how these tools can support a transition toward more **interactive, inclusive, and predictive control systems**.

In sum, this research demonstrates that management control—far from being a mere technical instrument—constitutes a **strategic vector of formalization, accountability, and innovation** for Chadian SMEs. Its development, however, requires a **contextualized, participatory, and progressive approach**, an essential condition for transforming constraints into opportunities for sustainable performance.

REFERENCES

1. Anthony, R. N. (1965). *Planning and control systems: A framework for analysis*. Harvard Business School Press.
2. Banque mondiale. (2023). *World Development Indicators: Chad*. <https://databank.worldbank.org/source/world-development-indicators>
3. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
4. Bouquin, H. (2019). *Le contrôle de gestion*. Presses Universitaires de France.
5. Carroll, A. B., & Brown, J. (2023). *Corporate Social Responsibility in the 21st Century*. Routledge. <https://www.routledge.com>
6. Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2–3), 127–168. [https://doi.org/10.1016/S0361-3682\(01\)00027-7](https://doi.org/10.1016/S0361-3682(01)00027-7)
7. Davila, A. (2021). Management accounting and control systems in SMEs. *Journal of Small Business Management*, 59(6), 1060–1082.
8. Elkington, J. (2018). 25 years ago I coined the phrase “triple bottom line.” Here’s why it’s time to rethink it. *Harvard Business Review*. <https://hbr.org/2018/06/25-years-ago-i-coined-the-phrase-triple-bottom-line-heres-why-im-giving-up-on-it>
9. Gond, J.-P., Mena, S., & Crane, A. (2020). Corporate social responsibility and organizational governance. *Academy of Management Annals*, 14(2), 641–674.
10. Goretzki, L., Strauss, E., & Weber, J. (2022). Management accountants and the enactment of management control practices in SMEs. *Qualitative Research in Accounting & Management*, 19(3), 389–415.
11. Granlund, M., & Lukka, K. (2017). Investigating highly established research paradigms: Reviving contextuality in contingency theory. *Accounting, Organizations and Society*, 61, 1–32. <https://doi.org/10.1016/j.aos.2017.01.003>
12. Hopper, T., Lassou, P., & Soobaroyen, T. (2017). Globalisation, accounting and developing countries. *Critical Perspectives on Accounting*, 43, 125–148. <https://doi.org/10.1016/j.cpa.2016.06.002>
13. Jarvis, R., et al. (2020). Management control in SMEs: Practices and innovations. *Small Business Economics*, 54(2), 345–362.
14. Kamdem, E. (2022). Gouvernance et pratiques de gestion dans les PME africaines. *Revue Africaine de Management*, 13(1), 22–41.
15. Kaplan, R. S., & Mikes, A. (2021). Risk management and the new performance agenda. *Journal of Applied Corporate Finance*, 33(2), 8–19. <https://doi.org/10.1111/jacf.12490>
16. Kouamé, S., & Huang, L. (2020). Contextualizing management accounting research in Africa. *Accounting Forum*, 44(3), 245–270. <https://doi.org/10.1080/01559982.2020.1766287>
17. Mignenan, V. (2020). Proposition d’un modèle de construction du capital humain en milieu organisationnel. *Ad machina*, 4, 110–134. <https://doi.org/10.1522/radm.no4.1247>
18. Mignenan, V. (2021a). Pratiques de management et succès de projets d’innovation. *Revue Africaine de Management*, 2(6). <https://doi.org/10.48424/IMIST.PRSM/ram-v6i2.25062>

19. Mignenan, V. (2021b). Proposal of a model for building human capital in an organizational environment. *Journal of Organizational Psychology*, 27(4). pp.72-92
<https://doi.org/10.33423/JOP.V21I4.4545>
20. Mignenan, V. (2023). Management practices and success of innovation projects. *American Journal of Management*, 23(3). Pp. 79-101.
<https://doi.org/10.33423/AJM.V23I3.6361>
21. Mignenan, V., & Meddeb, B. (2022). Analyse des approches et perspectives en management d'innovation frugale. *Revue de l'Entrepreneuriat et de l'Innovation*, 4(16).
<https://doi.org/10.34874/IMIST.PRSM/REINNOV-A-V4I16.34712>
22. Ndemewah, S. R., Osei-Assibey, E., & Amoako, K. (2021). Management control practices and SME performance in Sub-Saharan Africa. *Journal of African Business*, 22(4), 475–493.
23. OCDE. (2021). *Financing SMEs and Entrepreneurs 2021: An OECD Scoreboard*. OECD Publishing.
https://doi.org/10.1787/fin_sme_ent-2021-en
24. Otley, D. (1980). The contingency theory of management accounting. *Accounting, Organizations and Society*, 5(4), 413–428.
[https://doi.org/10.1016/0361-3682\(80\)90040-9](https://doi.org/10.1016/0361-3682(80)90040-9)
25. Otley, D. (2022). The evolution of management control research. *Management Accounting Research*, 55, 100769.
<https://doi.org/10.1016/j.mar.2021.100769>
26. Teece, D. J. (2018). Dynamic capabilities as (workable) management systems theory. *Journal of Management & Organization*, 24(3), 359–368.
<https://doi.org/10.1017/jmo.2017.75>