

Navigating Growth and Innovation: Challenges Faced by Sudanese Startup Companies

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ABSTRACT

Purpose: This study aims to analyze the challenges and opportunities faced by Sudanese startup companies by examining investment potential, the role of the innovation system, and the impact of economic growth on their development and sustainability.

Methodology: This study adopted a qualitative research approach, utilizing semi-structured and email interviews to gather in-depth insights from 21 Sudanese startup founders and key decision-makers. Data were analyzed using thematic analysis, combining descriptive and content analysis to identify key challenges, opportunities, and innovation strategies. By examining real-life experiences, the study provides a comprehensive understanding of the factors influencing startup growth in Sudan.

Findings: The findings reveal that internal factors, such as managerial practices and organizational culture, are more critical to innovation than external factors like market competition. Financial constraints were not a major barrier; instead, risk aversion, political issues, and resistance to change were the primary obstacles. The study concludes that fostering decentralized control, trust in team expertise, and a culture of creativity and risk-taking is essential for innovation.

Practical Implications: By adopting strategic planning, leveraging technology, and developing a shared vision, Sudanese companies can overcome these barriers and achieve sustainable growth. These insights offer practical guidance for entrepreneurs and contribute to understanding innovation and growth challenges in early-stage development contexts.

Originality: This study goes beyond theoretical analysis by offering practical insights into the challenges and opportunities faced by Sudanese startups. It highlights how innovation and strategic adaptability can drive business growth despite economic and structural barriers.

Büyüme ve İnovasyonu Yönetmek: Sudanlı Giriřim řirketlerinin Karşılaştığı Zorluklar

ÖZET

Amaç: Bu çalışma, yatırım potansiyelini, inovasyon sisteminin rolünü ve ekonomik büyümenin gelişim ve sürdürülebilirlik üzerindeki etkisini inceleyerek Sudanlı girişim şirketlerinin karşılaştığı zorlukları ve fırsatları analiz etmeyi amaçlamaktadır.

Yöntem: Çalışma, nitel bir araştırma yaklaşımı benimseyerek, yarı yapılandırılmış ve e-posta yoluyla gerçekleştirilen görüşmeler aracılığıyla 21 Sudanlı girişim kurucusu ve kilit karar alıcıdan derinlemesine bilgiler toplamıştır. Veriler, betimsel ve içerik analizi yöntemlerini birleştiren tematik analiz yoluyla incelenerek, temel zorluklar, fırsatlar ve inovasyon stratejileri belirlenmiştir. Gerçek yaşam deneyimlerinin incelenmesiyle, Sudan'daki girişim büyümesini etkileyen faktörler hakkında kapsamlı bir anlayış sunulmaktadır.

Bulgular: Bulgular, yönetim uygulamaları ve organizasyon kültürü gibi iç faktörlerin, piyasa rekabeti gibi dış faktörlerden daha kritik olduğunu göstermektedir. Finansal kısıtlamalar büyük bir engel olarak görülmemiş; bunun yerine riskten kaçınma, politik sorunlar ve değişime direnç, temel zorluklar olarak tespit edilmiştir. Çalışma, merkeziyetçi kontrolün azaltılması, ekip uzmanlığına güven duyulması ve yaratıcılık ile risk alma kültürünün teşvik edilmesinin inovasyon için önemli olduğunu ortaya koymaktadır.

Pratik Uygulamalar: Stratejik planlama, teknolojinin etkin kullanımı ve ortak bir vizyon geliştirme yoluyla Sudanlı şirketler bu engelleri aşarak sürdürülebilir büyümeyi sağlayabilir. Bu bulgular, girişimciler için pratik rehberlik sunarken, erken aşama gelişim bağlamında inovasyon ve büyüme zorluklarının anlaşılmasına katkıda bulunmaktadır.

Özgün Değer: Bu çalışma, teorik analizin ötesine geçerek Sudanlı girişimlerin karşılaştığı zorluklar ve fırsatlar hakkında pratik içgörüler sunmaktadır. İnovasyon ve stratejik uyum yeteneğinin, ekonomik ve yapısal engellere rağmen iş büyümesini nasıl destekleyebileceğini vurgulamaktadır.

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1. Introduction

In Sudan, startups are becoming an important part of the country's efforts to rebuild its economy and create new opportunities. Young entrepreneurs are stepping up, filled with ambition and creativity, but their path is often blocked by serious challenges. Sudan's unpredictable economy, fragile political climate, and outdated systems make it hard for new businesses to survive, let alone thrive. This research study will attempt to analyze the challenges and opportunities faced by Sudanese startup companies by examining investment potential, the role of the innovation system, and the impact of economic growth on their development and sustainability. And shedding the light on through a thorough analysis of the body of current literature and the execution of both qualitative and quantitative empirical research. The traditional method of approaching innovation frequently revolves around the traditional definition of innovation, which is normally connected to R&D initiatives meant to progress technology and create new products tactics, and the incorporation of IT capabilities for information and communication. But since market dynamics keep changing because of things like globalization and changing consumer behavior, creative strategies need to have a wider view and make use of a wider variety of possible capabilities. According to Abdalla and Mohamed (2020), this entails utilizing marketing techniques, innovative business models, and the integration of information and communication technologies. Because of this, Sudan's economic climate has required the implementation of several strategies to promote an innovative culture, even though the country is home to many startups and small firms. This investigation delves into the financial challenges encountered by Sudanese startups and their impact on success and sustainability. Startups require ample financial resources but often encounter obstacles in securing investment. Through an analysis of current data and a review of existing literature, this study aims to identify specific financial issues that impede entrepreneurs' access to finance and funding in Sudan. It explores the repercussions of financial hurdles on the success and sustainability of Sudanese businesses. By examining their influence on revenue growth, long-term viability, and corporate performance, the study sheds light on the role of financial constraints in business success. Furthermore, the report offers recommendations on how to overcome these financial obstacles and support the growth and ingenuity of Sudanese startups. It provides suggestions to enhance the financial environment for business owners in Sudan, such as facilitating easier access to capital, exploring alternative funding options, and endorsing legislative initiatives. With its insights for investors, entrepreneurs, and regulators, this study contributes to the existing body of knowledge on startup funding in Sudan. The goal of this research is to cultivate an environment that nurtures creativity and economic development by addressing the financial challenges faced by Sudanese business owners and proposing targeted solutions to foster their expansion and sustainability (Suchek et al., 2021).

Even though there is a general understanding of innovation within these enterprises, there lacks a comprehensive framework for assessing their innovative capacities and the factors that shape them. This study aims to bridge this analytical void and establish precise criteria for evaluating levels of innovation. Such an undertaking is crucial in developing practical and evidence-based strategies to link perceived innovation with success in the ever-changing global market.

In Sudan, the cultivation of ingenuity has frequently served as a catalyst for attaining a competitive edge among numerous enterprises—be it in the realm of production, marketing, or even the overall administration of the business. This examination elucidates the degrees of inventiveness embraced by diverse enterprises, delving into how these perceived innovations are influenced by an array of macro and microeconomic obstacles. Furthermore, it proceeds to expound upon the disparities witnessed in terms of innovation and the prevailing factors contributing to such patterns (Mohamed et al., 2021).

This investigation has been primarily driven by the constant evolution of technology and the imperative for businesses to adapt and reorganize their operations. Accordingly, the study's focus centers on the difficulties encountered in this rapidly changing and dynamic business realm

and their ramifications for Sudanese startups. The exigencies of the global business landscape necessitate swifter and more efficient strategies for addressing the shifts in technology and the escalating global competition (Teece, 2020).

This study takes a closer look at these challenges and opportunities. We want to understand the environment Sudanese startups are working in and find practical ways to help them grow and innovate. The goal isn't just to highlight the problems—they're already well known—but to offer thoughtful insights and strategies that can help move things forward. This study aims to analyze the challenges and opportunities faced by Sudanese startup companies by examining investment potential, the role of the innovation system, and the impact of economic growth on their development and sustainability.

1.1 Background

Sudan's strategic location between the Arab world and Sub-Saharan Africa has shaped its unique cultural and economic landscape. However, decades of political instability, economic sanctions, and internal conflicts have left the country with underdeveloped infrastructure, limited access to technology, and a fragile economy. Much of Sudan's output still relies on agriculture and raw materials, offering little in terms of value-added production or innovation (Sudan & Taggar, 2021). These structural issues directly affect the startup scene. Entrepreneurs face a tough climb: capital is hard to access, expertise is in short supply, and government support is often directed toward specific sectors or projects (Dodo, 2020). Many startups struggle to survive beyond their first few years, not due to a lack of vision or creativity, but because of the deeply rooted challenges that define Sudan's economic reality (Mohamed, 2020). Still this environment has sparked resilience and creativity among a growing number of entrepreneurs. There's a rising awareness of the importance of innovation, digitization, and strategic planning. By shedding light on their experiences, this study aims to understand how Sudanese startups can overcome these barriers and thrive in a system not yet built to support them.

2. Literature Review

Understanding how startups grow, adapt, and innovate requires a deep dive into global experiences, while also acknowledging local realities. In developed countries like the United States and the United Kingdom, startups tend to benefit from robust technological infrastructure, accessible funding, and innovation-friendly policies (Balland et al., 2022). By contrast, developing economies such as Nigeria and Tunisia often rely on adapting existing technologies and face challenges in creating original innovation systems. This global comparison suggests that countries like Sudan can learn from both models while creating localized strategies that reflect their specific circumstances (Coenen and Morgan, 2020).

Startups are typically born from a vision to solve a specific problem using innovative ideas. According to Aichner et al. (2021), they often begin on a small scale, driven by passion, risk, and creativity. However, their early stages are risky. Noted startups operate with limited resources in unpredictable markets. Many don't survive past their second or fifth year. Despite these odds, successful startups such as those in Japan demonstrate the importance of speed and innovation in outpacing traditional corporate practices (Maritz et al., 2020).

To scale and grow, startups typically adopt one of two strategic paths—internal or external. suggested that internal strategies focus on improving operational efficiency and employee capacity, while external strategies rely on partnerships, mergers, or new market entry (Karen & Biziere, 2014; Frigenti, 2020; Yan et al., 2023). As business landscapes grow more complex, emphasized the need for flexible, adaptive strategies over rigid integration models. This adaptability is especially crucial in volatile environments like Sudan, where startup success depends on innovation and strategic foresight (Njenga, 2022).

Innovation is at the heart of startup survival and growth. Hyytinen, A., Pajarinen, M., & Rouvinen, P. (2015). emphasized that startups must engage in disruptive innovation—going beyond applying old tools to new problems. Innovation should be embedded in a startup's DNA. Bocken and Snihur (2020), and Ghezzi and Cavallo (2020) all highlighted the importance of embedding novel, valuable ideas in business models. However, Kuckertz et al. (2020) warned that innovation must also be protected to ensure a lasting competitive advantage. Other researchers, including Lerner and Nanda (2020), emphasized the role of technological tools and strategic foresight in reaching untapped markets and customer groups.

The Sudanese context presents a distinct set of challenges. Financial systems in Sudan often demand high collateral and detailed feasibility studies, which many early-stage startups struggle to provide (Arabi & Abdalla, 2020). Access to funding is limited, and the startup environment lacks administrative, technological, and legal infrastructure (Ahmed, 2020; Daffalla et al., 2021). Entrepreneurs also face political instability, unclear tax structures, and inefficient bureaucracies (Mohamed, 2020; Abbass Ali, 2023).

Despite these challenges, there are ways forward. Studies highlight the importance of adopting local strategies for innovation and growth, such as developing stronger strategic partnerships building capable teams (Monteil et al., 2020; Carson et al., 2020), and embracing technology early (Elbadawi et al., 2023; Sudan & Taggar, 2021). Sudanese startups must also invest in continuous learning to stay competitive in rapidly evolving markets (Steel, 2021; Said & Enslin, 2020).

By synthesizing these insights, this study contributes to a better understanding of both the global startup ecosystem and the Sudanese context. It offers a solid foundation for proposing tailored, evidence-based strategies to support innovation and resilience in Sudan's entrepreneurial landscape.

3. Research Methodology

3.1 Study Approach

This study employed a qualitative research approach, utilizing self-administered interview forms to collect data from Sudanese startup companies. The qualitative method provided in-depth insights into the challenges faced by these startups, particularly concerning growth and innovation. This study uses a qualitative approach to capture the real-life stories and experiences of Sudanese startup founders. It's not just about numbers—it's about understanding how people navigate the startup journey in a tough environment (Tomaszewski et al., 2020; Denscombe, 2003).

3.2 Area of Study

The study focused on Sudan, particularly Khartoum, Omdurman and Bahri those are the Capital and economic center of Sudan, with additional respondents from other cities to ensure diverse perspectives. The study was conducted in 2023.

3.3 Data Collection and Sampling Procedure

Between June and October 2023, we conducted interviews with 21 entrepreneurs. We chose them based on their active involvement in running startups for at least two years. These entrepreneurs were selected because of their unique insights into the challenges and opportunities facing startups in Sudan. Given the country's evolving economic landscape, they provide valuable perspectives on how local businesses navigate financial and technological obstacles. These were people who had seen the ups and downs of entrepreneurship and had valuable insights to share.

3.4 Interview Method

3.4.1 Semi-Structured Interviews

Semi-structured interviews provided flexibility, allowing respondents to elaborate on their experiences and challenges in startup growth and innovation (Stenfors, Kajamaa & Bennett, 2020).

3.4.2 Email Interviews

Email interviews were conducted to accommodate logistical and financial constraints in Sudan. This method allowed participants to provide detailed responses at their convenience. Bowker and Tuffin (2004) suggests that email interviewing is potentially empowering for research participants because it allows them to control when, where, and how to respond (Bowker & Tuffin, 2004, as cited in James, 2016).

3.5 Ethical Considerations

We obtained ethical approval from the Karabuk University Research Ethics Committee (Approval No. 27/10/2023 tarih ve 2023/07(38,39). Everyone who took part gave their full consent, and we made sure their identities and data remained confidential.

3.6 Interview Process

We reached out to participants through local incubators, business networks, and referrals. Interviews were conducted in either English or Arabic, then transcribed and translated where necessary. Using thematic analysis, we carefully reviewed the data to identify recurring themes and meaningful insights, and we confirmed our findings through feedback from the participants themselves. Participants were selected based on their expertise in startup development. Semi-structured and email interviews were conducted with Sudanese entrepreneurs and financial representatives, ensuring comprehensive coverage of the study. By adopting this qualitative methodology, the study provides a deeper understanding of the challenges and opportunities faced by Sudanese startups (Strijker et al., 2020).

4. Analysis

This study took a qualitative research approach, using semi-structured, in-depth interviews to explore key aspects of growth and innovation among Sudanese entrepreneurs. Data were collected through both face-to-face and email interviews, with each session lasting around an hour. The primary research questions focused on understanding the main challenges Sudanese startups face in their early stages, the strategies they use to navigate market access and competition, and how entrepreneurs view the role of technology in driving business growth.

To analyze the interviews, a thematic analysis method was applied, following a two-step approach: descriptive analysis and content analysis. The descriptive analysis highlighted participants' perspectives through direct quotes, ensuring their voices were accurately represented. Meanwhile, the content analysis aimed to uncover key themes and relationships by organizing responses into broader categories. This was done by carefully reading through the transcripts multiple times, identifying recurring ideas, and grouping similar concepts together.

In the interpretative stage, the findings were compared with existing literature to provide deeper insights. Several key themes emerged, including challenges related to securing funding, strategies entrepreneurs use to access financial support, the government's role in fostering innovation, and how innovation contributes to business success. The study also identified critical obstacles hindering startup growth, such as a lack of long-term vision, an overemphasis on short-term operations, and a rigid management style characterized by centralized decision-making, risk aversion, and resistance to change.

By examining real-life experiences and market conditions, this research offers a clearer understanding of both the struggles and opportunities that Sudanese startups encounter. These insights carry important implications for policymakers and entrepreneurial support initiatives, highlighting areas where targeted interventions could help startups thrive.

5. Summary of Findings

The findings from this study shine a light on what truly drives innovation within Sudanese startups. While much of the existing literature emphasizes external pressures—like competition and market dynamics—as the main triggers for innovation, our research tells a slightly different story. Across the interviews, most startup leaders pointed to internal motivators—things like leadership style, team dynamics, and company culture—as the real engines behind innovation. This aligns with the perspectives of Hyytinen, A., Pajarinen, M., & Rouvinen, P. (2015), who emphasized the importance of internal strategic vision in enabling disruptive innovation. Similarly, Waring et al. (2015) noted that fostering a supportive internal environment is essential for bold innovation to flourish.

Interestingly, financial constraints—often considered a major hurdle—were not seen as the biggest roadblock by our participants. In fact, many founders found ways to innovate despite limited funds, echoing findings by Ghezzi & Cavallo (2020), who argued that agility and creative strategy can often compensate for financial limitations. Kuckertz et al. (2020) also found that during crises, many startups found unconventional paths to growth, even with tight resources.

One of the strongest themes that emerged was the role of trust and decentralized decision-making. Participants shared how giving team members more autonomy led to greater creativity and more successful projects. These insights are supported by Eriksen et al. (2021) and Didonet et al. (2020), who emphasized that empowerment and long-term thinking improve innovation performance.

Finally, the study's ambition to develop an innovation profiling system for future research resonates with ideas put forth by Saunila (2020) and Linde et al. (2021), who advocated for the need to measure and benchmark innovation capability in developing countries.

Taken together, these findings don't just confirm what's already been written—they add a fresh, grounded perspective based on real stories from the Sudanese startup ecosystem. They also offer a strong foundation for future research and practical tools that can help local entrepreneurs turn innovation into action.

6. Conclusion

The investigation concludes that the primary obstacles to innovation and expansion in the Sudanese business landscape are closely intertwined with a lack of long-term foresight and an excessive preoccupation with short-term operational concerns. The majority of companies in Sudan adhere to a "control typology," prioritizing rigorous and centralized information control, limited delegation of decision-making authority, and a reluctance to take risks. This approach to corporate management is largely influenced by an unpredictable and turbulent environmental context, characterized by stringent government regulations, an unstable and underdeveloped market, and socio-political issues stemming from wealth inequality. Consequently, the local business environment tends to reject innovation in favor of existing, tried-and-true solutions, hindering the establishment of a sustainable knowledge-based economy in Sudan. The current Sudanese government faces mounting pressure to find prudent resolutions to the array of socio-political and economic challenges it confronts. This research underscores the need for policymakers to recognize the impact of indigenous corporate management practices in constraining the capacity for sustainable technological progress. Rigid, fact-based approaches to formulating corporate strategies, driven by a predetermined vision and a managerial focus on cost reduction, which are characteristic of a "control typology," are unlikely to foster the broader societal objectives of innovation and advancement in Sudan. This study has yielded a comprehensive and nuanced understanding of the difficulties faced by Sudanese companies in embracing and effectively leveraging technology for profitability. It is imperative that Sudanese startups be guided by a well-defined roadmap for sustainable innovation and growth, achieved through the crystallization of a enduring and shared vision and mission throughout the organization, as well as the cultivation of a corporate culture that encourages creativity and risk-taking.

By departing from traditional and potentially outdated managerial practices and transitioning to more innovative strategic and operational solutions, Sudanese companies can chart a course towards success. These findings have relevance beyond Sudanese entrepreneurs and companies, as they contribute to a broader comprehension of the practical challenges associated with implementing innovation programs in countries at the early stages of technological advancement and innovation-driven structural and socio-economic changes. Success stories like those of Apple Computer, Yahoo, and Google can be attributed to the fundamental concept of “creativity,” which involves the generation of novel products and ideas. However, such successful practices and strategies necessitate a strong strategic orientation. The pursuit of alternative approaches and improvement efforts hinges on the essential need for intelligent and effective strategic planning practices, whether in Sudan or in more digitally advanced economies like that of the United States. This includes a necessary emphasis on technology, the utilization and management of existing knowledge, the cultivation of strategic thinking, and the recognition of potential opportunities on a global scale.

7. Implications and Recommendations for Future Research

The growth of businesses is vital across all industries, including Sudanese startups, which face significant challenges. As discussed earlier, Sudan’s unstable legal, social, and economic environment makes it difficult for startups to establish a strong market presence. Additionally, without robust technological infrastructure, startups may struggle to compete in a research-driven market. This study offers valuable insights into these challenges and practical strategies to address them. Crafting well-structured recommendations for future research requires justifying the need for novel research topics rather than addressing common industry issues. Each suggestion should be supported by thorough analysis, examples, and evidence. Organizing ideas with clear headings and logical progression helps connect research findings to meaningful recommendations. This section allows doctoral candidates to propose focused, innovative research agendas that explore modern, critical issues with purpose and credibility.

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