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African Innovation, Global Impact: Sub-Saharan Africa's Digital Service MNCs

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Keywords: Sub-Saharan Africa, digital services multinationals, international business, digital innovation, emerging economies

<https://doi.org/10.46697/001c.145023>

AIB Insights

Vol. 26, Issue 3, 2026

This paper explores the emergence of Digital Service Multinational Corporations (DSMNCs) from Sub-Saharan Africa, a new breed of “digital natives” challenging traditional international business and international entrepreneurship models. Drawing upon internationalization theories such as internalization theory and firm-specific advantages (FSAs), we examine how these African DSMNCs that leverage digital technologies and networks for rapid global expansion, are defying expectations. We explore their unique competitive advantages, contrasting them with traditional MNCs and established business models. By examining these firms’ unique characteristics and strategies, this paper contributes to a deeper understanding of the evolving dynamics of international business in the digital age. Furthermore, it highlights the implications of these developments for multinationals, the role of government policy in fostering a supportive ecosystem, collaborative endeavors, and the potential for these firms to drive intra-African trade and economic growth.

INTRODUCTION

The world of international business has been turned upside down by globalization and digital technologies. Imagine a new breed of multinational corporation (MNC), one not weighed down by legacy infrastructure but born agile, digital to its core. Globalization and the relentless march of digital technologies have cleared the stage for these “digital natives,” particularly those emerging from the dynamic landscapes of emerging and frontier economies. These are not your grandfather’s MNCs; they possess innovation ingrained in their very DNA, ready to seize opportunities, compete fiercely, and extend their reach across the globe.

Consider this: Digital Service Multinationals (DSMNCs) are not just relying on their own internal resources and a strict top-down structure. Their real power lies in their complex networks. International business experts observed that their whole global strategy is built on creating and using these networks, which is a major departure from how traditional multinational corporations (MNCs) have always operated. This new way of doing things really challenges the old ideas about how companies go global. On top of that, it is incredible how fast companies that used to be seen as minor players are now becoming major global contenders. Some suggest that this rapid success is often driven by their unique strengths and a powerful, entrepreneurial drive.

Against expectations, Sub-Saharan African DSMNCs are making significant waves. Armed with digital tools, they are tapping into global markets, competing head-to-head with established MNCs, and generating substantial value. Their

swift global expansion has surprised many, underscoring the transformative power of digital innovation in reshaping the global business arena. Across the continent, a vibrant ecosystem of innovative digital companies is taking shape. For example, names like Zeleza (Egypt), revolutionizing healthcare access across MENA; TradeDepot (Nigeria), streamlining Africa’s retail distribution through a B2B digital platform; Nadia (Kenya), delivering vital telemedicine services; Wallets Africa (Nigeria), simplifying financial transactions with mobile payments and cryptocurrency; Ushahidi (Kenya), developing open-source crowdsourcing tools for social impact; and MagilaTech (Tanzania), providing software development and cybersecurity solutions for digital transformation, are leading this charge.

The focus here is on telling the compelling story of this new breed of DSMNCs emerging from Sub-Saharan Africa. We will delve into the unique characteristics that set them apart, the strategies they employ to gain a competitive edge, and the factors fueling their surprisingly rapid journey onto the global stage. This exploration aims to develop practical insights from this growing phenomenon and stakeholders as summarized in the textbox below.

Main Stakeholders Takeaway

For Policymakers: Invest in digital infrastructure and skills, implement smart policies, address the

digital divide, and foster intra-African trade to support the growth of DSMNCs.

For Managers: *Understand the African digital space, make strategic digital investments, forge local partnerships, and embrace agility and innovation to stay competitive.*

For Investors: *Recognize digital prowess and seek agile African firms with strong digital capabilities and high growth potential.*

For African Digital Service MNCs (DSMNCs): *Leverage digital technologies and networks for expansion, highlight unique advantages, and drive intra-African trade.*

For International Business Scholars/Researchers: *Rethink traditional business models and focus on “digital natives” from emerging markets to advance international business theory.*

FROM TRADITIONAL TO DIGITAL: A NEW GLOBAL PARADIGM

Economic thinkers often point to a potent combination for international success: a favorable market opportunity coupled with “firm-specific advantages” or FSAs (Petricevic & Teece, 2019). FSAs are the unique strengths or special “ingredients” a company has that give it an edge over competitors, like a secret recipe that makes your restaurant stand out. Think of it as having a unique recipe and finding the perfect location for your restaurant. However, a great recipe alone is not enough; you need a strategy for expansion. Internalization theory explains why companies expand by setting up their own operations abroad instead of just exporting or licensing. It is about maintaining control to maximize profits from unique strengths and capturing a greater share of the value created via entrepreneurial pursuits (Buckley, 2009; Rugman, 1981).

From an entrepreneurial perspective, it is akin to venturing out with a bold idea and actively seeking new opportunities across borders. IE theory reminds us that operating in a foreign country introduces a “liability of foreignness” (Zaheer, 1995). Despite the inherent challenges of foreignness, this new generation of DSMNCs is exceptionally skilled at global expansion from their very beginning.

The internet and digital tools have fundamentally reshaped the landscape of IB. Technology offers unique avenues for reaching customers and streamlining operations, while simultaneously intensifying competition and demanding constant adaptation (Chen, Shaheer, Yi, & Li, 2019; Eden, 2016). The global marketplace has become significantly more crowded and operates at an accelerated pace (Shaheer & Sali, 2020).

While FSAs, those unique competitive advantages, remain crucial for international success, their nature often revolves around digital capabilities in today's world. This includes possessing sophisticated requisite data analytics, a robust online platform, or a powerful digital brand. Equally important is to recognize that what works effectively in one country may require adaptation in another, underscoring the context-specific nature of FSAs (Strange & Zucchella, 2017; Zucchella, Hagen, & Serapio, 2018).

Interestingly, digital technologies are also enabling entirely novel approaches to global expansion. Instead of solely relying on establishing traditional subsidiaries, companies are increasingly leveraging networks and online platforms to extend their reach. This signifies that building strong relationships, fostering collaborations, and strategically utilizing digital platforms are becoming pivotal strategies for international growth.

The convergence of digitalization and unique FSAs gives rise to a powerful phenomenon: “digitally savvy MNCs.” These companies effectively harness complex technologies to offer superior products or services, cultivate trust with customers online, and achieve rapid international expansion. These firms, including the African DSMNCs, appear exceptionally well-positioned to thrive in today's interconnected and digital global environment. They differentiate themselves from traditional MNCs through their core operations (intangible digital services vs. tangible goods), value chains (digital vs. physical infrastructure), labor force (specialized vs. substantial), regulatory environment (data/ cybersecurity vs. manufacturing/ trade), and economic impact (digital job creation/ disruption vs. broader traditional growth). This distinction also leads to several implications summarized in [Table 1](#). It is from here that one can deduce how this applies to the sub-Saharan Africa context.

AFRICAN CONTEXT: UNLOCKING DIGITAL PROSPERITY

In the vibrant and rapidly evolving landscape of Sub-Saharan Africa, both MNCs and governments hold crucial roles in unlocking digital prosperity. For MNCs in this digital evolution, astute navigation of local digital landscapes is paramount. This includes strategic investment in human capital's digital prowess and the intelligent leveraging of technology for enhanced efficiency and broader reach. True success hinges on a deep understanding of the unique digital terrain – the specific regulations, the nuanced cultural context, and the existing competitive players – and a proactive embrace of digital transformation for gaining valuable insights and facilitating expansion. Governments, acting as cultivators of this digital ecosystem, bear the responsibility of crafting supportive regulations and investing strategically in digital infrastructure and the development of essential digital skills. Both actors must champion digital innovation and nurture a thriving ecosystem through collaborative partnerships.

Sub-Saharan Africa is undergoing a rapid digital transformation, marked by improving internet connectivity and IT set-up resulting from building digital public infrastruc-

Table 1. Contrasting Traditional Multinational Corporations (TMNCs) with Digital Services Multinational Corporations (DSMNCs) in Sub-Saharan Africa.

Feature	Traditional Multinational Corporations (TMNCs)	Digital Services Multinational Corporations (DSMNCs)	Implications
Core Operations	Primarily focused on goods production, encompassing manufacturing, extraction, and distribution.	Primarily focused on providing digital services, including software, data, online platforms, and digital content.	DSMNCs exhibit distinct characteristics that typically require less physical infrastructure, facilitating faster market entry and expansion, and their operations may encounter unique regulatory challenges that differ significantly from those faced by TMNCs.
Value Chain	Often feature complex, global supply chains supported by extensive physical infrastructure e.g., factories, and warehouses.	Value chains are increasingly intangible and reliant on digital infrastructure.	While DSMNCs enjoy greater locational flexibility and operational agility, they may also face heightened vulnerability to disruptions in digital infrastructure or cybersecurity threats.
Labor Force	Characterized by substantial workforce needs across manufacturing, logistics, and other operational functions.	May necessitate a smaller workforce with a higher concentration of specialized skills.	DSMNCs can have a dual impact on local employment. They may create new job opportunities requiring digital skills while potentially displacing workers in traditional industries.
Regulatory Environment	Heavily regulated by manufacturing, trade, and infrastructure-related policies.	Navigating a complex and dynamic regulatory environment, including data privacy laws, cybersecurity regulations, and intellectual property rights.	Successfully navigating the regulatory environment for DSMNCs necessitates a comprehensive grasp of the dynamic legal and regulatory frameworks that govern their operations.
Impact on Local Economies	Drive significant economic growth, stimulating local economies by creating jobs, generating tax revenue, and fostering the development of local supplier networks.	Digitalization presents both opportunities and challenges for local economies. While it can drive economic growth through job creation in the digital economy and improved access to information and services, it may also disrupt traditional businesses and exacerbate existing inequalities.	Requires a thorough assessment of the social and economic impact of DSMNCs on local communities, with a focus on developing policies that ensure equitable benefits and minimize negative impacts.

ture. Yet, uneven access and affordability persist as significant hurdles, underscoring the need to cultivate fertile ground for digital growth (World Bank, 2024). Enterprising African DSMNCs are stepping up to this challenge, leveraging digital tools to bridge the global digital divide and significantly boost the economy. They strategically utilize their established connections, inherent entrepreneurial drive, strong interpersonal skills, and the improving digital backbone to create innovative solutions for long-standing challenges. For instance, by effectively building trust with the African diaspora, they are forging new opportunities and economic ties across the region.

Consider the likes of Ushahidi, empowering social impact through technology. The Ushahidi Platform is a crowdsourcing and mapping tool that helps communities use information to create change. It helps drive social change the world over. Similarly, Nala, an African -led fintech, is revolutionizing cross-border transactions across continents by

leveraging technology to provide faster, and more affordable money transfers. These effectively address the limitations of traditional methods.

Traditional internationalization theories, such as internalization theory with its emphasis on top-down control and FSAs, do not fully capture the dynamic reality of today's digital world. Sub-Saharan Africa DSMNCs, utilizing digital tools to leapfrog geopolitical barriers, disrupt established business models, and build global connections, present a new paradigm. Unlike traditional MNCs, these firms often prioritize collaboration and cultivating relationships over rigid internal hierarchies. Digital transformation is not just about adopting modern technologies; it represents a complete reimagining of business models.

In today's digital landscape, connections are paramount, often outweighing the significance of solely possessing unique advantages or being concerned about geographical distance. We are witnessing the rise of "*digital born-globals*"

Table 2. Sub-Sahara Africa-specific actionable recommendations

Recommendation	MNC Managers	Government Policymakers
Harness & Leverage Digital Opportunities	Understand in depth the local digital landscape; invest in internal digital skills; strategically leverage digital tech for efficiency and growth.	Build a supportive digital environment via smart regulations, infrastructure investment, and public digital skills programs.
Lead Digital Transformation	Adopt digital technologies to reshape business models; effectively utilize data analytics and AI for insights; leverage digital platforms for wider reach.	Implement policies promoting digital innovation and build a thriving digital ecosystem (incubators, R&D).
Build Collaborative Alliances	Build strong local alliances, cultivate an innovative culture, and foster innovation internally and externally.	Facilitate public-private partnerships for technology & knowledge sharing for collaboration in digital space environment.

– companies that achieve rapid global expansion thanks to the internet and the ability to tap into knowledge networks worldwide (Hervé, Schmitt, & Baldegger, 2020). This swift shift necessitates a re-evaluation of our traditional understandings of IB and the development of new, practical approaches to operating globally.

Sub-Saharan Africa, often perceived as facing insurmountable challenges, is now emerging as a significant hub for innovation and entrepreneurship, leveraging unique local insights, contextual understanding, and technological expertise. African DSMNCs are pioneering innovative systems and business models to effectively compete in the digital landscape, transcending geopolitical boundaries, embracing a “business without borders” approach, and leveraging the “African advantage” to significantly promote intra-African trade. As Africa deepens its engagement with digital technologies and the global economy, these firms are strategically positioned to significantly influence Africa’s future interaction with the rest of the world. Creating an enabling environment that fosters public-private collaborations in driving innovation and promoting robust economic growth throughout Sub-Saharan Africa’s digital journey will be instrumental. Likewise, building a culture of digital innovation and entrepreneurship through supportive policies, as well as nurturing a vibrant digital ecosystem with incubators, accelerators, and R&D hubs, will be crucial for fostering local talent and driving technological advancement.

Sub-Saharan Africa’s burgeoning DSMNCs bring a mixed bag of significant opportunities and distinct challenges. Their reduced reliance on physical infrastructure facilitates rapid expansion, yet this very agility exposes them to vulnerabilities in digital infrastructure and the often-uncharted regulatory landscapes that differ significantly from those faced by traditional multinationals. These inherent characteristics and vulnerabilities directly influence their operational impact, notably on employment and the complex regulatory environments they must navigate.

The impact on employment is multifaceted. While DSMNCs generate demand for digitally skilled workers, potentially leading to wage increases in that sector, they also risk displacing workers in traditional industries, necessitating proactive workforce development policies and educational reforms. Navigating the evolving regulatory terrain demands a deep understanding of dynamic legal frame-

works, a challenge amplified by inconsistencies across the diverse Sub-Saharan African landscape.

Considering this evolution, [Table 2](#) presents Sub-Saharan Africa-specific actionable recommendations outlining crucial strategies for navigating, embracing, and leveraging the digital landscape to foster growth and competitive advantage. Managerial recommendations focus on deeply understanding and leveraging the local digital landscape, adopting transformative digital technologies, and cultivating strategic partnerships, whereas Policy recommendations center on fostering a supportive digital environment, implementing policies that promote digital innovation, and facilitating partnerships for technology transfer and knowledge sharing.

HARNESS AND LEVERAGE DIGITAL OPPORTUNITIES

A critical consideration lies in ensuring that the socio-economic benefits of DSMNC growth are distributed equitably. Policymakers and business leaders must collaborate to harness and leverage digital opportunities to ensure that the growth of digitally savvy DSMNCs translates into equitable socio-economic benefits. This means governments should create strategies to maximize job creation and promote digital inclusion, while also implementing policies to mitigate the negative consequences of disruption. This balance is crucial for a just transition that fuels innovation while safeguarding local economies.

LEAD DIGITAL TRANSFORMATION

Digital transformation requires action from both the public and private sectors. Businesses must lead the charge in adopting and integrating digital technologies across their operations. Governments, in turn, must create an enabling environment by investing in robust digital infrastructure, from high-speed internet to secure data centers. This also includes implementing policies that encourage digital innovation, such as tax breaks for technology R&D and streamlined regulations for new services.

BUILD COLLABORATIVE ALLIANCES

Sustainable digital prosperity is built on a foundation of collaboration. DSMNCs, local businesses, and governments must work together to cultivate an environment where

African innovation can thrive. This involves forming strategic partnerships to facilitate the exchange of knowledge and technology through joint ventures, incubators, and public-private collaborations focused on upskilling the local workforce. By actively fostering this ecosystem, stakeholders can ensure the economic benefits of digital growth are shared, leading to more resilient and inclusive economies.

CONCLUSION

The rise of Sub-Saharan African DSMNCs signifies a profound and transformative shift in global business, where digital prowess, driven by innovation and agility, increasingly outdoes traditional physical assets. Their rise demands a collaborative and forward-thinking approach. MNCs managers must cultivate a deep understanding of and invest strategically in the unique African digital space while actively forging strong local partnerships. Simultaneously, African governments must create supportive and enabling environments through the implementation of smart policies and the development of robust digital infrastructure. Addressing the inherent challenges, such as unequal access to technology and potential job market shifts, requires careful planning and proactive solutions. This on-

going digital transformation, driven by collaboration and mutual understanding, strategically positions Sub-Saharan Africa as a pivotal and influential player in the evolving future of international business.

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Submitted: April 06, 2025 EDT. Accepted: September 17, 2025 EDT. Published: October 14, 2025 EDT.



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REFERENCES

- Buckley, P. J. 2009. The internalisation theory of the multinational enterprise: A review of the progress of a research agenda after 30 years. *Journal of International Business Studies*, 40(9): 1563–1580.
- Chen, L., Shaheer, N., Yi, J., & Li, S. 2019. The international penetration of ibusiness firms: Network effects, liabilities of outsidership and country clout. *J Int Bus Stud*, 50: 172–192.
- Eden, L. 2016. *Strengthening the global trade and investment system for sustainable development*. ICTSD/World Economic Forum.
- Hervé, A., Schmitt, C., & Baldegger, R. 2020. The internationalization of born-digital firms: A systematic review and research agenda. *Journal of International Entrepreneurship*, 18(2): 173–210.
- Petricevic, O., & Teece, D. J. 2019. The structural reshaping of globalization: Implications for strategic sectors, profiting from innovation, and the multinational enterprise. *J Int Bus Stud*, 50: 1487–1512.
- Rugman, A. M. 1981. *Inside the Multinationals: The Economics of Internal Markets*. Columbia University Press.
- Shaheer, N., & Sali, L. 2020. The CAGE Around Cyberspace? How Digital Innovations Internationalize in a Virtual World. *Journal of Business Venturing*, 35(1): 105892.
- Strange, R., & Zucchella, A. 2017. Industry 4.0, global value chains and international business. *Multinational Business Review*, 25(3): 174–184.
- World Bank. 2024. *Digital Transformation Drives Development in Africa*.
- Zaheer, S. 1995. Overcoming the Liability of Foreignness. *Academy of Management Journal*, 38(2): 341–363.
- Zucchella, A., Hagen, B., & Serapio, M. G. 2018. *International Entrepreneurship*. Northampton, Massachusetts: Edward Elgar Publishing.