



Sierra Leone

Priority Areas



Country Profile

2023

**Blockchain and Digital
Transformation in Africa.**

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Note: The information presented here highlights crucial focus areas for the country, especially in the context of the emerging industries of Fintech, DeFi (Decentralized Finance), NFTs (Non-Fungible Tokens), and cryptocurrencies. The information presented sheds light on several developments and pioneering enterprises that are fueling the country's digital progress in the blockchain domain. However, it is important to note that this is not an exhaustive list; rather, it provides a glimpse into the country's direction and ability to achieve key milestones in the blockchain sector.

Fintech

Digital Payment Systems

Orange Money: Orange, a major telecom carrier in Sierra Leone, operates Orange Money, a popular mobile money network. It allows mobile money transfers, bill payments, airtime top-ups, and merchant payments.

Africell Money: Africell, another major telecom carrier, offers its mobile money platform. This service allows mobile users send money, pay bills, buy airtime, and access other financial services.

QCell Money: Sierra Leonean telecom operator QCell offers mobile money. This platform supports money transfers, bill payments, and merchant transactions.

Pay4Me Sierra Leone: Pay4Me is an online payment gateway for online retailers in Sierra Leone. It enables people to make secure internet purchases.

Splash Mobile Money: Splash Mobile Sierra Leone runs a digital payment platform. It enables mobile money transfers, bill payments, and airtime top-ups.

Financial Literacy and Education Programs

National Financial Inclusion Strategy (2017-2020): The National Strategy for Financial Inclusion 2017-2020 created the Digital Financial Services (DFS) Working Group to address Sierra Leoneans' 87% financial exclusion.¹ The group, which includes regulators, commercial lenders, microfinance institutions, wireless network operators, and other stakeholders, facilitates industry-level dialogues, identifies possibilities and obstacles for scalable DFS adoption in rural areas and target markets, promotes stakeholder collaboration, advocates for government support and forward-thinking regulations, and fosters innovative models for expanding DFS. Therefore, building Sierra Leone's digital economy required collaboration and flexibility from the Working Group.

National Financial Inclusion Strategy (2022-26): Sierra Leone's National Financial Inclusion Strategy (2022-2026) targets underrepresented groups like women, youth, rural areas, and MSMEs. The plan expands client-centric financial solutions and employs innovative technology for inexpensive digital financial services². It also provides consistent financial

¹ UNCDF, "Sierra Leone Launches the Digital Financial Services Working Group - UN Capital Development Fund (UNCDF)," [www.uncdf.org](https://www.uncdf.org/article/180/sierra-leone-launches-the-digital-financial-services-working-group), 2016, <https://www.uncdf.org/article/180/sierra-leone-launches-the-digital-financial-services-working-group>.

² AFI, "Sierra Leone's 2022-2026 National Financial Inclusion Strategy," Sierra Leone's 2022-2026 National Financial Inclusion Strategy, 2022, <https://www.afi-global.org/publications/sierra-leones-2022-2026-national-financial-inclusion-strategy/>.

education to all Sierra Leoneans to help them confidently manage their finances and safely access financial services and products.

Mosabi, a Sierra Leonean fintech firm, provides financial services to informal merchants using ed-tech. Through video lessons, gamified quizzes, and surveys, its mobile-based e-learning platform teaches entrepreneurship, business skills, and financial literacy. Mosabi generates creditworthiness ratings for partner financial institutions using engagement analytics and behavior tracking. Mosabi's platform has 20,000 users in six countries and has improved loan payback and savings behavior.³ The business is partnering with banks and financial institutions to expand into more nations and support inclusive missions. Thus, Mosabi empowers users with tools and skills to better their livelihoods by providing transformational and practical value.

Stakeholder Collaboration: Orange Mobile Finance (Orange Money), Mosabi, and Empire Solutions have teamed with the UN Capital Development Fund (UNCDF) to improve financial awareness and recruit women as mobile money agents in Sierra Leone. The collaboration intends to improve financial literacy, credit availability, financial access points, and women agents to expand finance access for low-income people, including women and youth. Half of the 2,000 new agents and 20% of the 500 reengaged agents will be women by October 2022. Mosabi also offers 2,000 digital loans to 10,000 users and financial and digital literacy training. Orange Money, part of France-based Orange SA, services millions of clients worldwide. UNCDF spent \$75 million on financial services for 3 million unbanked and underbanked people in 2020⁴.

Microfinance and Microcredit Services

Kiva Protocol: Sierra Leone's breakthrough blockchain-based financial inclusion program. It links thumbprints to identities, creating a national credit bureau. The goal is to give most unbanked people financial access and stimulate bank lending. The program has enrolled all 5.1 million adult Sierra Leoneans⁵. Thus, the project improves government services, lowers cell operator and startup costs, and brings more small enterprises into the formal sector. Kiva will soon spread to other countries.

Kiva: Sierra Leone's Kiva is a well-known global microfinance platform. It connects international lenders with Sierra Leonean borrowers for small loans to

³ Tom Jackson, "Sierra Leone's Mosabi Combines Ed-Tech, Fintech to Boost Inclusion," *Disrupt Africa*, March 4, 2019, <https://disrupt-africa.com/2019/03/04/sierra-leones-mosabi-combines-ed-tech-fintech-to-boost-inclusion/>.

⁴ Sheen Gupta, "MICROCAPITAL BRIEF: Empire, Mosabi, Orange, UNCDF Seek to Boost Financial Inclusion in Sierra Leone with Focus on Financial Literacy, Recruiting Women as Mobile Money Agents - MicroCapital," *MicroCapital*, January 14, 2022, <https://www.microcapital.org/microcapital-brief-empire-mosabi-orange-uncdf-seek-to-boost-financial-inclusion-in-sierra-leone-with-focus-on-financial-literacy-recruiting-women-as-mobile-money-agents/>.

⁵ Hannah Murphy and Neil Munshi, "Sierra Leone's Thumbprint Breakthrough to Sign up Unbanked," *Financial Times*, August 21, 2019, <https://www.ft.com/content/40980b7c-c350-11e9-a8e9-296ca66511c9>.

	<p>entrepreneurs and individuals without bank accounts. Borrowers use the funds for schooling, starting or expanding a small business, and living improvements.</p> <p>InvestED's mobile app: It trains low-income entrepreneurs in business ownership, business, and finance. SMT's and other lenders' credit products are available to users via the app. Besides, mobile money handles loan repayment.</p>
<p>E-commerce and Online Marketplace Development</p>	<p>E-commerce in Sierra Leone is still developing as of September 2021. Mobile phone providers' mobile money services are growing in popularity, although cash still dominates transactions. The ICT infrastructure is poor, and debit and credit card use is limited. ATMs are available at some banks but not nationwide. Again, DHL delivery services are expensive despite rising internet sales. Sierra Leone's burgeoning e-commerce business offers opportunity for companies, but poor digital infrastructure and payment methods provide hurdles.⁶</p>
<p>Regtech Solutions for Regulatory Compliance</p>	<p>Sierra Leone's Ministry of Information and Communications is implementing the \$50 million World Bank-funded Digital Transformation Project. The project intends to improve government digital services, broadband internet access, and digital skills. The five-year project aims to digitally link Sierra Leoneans and increase digital economy participation. Smart Africa, a digital startup that digitizes Africa, is partnering with the Ministry. Digital transformation will improve government services and project delivery.⁷</p>

⁶ International Trade Administration, "Sierra Leone - ECommerce," [www.trade.gov](https://www.trade.gov/country-commercial-guides/sierra-leone-ecommerce), 2021, <https://www.trade.gov/country-commercial-guides/sierra-leone-ecommerce>.

⁷ Regtech Africa, "Sierra Leone: Information Ministry Commences Implementation of Digital Transformation Project - REGTECH AFRICA," RegTech, January 23, 2023, <https://regtechafrica.com/sierra-leone-information-ministry-commences-implementation-of-digital-transformation-project/>.

DeFi

Infrastructure Development	<p>KafkaMining is a prominent provider of cloud mining services in Sierra Leone, contributing to the country's economic development and empowering locals. The company emphasizes sustainable mining, community development, and employment. KafkaMining works with local businesses and government to build a cloud mining ecosystem to make Sierra Leone a leader in Africa. Sierra Leone has promising cloud mining prospects for regulatory framework, infrastructure, education, and skill development. Renewable energy sources improve sustainability and efficiency. International cooperation and investment boost innovation and market access. Sierra Leone's digital transformation and prosperity will benefit from cloud mining's financial inclusion and economic empowerment.</p>
Regulatory Framework Establishment	<p>Sierra Leone's goals to become a "Smart Country," including using blockchain technology for elections and launching the Kiva Protocol for a national identification system, affect DeFi growth. It has created a more inclusive and digitized financial ecosystem by adopting digital ledger technology and promoting financial inclusion through initiatives like the Kiva Protocol, enabling DeFi solutions and decentralized financial services for the unbanked and underbanked. However, the current level of DeFi adoption in Sierra Leone is unknown, and these projects' success will decide their impact on the country's DeFi future.</p>
Access to Financing	<p>UNCDF, Orange Mobile Finance (SL) Ltd., Mosabi, and Empire Solutions are working to improve financial inclusion in Sierra Leone. Remote communities lack financial services because most financial institutions are in cities. The partnership wants to provide digital financial services to women, youth, and low-income people. Orange Money will provide training and loan technology to increase female agent representation, financial literacy, and entrepreneur credit. Over 10 months, the project will recruit and educate 2,000 new agents (50% women), reactivate 500 inactive agents (20% women), and train 10,000 consumers in financial and digital literacy, with 2,000 receiving digital loans.⁸</p>

⁸ UNCDF, "Sierra Leone - a New Private Sector Consortium in Digital Finance for Underserved Markets," www.uncdf.org, 2021, <https://www.uncdf.org/article/7377/sierra-leone-a-new-private-sector-consortium-in-digital-finance-for-underserved-markets>.

Education and Awareness

Freetown hosted the world's first blockchain-powered election in early March 2018. This new voting mechanism addressed electoral transparency and accountability issues. Sierra Leone, like many underdeveloped nations, struggled to ensure electoral transparency due to low literacy⁹. Low literacy levels have historically impacted individuals' knowledge of the voting process and election importance. Thus, education and awareness efforts about blockchain-based voting and its benefits were necessary. Education and awareness help voters understand the importance of their votes and acquire trust in the electoral process, supporting greater transparency and participation in future elections.

Collaboration and Partnerships

Sierra Leone's DeFi will benefit from RippleNami and Data Edge Revenue's collaboration¹⁰. Blockchain-based data visualization and management solutions will improve data infrastructure and support DeFi protocol adoption. Thus, digitization and widespread access to key services will improve financial inclusion, supporting fintech innovation. DeFi initiatives in Sierra Leone will empower individuals and communities and boost social and economic development thanks to blockchain technology's transparency and security. However, the impact will depend on execution, adoption, and Sierra Leone's DeFi regulatory framework.

⁹ Usman Chohan, "Blockchain Enhancing Political Accountability? Sierra Leone 2018 Case," *SSRN Electronic Journal* 1, no. 1 (2018), <https://doi.org/10.2139/ssrn.3147006>.

¹⁰ Intelligent CIO, "RippleNami, Inc. Announces Partnership to Accelerate the Use of Blockchain in West Africa," *Intelligent CIO Africa*, 2017, <https://www.intelligentcio.com/africa/2017/09/07/ripplenami-inc-announces-partnership-to-accelerate-the-use-of-blockchain-in-west-africa/>.

Cryptocurrency

Regulatory Framework	<p>Sierra Leone's 2022 cryptocurrency ban will affect its adoption and potential economic benefits. The government restricts access to the benefits of a decentralized and global financial system by banning digital currencies, which inhibit financial inclusion and blockchain technology innovation and investment. The restriction will prevent foreign investors and crypto enterprises, reducing economic growth and missing opportunities to participate into the global digital economy. Again, Sierra Leone's ban on cryptocurrencies will isolate it from the financial community, making it harder for its residents and enterprises to engage in the digital financial ecosystem.</p>
Financial Literacy and Education Programs	<p>UNCDF Mobile Money for the Poor's "Digital Financial Services" project in Sierra Leone aims to expand digital financial offerings for women, youth, and micro/small and medium companies (MSMEs) to support equitable economic growth. Accessible and inexpensive digital financial services will help Sierra Leone's Sustainable Development Goals and national financial inclusion goals. The project aims to improve financial inclusion for low-income MSMEs, women, smallholder farmers, and youth by 2021. The initiative will accomplish this through three main interventions: developing an investment institution for innovation, advocating for and improving regulatory capacity in financial technology, and supporting evidence-based learning. Thus, these digital banking services will allow 100,000 people to borrow and save.¹¹</p>
Microfinance and Microcredit Services	<p>BRAC Microfinance's digital transformation prioritizes client value and reduces the gender gap in women's technological-based financial inclusion. Hence, it is establishing a core banking system and testing mobile money-based loan repayments to improve operational efficiency and customer convenience¹². Responsible microfinance will empower poor people and build resilience.</p>

¹¹ UNCDF, "United Nations Capital Development Fund PROGRAMME DOCUMENT (Sierra Leone) Programme Title: Digital Financial Services in Sierra Leone Implementing Partner: Bank of Sierra Leone Brief Description," 2018, https://info.undp.org/docs/pdc/Documents/H42/FINAL%20SL%20Digital%20Financial%20Inclusion%20Project_IBSA.pdf.

¹² BRAC International, "ABOUT- BRAC MICROFINANCE SIERRA LEONE LIMITED," Bracinternational.org, 2022, <https://bracinternational.org/brac-microfinance-sierra-leone/>.

E-commerce and Online Marketplace Development

Sierra Leone's inconsistent internet connections, inadequate infrastructure, expensive expenses, and low ICT penetration make e-commerce deployment difficult. A study identified SMEs' biggest e-commerce adoption hurdles and examined how geography moderates them. 442 SME owners in the capital city and three main rural districts completed the questionnaires¹³. Thus, technological, corporate, and environmental constraints are negatively associated with e-commerce adoption. The survey also indicated that these obstacles hurt rural SMEs more than urban ones. The report advised Sierra Leone's authorities, legislators, entrepreneurs, and SME managers to foster a business-friendly climate and boost rural SMEs' e-commerce adoption. Hence, digital transactions, crypto payment choices, cross-border transactions, and blockchain-enabled supply chain transparency will promote crypto acceptance in underdeveloped countries like Sierra Leone as e-commerce grows.

Regtech Solutions for Regulatory Compliance

The Financial Institutions (FIs) are not required to examine ML/TF risks before launching new products or technology under AML/CFT regulations. Before releasing new financial services or technology, banks perform internal product risk assessments, including ML/TF risk considerations. Larger banks, notably international banking companies, have internal policies for adopting new technologies like online banking, mobile banking, and digital customer identification.¹⁴

¹³ Abdulai Brima and Brima Sesay, "Barriers to E-Commerce Adoption among SMEs in Sierra Leone: The Moderating Role of Geographical Location," *International Journal of Science and Management Studies (IJSMS)* , 2019, <https://www.ijmsjournal.org/2019/volume-2%20issue-1/ijms-v2i1p101.pdf>.

¹⁴. FATF, "Sierra Leone's Measures to Combat Money Laundering and the Financing of Terrorism and Proliferation," www.fatf-gafi.org, 2012.

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