



DIGITAL AND ENTREPRENEURSHIP ECOSYSTEM MAPPING



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i) Table of Abbreviations

SMEDA Small and Medium Enterprises Development Agency

SLEDP Sierra Leone Economic Diversification Project

SME Small and Medium Enterprises

MSME Micro, Small and Medium Enterprises

ETA Electronic Transactions Act

ROBA Registration of Business Act

CAC Corporate Affairs Commission

OARG Office of the Administrator and Registrar General

DSTI Directorate of Science, Technology and Innovation

NIDS The National Innovation and Digital Strategy

PAID Patent and Industrial Design Act

NATCOM National Telecommunication Commission

MTNDP Medium-Term National Development Plan

IT Information Technology

Tech Technology

il) Acknowledgements

This project would not have been possible without the grant and technical guidance of the United Nations Capital Development Fund (UNCDF). We would also want to thank in a special way the United Nations Development Program (UNDP), Sierra Leone Economic Diversification Program (SLEDP) and the SME Development Agency, United Nations Children's Fund (UNICEF) and Invest Salone for the overwhelming support towards this work.

We are appreciative of the cooperation and tolerance of the different stakeholders throughout the entire project towards the building of Sierra Leone's Digital and Entrepreneur Ecosystems. As we submit this report, we are proud of the work that has been done so far and we look forward to leveraging on the good foundation to expand on it further in future. We continue to encourage dialogue and collaboration among the different stakeholders so together we can build the necessary ecosystems for the accelerated development of Sierra Leone.

We would like to thank our own Department of Science Technology and Innovation (DSTI) team for their immense efforts in making this research, report, and interactive tool a possibility. We would like to make special mention of Emeka Okafor, Mahmoud Javombo, Mohamed Bangura, Ishmael Bull, Dominique Oke and Ahmed Tejan Foday. Finally, let me use this opportunity to also express my profound gratitude to the authors of this reports, Tafadzwa Chiganga (lead author) of Muzambiringa (SL) Limited and Oluwagbemileke Joy Jegede(co-author); this would not have been possible without you. This report has provided so much insight and knowledge for us, as a team and we hope that as you read through, it provides the same deep knowledge to you, the readers.

Michala Mackay

Chief Operating Officer

DSTI



UNCDF:

The UN Capital Development Fund makes public and private finance work for the poor in the world's 46 least developed countries (LDCs).

UNCDF offers "last mile" finance models that unlock public and private resources, especially at the domestic level, to reduce poverty and support local economic development.

UNCDF's financing models work through three channels: (1) inclusive digital economies, which connects individuals, households, and small businesses with financial eco-systems that catalyse participation in the local economy, and provide tools to climb out of poverty and manage financial lives; (2) local development finance, which capacitates localities through fiscal decentralization, innovative municipal finance, and structured project finance to drive local economic expansion and sustainable development; and (3) investment finance, which provides catalytic financial structuring, de-risking, and capital deployment to drive SDG impact and domestic resource mobilization.

LEAVING NO ONE BEHIND IN THE DIGITAL ERA

The UNCDF strategy 'Leaving no one behind in the digital era' is based on over a decade of experience in digital finance in Africa, Asia and the Pacific. UNCDF recognizes that reaching the full potential of digital financial inclusion in support of the Sustainable Development Goals (SDGs) aligns with the vision of promoting digital economies that leave no one behind. The vision of UNCDF is to empower millions of people by 2024 to use services daily that leverage innovation and technology and contribute to the SDGs. UNCDF will apply a market development approach and continuously seek to address underlying market dysfunctions.

UNDP:



UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in some 170 countries and territories, they offer global perspective and local insight to help empower lives and build resilient nations. Visit www.africa.undp.org for more information.

SMEDA:



Small and Medium Enterprises Development Agency's core mandate is the promotion of a conducive business environment, including an efficient and effective service delivery network, to empower and develop Small and Medium Enterprises for growth, productivity and competitiveness. The agency operates within five strategic pillars: coordinating Government SME interventions, developing SME Observatory and Database through research and statistical data, providing Business Development Services, Facilitating Access to Finance, and Promoting Entrepreneurial Culture.

As the primary agency responsible for SME development in Sierra Leone, SMEDA seeks the development of SMEs through effective policies and interventions. Data is key to achieving these objectives. For effective and result-based intervention, the agency requires improved data on information that illuminates the nature and characteristics of SMEs, activities and challenges faced; including sector and regional levels. There is a need for data-driven policies and interventions.

SLEDP:



The Sierra Leone Economic Diversification Project (SLEDP) is designed to support the growth of SMEs and Entrepreneurs in Sierra Leone to enhance domestic and international investment and increased revenue from non-mining sectors. SLEDP addresses three key constraints of (i) weak governance and burdensome regulation; (ii) poor entrepreneurship ecosystem and low skills base; and (iii) low-quality infrastructure and addresses these constraints with the following solutions: business environment reforms; SME and entrepreneurship support, public goods investments, and public sector capacity building.

SLEDP focuses on addressing key constraints to the growth of SMEs and entrepreneurship in Sierra Leone, as part of broader national objectives of economic diversification, poverty alleviation and supporting more equitable economic development and has four priority areas that will guide the implementation of activities supported: Women Economic Empowerment, Maximizing finance for development, the building of government capacity, increasing resilience and sustainability. (Source: SLEDP PIM)

INVEST SALONE



Invest Salone is a private sector development initiative that aims to help Sierra Leone realise the benefits of international trade and raise the incomes of 370,000 people by 2025. It plans to achieve this by reducing the risk of investment in Sierra Leone and supporting market development.

Invest Salone is working to reduce the cost and risk of doing business in Sierra Leone. It also helps firms to grow using a spectrum of tools, including brokering links between producers and buyers and technical assistance. Invest Salone works across four key sectors: agriculture, fisheries, manufacturing and tourism.

(source: investsalone.com)

Executive Summary

This report presents a review of the digital, Innovation and entrepreneurship landscape in Sierra Leone. The report covers companies involved, stand-out cases, funding trends, regional comparisons, policy environment, current market size, and near-term growth outlook. The main goals of the report, as a follow through from the research are:

- To identify gaps in the policy and regulatory framework of the technology and entrepreneur ecosystems and provide a basis for policy action to address these gaps and support growth and sustainability of the ecosystems.
- To obtain data that informs policies and development interventions for micro, small and medium enterprises (SMEs) in Sierra Leone. Data collected will form the baseline for subsequent interventions.

The research discovered key findings from Digital and Entrepreneur Ecosystems in Sierra Leone, which vary widely from cultural and historic issues, to infrastructure and systems within the operating environment. Further, through the research, we were able to identify potential high impact solutions that would have a multiplier effect in the development of the ecosystems. Here are the main highlights of the findings:

1.1 Digital Ecosystem Highlights

Key Findings	Recommended Solutions
Limited access to and use of the internet and technology	Digital entrepreneur ecosystem platform
Lack of wide spread digital skills	Second mapping project to focus on the existing start ups
Weak digital infrastructure and platforms	Increased government utilization of the digital ecosystem, platforms and infrastructure
Digital financial systems that significantly lag behind global trends	Increase the use of already existing report and research
Incoherent and duplicated technology and innovation legislation	

1.2 Entrepreneur Ecosystem Highlights

Key Findings	Recommended Solutions
Lack of standardization of the definition of MSMEs	Develop a pool of growth entrepreneurs
Illiterate human capital and limiting culture	Develop collaborative training of entrepreneurs across the different ESO, NGOs and government initiatives
Survival vs Growth entrepreneurs	Attract potential entrepreneurs from the diaspora
Limited access and availability of local finance	Showcase entrepreneur success stories
Lack of sufficient foreign direct investment	Venture building
Poor infrastructure - electricity, transport and water	Centralized planning and organizing of entrepreneurial support interventions
Lack of coordination, recognition and structure in the business and entrepreneurship support network	Mobilization of a change in culture and encouraging positivity, transparency and accountability

1.3 Policy Mapping Highlights

Key Findings	Recommended Solutions
Lack of awareness of policies and laws	More integration of policies and less duplication
Negative perceptions of business laws and government intentions	SMEDA advisory board, collaborating across government departments and private sector
Lengthy and tedious business formalization processes	One stop shop for registration and formalization
Limiting SME legislation and policy	Consistent and standardized definition of MSMEs
	SMEDA strengthening with private partnerships

BACKGGROUND

2.1. Project Background

The world as we know it has been under constant change and development with precedence set by different revolutions including the agricultural and industrial revolutions, but nothing prepared us for the level of change we are now experiencing since the introduction of computers and the internet. This current revolution, termed the fourth industrial revolution (4IR), is changing the way the world functions, redefining the way people interact with each other and with the world around them. This change is rapid, global, and high impact, breaking new grounds in innovation and development and consequently, economic growth. A country that finds itself lagging behind in technology will inevitably be lacking in productivity and growth.

Much is said about the 4IR but the key to this revolution for developing economies is enabling leapfrogging. Ordinarily in previous times, developing economies tended to "follow the leader", playing catch up with the technologies, processes, and systems in the developed countries; a process that kept them behind. However, with the concept of leapfrogging, developing economies are now able to "skip" some development stages, embrace the significant changes and opportunities that 4IR is bringing and potentially achieve developed economy status in record time.

The fourth industrial revolution (4IR) is characterised by the fusion of the digital, biological, and physical worlds with additionally because the growing utilization of recent technologies like computing, cloud computing, robotics, 3D printing, IOT, and advanced wireless

"There is every need to connect our research facilities to academia, link our innovation labs with our inventors, connect our entrepreneurs with startups. All these can be achieved if we truly understand how to connect our activities within the ecosystem and leverage on the potential of using science, technology and innovation as the bedrock for developing a modern economy"

(President Bio, May 2018).

technologies among others has ushered in an exceedingly new era of economic disruption with unsure socio-economic consequences for Africa. So far, it doesn't seem that the continent has mastered twenty-first century development because it still lags behind in many indicators that are very important for a fortunate digital revolution.

According to GSMA (2020), the ICT sector in Africa has continued to grow, a trend that is likely to continue. Of late, mobile technologies and services have generated 1.7 million direct jobs (both formal and informal), contributed to \$144 billion of economic value (8.5 percent of the GDP of sub-Saharan Africa), and contributed \$15.6 billion to the public sector through taxation .

However, the Government of Sierra Leone has sought ways to drive economic development through the joint forces of entrepreneurship, innovation and technology.. From the development of the Sierra Leone Medium-Term National Development Plan (2019-2023) and the National Digital and Innovation Strategy (NIDS), the setting up of Small to Medium Enterprises Development Agency (SMEDA), Sierra Leone Economic Diversification Project (SLEDP), and private sector participation and partnerships among other initiatives, the government has been seeking ways of addressing the factors that enable leapfrogging. Through partnerships with United Nations Capital Development Fund (UNCDF), United Nations Development Program (UNDP), and Invest Salone, the government, through its Directorate of Science, Technology and Innovation (DSTI) embarked on the Digital and Entrepreneur Ecosystems mapping project, which had the following objectives:

- To identify gaps in the policy and regulatory framework of the technology and entrepreneur ecosystems
 and provide a basis for policy action to address these gaps and support the growth and sustainability of
 the ecosystems.
- To obtain data that informs policies and development interventions for micro, small and medium enterprises (SMEs) in Sierra Leone. Data collected will form the baseline for subsequent interventions.

This report presents the results of the mapping researchwork and provide the necessary recommendations for the way forward.

2.2. Digital and Entrepreneur Ecosystems Defined

The word "Ecosystem" is believed to have been coined in 1935 by an English ecologist named Sir Arthur George Tansley. The word is said to have been derived from the Greek word "oikos" meaning home, and "systema" meaning system and was used to define a community of both living (biotic) and nonliving (abiotic) organisms that function in unison through their integrated interactions, for the sustenance of each other. The system was based on an understanding that energy is never created nor lost, but is used and converted from one form to another. Each form of the energy would then be utilized by a component of the ecosystem for its survival, development or function and in the process, create a by-product energy form that would then be utilized by the next component of the ecosystem. An ecosystem was therefore based on a sophisticated web of interdependence between the different components; needless to say, that the ecosystems would come in different forms. A single ecosystem could be a component in another ecosystem.

The digital ecosystem, also known as the internet economy, is that part of the economy where transactions are of or conducted with, or through the use of computing technologies and the world wide web. It consists of different components, which, according to the Digital Economy for Africa Initiative (DE4A) include:

Foundational Elements:

- a) Digital skills and literacy;
- b) Digital Platforms

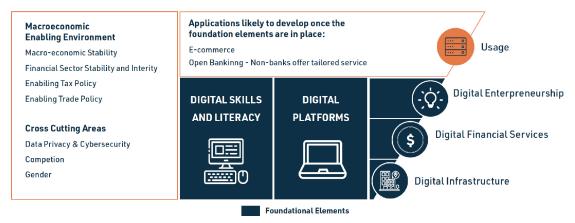
Usage Systems:

- c) Digital Infrastructure,
- d) Digital Financial Services and
- e) Digital Entrepreneurship

Enabling Environment: Macro-Economic Stability, Financial Sector Stability and Integrity, Enabling Tax Policy and Enabling Trade Policy

Cross Cutting Areas: Data Privacy and Cybersecurity, Competition and Gender Equality and inclusion

Key components of the Digital Economy Ecosystem:



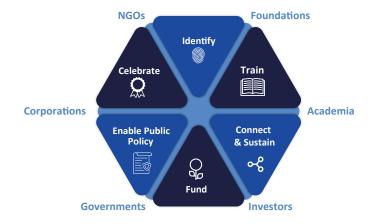
Source World Bank DE4A Initiative: Sierra Leone Report

The digital economy ecosystem depends highly on the government and its approach to creating an enabling environment. It also depends on the country's human capital and its ability to engage, embrace and utilize the digital facilities available to them. It is driven by deep innovation, grounded on research and development, and propelled by a strong entrepreneurial attitude which reduces the dependency on global value chains but encourages self-sufficiency and resilience.

Definitions of the entrepreneurial ecosystem vary, depending on when they were defined and by whom they are defined. However, common across definitions of the entrepreneurial ecosystem is that it is a community that includes the entrepreneurs (existing or potential), their immediate environment and ultimately the market or operating environment. The seeds of the entrepreneurial ecosystem are entrepreneurs, who need to be risk takers, sufficiently educated, and willing and able to utilize opportunities that are available to them. Entrepreneurs, in sufficient numbers, will create a demand for services that will mobilise innovation and the development of relevant products, which would feed into digital entrepreneurship and the digital economy.

Here are some examples of entrepreneur ecosystems models:

- University based Entrepreneurial Ecosystem Green et al (2010) | focused on supporting entrepreneurship through teaching, research, and outreach programs
- Entrepreneurial Ecosystems Model by Isenberg (2010, 2011) identified six components which include conducive culture, enabling policies and leadership, availability of appropriate finance, quality human capital, venture friendly markets for products, and a range of institutional supports
- Aspen Network of Development Entrepreneurs ANDE (2013) identified eight key components which consisted of business support, finance, human capital, culture, policy, research and development, infrastructure and markets.
- Koltai's Entrepreneurship Ecosystem Model (2014) identified six pillars and six key players which are depicted below:



A comparison of the entrepreneurship ecosystem and the digital economy ecosystem shows that they are interconnected and have specific elements that are key for both ecosystems to succeed. These include enabling public policy, sufficient and appropriate financial systems, human capital and infrastructure. A country that strengthens these elements will be well-positioned to have a strong entrepreneurial and digital ecosystem, and consequently take advantage of the opportunities provided by the 4IR through leapfrogging.

In analyzing the digital and entrepreneur ecosystem, we focused on the state of the two ecosystems in Sierra Leone and what we have found to be the cornerstones for strengthening the ecosystem. Our analysis was aligned with not one, but the four entrepreneur ecosystem models which are Isenberg, University, ANDE and Koltai's models and the DE4A models for the digital economy.

2.3. Sierra Leone Snapshot



Sierra Leone occupies a total of 71,740 square kilometres and houses a population of 7.6 million people. The country boasts of wealth from its agriculture, forestry and fishery resources which combined contribute approximately 60% of GDP per annum. Agriculture is by far the strongest, contributing upwards of 50% to GDP in the last four years. The country is also rich in mineral resources which drive exports, specifically for gold, diamonds, bauxite and titanium. Mineral exports contributed 7% of GDP in 2018 and made up 64% of the country's exports.

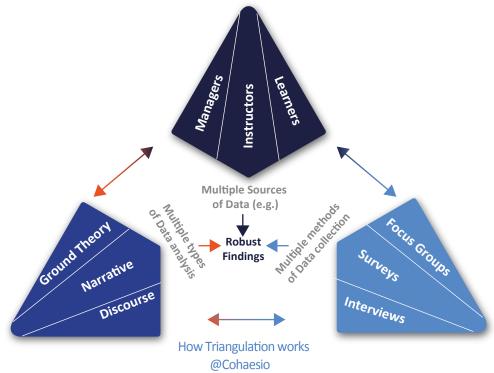
Regardless of the country's wealth in resources, Sierra Leone sits at the bottom of most metrics on poverty and human development due to multiple factors. For example, the civil war of 1991 - 2002 resulted in mass devastation and destruction of infrastructure that reduced the country to a shell of its former glory. From being the stronghold for West African education, Sierra Leone now only has an adult literacy rate of 43.4%, a weak base to support any economic recovery solutions.

While the country experienced double-digit growth in the years following the war, the Ebola epidemic slowed it down and with the combination of natural disasters and the COVID-19 pandemic, the country has been struggling to recover. Strong and divided political opinions across the population have challenged continuity across different governments which have further slowed the development process. The result is an economy that is driven by the informal sector's survival entrepreneurs and high import dependency. The sector continues to have limited access to investment and information and faces within itself threats of collapse due to the operating environmental challenges.

3. Research Methodology

For this research we used methodological and theory triangulation methods to investigate, consolidate and analyze the data. Through methodological triangulation, we used alternative research methods such that the weaknesses of one research method were compensated for by the strengths of another method. Our main research tool was surveying; however, during the survey, investigators were also alert to observe and note the behaviour of the interviewees to gather additional information beyond the simple response to the interview questions.

Once the data had been collected using different methods, theory triangulation was used to further interrogate the data. In theory triangulation, we analyzed the data we collected, compared it to theories collected from desk research and further compared to the results of the additional interviews carried out with key stakeholders. For this part of the research, the Sierra Leone Opportunities for Business Action "SOBA", The State of Entrepreneurship in Sierra Leone Report; and the Digital Economy for Africa DE4A Initiative report on Sierra Leone, were cornerstone referrals. Theory triangulation enabled us to derive the fundamental or baseline issues driving the activities within the digital and entrepreneur ecosystems.



The research for the project consisted of three main components:



The research started with desk research, analyzing already existing reports and similar research. This was followed by stakeholder and national consultant engagements. As the project had many partners each with a different focal point, the stakeholder engagement first ensured that the different stakeholders were aligned in their goals for the project.

Stakeholder consultations provided learning opportunities and helped to roadmap an appropriate approach(es) to ensure that the needs of stakeholders were met. It also provided a space to share real-life experiences that helped to test project assumptions about the tech and entrepreneurship space in Sierra Leone. A significant task of this project was to conduct inclusive stakeholder consultations. The national stakeholder consultations were held from December 16–21, 2020 in Bo, Kenema, Makeni, Port Loko and Freetown, and the diaspora consultations were held from February 15-17 (North America, Europe/Africa, and Asia/Australia).



Makeni Stakeholder Consultation Breakout Sessions



Diaspora Consultations via Zoom

Discussions were organised with a varied group of stakeholders to get more information on their experiences both on constraints and opportunities in the current technology and entrepreneurship ecosystems and to maximize the impact of stakeholders input and recommendations to DSTI. Stakeholders included local entrepreneurs, industry professionals from key sectors such as agriculture, health, and education, among others, and various strata of community leaders.

While the interviews and engagements were more impromptu and directed mostly by the conversation and the desk research was based on the available information, the surveys were more intentional. We aimed to get specific information on the companies and as such internally designed with the survey. After the initial design of the survey tools, a pilot was carried out to test the efficacy of the research tools designed. The pilot data was reviewed and this resulted in further improvements in the research tools and the design of the training program for the interviewers. A total of nine research instruments were adopted and used in the research and each tool focused on a specific component of the digital and entrepreneur ecosystem. The tools were:



While we were able to collect data using all the instruments during the writing of this report, we had not received data from Financiers.

As the research was aimed at understanding SMEs, technology in business and policy interaction, the research was carried out in the following ways:

- For Entrepreneurship Diagnostics, there were two parts: We conducted semi-structured interviews with SMEs and Industry Associations & experts and mapped the number of business support organisations available on a district level, their services, cost, and contact details.
- For Technology Ecosystems Mapping, there were two parts also: We conducted semi-structured interviews with tech businesses, investors, funders, and other financial supporters of innovators and entrepreneurs; and hubs, accelerators, and other non-financial supporters of innovators and entrepreneurs. We also mapped government use of tech in service delivery and internal administration. This was done through interviews with IT managers in Government MDAs.
- For Policy Mapping, there are two parts as well: We conducted semi-structured interviews with policy actors involved in legislation and implementing current technology, innovation and entrepreneurship laws. We also mapped key business processes in which entrepreneurs and tech businesses engage, at a district level.

Data used in the surveys and interviews were sourced from different key players. Below is a table with the data sources.

	Instruments	Data Sources
1	SMEs	SMEDA & CAC
2	Industry associations & experts	SL Chambers of Commerce andKey informant interviews
3	Financier	Key informant interviews & desk research
4	Use of Tech in Government	SL Chambers of Commerce andKey informant interviews
5	ESOs	Key informant interviews & desk research
6	Tech businesses	CAC, desk research & key informant interviews
7	Process	Ministry of Local Govt (provided contactsfor district & city administrators)
8	Policy	Key informant interviews
9	BSOs	 Ministry of Local Govt (provided contacts for district & city administrators)

The surveys and interviews were a fair success, with most of the data collected meeting the quota set for the research. We did not have any submissions from the financiers, and we continue to follow up with them for more information to feed the development of the entrepreneurship tool. We had high participation from SMEs (78%), Business Support Organisations (100%), Processes (100%), and a lower participation from Policy (50%), Government and governmental institutions (40%) and Tech businesses (33%).

The triangulation method used was efficient in addressing the issues around survey participation and the natural selection of SMEs. Regardless of the challenges mentioned above, we were still able to collect substantial data, sufficient for us to carry out an analysis and achieve the goals of this research.

Limitations of the Research

Due to the COVID-19 pandemic and the consequential social distancing protocols, although the project was launched in November 2019, work effectively started in December 2020. As a result, there were significant time constraints in the execution of the project, which resulted in some data not being collected, or a limited amount of analysis being done. For example, during the data analysis stage, we realized that the data for the surveys had had a natural selection as it was sourced mostly from SMEDA. The CAC data received was incomplete and hence there was a high dependency on the SMEDA data. The result of this was that mostly SMEs registered with SMEDA were surveyed, and these would typically fall under micro businesses. Small to medium businesses with a higher asset and revenue base was not sufficiently represented in the surveys.

A key recommendation in terms of the research work is to carry out an additional mapping that will fill in some of the gaps that arose from the first mapping initiative. This additional research would focus on getting additional details on the companies operating in the different sectors, including the larger startups that may have been missed during the initial process. This data would then be fed into the entrepreneur ecosystem mapping tool which will have a directory of all the businesses identified. This will be discussed in further detail in the recommendation section.



4. Key Research Findings

In this section, we discuss the key takeaways from the research we carried out, focusing on the areas where improvements can be made to improve the efficiency of the digital and entrepreneur ecosystems.

4.1 Summary of Overarching Results

Business Structure

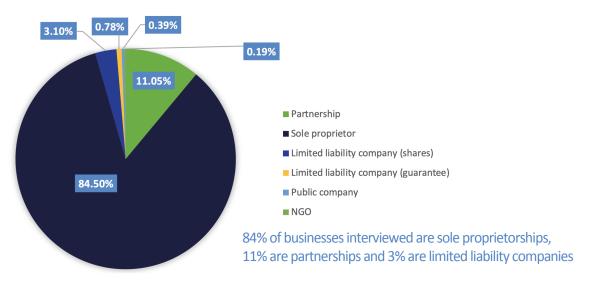


Table 4.1

Why start a business?

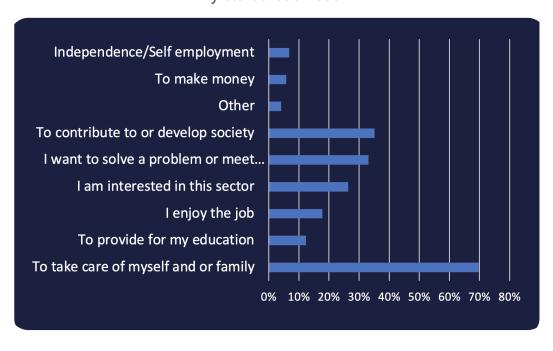


Table 4.2²

70% of interviewed businesses started their business to take care of themselves and their family, 35% did so to contribute or develop society, and 33% started a business to solve a problem or meet a need.

 $^{^{2}}$ Total adds up to more than 100% because interviewees were able to give more than one answer

Formal registration among businesses

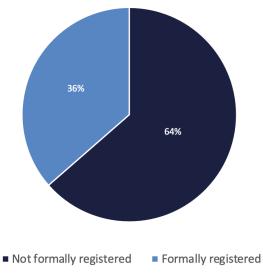


Table 4.3

Only 36% of interviewed businesses are formally registered with the Office of the Administrator and Registrar-General and or Corporate Affairs Commission as legally required.

Top 20 challenges facing businesses

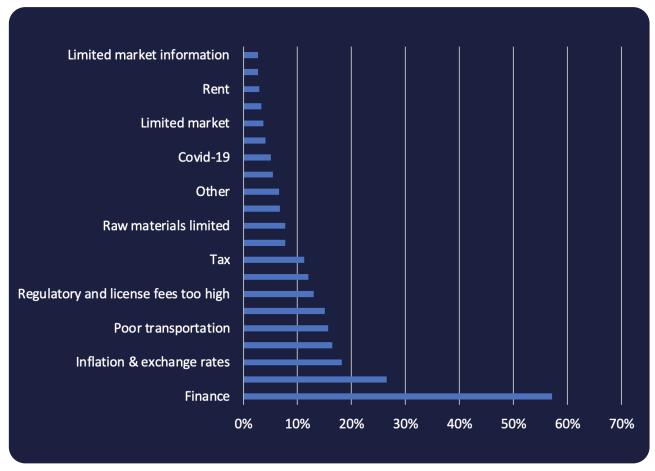


Table 4.4³

Industry distribution of interviewees

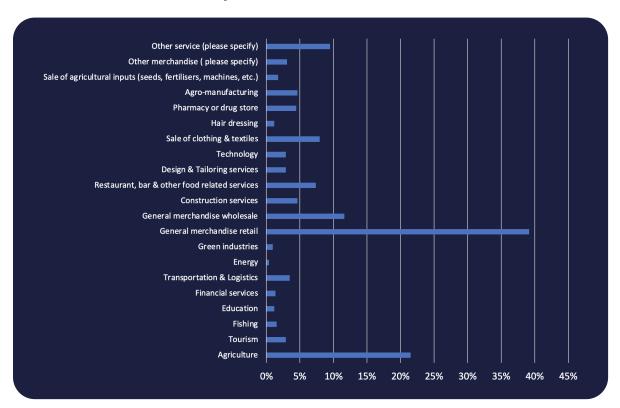


Table 4.5⁴

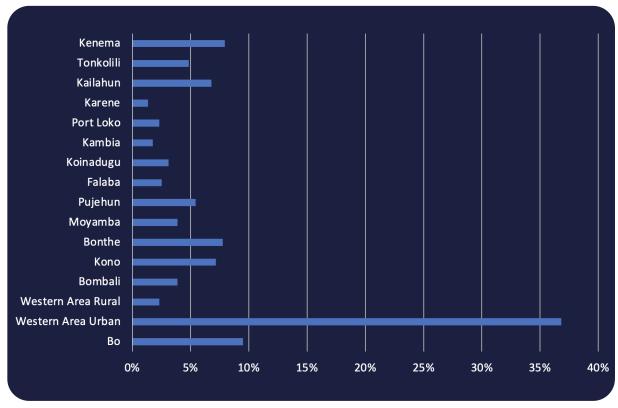
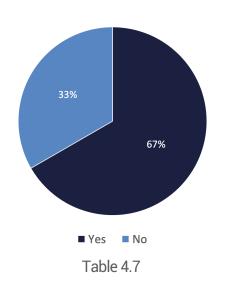


Table 4.6

 $^{^{4}}$ Total adds up to more than 100% because interviewees were able to give more than one answer

Is your business led or co-led by a female

Number of female employees



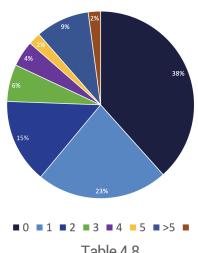


Table 4.8

38% of interviewed businesses do not have any female employees, 23% have only one female employee, 15% have 2 female employees, and 9% have more than 5 female employees.

Business structure - gender

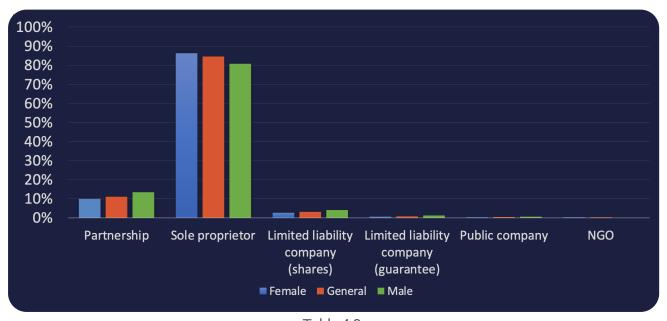


Table 4.9

Businesses led or co-led by a woman are predominantly sole proprietorships with 86% of female-led or co-led businesses being sole proprietorships compared to 81% of male-led businesses.

4.2 Digital Ecosystem

DIGITAL INFRASTRUCTURE		★★☆☆☆	
Indicator	Source and date	Sierra Leone	SSA average
"Unique" mobile-broadband subscriptions per 100 inhabitants	GSMA Intelligence 2019	26.6	28.2
% of population covered by 3G mobile network (%)	GSMA Intelligence 2019	62.6%	77.9%
Average Mobile Broadband download speed (Mbit/s)	Cable.co.uk	1.2 Mbps (ranked#189 out of 207 countries)	2.66Mbps
Cost of broadband internet (500MB, as % of GNI)	A4AI	4.9%	9.95%

DIGITAL PLATFORMS		★★☆☆☆	
Indicator	Source and date	Sierra Leone	SSA average
Digital Adoption Index - government cluster	World Bank 2016	0.42	0.41
Open Data Inventory Score	Open Data Watch 2019	Score 44/100 (ranked #86 of 178 countries)	n.a.
Online Service Index	UN 2018	0.33	0.36
% ID coverage for adults	FINDEX 2017	n.a.	69%

DIGITAL FINANCIAL SERVICES		***	
Indicator	Source and date	Sierra Leone	SSA average
Mobile money access rate (% of adults)	Findex 2017	11%	20.9% (excluding high income)
Made or received digital payments in the last year (% of adults)	Findex 2017	15.6%	34.4%
Used a mobile phone or the internet to access a financial institution account in the past year (% of adults)	Findex	2.8%	7.8%

DIGITAL ENTREPRENEURSHIP		★☆☆☆☆	
Indicator	Source and date	Sierra Leone	SSA average
Global Entrepreneurship Index	GEI 2018	Ranked #132 out of 137 countries	n.a.
Firm-level technology absorption, 1 = not at all and 7 = to a great extent	WEF Global Competitiveness Report 2017-2018	3.5 (Ranked #126 out of 137 countries)	n.a.

Pillar	Overall Performance			
DIGITAL SKILLS		\bigstar \Leftrightarrow \Leftrightarrow \Leftrightarrow \Leftrightarrow		
Indicator	Source and date	Sierra Leone	SSA average	
Proportion of youth and adults with advanced digital skills	ITU	n.a.	2%	
Internet access in Schools	WEF Global Competitiveness Report 2017-2018	2.6 (Ranked #131 out of 137 countries)	n/a	

Table 4.10 DE4A Sierra Leone Rating 2021 Report

4.2.1 Use of Internet, Technology and Digital Skills

With an internet penetration rate of 13% in 2017, the use of digital technology in Sierra Leone is low but growing rapidly. Although below the sub-Saharan Africa rate, it is above its neighbours, Guinea and Liberia. Looking at mobile internet penetration rates in sub-Saharan Africa, Sierra Leone is also the most improved country increasing from 13% in 2014 to 27% in 2019.

Individuals using the Internet (% of population)

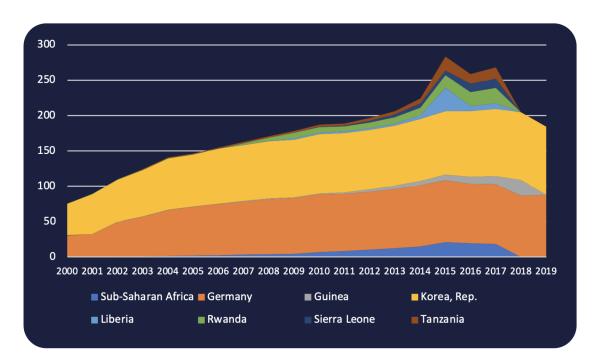


Table 4.11

The major types of technology used by businesses are mobile money and social media with 71% and 70% of businesses who use technology using these forms respectively. The most common social media platforms for businesses are WhatsApp and Facebook. There has been a significant use of digital services to drive the financial inclusion of local businesses and foster more trade without the geographical barrier associated with physical cash. This remains true even when disaggregated across regions with the provinces having a similar rate of 36.5% of businesses using mobile money.

Use of technology in businesses

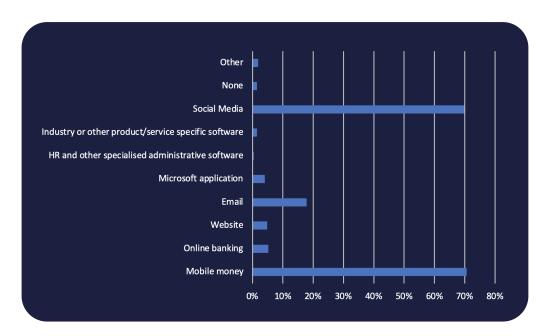


Table 4.127

Social Media use

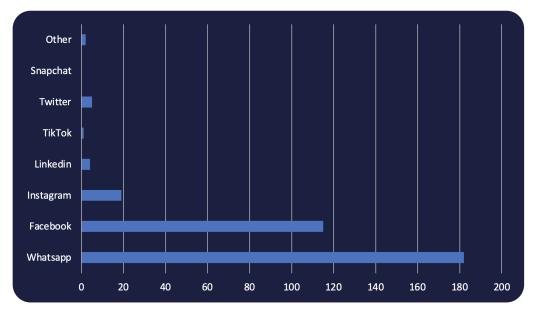


Table 4.13

Linked to education, is the lack of **digital skills**, a key element of the digital economy. 48% of the non-tech businesses said they do not use any technology including the internet to run their business. The main reasons being the high cost (33%) and lack of know-how (31.6%). A significant number of businesses believe they do not need the internet to run their businesses. A few businesses acknowledge the value of using the internet but believe that their businesses are not ready or that it is not currently the priority . The majority of the entrepreneurs do not have websites nor internet services linked to their business.

 $^{^{7}}$ Total adds up to more than 100% because interviewees were able to give more than one answer

Reasons for not using the internet

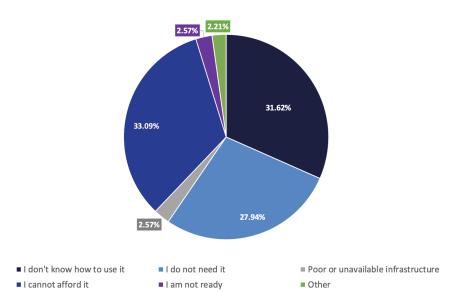
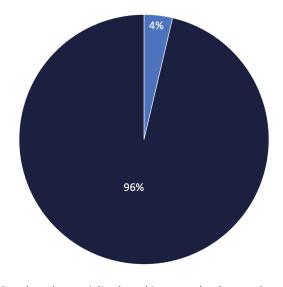


Table 4.14

A lack of digital skills limits innovation and development as there is a lack of knowledge of what is possible, and how it can be used to solve the problems being faced. To understand the innovation and technology development among businesses, entrepreneurs were asked whether their enterprises had developed a specialised machine or technology tool for their business purpose. A vast majority of the companies had not, with only about 4% of businesses indicating that they had done so.. Some of such included small animal traps, oil palm processing machines, winnowing machines for processing groundnut, a cleaning machine to wash plastic for onward processing, a solar dryer to dry harvested moringa, a machine for producing bio charcoal.

Technology development for business purposes



- Developed a specialised machine or technology tool
- Have not developed a specialised machine or technology tool

Table 4.15

Our observations on the entrepreneurs and entrepreneurship were the following:

- There is a low quality of entrepreneurs who have limited education, lacking the basic skills of starting and running a business; driven by survival vs growth.
- The culture is an obstacle to progress particularly the dishonest behaviour of employees, get rich quick mentality, individualism and the lack of qualified skills.
- Digital skills are nascent, and as such so is digital entrepreneurship. According to the DE4A report, these two elements of the digital economy scored the least with zero point five (0.5) and one (1) out of five (5) and respectively.
- The quality of businesses being set up is therefore fairly poor and cannot drive economic development in the way that is anticipated.

4.2.2 Digital Infrastructure and Platforms

Electricity challenges have a strong, more detrimental effect on the functionality of the digital economy. Without electricity, a significant number of the elements of the digital economy are non-functional, for example, internet access and availability. While Sierra Leone was one of the first countries in West Africa to commit to improving the geographical reach of high-speed connectivity, the country still ranks low in terms of access (153 of 207 economies for mobile access and 197 of 208 for internet access); affordability (57 of 61 economies) and quality (151 of 173

Digital infrastructure refers to the internet, data repositories and connectivity while digital platforms refer to the tools used to perform the digital transactions and connections.

economies). The civil war resulted in significant infrastructural damage, especially to the fixed-line infrastructure.

The mobile network has been one of the major influencers of market penetration, with 80% of the population believed to have mobile coverage, and which explains the high usage and access to social media and mobile money platforms among the entrepreneurs. Access is mainly through mobile phones, and for a limited number of entrepreneurs, through mobile Wi-Fi (MiFi). Only 6% of businesses who use the internet had installed facilities on their premises and the previous practice of using internet cafes seems to have died out and or is impracticable for businesses.



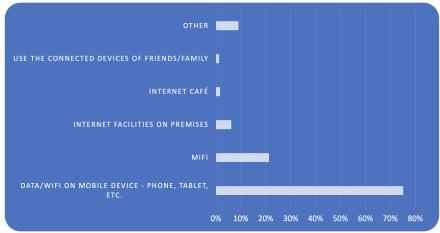


Table 4.16⁸

 $^{^{8}}$ Total adds up to more than 100% because interviewees were able to give more than one answer

Secure internet servers

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
■ Tanzania	22	27	46	80	116	169	300	1241	1537	2268
■ Sierra Leone	3	4	9	7	5	7	11	14		41
Rwanda	9	8	27	44	63	84	149	219	449	900
■ Liberia	2	1	2	2	4	4	10	9	11	24
■ Korea, Rep.	8688	10413	13470	17000	20634	28452	36928	61580	106574	234958
Guinea	1	1	4	4	6	9	11	19	41	63
■ Germany	85810	118157	176527	209774	271517	351083	957300	2825322	4676435	6478761

Table 4.17

Secure Internet servers (per 1 million people)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
■Tanzania	0.5	0.59	0.98	1.65	2.32	3.28	5.65	22.7	27.29	39.1
Sierra Leone	0.47	0.61	1.34	1.02	0.71	0.98	1.5	1.87		5.25
Rwanda	0.9	0.78	2.56	4.07	5.68	7.39	12.77	18.28	36.5	71.28
■ Liberia	0.51	0.25	0.48	0.47	0.92	0.89	2.18	1.91	2.28	4.86
■ Korea, Rep.	175.32	208.52	268.33	337.11	406.61	557.72	721	1198.94	2065.12	4543.84
■ Guinea	0.1	0.1	0.38	0.37	0.54	0.79	0.94	1.57	3.3	4.93
■ Germany	1049.32	1471.9	2194.9	2601.18	3352.79	4297.93	11624.96	34181.28	56406.62	77970.03
Sub-Saharan Africa	3.68	5.69	9.97	12.07	15.56	19.01	68.63	577.9	735.31	806.26

Table 4.18

Secure Internet servers are the number of distinct, publicly-trusted TLS/SSL certificates found in the Netcraft Secure Server Survey.⁹

The most popular digital platform is mobile money. While some entrepreneurs are exploring the use of mobile apps and other such platforms, the market still has multiple barriers to access these platforms. Mobile phones with the highest usage are the basic smartphones that provide access to social media platforms and less of the specific product apps(e.g. mobile banking app). This is because the prices of advanced smartphones, tablets and computers are still well out of reach of the masses, entrepreneurs and customers alike. As a result, entrepreneurs remain with the brick-and-mortar services across the different sectors and products, even when they are using other types of digital platforms.

Incorporating digital technology whether as part of a business model or as part of business operations requires establishing the necessary infrastructure for the technology to become integral to the business. However, the reliability and cost of the internet remain the biggest challenges in using technology. Availability of the internet also remains a challenge for a good number of businesses. To establish a digital economy, one of the three pillars of the National Innovation and Digitalisation Strategy, we must strengthen the digital infrastructure in which the digital economy will operate.

4.2.3. Digital Financial Services (DFS)

One of the fastest growing technology trends is in digital financial services (DFS), where we see an increase from 9% of adults actively using a DFS account to 30% in 2019. This increase has been attributed to greater integration and more partnerships among DFS providers, as well as increased focus on activation and use-case adaptation for customers (Ngwabe, Duijnhouwer, Favrichon, & Kalungulungu, 2021). However, challenges remain on the issue of customers' understanding and adoption of DFS and unclear and somewhat onerous regulations.

Most of the banks provide a facility for electronic banking through swiping cards in shops and ATMs. Other forms of digital banking services available include mobile banking apps and internet banking which allows for financial transactions to be done electronically for example paying for electricity or buying mobile phone credit. There is, however, a relatively high downtime with the ATMs, processing machines, mobile apps and internet banking which ultimately forces the banking customers to opt for brick and mortar banking. A walk around the city of Freetown will provide evidence of the high dependency on the brick and mortar banks as there are long queues outside banks.

Mobile money has had a significant penetration, with Orange Money and Africell money leading the market. Through these services, we start to see how non-financial institutions are starting to provide financial services, evidence of the development of digital finance. Both mobile service providers are starting to explore extending their services beyond simple mobile money transactions and adding some form of credit facility or financial products.

4.2.4 Technology and Innovation Legislation and Policy

Sierra Leone's technology and innovation legislation and policy comprise:

- A. The National Innovation and Digital Strategy NIDS
- B. The intellectual property laws:
 - i. the Copyright Act, 2011,
 - ii. the Patent and Industrial Design Act, 2012 (PAID Act), and
 - iii. the Trademarks Act, 2014.
- C. The Telecommunications Act, 2006 (as amended),

A. The National Innovation and Digital Strategy (NIDS)

In 2019, the Directorate of Science Technology and Innovation DSTI launched the National Innovation and Digital Strategy for 2019 – 2029. The Strategy set out short-term strategic activities centered around 6 areas: National Digital Identities, Applied AI for governance, Infrastructure, Security, Entrepreneurship and Society, and Organisational Architecture. Unlike the SMEDA Act, which does not make provisions for interactions between entrepreneurship and technology, the NIDS tries to do that by primarily having one of its pillars as the digital economy and focusing one of its short-term strategic areas on entrepreneurship and society. Such a focus is likely easily aided by having innovation as one of the pillars of the strategy since innovation and entrepreneurship tend to go hand in hand. This relationship is explicit in the Strategy which states that its focus on the digital economy will be driven by innovation and entrepreneurship.

By the interdisciplinary nature of the strategy, it has well-integrated the technology and entrepreneurship priorities and their role and importance for economic development. However, there is very little elucidation on how such integration will work in practice. The strategy sets out the philosophy, approach principles and short-term activities that will be engaged in, but it has not provided specific, tangible priorities and activities that will be engaged in to achieve goals that have also not been spelt out. The strategy is less coherent than it could be with the activities section comprising aspirations, recommendations, and reports on current activities but little that specifically spells out clear steps that will be taken to achieve goals in the three digital clusters: Identity, Governance, Economy.

Further, despite identifying these three clusters, the Strategy fails to set out clear strategic objectives for each cluster under each of them. Rather, it provides background on what each cluster includes and current activities that fall within the cluster. Although certain objectives and targets may be gleaned from the Strategy, they are not set out and a "less than keen" reader will fail to see the tangible steps Sierra Leone plans to take to build its digital identity, governance, and economy.

B. Intellectual Property Laws

On the other hand, the intellectual property legislations generally have the protection of intellectual property rights as their purpose and the various statutes focus on this. However, these statutes are meant to be accompanied by regulations, which would implement and support the enforcement of the statutes' provisions. These regulations are still unprovided for and remain a barrier to the proper protection of IP rights in Sierra Leone as highlighted in our interview with the OARG, the body responsible for the administration of intellectual property in Sierra Leone.

The Trademarks Act provides for protection, registration and regulation of trademarks, trade names while the Copyright Act establishes copyrights and related protections for authors, co-authors, or joint authors of literary works, artistic works, sound recordings, musical works, audio-visual works, choreographic works, derivative works, programme-carrying signals, and computer software and programmes. The Copyright Act establishes the moral and economic right of authors and makes several provisions on the duration of copyright; permitted use and transfer of copyright; protection of performers, broadcasting houses, sound recording producers, and audio-visual producers; royalties, public domain and registration; the Collecting Society; and the infringement and enforcement of copyright. To be eligible for copyright, a work has to be original in character and meet other places of origin criteria.

The PAID Act provides for three types of intellectual property: patents, utility models and industrial designs. The Act requires that for an invention to be patentable, it must be new, involve an inventive step and be industrially applicable, with all of these criteria clearly defined in subsequent provisions. The grant of a utility model certificate only requires that the invention be new and industrially applicable, a less stringent requirement than for patents. The Act in general provides for patentability, right to patent, an applicant for and refusal of patent grant, utility model certificates, international applications of the Patent Cooperation Treaty and ARIPO Protocol, and industrial design.

The PAID Act has the objective of providing for the promotion of inventive and innovative activity and facilitating the acquisition of technology through the grant and regulation of patents and industrial designs and for other related matters. This is unlike the Copyright Act which has the seemingly simple purpose of providing for the protection of copyright. It does not refer to any grand goal such protection is meant to achieve.

The implicit goal seems to be to protect the right of creators and thus protect innovation, which is similar to that of the PAID Act. However, while the traditional argument of protecting invention, which is explicit in the PAID Act and implicit in the Copyright Act, is true in many ways, it does not fully acknowledge the importance of future creation, which many times rely on previous creations. To truly promote innovation, our legal framework must properly balance the importance of giving creators and inventors incentives to create and invent with the need to not stifle the ability of future creators and inventors to utilise relevant knowledge. Intellectual property rights are important but make them too strong and you risk breaking the virtuous cycle of knowledge transfer and innovation (Gangopadhyay & Mondal, 2012; Fisher, 2001; Bechtold, 2016; Boldrin & Levine, 2008).

The intellectual property legislations do not make any specific provisions that would ensure the necessary knowledge transfer and open networks necessary for creators and inventors to learn from each other and build better. This is not provided for in other legislation either. Within these legislations, the most relevant provisions are the provisions of the breadth, length and infringement of the right. In the Copyright Act, the duration of copyright is generally for the lifetime of the author and 50 years after or for corporate bodies, 50 years after the work was made to the public. In the PAID Act, patents expire after 20 years, utility model certificates expire with no possibility for renewal after 7 years, and industrial designs can last for up to 15 years if renewed.

The rationale for determining the duration of these intellectual properties is not in the public domain and the research on the ideal length of intellectual property is not definite (Takalo, 2001). For patents, making and using patented products is prohibited and so is using patented processes. There is an exception for acts done only for experimental purposes relating to a patented invention. Thus, if the act is not being done about a patented invention, you cannot utilise a patent for experimental purposes, which still severely limits the use for experimentation as it excludes use for new inventions.

However, the most critical issue in this discussion is that for intellectual property legislation to provide any benefits for innovation, there has to be something to grant such rights over. Only 18% of the tech businesses interviewed had a registered trademark but none of the other intellectual property rights, which require originality and or inventive steps. There has to be a culture of research, development and invention.

The value of intellectual property rights is not in being able to buy and sell them, although there is value in this, but in being able to commercialise the product or process on which you have such right and having a monopoly over it. Thus, fundamental to our discussion of intellectual property and the innovations ecosystem is the provision of the basics – creating a business and social environment where people are motivated and provided the capacity to innovate. As they do, these innovators and the nation will start experiencing the benefit of intellectual property rights. We can then start adapting our legislation to meet our innovation and development goals as needed, not just following the standard template which may or may not be optimal for us.

C. Telecommunications Act

The third set of legislation influencing technology in Sierra Leone is the Telecommunications Act. The body responsible for both supporting and regulating the telecommunications industry and its technologies is the National Telecommunications Commission (NATCOM). Upon amendment of the Telecommunications Act, the Commission now has extensive functions which include fostering and protecting an efficient ICT market, ensuring fair competition between telecommunications operators, ensuring universal availability of efficient, reliable and cost-effective telecommunications services, and protecting telecommunications operators and users from unfair conduct by other operators, among others.

The Telecommunications Act initially provided primarily for the regulation of telecommunications and related technology in Sierra Leone. It has, thus, had a very singular focus in this regard with little explicit considerations for technology in general or entrepreneurship. However, in 2009, this Act was amended to include fostering and protecting an efficient ICT market as one of the functions of the Commission. This Act is also key in the Sierra Leone technology sector as some of the major technologies such as mobile money are being provided by the telecommunications companies. Hence, providing a competitive environment to operate in while safeguarding users and investors is a key role in ensuring that the telecommunications sector's contribution to Sierra Leone's direct technology growth and indirect entrepreneurship growth is well harnessed.

Although, despite one of the Commission's functions being to foster and protect an efficient ICT market, the Act makes no other provisions on how the Commission should do this. Further, in practice, the regulation of providers of digital financial services including mobile money, which is operated by the telecommunications companies is done by the Bank of Sierra Leone because they classify as financial services. Hence clear regulation of digital technology in Sierra Leone seems to be non-existent with the only institution responsible for an aspect of it—fostering and protecting an efficient ICT market—having no further directions on how this should be done beyond the statement of the function and in practice having a role limited to telecommunications.

With regards to entrepreneurship and SMEs, Telecommunications makes no special provisions. All businesses in the telecommunications sector face the same regulatory requirements with no exemptions.

4.3 Entrepreneurship Ecosystem

At the core of both the digital and entrepreneurial ecosystems are the entrepreneurs and entrepreneurship. This is mainly driven by micro/small to medium enterprises and startups.

SMEDA Definition of MSMEs:

According to SMEDA, Small enterprises are companies that are making less than SLL100 million (approx. USD10,000) in revenue per annum; while medium enterprises are defined as companies that are making between SLL100 million (approx. USD10,000) and SLL500 million (approx USD50,000) per annum. SMEDA does not define micro-enterprises.

UNCDF Definition of MSMEs: According to the UNCDF, micro-enterprises are defined as companies that have:

- Has less than 10 employees
- Has assets less than USD100,000
- Has annual revenue less than USD100,000

UNCDF also defines small to medium enterprises as companies that:

- Have between 10-200 employees
- Have assets valued between USD100,000 and USD15 million
- Have revenues ranging between USD100,000 and USD15 million.

Comparing these two definitions immediately highlights the level of inconsistencies in defining the MSME sector. Under the UNCDF definition which is also standardized by the United Nations in its operations globally, all of the companies considered under SME definition from SMEDA fall under MSMEs. The UNCDF also provided multiple touchpoints for the definition, taking into account the number of employees and the value of assets owned.

While each country can have its internal definition of MSMEs, it is important to have some standardization so that as different stakeholders discuss and plan for the interventions and support, they are envisioning the same group of companies.

4.3.1 Definition of Micro, Small and Medium Enterprises

The definition of micro, small to medium enterprises differ per country. However they are customarily defined by revenues, asset value and the number of employees. [See text box] The term MSMEs tends to refer to comparatively smaller companies within any territory, in comparison to other companies and sometimes the economy as a whole.

Studies have shown that well-structured MSMEs have the potential of having a significant multiplier effect on an economy, especially through employment creation, contrary to their notably smaller size. According to the World Bank, SMEs represent 90% of businesses and contribute 50% of employment worldwide; statistics that would be higher after considering the informal sector. In developed countries, the numbers are significantly higher. For example, in Europe, according to the 2019 SBA Fact Sheet, MSMEs represented 99.8% of businesses by number, contributing 66.6% of jobs and creating 56.4% of the economic value. Some of the fastest-growing economies in Africa are being driven by the entrepreneurial and digital ecosystems. For example, in Kenya, as of 2018, MSMEs employed over 7.5 million people which is 80% of formal employment and created 92% of new jobs annually.

4.3.2 Human Capital and Culture

Successful ecosystems are driven by young, growth-oriented, risk-taking, well-educated entrepreneurs. Sierra Leone has a young population with a median age of 19.1 years which provides a good base for entrepreneurship by demographic. However, the country has a low literacy rate of 43% (2018) with 2.2.% enrollment in tertiary education. 64% of entrepreneurs interviewed had not registered their business, mostly because they did not know how (Table 4.3), 60% of the entrepreneurs indicated that they did not have a written business plan or strategy and although 65% of them said they kept financial records of their businesses, none of them could clearly articulate their average annual revenue. Of the 35% who did not keep financial records, more than 50% did not have the know-how, or thought it was not important.

About 5% of interviewed businesses identified issues around human capital as the major challenge they faced. The primary challenges were finding skilled people and trusted employees. While some entrepreneurs would be willing to provide training facilities to bridge the skills gap, 38% of the entrepreneurs said staff behaviour and lack of integrity were some of the major human capital obstacles. According to one interviewee, a major challenge is the dishonesty of workers. He added "at times they will not hand over all the money for sales they make for the day" and according to another "Getting the right people to work with is a big issue".

The quality of entrepreneurs that any economy has is a direct consequence of the community and culture that molds them. It is difficult to be an entrepreneur when you must focus on survival, not just for yourself but for your extended family (black tax). In instances where they are able to start up their businesses, entrepreneurs find themselves burdened with household financial responsibilities that they cannot reinvest in their businesses but must take some drawings to fund the family's financial needs. This means the business is deprived of ploughed back profit and remains small and of low economic impact. This explains the business structure we see in Tables 4.1 and 4.9, where most businesses interviewed were sole proprietors.

"Usai den tye cow na dea inh dea eat" is a popular statement in Krio which loosely translates to "The cow will feed where it is tied". This statement was initially made to encourage people to make the most of what they have, however it is now commonly used to encourage corruption or abuse of resources, particularly in the workplace.

In other instances, the potential entrepreneurs are not even able to start the business. The family plays a pivotal role in blocking the entrepreneurial mind as they drive the potential entrepreneurs into professions that are perceived to guarantee employment and regular income, for example, accountants, doctors and engineers. This is because the entrepreneurial field does not have many success stories which upcoming entrepreneurs can look up to and emulate. There is a "get rich quick" mindset that is embedded in corruption, lavish lifestyles and individualism. As a result, due to the high unemployment and economic hardship, the country has a net negative migration rate of -0.96/1000 (2021 estimate) which means the population will opt to leave the country at any possible opportunity, and the natural selection of migration in such circumstances means there is a brain drain.

4.3.3 Survival vs Growth Entrepreneurs

As is shown in **Table 4.2**, 70% of the entrepreneurs interviewed were survival entrepreneurs, mostly sole proprietors (**Tables 4.1 and 4.9**) and they started the business to earn some income to take care of themselves and their families. Survival entrepreneurship does not drive significant economic development because the focus would be on the individual's immediate needs, not expansion or community impact for example. Growth-oriented entrepreneurship on the contrary leads to economic development.

ESOs reported a high dropout rate in their programs, of sometimes over 50%, with the majority of the dropouts either succumbing to family pressure to move to more "lucrative fields" or taking on a job that has regular income. About 50% of entrepreneurs also highlighted that their interest in the ESO support would be due to the financial incentives provided and not the actual training. With the high levels of poverty (56.8% 2018), the pressure mounts on the potential/aspiring entrepreneurs to focus on survival, which, even if they were to proceed with their entrepreneurial journey, still limits the level of development they can drive.

There was, however, a stack difference between the key drivers of business for tech and non-tech entrepreneurs. 100% of the tech entrepreneurs interviewed focused on adding value and having some kind of a growth objective. This suggests that there is a different level of awareness among tech entrepreneurs and if invested in, may lead to significant economic growth and development.

Tech entrepreneurs, by nature of their business, already suggest a higher level of education, experience and exposure but these were only about 2% of the entrepreneurs interviewed. 47.5% of the non-tech businesses interviewed use the internet in running their businesses, while about 5% use other forms of technology. That said, when asked which technology they use, the results were very limited, with a significant proportion using mobile money and social media, a majority of which was WhatsApp.

4.3.4 Local Access and Availability of Finance

Over 50% of all the interviewed entrepreneurs cited access to and availability of affordable finance as the main challenge to the business development (Table 4.4) and this is consistent with the 64% of respondents who cited the same during the SOBA research in 2018. For 66.5% of the businesses, the major source of start-up capital was their personal savings. Other common sources are gifts and loans from friends and families, a very limited option given the level of income and poverty within the country. The least common sources are external investments, grants, and loans from banks and microfinance.

Sources of capital at startup and after

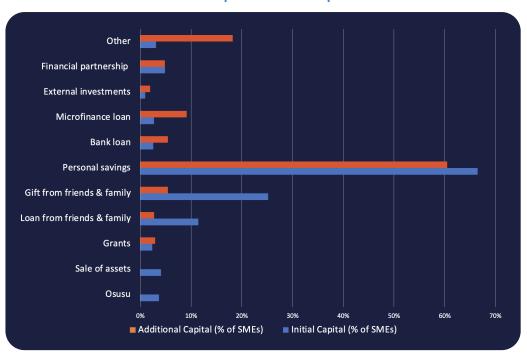


Table 4.19¹¹

The financing of entrepreneurship in Sierra Leone is plagued with different challenges faced by both entrepreneurs and financiers alike. 29% of businesses interviewed do not know where to go if they need to access financing to increase their capital and 83.7% of those who indicated that they know of potential sources of finance for their businesses refer to either bank and or microfinancing loans. Hence, enterprises have very limited information on the sources of funding they could access for their businesses and those that do know of potential sources of finance face several challenges including affordability, not meeting the requirements or even having the capacity to meet the requirements.

For almost 12% of interviewed businesses, obtaining the required amount of collateral was a major difficulty they faced. Trust issues were also raised with a few interviewees believing that they needed to have a "connection" to obtain a grant or loan for their businesses and this was causing them difficulties because they did not have those "connections".

The challenges raised also highlight the need for ESOs and other related organisations including SMEDA to provide a platform where enterprises can access information on financing, position themselves to meet the requirements and gain access to relevant networks where necessary. However, with ESOs limited to Freetown and serving a small number of businesses, most SMEs seem to be left out with little or no information on how to access finance or even meet the requirements necessary.

 $^{^{11}}$ Total adds up to more than 100% because interviewees were able to give more than one answer

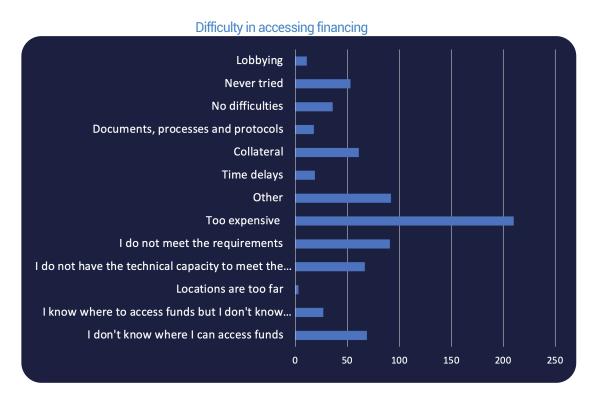


Table 4.20

However, the cost of financing itself is a major issue as indicated by the 40.7% interviewed businesses who highlighted it as a challenge faced in accessing financing. There is no easy or quick fix to this as banks who are a major source of financing for many SMEs are very wary to offer to finance small enterprises because it has caused them major losses. Thus, we have a vicious cycle where because of high-interest rates, enterprises default on their loans, which leads to even higher interest rates by financial institutions and so on. This calls for careful policy intervention that does not exacerbate the information asymmetry.

In 2018, there was a lack of transparency in the banking industry on credit rating for different individuals and businesses. As a result, the collateral requirements were high, and also the interest rates. The central bank therefore introduced the credit reference bureau, which is still very manual but provides a starting point for credit evaluation. Under the requirements of the credit reference bureau, all banks are required to submit the list of the debtors and evaluate any potential debtors against the list before issuing a loan. On paper, this is a good solution. However, it could be simplified by the use of technology.

4.3.5 Foreign Direct Investment

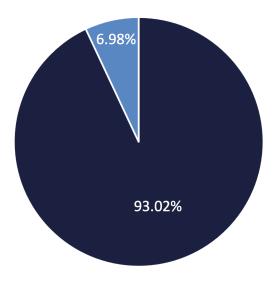


Table 4.21

Foreign direct investment in the businesses we interviewed is quite low with only 7% of businesses having raised capital outside Sierra Leone, most of whom is from diaspora remittances and not necessarily venture capital or impact investors. However, this is likely indicative of the sample interviewed who are dominantly SMEs and sole proprietorships.

- Never raised capital outside Sierra Leone
- Raised capital outside Sierra Leome

With most SMEs having a survival orientation, external investments are unlikely to play a huge role in their financing as they are not structured to attract venture or impact investment capital. However, a larger factor for the limited financing sources is the lack of external investment funding available to businesses in Sierra Leone. Outside banks, microfinance institutions and the grant and credit programs run by government agencies, and NGOs, there are scarcely other financial options available to SMEs in Sierra Leone. About 9% of businesses know of financing outside banks, microfinance, and grants but this mostly includes credit and other support schemes run by NGOs and government agencies. Of note, although international NGOs and government agencies are the biggest players in supporting entrepreneurs in Sierra Leone and most of these entrepreneurs highlight financing as their biggest challenge, grants and external investments are the two least likely sources of financing for businesses both at start-up and after.

4.3.6 Infrastructure: Transport, Electricity and Water

About 75% of the interviewed entrepreneurs identified at least one of the main challenges in their business to be infrastructural, from cost and availability of electricity and water, cost and quality of transportation to cost and availability of the internet and related services. The consequences of the infrastructural challenges include higher than average operating costs as the entrepreneurs have to bear the additional costs of improving the infrastructure. For example, inconsistent electricity supply means that every business that wants to operate fully will need to improvise and acquire a generator or solar backup system and pay for the additional costs.

27% of businesses indicated that a major challenge was the cost of transportation and 16% indicated that the quality of the road and other transportation networks also proved challenging. Sierra Leone experiences a long and heavy rainy season between May and November every year and a significant number of businesses must either slow down or shut down during this period. Although road networks have improved significantly over the last years, with most of the towns and cities well connected, some roads are still not well constructed; bridges flood in some parts; roads unpaved and impossible to navigate after the heavy rains. Over 50% of the entrepreneurs cited transport-related costs as a hindrance to accessing the raw materials needed in their production and exporting their produce for regional sales.

Challenges in selling/buying from other districts

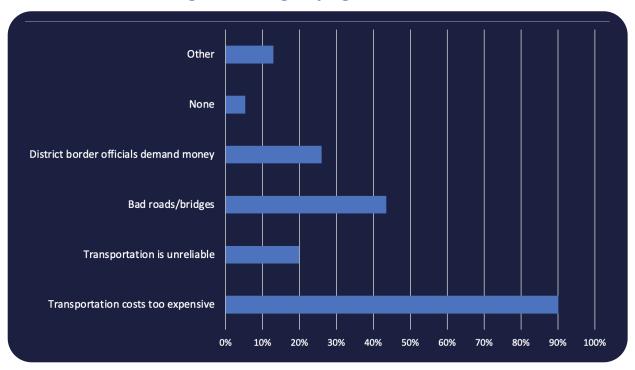


Table 4.22 ¹²

The major challenges for businesses that trade with other districts but not beyond the country are the cost of transportation (90%) and the quality of the road network (44%).

Access to electricity in Sierra Leone slowly increased from 2005 to 2018 but there was a declined from 26% to 22.7% from 2018 to 2019. Its neighbours and other African countries have been growing their access to electricity at a faster rate and with Sierra Leone's decline, it became the country with the lowest access rate among its neighbours, and other African countries that have sought to develop their innovation and entrepreneurial ecosystem. With an access rate of 22.7%, it has less than half of the access rate of sub-Saharan Africa, 46.7%. South Africa which arguably has the most developed innovation and entrepreneurial ecosystem in Africa has an access rate of 85% and Germany and South Korea who are currently among the most innovative countries in the world have an access rate of 100%.

Access to electricity (% of population)

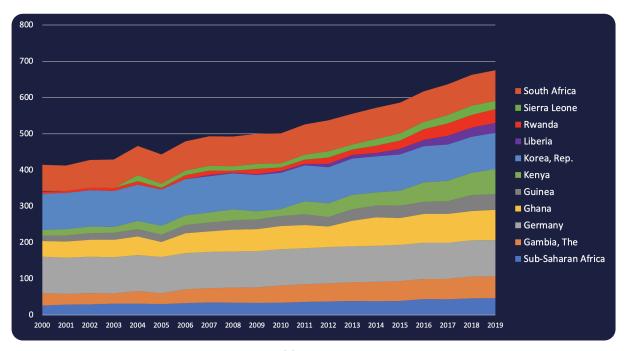


Table 4.23

Access rate for electricity is much higher for the urban population in Sierra Leone with 51.4% of persons residing in urban areas having access to electricity in 2020. It outperforms neighbouring Liberia which has an urban access rate of 46.4%. However, Sierra Leone's urban access rate is still much lower than other similar sub-Saharan African countries like Gambia (80%) and Guinea (88%), the sub-Saharan Africa average (78%), and other African countries with more advanced entrepreneurial ecosystems.

Access to electricity (% of urban population)

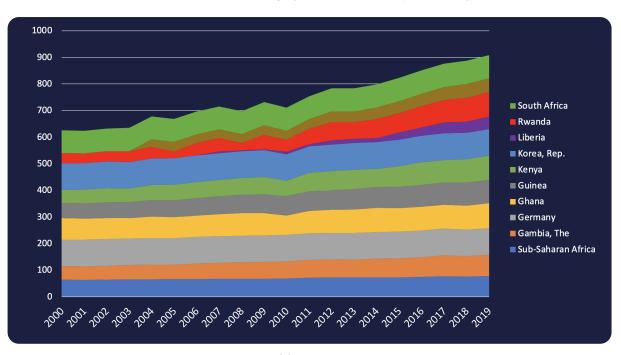


Table 4.24

For those who can access electricity, the costs remain high. While there has been a significant reduction in the cost of commercial electricity from an average of USD0.28/KwH in 2018 to USD0.21/KwH in 2020, the costs remain significantly high when considered against the 56.8% of the population living in poverty. The costs are staggered with household and low usage costs as low as USD0.15/KwH and sharply increasing with consumption. This means companies or individuals that have higher consumption end up paying significantly higher prices for the electricity.

In addition to the cost of electricity, the supply is not reliable. Sierra Leone does as badly as its neighbours scoring 0 on a scale of 0 to 8 measuring the reliability and transparency of electricity supply. The reliability of supply and transparency of tariffs index encompasses quantitative data on the duration and frequency of power outages, as well as qualitative information on:

- the mechanisms put in place by the utility for monitoring power outages and restoring power supply,
- the supervision of power outages by a regulator,
- the transparency and accessibility of electricity tariffs, and
- whether the utility faces a financial deterrent aimed at limiting outages such as a requirement to compensate customers or pay fines when outages exceed a certain cap. (Doing Business, 2020)

The impact of unreliable electricity is further emphasised in our research as it was the fourth most mentioned business challenge.

The cost and access to electricity challenges have significant implications not just for large businesses who may incur high electricity costs by using alternative sources but also small one-man businesses that rely on electricity for their operations. According to one of our interviewees "As a mechanic, what makes you get the money I will say is when you can fix people's appliances, but if there is no light, I can't do that." For many smaller enterprises, which includes the vast majority of businesses in Sierra Leone, challenges with access, cost and reliability of electricity do not only reduce their profit margin by increasing costs, it hinders their capability to even operate.

4.3.7 Entrepreneur Support Organizations and Business Support

Only 32.5% of interviewed SMEs know of entrepreneurship support organisations and of those, 86.5% identified another organisation apart from those conventionally known as entrepreneurship support organisation (ESOs) as an organisation that has supported them entrepreneurially i.e SMEDA or NGOs. Conventionally entrepreneurship support organisation (ESOs) refers to hubs, incubators, accelerators, co-working spaces, and related programs. However, most of the SMEs we interviewed interpreted the term quite broadly to include organisations that support them as entrepreneurs. 44% of the non-conventional ESOs identified are government agencies, 25% are financial institutions and 22% are international NGOs. This speaks to the limited visibility of and understanding of the role conventional ESOs could potentially play among SMEs. Several factors play a role such as the scale of the operation of such organisations and maybe more importantly the fact that most of these organisations operate mostly in the capital city. 69% of the interviewees who knew of a conventional ESO are based in the Western Urban Area. There is a severe lack of awareness of ESOs, who they are and how they can support businesses in non-financial ways.

Participation rates within conventional ESOs are even lesser. 98% of those who have been or are part of ESOs are not part of conventional ESOs. One participant was a part of Innovation Axis and another participant has been part of three ESOs – Sensi Tech Hub, Innovation Axis and UNDP Accelerator Lab. 55% of the other identified ESOs are government agencies and 99% of such references are to SMEDA. Thus, our results are most likely skewed by the fact that 84% of our interviewees are registered with SMEDA and significant number of people who know of ESOs but choose not to be part of them (13.8%), which is not much less than those who know of ESOs and are currently or were previously part of ESOs (18.8%). It would, therefore, seem that the value ESOs can bring into the entrepreneurship ecosystem by providing entrepreneurs with the required resources and support to build and grow their businesses is both unknown (67.4%) and underappreciated.

The most common reason for participating in an ESO is to get financial support usually in the form of grant funding, the second most common reason is to develop business and or managerial capacity. Other common reasons are to gain investments/loans, obtain support in developing business models and develop business networks. Notably, none of the SMEs interviewed joined ESOs to support their product launch and very few sought support for branding/marketing and product development, indicating that for SMEs there is little focus on product development or it is not an area in which they generally seek support, relying on their skill and knowledge.

Reasons for Participation in ESOs

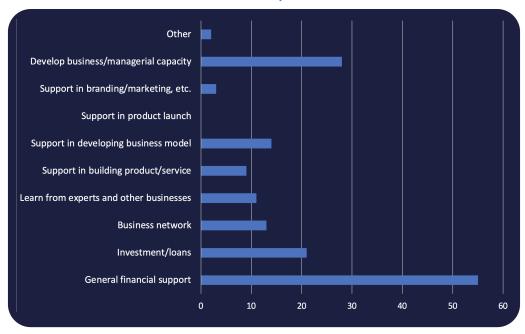


Table 4.25

The emphasis on financial support is re-echoed when interviewed SMEs speak on how they would like to be supported by ESOs. There is also some demand for technical support and mentoring and provision of business skills. It would seem that while SMEs wish to be supported in obtaining business skills, they have little interest in gaining direct management support from ESOs. This could be due to the small size of most SMEs which do not have or even require more than the sole proprietor/manager. We expect that the result would be different in the larger organizations.

In what ways can ESOs better support SMEs

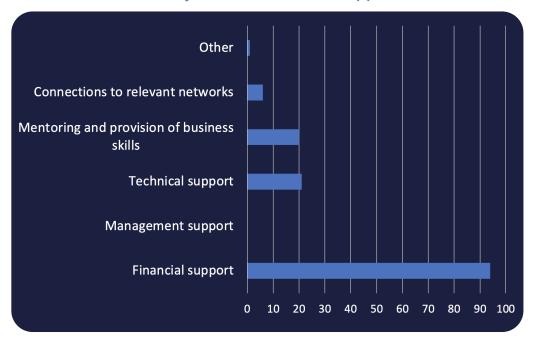


Table 4.26

In discussing the partners that have supported them in developing their business, most SMEs say they have had no partners that supported them, many indicated that they have received support from their friends and families while some consider a government agency or financial institutions as being of support to them in growing their business. The predominant sentiment among SMEs is that they had to rely on their skills, resources and hard work to get to where they are today and for the second-highest majority, they had friends and families who supported them. None of the conventional ESOs was mentioned by the interviewed SMEs.

SME support partners

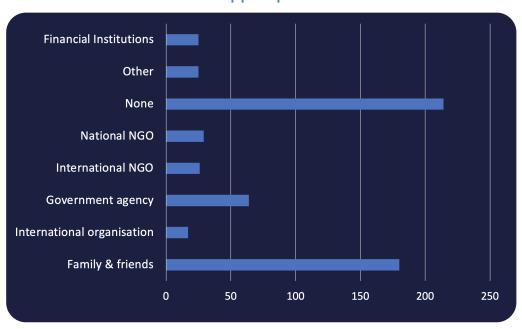


Table 4.27

One of the major players for entrepreneurship support in Sierra Leone is industry associations. Although less prominent than the ESO categories discussed above, many of them have a practical orientation towards supporting their business members. As access to finance is the key issue most entrepreneurs identify as a pressing challenge, they try to meet the needs of their businesses by supporting them in accessing loans and liaising with government authorities while empowering their businesses by providing training and education to their businesses, networking opportunities.

For more formal associations, they also sometimes try to take on the role of influencing policy and or laws that affect their industries. As associations, they tend to be more connected to the needs of their businesses and with most committees comprising businesspersons in the industry, they have insider's knowledge of their industry issues. The work of industry associations in supporting businesses in their industry could potentially be significant in helping SMEs to grow and establish, and it is, therefore, important that they are also empowered to become independent and sustainable organisations that can support their members.

4.4 Policy Mapping

4.4.1 Awareness of Business and Technology Laws

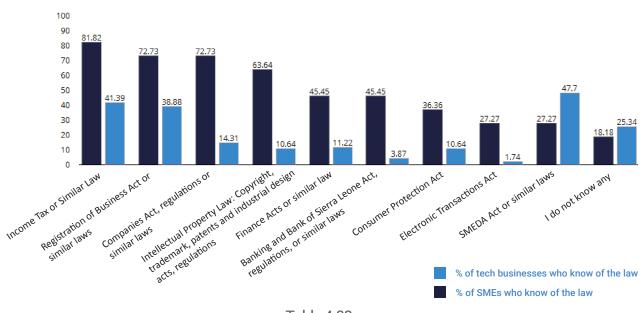


Table 4.28

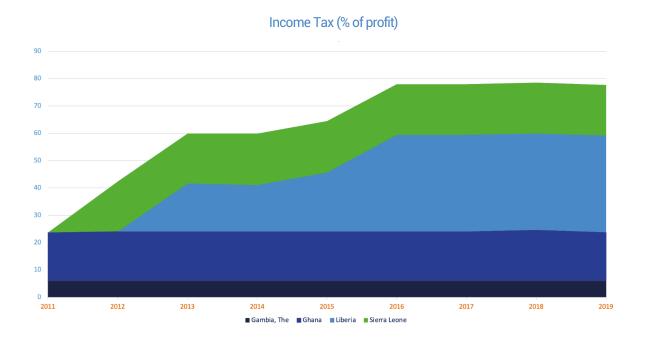
Awareness of the various laws affecting technology and businesses vary significantly between tech businesses and other SMEs as shown in the diagram above. For tech businesses, the most known law is the Income Tax Act, while for SMEs, the most known law is the SMEDA Act. Although, there is a chance for some bias on the knowledge of the SMEDA Act because 84% of the SMEs interviewed came from the SMEDA database. Only 48% of SMEs know about the SMEDA Act. There is, therefore, a significant number of SMEs registered with SMEDA that do not know there is a law that regulates their interactions with the Agency. However, the Income Tax Act is very familiar to both tech businesses and SMEs alike, although only 41% of SMEs are aware of it.

The least known law for SMEs is the Electronic Transactions Act, 2019 while the least known law for tech businesses is both the Electronic Transactions Act and the SMEDA Act. The Electronic Transactions Act provides for the formal recognition of electronic transactions and the enforceability of contracts executed in electronic form and the SMEDA Act provides for the establishment of the Small and Medium Enterprise Development Agency to create a conducive environment within which SMEs can thrive. The ETA is one of the few laws that have implications for increasing digitization in business but neither SMEs nor tech businesses seem to know about it. This may not be an issue if they have taken for granted the provisions it makes for enforcing electronic transactions but if they have not, the lack of awareness around it speaks to the serious gaps between policy creation for business and digitalization and policy awareness and implementation.

The low awareness rates for many of these laws especially for SMEs speaks to a foundational problem – if the businesses do not know the law, how are they expected to comply with these laws or take advantage of the incentives that these laws may provide for them if any? Our laws and policies are meant to both regulate and support technology and entrepreneurship in Sierra Leone but 25% of SMEs interviewed and 18% of tech businesses interviewed do not know of any technology or business laws in Sierra Leone. In the case where they know of it, there is very little evidence in their operations and business models, to support an in-depth understanding of the implications of the law.

4.4.2 Perceptions of Business and Technology Laws

37% of SMEs indicated that the most challenging laws were the tax laws indicating that the tax rate for SMEs was too high. This was similar for tech businesses at 27% although a majority indicated that they did not have any challenges with the current laws and policies. Sierra Leone's tax rate compared to its neighbours is actually within the average for income tax as a percentage of profit and the lowest for total taxes and contributions as a percentage of profit. Ghana, which has one of the stronger ecosystems in the region, has similar tax to profit ratios as Sierra Leone, suggesting an absolute reduction in tax may not necessarily be the appropriate solution for incentivizing business growth.



Total Tax and contributions (% of profit)

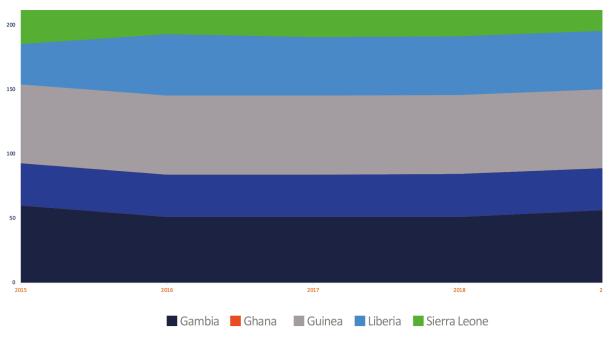


Table 4.30

Another policy issue raised by SMEs is price control, which speaks to rising inflation in Sierra Leone and its overall macroeconomic performance. There is no quick or easy fix to this and in fact, rising inflation can be strongly affected by the country's private sector growth, among others.

Over 47% of SMEs interviewed believe that none of the government's laws or policies has positively affected their businesses and 7% mentioned that they do not know of any law or policy that positively affects their business. Of the remaining SMEs, only very few can articulate in any way a policy or law that has positively affected their business and how. This is similar for tech businesses with only one interviewee mentioning a positive impact of the current laws and policies on his/her business. This highlights an issue that may influence the attitude towards any government related initiatives. If entrepreneurs feel that none of the government legislation is supporting their businesses positively, there is a high likelihood of avoiding government interactions, or complying with government recommended standards. While we know that some of the laws implemented are actually for the benefit of the entrepreneurs, for example, the SMEDA act, the benefit will not translate if there is suspicion and lack of trust between the government and entrepreneurs.

4.4.3. Formalisation of Businesses

The two main legislations that provide for formalisation of enterprises in Sierra Leone are:

- 1. The Companies Act, 2009 (as amended)
- 2. The Registration of Business Act, 2007 (as amended) (ROBA)

The Companies Act makes provisions for the regulations of companies and is the primary legal instrument for their regulation. The Registration of Business Act makes provisions for the registration of businesses in general, which is its primary concern. Together, these two Acts contain two parallel registration requirements for corporate entities:

- 1. Incorporation under the Companies Act to be carried out with the Corporate Affairs Commission
- 2. Registration under the ROBA to be carried out with the Office of the Administrator and Registrar-General

However, these parallel requirements have been combined in practice for corporate entities with the creation of a one-stop-shop at the CAC where all business incorporation requirements including registration of business location and tax registration are processed and handled by the CAC.

While both laws have a relatively high level of awareness among entrepreneurs compared to other laws (over 70%), 83% of the interviewed entrepreneurs did not know about the organizations involved, i.e. CAC or OARG; and only 36% were registered with CAC while 64% of the entrepreneurs indicated that they did not know how to register a business. We realized that there is a superficial awareness of these laws, with ROBA having the higher awareness and implementation, regardless of the many vehicles for implementation as will be discussed in the SME Legislation and Policy below.

In our interviews with the OARG, it was noted that the major challenge faced during the passing of the ROBA was limited funding. The limited funding remained a constraint for ROBA even for its implementation. Conversations with CAC indicated that they did not perceive any real challenges in the implementation of the Companies Act. Following further investigations, however, we found that the development of both Acts seemed to follow similar processes and was facilitated by the same actors including external consultants, the Law Officers Department, business groups and OARG/CAC. Despite this, the need for broader participation and consultations in the development of the ROBA was highlighted. While CAC interviews revealed that they were not aware of any challenges with implementation, the Companies Act had a much lower awareness than ROBA which highlights that within CAC itself there may be a low awareness and weak monitoring system to evaluate the success of the law. Laws like the ROBA and Companies Act affect all levels of businesses and the circumstances of the people who would be most affected by its provisions must be carefully considered.

Regardless of the above, neither the OARG nor the CAC identified any issues businesses face with their implementation of the Acts. Both agencies believe that the ROBA made it easier for businesses to register but the sentiment of SMEs who have registered with the OARG is mixed. While there are a few businesses that said they had no issues with the registration process, many mentioned facing issues due to delays in the process, poor customer relations, not having an office in their district, and or difficulties understanding the required documents and process. Businesses that registered with CAC mostly felt that the registration process was smooth and had few delays but there were a few recommendations for better customer relations and supporting businesses in understanding documents and required information.

4.4.4 SME Legislations & Policy

The only legislation and/or policy dealing specifically with SMEs is the Small and Medium Enterprises and Development Agency Act, 2016 (SMEDA Act). The SMEDA Act makes provisions for the establishment of the Small and Medium Enterprises Development Agency (SMEDA), its functions, administrative provisions, financial provisions, registration of small and medium enterprises (SMEs), and miscellaneous provisions on offences and regulations. It identifies two objectives:

To establish the Small and Medium Enterprises
Development Agency in order to create a
conducive environment within which SMEs can
thrive and operate.

To provide for Sierra Leone's fiscal, monetary and banking policy, trade and industry, technology, marketing, infrastructural and institutional development, and related.

The scope of the Act is quite broad, especially with the inclusion of the second arm but it is within this arm that we see consideration for technology among others. It may be indicative that technology is a factor that is considered when we think of SME development in Sierra Leone, but it is not the only factor. However, there is no further reference to the interactions between technology and enterprise in the Act and until this collaboration with the DSTI, SMEDA's activities have not included interactions with the technology ecosystem.

Further, it is unclear whether the considerations in the second arm are to be taken into account as they relate to SME development or in general. Even if they are to be considered as they relate to SME development, their inclusion creates the tendency for duplication of roles. This duplication of roles is further seen in the registration provisions of the Act (Part VI), which require SMEs to register with SMEDA to partake in any of its initiatives. SMEs are required to register both with SMEDA under the Act and with the Office of the Administrator and Registrar-General under the Registration of Business Act, 2007 (Section 25). This requirement for double registration is quite onerous for SMEs who more than likely than not have a single person running every aspect of the business; and who are already struggling with the current registration process with CAC and OARG. Non-corporate SMEs in Sierra Leone have the shorter straw when it comes to ease of starting business formally as they have to go through several different agencies to fully comply with formalisation requirements, some



This is unlike corporate entities who are only required to register with the Corporate Affairs Commission to complete the entire formalisation process. CAC acts as a one-stop-shop for them.

Although the second arm of the Act's stated purpose makes provisions for Sierra Leone's fiscal, monetary and banking policy, trade and industry, technology, marketing, infrastructural and institutional development, and related, the substantive provisions of the Act focus on the first arm — the creation of a SMEDA to create a conducive environment for SMEs to thrive and operate. Based on the interview with the SMEDA, the major challenge facing the Agency is limited resources to effectively carry out its mandate. Coupled with the broad scope given to the Agency in the Act, it runs the risk of running itself too thin and being unable to have a significant impact.

Further noted was the definition of SMEs, the category of businesses, which the Agency is meant to support. Currently, the Act defines small enterprises as businesses with less than Le 100 million in annual revenue and medium enterprises as businesses with Le 100 – 500 million in annual revenue. SMEs are only defined regarding revenue, unlike most definitions of SMEs which are composite requiring businesses to fulfil at least two out of three criteria relating to revenue, employee size and asset base, to qualify under a category. Such composite definitions provide a more rounded picture of enterprises and their capacity, which in turn provides insights into ways they can be better supported.

4.4.5 Other Relevant Legislation and Policy

A major government policy that affects both business and technology in Sierra Leone is the Government's **Medium-Term National Development Plan (MTNDP)**. The MTNDP focuses on technology and entrepreneurship through the lens of infrastructure and economic competitiveness highlighting them as a means of achieving infrastructural development, which would enhance economic competitiveness in the nation. The MTNDP clearly states that it intends to make critical use of technology for economic diversification, stabilisation and growth. The plan identifies the challenges in the technology sectors including an inadequate legal framework, an inadequate regulatory and institutional environment, high costs, and the lack of a national electronic governance system to improve capacity and the delivery of public services, among others.

The MTNDP is quite clear on the role of technology for development and the challenges in achieving this. It sets out very clear key targets including:

All cities and district headquarter towns are accessible by modern ICT services, especially Internet.

By 2023, 30 percent of the population will be penetrated by broadband.

By 2023, mobile penetration will increase to 80 percent of the population up to chiefdom levels.

Further, it does not approach technology within a vacuum but highlights its relationship with entrepreneurship and the economy stating that the strategic objective is to improve ICT services for increased access and affordable cost to ensure that it is integrated into all development initiatives for growth, innovation, entrepreneurship, and building a digital economy. As a strategy, the MTNDP does a decent job of integrating technology and entrepreneurship, although this is not specifically reflected in the key targets. However, the key targets if met are sure to boost the use of technology by businesses in both quantity and quality.

Compared to technology, the MTNDP's focus on entrepreneurship is less singular as it frames entrepreneurship as a means to ensuring private sector growth, which is believed to be the most stable engine of economic growth. The plan's analysis of challenges impeding entrepreneurship and private sector growth is succinct and the issues highlighted such as limited capital provision and labour market, limited data and information on private investment opportunities (information asymmetry, regulatory constraints including inconsistent tax regimes, et al. are well known.

However, it is less clear how the targets are set to map out to solving these challenges. The three targets are:



Arguably, improving the third target will include solving many of the challenges listed but considering the many factors that comprise the index, merely aiming to improve rank does not say much about how the Government of Sierra Leone aims to promote entrepreneurship and ensure private sector growth. Further by setting the improvement of a rank as a target, the focus could tend to become on improvements merely on paper rather than tangible actions that should be taken.

Other legal developments that may affect the development of technology and entrepreneurship include the Electronic Transactions Act which gives legal effect to transactions conducted electronically and the Consumer Protection Act, which provides for the promotion and protection of consumers. The Bank of Sierra Leone Act, 2019 and the Other Financial Transactions Act, 2001 are also relevant for regulating the digital financial space as there is no specific regulation for this sub-sector. Hence, these Acts are usually made to fit into the digital financial space as best as possible, which does not always produce ideal results.

5. Observations and Recommendations

- Fragmented entrepreneurial ecosystem the different elements are not coherent and in some instances are a source of confusion and frustration within the ecosystem
- The digital economy is nascent. While there are elements of it that are present, it is grossly underdeveloped and in need of investment
- Infrastructural development is a key hindrance to the development of both the digital economy and the entrepreneur ecosystem and requires an intentional approach to its development
- Cost and availability of finance are lagging significantly. The market is still dependent on traditional sources of finance which are expensive and inaccessible
- The quality of entrepreneurs is very low, with many focusing on the survival objective, lacking in business, numerical and literal skills, risk-averse and exposure to alternatives.
- The educational curriculum is outdated and is not providing the necessary skills required for the population to establish and function in a digital economy
- There are significant cultural issues that are derailing the efforts of developing a strong entrepreneurial ecosystem and digital economy, which include but are not limited to corruption, lack of support of entrepreneurship, dishonesty, get rich quick mentality amongst others
- Information asymmetries with both the entrepreneurial and digital ecosystem not all the players have the same information

As we come to the end of this report, we shall circle back and reference the main goals of this project which are:

To identify gaps in the policy and regulatory framework of the technology and entrepreneur ecosystems and provide a basis for policy action to address these gaps and support growth and sustainability of the ecosystems.

To obtain data that informs policies and development interventions for micro, small and medium enterprises (SMEs) in Sierra Leone. Data collected will form the baseline for subsequent interventions.

5.1 Digital and Entrepreneurial Ecosystem

Throughout the research, there was a glaring discovery – the ecosystems whether considered from the entrepreneurial or the digital perspective lacked coherence. The different components of each ecosystem functioned almost in isolation or in a silo, and in some instances, with direct conflict with other components of the ecosystem.

The second main observation was that there was a blanket term or view of entrepreneurs incorporating both the growth and survival entrepreneurs in the same bracket when the two have very different characteristics, needs and potential. What we need for economic development and leapfrogging are strong growth entrepreneurs who, as a reflection are defined as:

- Innovative and risk taking able to design business models that take advantage of available opportunities.
- Long term visionaries are working towards achieving a long term vision vs. immediate needs
- Relevant experience and education to not only set up the business but also ensure that it continues to operate even in very challenging and difficult environments.
- Able and willing to set up and participate in partnerships which would include other key players of the
 ecosystem like investors, government, development partners etc, with the knowledge that the success
 of the business will depend on strong relationships within the ecosystem.

Based on our research, 70% of entrepreneurs involved do not fit this criteria, and considering the infrastructural challenges currently prevailing in the country which include poor education facilities and standards, individualism culture, and poverty, the type of entrepreneurs we need will need to either be coached into the growth entrepreneur, or may have to be encouraged to return to the country from the diaspora.

Below are a set of recommendations we believe will significantly boost both the digital and entrepreneurial ecosystems to support the Sierra Leone economy.

5.1.1 Digital Platform:

The non-coherence in both the digital and entrepreneurial ecosystem is a result of information asymmetries that start from not knowing who the other players in the ecosystem are, the work they are doing, the resources they have available or the ones they need, among others. Therefore, the mapping project also comprises the creation of a digital platform, which is currently being built to address some of these needs. We believe that the digital platform could potentially be one stop shop for all ecosystem needs, increasing transparency and the potential for partnership or engagement across different partners. The platform would ideally serve the following functions:

- **Directory of ecosystem players:** This will have information on entrepreneurs working in different sectors, investors, relevant government agencies, financial institutions, private sector players, and other partners participating in the ecosystem. The directory will provide information on their activities, contact, and possibly previous work history, defining clearly what they do, where to find them, and possibly a history of their previous work. We believe that this directory will adequately provide the needed information for each player, which could be useful in evaluating their ability to execute a specific task. Further, many entrepreneurs indicated that they did not know where to access financing, meet regulatory requirements, or even get relevant training and support. It is our hope that the directory could, therefore, serve as a starting point for filling these information gaps.
- Process consolidation: During the research, we found that there are many steps entrepreneurs needed to go through to conclude a single process, such as all business related registration of non-corporate entities. This was also found with some policy designs where sometimes the content of a policy is duplicate of another process or somehow complicates or contradicts an already existing policy. The digital tool could, therefore provide a platform where processes could be consolidated. For example all business related registration could be done on one platform in a few steps and the information collected there could then be shared amongst the different organizations such as CAC, OARG, NRA etc. This simplifies the process for entrepreneurs and also reduces the opportunities for corruption through use of a closed system. In the same way, information can be shared about ongoing processes including the design or definition of new policies, or legislations.
- Marketing and advertisement: One anticipated challenge with the digital platform is that it may be resisted by the different players who may not want to share their information. The research showed that the ecosystem players are working in an environment of low trust, high suspicion and individualism. In order to encourage them to share their information and start building trust, there needs to be a benefit of using the platform. The platform or its future editions will therefore function as a marketing platform where registered players can share information on opportunities they have available. Such registered players could be given the right of first refusal in all relevant opportunities for which they may qualify. For example, whenever there are projects to be executed, project evaluators would consider the registered businesses for the opportunity as project executors.

The concept of a digital platform is not new and would not be unique to Sierra Leone. There are several coun- tries that have successfully launched digital platforms and are using them for different functions, from consolidating businesses in the entrepreneurial ecosystem or providing information for citizens in the country etc. What is clear is that most of these initiatives, although initiated by the government or for the benefit of the government, function better when they are managed by a private sector party. In this process, we believe the ecosystems will benefit from a public and private partnership, with the government responsible for the initial set up, and the private sector responsible for managing the platform and making it self-sufficient.

We also note that the above discussed functions may not be fully included in the current version of the tool but could be potentially included as the tool is further developed and expanded. It is important that the tool development and management remains dynamic responding to the everyday needs of ecosystem actors, including features most beneficial to creating synergies in the ecosystem.

5.1.2 Second Mapping Project

At the start of this project, there was information available to inform the structure of the process, however, this information was based on the limited information that was available at the time. The scope of the project for example, identifying the challenges and recommending the way forward, came as a result of negotiations among the different partners, however, did not fully represent all the initial needs of the partners or the ecosystem as a whole. While we were able to carry out some mapping work, with regards identifying the companies with roles in the ecosystem, more work will need to be done especially for the purpose of informing the digital platform. In addition, the research was carried out before it was clear what information was needed for the platform or for any kind of directory. There were also time limits and in some instances, external challenges including COVID-19 and the resulting "new normal" working environment.

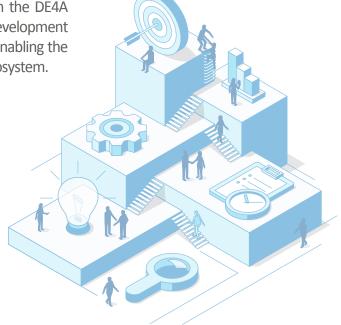
We would highly recommend carrying out a second mapping project which will focus on providing information that would be used in the tool, for example, specific details of companies operating in the country, both in the digital and non-digital ecosystems, designed with the "new normal" working environment. The benefit of the second mapping, immediately after the first cannot be overstated. The mapping process in its design was not a beginning and an ending in itself, but just the first step to the significant amount of work that needs to be done in building both the digital and entrepreneurial ecosystems in the country. For continuity, and to avoid having another detailed report sitting on shelves, the ecosystem mapping team are ready to take on the second phase of the research work and to put into action some of the recommendations already made. Accompanying this report will be a summary of what we believe are the key next steps, and proposed timelines. While we acknowledge that decision making processes tend to be long and winding, it is one of our recommendations that all the key partners in this project make the effort to facilitate faster turnaround times on the follow up work based on these recommendations.

5.2 Digital Ecosystem Recommendations

5.2.1 Infrastructural development

Infrastructural development has proven to be especially paralyzing for the digital ecosystem, which depends on the availability and efficient operation of digital infrastructure and digital platforms which both scored one point five out of five (1.5/5) in the DE4A assessment. The government, private sector and development partners need to come together and be intentional in enabling the development of digital systems to support the digital ecosystem.

The non-digital space equally needs infrastructural attention, from the road transport networks to availability of electricity and water and these are areas where innovation, venture building, private public partnership and developmental support can come in handy. We highly recommend a phased approach given how the amount of work to be done in this area can be overwhelming and significantly demanding. For the country to achieve the level of infrastructural development desired, it will only take collaboration and an attitude of "all hands on deck", without which the scattered efforts will see no real results.



5.2.2 Government Utilization of Digital Resources

While the Sierra Leone government has embraced the Whole of Government "WoG" approach which is when the government takes the initiative to lead initiatives that support the digital ecosystem; there is very little coordination among government departments and limited standardization. The lack of coordination and standardization limits interoperability between the different bodies and their respective initiatives. We recommend that the government takes a more proactive and collaborative approach not only in developing initiatives but also in implementing them.

In addition, a widespread use of basic digital infrastructure and resources means a natural learning curve for the population past the initial introduction of the systems. We highly recommend that the government digitises not only the internal operations but also the public services, for example national identity registration process. While efforts have already been made, more can be done.

In the implementation of the recommendations above, the government will greatly benefit from additional collaboration with private sector players, be it in the corporate world or the development space. We believe that if the government leverages these relationships, it will be in a better position to enable leapfrogging in the Sierra Leonean economy.

5.3 Entrepreneurial Ecosystem Recommendations

5.3.1 Develop a pool of growth entrepreneurs

At the epicenter of both the digital and entrepreneurial ecosystems are the growth entrepreneurs, who are currently in short supply in the country. As a critical resource for the development of the ecosystems and the economies, there is undoubtedly a need to invest in developing a pool of these entrepreneurs and we believe there are three ways of doing this.

a) Develop collaborative training for local entrepreneurs: While the entrepreneurial/startup scene has been nascent over the last couple of years, we have witnessed a strengthening of the sector with several Entrepreneur Support Organizations setting up offices in Sierra Leone. These include Innovation Axis, Aurora, Sensi Hub, SLG Accelerator and Muzambiringa. In addition, some universities are starting to set up vibrant entrepreneurial programs, for example the University of Makeni. This is starting to show the private sector capacity in developing a stronger entrepreneurial culture. Functioning in parallel are the development agencies who have historically and continued to provide strong support for entrepreneurs through coaching and training services. The only concern is that all of this is happening somehow in silos with minimum collaborations.

From our assessment, we noticed that local entrepreneurs need a longer-term period of training in order to groom them from survival entrepreneurs to growth entrepreneurs. This training would cater for cultural mindset shift, academic gap bridging and business skills training, and then ultimately the entrepreneurial and start up skills for building a resilient business. Currently, the different trainings are provided by different players in short and uncoordinated programs, depending on the funding available. This is proving to be, not only unsustainable, but of minimum impact and results. With the same pool of funds available, and coordinated efforts for longer term training and coaching, we forecast to see more efficiency and effectiveness in the training and consequently a growing pool of growth entrepreneurs.

within the ecosystem have one main thing in common – they are mostly diaspora returnees, or have some kind of international exposure. Some of them, when interviewed, clearly said that they came back to the country after listening to the president's speech in 2018, encouraging them to come back and rebuild their country. The advantage of these entrepreneurs is that they tend to have most of the key characteristics of growth entrepreneurs already and will need minimum hand holding when it comes to setting up and managing their businesses locally.

With the above in mind, we recommend strategizing ways to attract more of the young people in the diaspora to come back to Sierra Leone and start some businesses. This can be done through active marketing of the country, and roadshows in the different diaspora communities, with both government and private sector representations. Incentives such as government and developmental aid and ESO support need to be provided for these diasporans to return. These could be in the form of tax holidays, grants, and venture building support to start and set up the businesses.

C) Showcase Entrepreneur Success Stories: The entrepreneurial sector or journey is still quite unknown in Sierra Leone, with a lot of families associating it with continuous poverty and considering it inferior to finding a regular job. As such we believe that success stories of entrepreneurs should be showcased as much as possible, in an effort to make non corrupt entrepreneurship aspirational. This can be achieved through entrepreneur awards and competitions that are widely published in the media including on television, radio and newspapers. Our community still recognizes it as a major achievement to be acknowledged in the media by some of the society's most recognized faces. We believe this will drive a significant shift in the mentality about entrepreneurship and encourage growth entrepreneurs to emerge.

5.3.2. Venture Building

Closely in support of the above, we believe that there needs to be an intentional drive to develop businesses that will address some of the major challenges that the country is facing, for example, the country has waste collection and management challenges. The government can engage ESOs or other sufficiently skilled private sector players to design business models that can solve the specific challenges that need to be addressed and with development aid support through grants, offer the recruited growth entrepreneurs an opportunity to start and set up that business. Some of the entrepreneurs may come up with their own initiatives which can also be further molded to address the specific economic challenges that the country is facing. The idea behind venture building is that it is intentional, and focused to have specific results.

5.3.3. Centralized planning and organizing of entrepreneurial support interventions

One of the reasons for the minimum efficiency of the current efforts and interventions to support entrepreneurship, as mentioned earlier, is a lack of coordination. While there are a couple of players in the sector who are able to make a meaningful impact, the lack of collaboration and coordination means there are gaps in training which significantly reduce its effectiveness. Beyond the lack of efficiency, a lack of coordination and collaboration means a wastage of the available but limited resources.

As a key takeaway from this research, we highly recommend that the work of supporting entrepreneurs be coordinated and centralized, with annual goals set for all the key stakeholders in the ecosystem – both digital and non digital. This way, we are likely to witness a more efficient use of resources and more effective training results.

5.3.4 Revamping of educational curriculum for all levels of education

The war collapsed the country's education system and since then, it has struggled to recover. However, given that Sierra Leone was the epicenter of quality education in West Africa at some point, there is still hope. The education sector is one that also requires a lot of innovation. Attempting to restore the high standard of education by following historical systems will no longer achieve the desired results because the systems are changing especially due to the technological revolution. Digital skills and literacy are no longer optional, they need to be mandatory in each and every school, which also means the schools all around the country need to have access to the internet, and the necessary technology equipment.

Twenty-first century education is also more of the doing, rather than theory. Children need to learn to use their hands to be productive in food production and design and innovation. The University of Makeni's model for training entrepreneurship is commendable as it encourages the entrepreneurs to be hands-on and practice what they are learning in class. We recommend that this model be adopted in the other universities across the country.

Lastly we would highly recommend the engagement of experts in entrepreneur training, entrepreneur support organizations, the Ministry of Education, digital education and the different levels of educational institutes to collaborate in redesigning academic syllabus that can equip the new generation to succeed in this constantly changing environment.

5.3.5 Mobilization of a change in culture and encouraging positivity

When it comes to the culture in the country, we believe more can be done to challenge what has become the norm. The setting up of the anti corruption authority was one step in the right direction but we will need more grassroots solutions that encourage a positive day to day living. The country has suffered a significant amount of trauma from the war, the pandemic and epidemics and natural disasters. This trauma needs to be acknowledged and addressed.

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5.4 Policy Recommendations

Policy observations were as follows:

The above-mentioned legislation and policies comprise the legal and policy framework within which the technology, innovation and entrepreneurship ecosystems exist. However, the mechanisms by which they support and regulate these ecosystems seem to be even more fragmented than the ecosystems themselves. There is little harmony in these laws and while they are not entirely dissonant taken together, their collective support and regulation of the ecosystems are very piecemeal.

The financial incentives for technology and SMEs are scattered and do not seem to have a clear objective which they all seek to achieve. Given, most financial incentives are within the agriculture and manufacturing sector implying these are the two sectors through which the Government seeks to drive private sector growth. However, most enterprises in these sectors are too small to be able to benefit from the incentives provided by the Government as they usually have minimum investment criteria. These incentives would mostly be useful for businesses with a large amount of capital or are already very established.

Driving SME (as defined by the SMEDA Act) growth is not necessarily the same as driving private sector growth. The businesses that have the capital and are motivated to scale are not the same businesses that would qualify as SMEs as defined by SMEDA. They have different motivations and needs, and our current policies do not reflect this difference and thus do not provide for their varying needs.

We have a NIDS strategy that gives us three strategic pillars to focus on but little in way of clear objectives and plans and how to achieve them, intellectual property legislation that does not have regulations needed for their administration and implementation, and a telecommunications act that makes one of the functions of NATCOM the fostering and protection of an efficient ICT market but makes no provisions on how this should be done. The SMEDA Act which is meant to promote a conducive environment for SMEs narrowly defines SMEs, duplicates registration obligations for SMEs and broadens the scope of the Agency beyond what is needed to effectively carry out its mandate.

For most SMEs in Sierra Leone as categorised by the SMEDA Act, their major constraint is access to finance. Businesses with a revenue of 500 million leones or less, 500 million being the cap for a business to qualify as a medium enterprise, will not have the start-up capital to operate the businesses to which financial incentives have been granted. Thus, financial incentives for SMEs as defined by SMEDA remain sparse while financial incentives for 'larger' private sector actors remain dissonant.

The primary recommendation for policies that seek to develop SMEs in Sierra Leone is more integration, less duplication. A lot of the tools required to support SMEs are already available and new powers do not have to be created or endowed on SMEDA. It is more important that SMEDA plays a coordinating, facilitating, advocacy and promotion role for SMEs rather than taking on an established role. In this regard, we recommend that SMEDA increase its outsourcing of work from private sector service providers with each working toward specific goals aligned with the objectives of SMEDA. This way, SMEDA will focus on determining what needs to be done, and monitoring and evaluating how well it is done. As mentioned earlier, the role of SMEDA defined in the Act is quite broad and will run the firm thin in terms of capacity to effectively deliver on all the goals.

In addition, we recommend that SMEDA have an advisory board comprising of leading policy actors working on Sierra Leone's fiscal, monetary and banking policy, trade and industry, technology, marketing, infrastructural and institutional development, and related; and also some key players in the Entrepreneur Ecosystem from ESOs, entrepreneurs, etc. This will give SMEDA direct access to the various actors who are needed to facilitate relevant policies and programs that benefit SMEs. Further, if these actors are included directly, they would take more ownership in creating beneficial policies for SMEs within their various sectors rather than view themselves as external actors receiving a request from another government organisation.

The obvious recommendation on formalisation is the creation of a one-stop-shop for SMEs as well – a single registration that allows them to register with all necessary government agencies including SMEDA and can be done completely online. SMEs, which already have limited capacities should not be overburdened with dealing with multiple registrations to function formally. While it is advisable to keep separate the legal regimes governing SMEs that are not corporate organisations and SMEs and other enterprises that are corporate organisations, it is not necessary that the institutions facilitating their formalisation be separate.

However before creating such a one-stop-shop it is important to further build the definition of SMEs – make it composite including criteria such as asset base and employee size, and possibly vary the revenue categories. Also, there has to be enforced reporting criteria that allow the responsible institution to classify businesses as needed and SMEDA to identify their target beneficiaries. It will benefit that all companies be registered as companies regardless of a sole proprietorship, partnership or otherwise. Instead, in the company registration process, they can identify which type of company they are, and depending on this classification, size etc they are automatically added to any relevant databases including the SMEDA data.

Further, registration for both CAC and OARG needs to be decentralised. CAC currently has offices in only one district – Western Area Urban and OARG has four district offices, however, this is still less than adequate with SMEs still requesting that registration be decentralised even for the OARG. With regards to the registration process, other gaps noted by businesses are the need to improve customer relations and provide technical support and guidance to businesses during the process. Overall, however, we recommend that there be an extra effort in creating awareness and ensuring accessibility to the different laws; possibly even providing a simple registration package/starter pack upon registration which provides all the information on legislation and policies and how they can support the entrepreneurs.

SMEDA has to be strengthened in terms of capacity and resources for it to be effective. Entrepreneurship is necessary for private sector growth, which is in turn important for general economic development. Prioritising economic development requires prioritising the support and development of SMEs and the entrepreneurship ecosystem in which they find themselves. SMEDA's scope and mandate also have to be focused to ensure it is not responsible for everything and nothing at all but it should not be so narrow as to exclude key players in Sierra Leone's entrepreneurship ecosystem because they do not fall into the limited definition of SMEs provided in the Act. We believe it is necessary to re-define SMEs, taking into consideration the global standard, the definition of micro-entrepreneurs, and consequently defining the kind of support to be provided to each of the groups of organizations. This way, SMEDA can also focus on the group of entrepreneurs who have the potential to make the most significant impact on the economy.

In general, there has to be a clear and coherent strategy on how to support entrepreneurship for private sector growth from the business registration process to the financial incentives provided, the regulatory institutions and framework, and supporting entrepreneurs in embedding research and innovation in their culture. Having an innovation strategy is an important first step but we need to go further and ensure it provides a clear roadmap of how we develop an innovation culture in both the private and public sector and position Sierra Leone for technology-driven development. We recommend that the strategies already defined be supported by clear action items and milestones, which can be outsourced to private sector players for implementation, with a strong supervisory responsibility from the relevant government arm. This is particularly true for NIDS and MTNDP.



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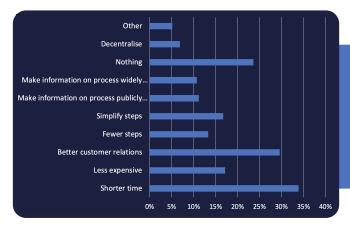
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7. Annexures

7.1 Additional Results from Research

What would you like to change about the registration process at CAC/OARG?



 34% of businesses registered with CAC and or OARG would like to shorten the time for registration, 30% want better customer relations, and 24% would change nothing about the registration process.

Table 6.1

72% of businesses registered with OARG alone registered because it was required by law, 50% registered because of legitimacy and credibility, and 44% registered for business growth/expansion/opportunities, etc.

- 80% of businesses who registered with CAC alone registered because it was required by law and 20% registered to gain legitimacy and credibility.
- 83% of businesses registered with OARG and other organisations registered with because it was required by law, 45% registered with them for legitimacy and credibility and 44% registered with them to access funding and other support
- 85% of businesses registered with CAC and other organisations registered with them because it was required by law and 34% registered to gain legitimacy and credibility.

Reasons for registering (CAC & OARG)

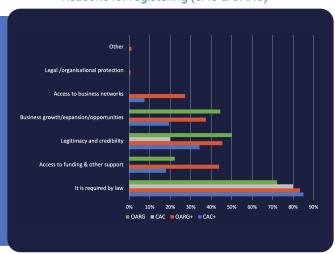
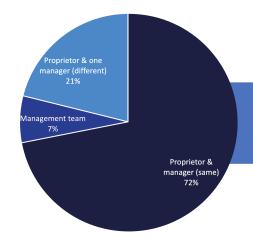


Table 6.2

Management Structure of businesses



72% of interviewed businesses have their proprietors serving as their manager as well, 21% have a proprietor and one manager, and 7% have a management team.

Table 6.3 —

How far away do you sell your products?

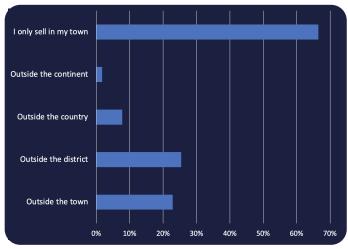


Table 6.4

 66% of interviewed businesses only sell within their town while only 2% sell outside Africa.

Reasons for not exporting to other countries

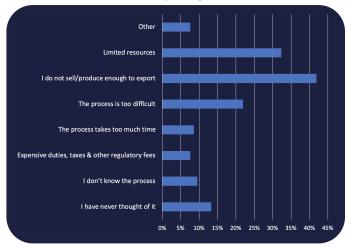


Table 6.5

Reasons for not exporting to other continents

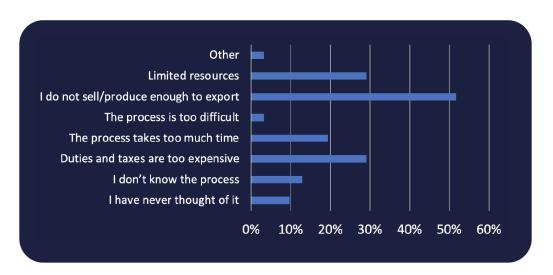


Table 6.6

7.2 List of Businesses Interviewed

Bo

- 1 M-Dee- Lans Enterprise
- 2 M&K BUILDING MATERIALS
- 3 Africa Information Technology Holdings Limited
- 4 Kensba's Construction & General Services
- 5 Bamba's Enterprise
- 6 Sedmo Construction, Agricultural & General Services
- 7 Family Man Enterprise
- **8** Gbotima Shoe Making Enterprises
- 9 Francis Gbondo Enterprise
- 10 Mayrays Foundation
- 11 Steven and Marian Enterprise
- 12 Gbintie Enterprise
- 13 Rugiatu Enterprise

Bombali

- 1 Nem's fashion design and boutique
- 2 Lag boutique

Bonthe

- 1 Madish Rutile Enterprises
- 2 Ngovamakeh Farmers Association
- **3** Ginger Sellers Association
- 4 M.B Enterprise
- **5** Zainab Enterprise
- 6 Foday Enterprise
- 7 Philico Oil Palm Association
- 8 Unity Metal Workshop
- 9 Muloma Palm Oil Association
- 10 Hopanda Association
- 11 Harding Enterprise
- 12 A.M.K Enterprise
- 13 Classic Electronics Enterprise
- 14 Bonthe Community Enterprise
- 15 United K Business Centre
- **16 SUBU ENTERPRISE**
- 17 Shalom Investment and Machandise
- 18 Myke Sam Construction, Catering and General Services
- 19 T/ A SITTIA ENTERPRISE
- 20 Ndeglomah
- 21 Hamidu Enterprise
- 22 Mr. Kent Enterprise
- 23 Alpha Stores
- **24 PATHANMAS**
- 25 Alice Fofanah Enterprise
- 26 F & F Enterprise
- 27 Petty Trading
- 28 BemBem Enterprise
- 29 Cole Enterprise
- 30 Mohamed J Tucker and Son's Enterprise
- 31 Cherinor & Kadiatu Enterprise
- 32 Joint Group Development Association
- **33** ALSAS GAS STATION
- 34 Unique After Work FTK Enterprise

Falaba

1 Umu Hawa Bah Enterprise

Kailahun

1 SAK construction and logistics Suppliers

Kambia

1 Wallah Enterprise

Kenema

- 1 New world investment
- 2 Business women Empowerment (Palmoil Sellers Association)
- 3 Mungilato Enterprise
- 4 Mariatu Adams Enterprise
- 5 Makanneh Brima & Son Fashion Wears
- 6 Oge Enterprise
- 7 Palmoil Sellers Association
- 8 Lama Enterprise
- 9 Raw Fish Sellers Association
- 10 Fatmata Bah Enterprise
- 11 Mattu Brima & Son's Enterprise
- 12 Palmoil Sellers Association Kenema
- 13 Katie SI Lim5
- 14 Samuel and Grace Enterprise
- 15 Homonya Avenue Sanitary Kisok.
- 16 Muleama Palmoil Sellers Association
- 17 Ever Green Women's Agric Business
- 18 Grace land Fashion Botique
- 19 Zaban Enterprise
- 20 Munafa Cocoa Farmers Cooperative
- 21 Yeane's Restaurant
- 22 Albecky Enterprise

Koinadugu

1 Onn word farmers base organisation

Kono

- 1 Amazing Catering and General services
- 2 Women's Development Initiative
- 3 Premier Sun Shine Enterprise
- 4 Kumba Enterprise
- **5** Alice Bockarie Enterprise
- 6 Unity women organisation
- 7 Young Rising Social Movement Organisation
- 8 Women in Action.
- 9 Momoyondema Women's Organisation
- 10 Kongormani Women's Organisation

Moyamba

- 1 Dee-mags global venture general services
- 2 Gbotima Syniva Organisation
- 3 Issa Jalloh Drug Store
- 4 Ngoyila Catering Services
- 5 Davishcha's Catering And General Enterprises
- 6 Green Life Investment
- 7 Mohammed Investment and logistics
- 8 Pnet Trading Enterprise
- 9 Munda Ginger Powder Production Center
- 10 Julitex Limited
- 11 Isatu Bangay Muloma Enterprise
- 12 Kpange Agricultural Company
- 13 JKL Production ICT Consultant and Enterprise
- 14 AL-HAN-SAT Enterprise
- 15 Sierra South Atlantic Investment
- 16 SINAVA GROUP LIVESTOCK ASSOCIATION

Port Loko

- 1 Cash cash enterprise
- 2 Savida Enterprise

Pujehun

- 1 Faith Hair Dressing Yanies Saloon
- 2 West Point
- 3 Mugomeh Enterprise
- **4** Rogers Trading Centre
- 5 Papa Man Enterprise
- 6 M J Linanh Enterprise
- 7 Adeson Sinava Enterprise
- 8 Malema Enterprise
- 9 Wanted Trading Centre
- **10** Allicious Enterprise
- 11 H K Enterprise
- 12 Wanjama Enterprises
- 13 Growth Centre
- 14 Pumagoi Agricultural Organisation
- 15 Njoyilla women Empowerment
- **16** Gbotima Development Association
- 17 Together as One women Association
- 18 Drisker Enterprise
- 19 Mulooma Agriculture Organisation
- 20 Ngoyilla Women's Association
- 21 Dokoilla II Farmers Association
- 22 Mugomeh Women's Organisation
- 23 Women's For Business Organisation
- 24 Bayama Mahoma Agricultural Organisation
- 25 Mulooma Farmers Association
- 26 Sogbema Agricultural Company
- 27 Toabu Agricultural Organisation
- 28 Jata Logistics and general merchandise

Western Area Rural

- 1 Bright The Devine Logistics
- 2 GLOBAL SOLAR PV SYSTEM LTD
- **3** Grace Enterprise
- 4 Jemie Twins Kloset
- 5 LAWRENCE CONSTRUCTION & LOGISTICS SERVICES
- 6 Mullahs Services SL Limited
- 7 Mui Enterprise
- 8 Aruna Enterprise

Western Area Urban

- 1 Okeke Investment Enterprise
- 2 FOOD TOWN
- 3 Mablamsay Enterprise
- 4 Carlsank Enterprise
- 5 JAK Logistics
- 6 Invictus logistics & procurement
- 7 Alkel fishing company SL LTD
- 8 DS Trading Ltd
- 9 OMED Travel and Tours
- 10 Sajaco logistics & General Merchandise
- 11 A-Fames travel & tours limited
- 12 WELI AGRO-LINK SL Limited
- 13 Sahnora Boutique
- 14 ISA logistics company Limited
- 15 M Beretay Enterprise
- 16 Sierra Mountain Travel and Tours
- 17 GGT Trading and Industry Limited
- 18 Heritage Tour and Travel Agency
- 19 JOSBA World Tours & Travel Agency
- **20** SILICON LOGISTICS & GENERAL TRADING
- 21 Easi Construction & Trading Ltd
- 22 Sumujay Business
- 23 Wuyatta's Enterprise
- 24 DavidMark travel Agency and Tour
- 25 Winners Investment and General Services
- 26 Masikas Enterprise
- 27 Algeb's Enterprise
- 28 Ada Tegeh Enterprise
- 29 Ya-Bang's Enterprise
- 30 Suanita fast food and restaurant
- 31 Tidas Restaurant
- 32 Marim Fast Food Enterprise
- 33 Rebecca Sia Soccoyama Ent
- 34 Tame Habte Enterprise
- 35 Lambambo SL Ltd
- 36 Knight Investment
- 37 Gomarket SL Ltd
- **38 T KALLON GENERAL SUPPLIES**
- 39 Emmernuel Salaries Solution limited
- 40 London boss bar restaurant

Western Area Urban

41	Calanas hy Diaka
	Salenaz by Diaka
	All Nations Fashion and Design enterprise
	Women's United for Sustainable Agriculture Development Manga's fast food
	Abdul J. Enterprises
	·
	BLOSSOM AND JOY FISHING
47	DENORA ENTERPRISES
	JERILAN ENTERPRISE
	KONUS ENTERPRISE
	Shine Star Enterprise
	Rose Kpaka Enterprise
	Hates Enterprise
	Magrusam Enterprise
	Faridah's Beauty
	Access Enterprise
	Sal-Ben & Sons Enterprise
	I & S Enterprise
	AK&SB Enterprise
	SAMTHEPAL ENTERPRISE
	NENEH'S ENTERPRISE
	Sierra Leone Music Television
	Joile model Coutuie
	Cess Collection SL Limited
	Esther Mario Jengima Enterprise
	Smith Electricals
	Teeg Company Limited
	Okentu logistics &General supply
	Picket logistics
	Yeakem Sesay Enterprise
	JALIMI FARMS AND FOODS
	Jay Bees Enterprise
	Abu Bakkar Bah Enterprise
	Turiye Enterprise
	Tonitel Tonisco
	Emmaco Investment
	Golden Touch Enterprise
	Loiwil Pharmacy
	Universal Marine Solutions
	Nyabie Business Center
	Mariama and Sons Enterprise
	WOMEN'S VOCATIONAL ENTERPRISE
	AMA WRIGHT ENTERPRISE
	Salvation Drug Store
	Bernard Investment
	SLP Logistics
	Hajawaco Investment
	Mr Bakay Enterprise
	Chief Yankay Kamara Enterprise
	TWIN BROTHERS ENTERPRISE
	G&E ENTERPRISE

92	Jasmine's Enterprise
93	Winston Kay and Sons Enterprise
94	Al-Hann Enterprise
95	Med B Enterprise
96	Igab Enterprise
97	IMA-MEL ENTERPRISE
98	AFAMA CLUB
99	Augmac Farm Product
100	Sal Enterprise
101	Blue Sea Enterprise
102	FA and Children Beauty Saloone
103	Angelina Enterprise
104	Hot Link Enterprise
105	Roukllyn
106	Turay Hassanat
107	Light Salone Innovation SL Limited
108	Oswald Tech
	Donated Building Materials
110	C.A.M Abro Link SL Limited
111	Health for all Medical
	Micro Enterprise Development initiative
113	Ahmed Enterprise

91 GRACE FINGERS ENTERPRISE



ENTREPRENEURSHIP ECOSYSTEM MAPPING 2021



