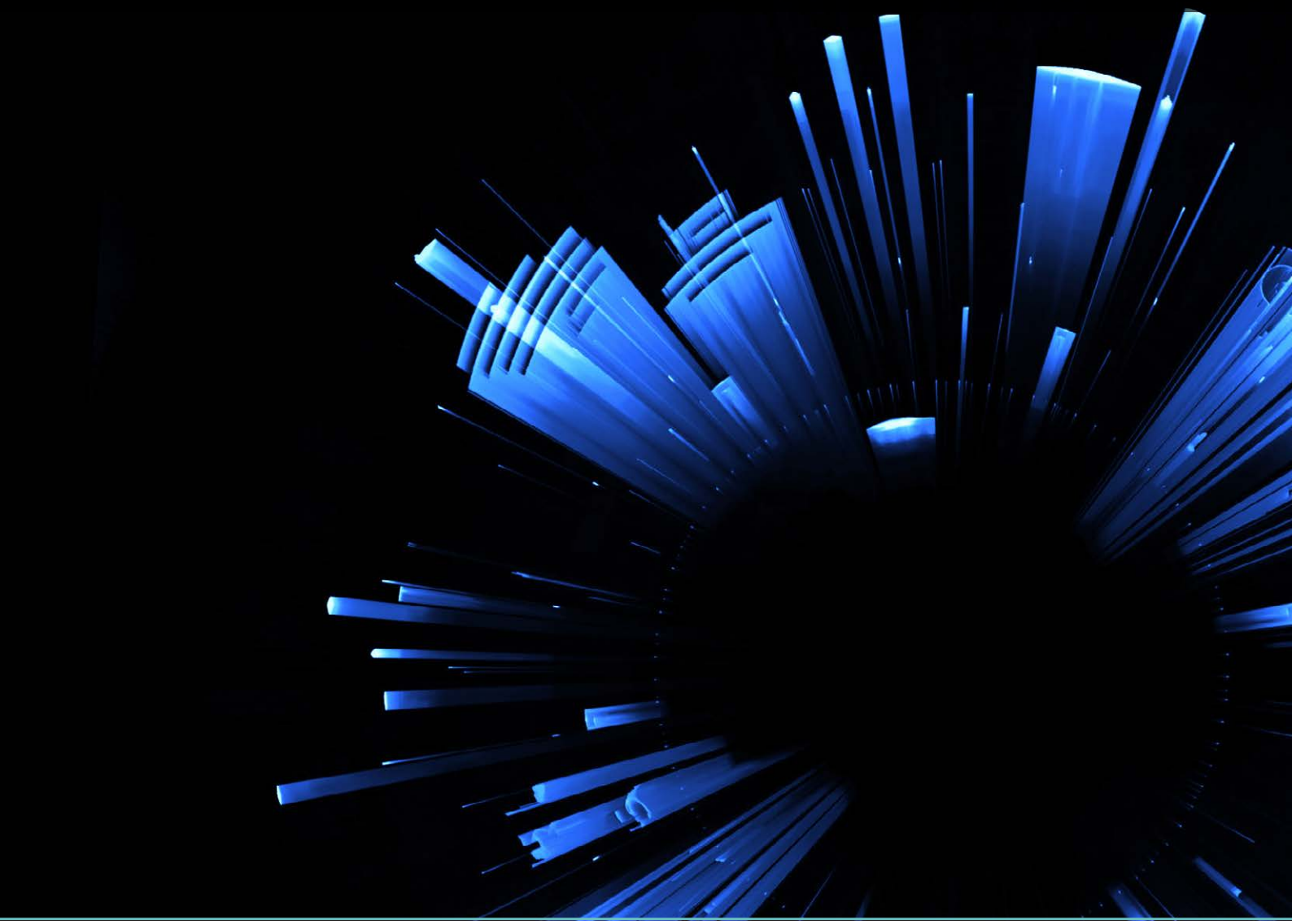
Understanding the gaps to lay stronger foundations:

Appraising scaling data indicators in Kenya, Ethiopia and Rwanda

October 2023



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RISA Research and Innovation Systems for Africa

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Contents

In this report, we highlight key elements of a data supply audit undertaken to determine what data exists that is relevant to scaling ventures in Kenya, Ethiopia and Rwanda. The findings inform the co-design and co-development of country-level data collaboratives to support ventures and ecosystem stakeholders by identifying, collating and diffusing relevant data and insights on scaling in the three countries.

This insight report is the second of a series produced by GrowthAfrica and Systemic Innovation under a FCDO-funded Research and Innovation Systems for Africa (RISA) Fund project to conceptualise, design and launch a scalable and replicable model for a data observatory for scaling commercial ventures in Kenya, Ethiopia and Rwanda.

Data Supply Mapping

Graphic 1: A selection of data sources considered that are focused on entrepreneurship growth, investment, and ecosystem conditions.

Regional insights

Contextual barriers

- Varying levels of investment and ecosystem development across the countries create challenges for a uniform design process.
- The majority of firms in the examined countries are micro or small enterprises, with only a small fraction considered scaling or high-growth ventures.
- Kenya has a significantly higher ecosystem value compared to Ethiopia and Rwanda (see graphics below).

Data challenges

- Scarcity of formal quantitative research on scaling and high-growth firms in East Africa.
- Limited availability of public data on scalability metrics and firm capability dynamics.
- Lack of longitudinal research on sustained growth and factor dynamics.
- National statistics offices have insufficient detailed firm-level data.
- Reluctance among academics and researchers to share data, leading to data recycling and limited surveys.
- Limited access to ventures' internal KPI data.

Gaps in data

- Limited research on the "how" and "why" of scaling firms, relying instead on investment data as a proxy for scaling intelligence.
- Data gaps in understanding the growth and sustainability of startups in the examined countries.
- Absence of publicly available firm-level benchmarking data, hindering comparative assessments.
- Limited demand-side data from scaling founders regarding their specific needs.
- Existing platforms focus on macro-level factors and have limited practical use for benchmarking scaling and high-growth firms.

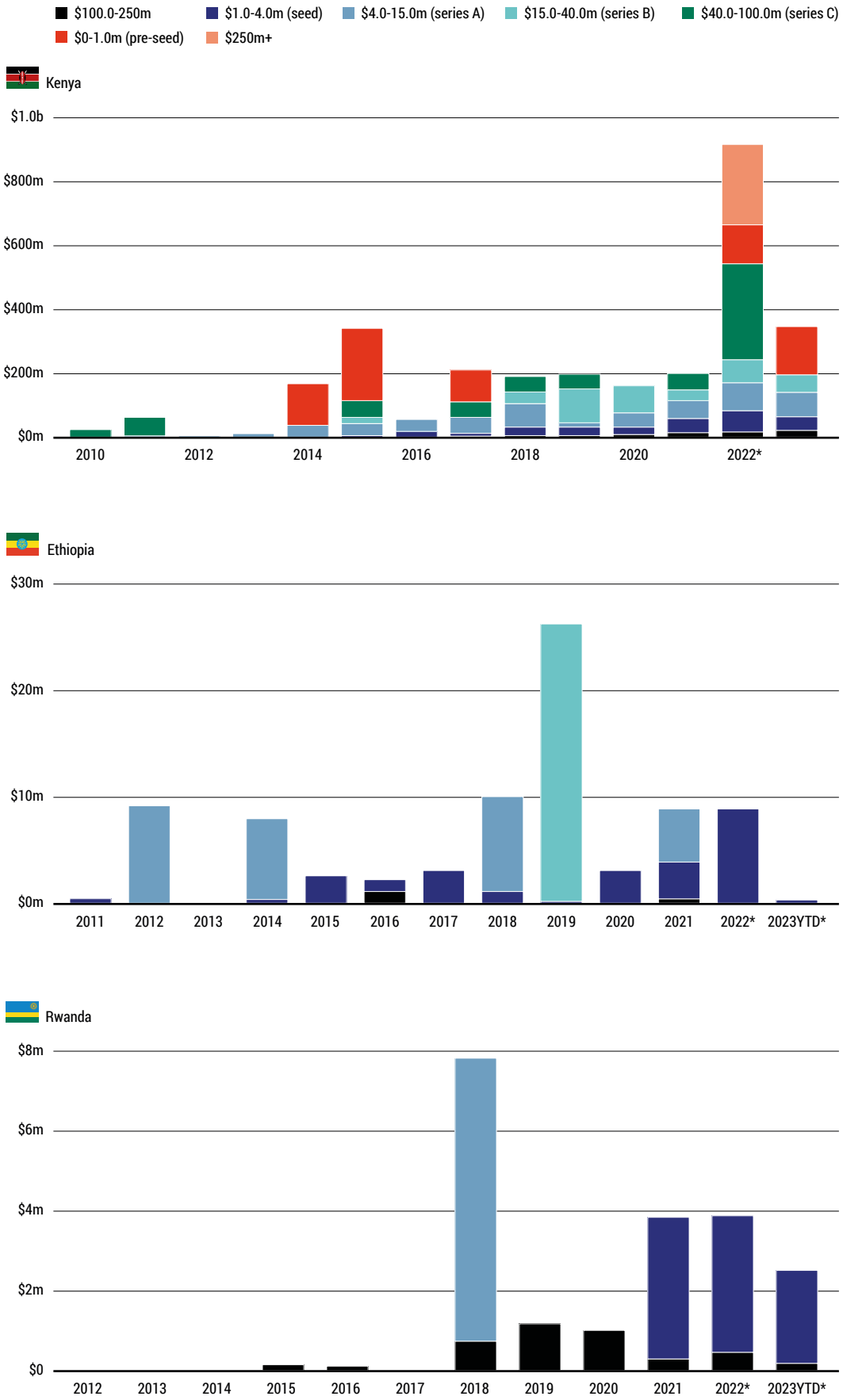
Conceptual challenges

- Methodological challenges in measuring ecosystems, defining what to measure and how.
- Lack of clear taxonomies for understanding scale and high growth.
- Difficulty in predicting scaling and high growth firms due to heterogeneous characteristics and the random nature of growth.
- No consistent set of underlying features of scaling and high-growth firms across different settings.
- Lack of distinction between different types of growth firms in East Africa's research and data initiatives.
- Few data collaboratives exist in East Africa, and none for entrepreneurship.

Measurement and evaluation challenges

- Insufficient M&E data for assessing the effectiveness of ecosystem interventions.
- Importance of intelligence on capabilities and behaviours for understanding growth strategies and challenges.
- Gaps and inconsistencies in investment deal data.
- Patchy ecosystem data with varying definitions of "strong" conditions.
- Established ecosystem health indicators, but data gaps and accessibility issues remain.
- Existing macro ecosystem indicators do not cater to the needs of micro firms.

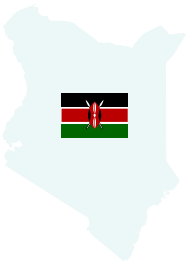
Graphics 2, 3, 4:
Equity investment into 1) Kenyan, 2) Ethiopian and 3) Rwandan companies by year, and deal size - overall ecosystem "value" is significantly skewed toward Kenya



Equity investment into 1) Kenyan, 2) Ethiopian and 3) Rwandan companies by year, and deal size - overall ecosystem "value" is significantly skewed toward Kenya (Source: Dealroom, 2023)

Our data audit methodology

- **Desktop research**: We conducted a comprehensive review of key data sources, including public and private databases, and conducted an extensive literature review of academic studies. We analysed and ranked 319 articles and reports (169 for Kenya, 57 for Rwanda, 93 for Ethiopia) based on their relevance to our investigation. We also explored relevant data platforms and open data processes and policies in each country.
- **Stakeholder interviews**: We conducted targeted semi-structured discussions with various stakeholders in the ecosystem to validate and enhance our research findings.
- **Synthesis/ analysis**: Based on our research and data discovery process, we examined the available data, identified gaps, and analysed their implications.



Kenya snapshot

Despite being the biggest and most mature of the three ecosystems, there is limited research and data targeting scaling and high-growth firms. A recent UK Government report highlighted how the ecosystem suffers because of the lack of accurate, high-quality data. Our review of academic journals also found very limited analysis of scaling dynamics.

Insights

→ The influence of psychological traits such as control, risk appetite, motivation, and traditional dimensions like managerial skills, entrepreneurship experience, education, gender, age and self-efficacy is missing from existing data and research.

→ Firm-level characteristics in Kenya do not consider the impact of engagement in export activities and ownership structure (especially foreign ownership) on performance and growth.

→ There is limited focus on agglomeration effects (i.e. economic benefits derived from the clustering of economic activity), while broader ecosystem attributes such as access to capital, networks/ linkages, regulatory frameworks, policies and infrastructure receive significant attention.

→ Studies examining the influence of business systems and processes related to the transition from startup to enterprise and the organisational dynamics of rapid growth are lacking.

→ The categorisation of scaling and high-growth firms in Kenya is challenging due to limited recognition by the government and unclear classification parameters, which hinders understanding of how and why successful scaling occurs.

→ Research on gazelles (i.e. scaling firms with 20% year-on-year growth) and the concept of scaling has received limited attention from academics and is often used interchangeably with firm performance.

→ The absence of theoretical models or empirical tests explaining the success of scaling and high-growth firms in Kenya further limits understanding in this area.

Spotlight: FCDO Ecosystem Assessment highlights data holes

In March 2023, Maitri Capital published an ecosystem assessment report and series of case studies commissioned by the UK Government's FCDO which identified a series of gaps and challenges:

→ The ecosystem suffers from insufficient research due to the lack of accurate and quality data, which often forces stakeholders to rely on bias or extrapolation-based data.
→ Data deficiency represents a major barrier to effective startup and innovation policy and programme design, impact assessment, and monitoring, evaluation and learning.
→ Various government organisations working in silos with little or no coordination on activities, programmes or incentives related to startups (therefore duplicating activities and services, resulting in wastage of resources).
→ The government faces difficulties defining startups and typically bundles micro and small businesses with startups.
→ Lack of sufficient recognition or attention to startups and their role as a key economic driver.
→ Due to a lack of sufficient quality data on the number of startups and the entire ecosystem, the government has found it difficult to channel cash to help the industry.
→ Access to information is difficult, as are obsolete and incomplete data sets used in decision making.

Rwanda snapshot

Scaling and high-growth firms are largely absent in the ecosystem despite significant Entrepreneur Support Organisations (ESO) support activity. No academic studies focus on scaling ventures. There are initiatives seeking to collect better measurement and evaluation (M&E) from ESOs.

Insights

→ Limited insights into how firms develop into enterprises and scale outside the country. Data availability is scarce, and the pool of observable growth firms is small, mainly comprising corporations with ties to the government.

→ Lack of detailed profiles of successful scaling and high-growth firms. Most literature focuses on surveys of SMEs, with limited examination of individual founder profiles and longitudinal data.

→ Some case studies on large firms, such as SINA Gerard Urwibutso and Braliwa Ltd., offering insights into their operations and internal dynamics.

→ Emphasis on challenges faced by larger firms, including innovation constraints, autocratic management, relationship-based hiring, and limited employee involvement.

→ Commonly-cited factors hindering SME growth include skills gaps, fear of failure, risk aversion, lack of self-confidence, limited innovation and managerial skills, and inadequate human resource management.

→ Most Rwandan enterprises lack the scale economies necessary for competitiveness, as highlighted in the IFC private sector diagnostics report.

→ Limited sector-specific literature and definitional clarity for SMEs, with recent studies starting to focus on specialised sectors.

→ Limited examination of individual entrepreneurial traits, particularly related to growth firms.

→ Insufficient evidence on deeper causal factors supporting SME growth, despite some consideration of dynamic firm capabilities.

→ Lack of studies on Rwandan corporations' entry into regional or global markets and limited cross-comparative analysis with other regional markets.

→ Surface-level assessments of positive spillover benefits from SME performance, without clear identification of impactful governmental policies.

→ Lack of research on women in scaling firms and addressing challenges faced by female entrepreneurs and youth.

Ethiopia snapshot

Many key public and private data variables are neither collected nor available. The entrepreneurial ecosystem is very nascent, but developing. There has been very limited evaluation and measurement focus from ESOs. Few academic studies or grey literature exists on scaling ventures.

Insights

→ Access to credit is a significant concern for SMEs, as they face challenges in obtaining loans from both microfinance institutions and formal banks, reflecting the absence of "missing middle" financial intermediaries that cater to small enterprises.

→ Tax rates are perceived as an obstacle for scaling and high-growth firms.

→ ESO programmes in Ethiopia do not prioritise innovative and competitive firms when allocating resources.

→ Studies indicate that firm growth tends to decrease with size, with smaller firms exhibiting faster growth rates, despite higher attrition rates.

→ Limited historical research exists on entrepreneurship and gender in Ethiopia, but indications suggest that female-owned firms have registered relatively lower growth rates compared to their male counterparts.

→ Large firms account for 97 percent of new job creation, and incumbents play a more significant role in generating employment than new entrants. Factors such as agglomeration economics, a favourable business environment, and access to infrastructure vary in their impact depending on the firm's size, life cycle, and growth rate.

→ Various challenges - including financial, political, legal, and technological factors - impede the growth and sustainability of firms. Although many studies focus on micro firms, these underlying challenges are common and significant determinants of firm growth.

→ Ethiopia's complex business environment and regulatory framework pose difficulties for East African investors seeking to navigate the market and find investment opportunities. The early stage of the private sector and the lack of mature businesses further limit the investor pipeline.

→ Internal enterprise factors (such as firm size, employees' education level, managers' technology adoption capability, on-job training, and research and development expenditures) have a positive impact on both types of innovations. Private and foreign ownership were found to be significant only for process innovation.

A pragmatic way forward to support scaling ventures

Capturing and processing a vast array of entrepreneurial ecosystem data and datasets is beyond the scope of our project. Instead, our focus is on the specific data needs of scaling ventures during their scaling journey.

Our data collaborative effort aims to identify, compile and share relevant data on scaling ventures in the three countries. We acknowledge that ESOs are well-positioned to gather and utilise data, as they already provide direct support to ventures and ecosystem stakeholders.

Our approach involves exploring a narrow set of firm-level data, in addition to ESO datasets, to inform our future direction. We anticipate partnering with select organisations specialising in venture and ecosystem data. We are leveraging existing activities and investments to ensure sustainability and maximise long-term benefits.

Ecosystem recommendations

1. Enhance coordination among key public agencies at national and international (donor) levels to improve coherence and efficiency, reducing duplication and maximising value for money.
2. Increase academic research specifically targeting scaling and high-growth firms, including in-depth longitudinal case studies to understand the unique dynamics and evolution of scaling across different types of growth firms.
3. Implement scale diagnostics to assess key organisational dynamics and identify barriers hindering growth trajectories, enabling a better understanding of growth impediments.
4. Integrate scaling data with impact reporting to ensure that growth has positive spillover benefits and contributes to broader societal impacts.
5. Effectively disseminate ecosystem knowledge to ensure a better understanding of scaling beyond mere investment raising, facilitating a more nuanced evaluation of growth processes.
6. Address ecosystem fatigue by promoting improved coordination, resulting in increased efficiency and resource optimisation within the ecosystem.
7. The World Bank has made a call to action to national statistical agencies, donors and international organisations to make high-quality firm data a priority. If we agree that ecosystem productivity is what matters in the long run, efforts should be more serious and intentional about measuring it.

For further information, please contact us at contact@systemicinnovation.work