

New Innovation Pathways

A data collaborative model for improved entrepreneurship decision-making in East Africa

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This insight report is the first 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.

In this insight report, we shed light on the crucial need and value of a data collaborative model within the East African entrepreneurial ecosystems. With a specific focus on Kenya, Rwanda and Ethiopia, we present a compelling case for a stronger evidence base, discuss the timely nature of this endeavour, and underscore the advantages associated with enhanced data coordination and improved ecosystem cohesion.

Scaling firms and their significance

Extensive evidence indicates that scaling ventures play a pivotal role in making substantial impacts in terms of employment generation, talent capacity, and overall socio-economic value creation. We draw insights from our research report, "[Scaling in Africa](#)," which extensively explores the transformative effects of scaling businesses.

Numerous studies have demonstrated that scaling enterprises significantly contribute to innovation, social change, and the enhancement of national competitiveness. However, despite their paramount importance, little attention has been given to understanding and analysing the growth and decline patterns of African ventures.

We strongly contend that delving deeper into the intricacies of the scaling process has the potential to yield invaluable insights into how ventures operating in resource-constrained conditions, facing fragmented market environments and pervasive informal economies—such as those found in Kenya, Ethiopia, and Rwanda—manage to grow against all odds and achieve medium- to large-sized operations, as well as expand internationally.

The significance of data

Data fundamentally serves as an enabler—a core currency for reinforcing research and innovation ecosystems—but only when it is effectively understood and applied.

Unfortunately, there is a dearth of formal quantitative research investigating the factors that contribute to scale in East Africa, and Africa in general. Existing data often takes a prescriptive approach, primarily reporting essential market information and deal flow. Mistakenly, this data is sometimes considered evidence of innovation. Private data service providers predominantly measure investments rather than high growth itself.

Consequently, high growth and investment data have become synonymous, representing a shallow level of analysis. Although there are correlations between raised funding and the potential to build teams, develop products, and implement go-to-market strategies, revenue data is generally unavailable, direct employment data is patchy, and social impact metrics are entirely absent.

The metrics related to scalability, organisational health, and specific firm capability dynamics are often overlooked. Consequently, firm-level benchmarking data has been forgotten, making it incredibly challenging to derive a consistent set of underlying features of high-growth firms across different settings.

Moreover, there is limited consensus and alignment between data service providers regarding definitions and sector categorisations, hindering accurate comparative assessments. We also recognise that specific indicators are far more important for high-growth firms compared to their startup counterparts. For instance, specialist industry knowledge, mentoring, partnerships, and expertise in international expansion play a critical role. However, these elements often receive inadequate attention.

Understanding entrepreneurial ecosystems

The concept of entrepreneurial ecosystems is rooted in the understanding that entrepreneurs and firms are intricately interconnected with their surrounding environments. The range of environmental metrics and indicators is extensive. There are considerable methodological differences in assessing how well an ecosystem performs.

Entrepreneurship support organisations (ESOs) are ideally positioned to gather and utilise data to support high-growth ventures, as they provide direct support through programme design and tailored services to cater to unique needs. Unfortunately, many ESOs face limitations in their monitoring and evaluation processes, often due to insufficient resources allocated by donors.

Thankfully, data-driven technological advancements facilitated by organisations such as Village Capital, ANDE, C4G and Impact Foresight have resulted in improved diagnostic tools becoming available. The benefits would be immense if some of these insights were pooled together and shared widely, rather than being held in isolated silos. It is essential to capture positive externalities, particularly where public funding generates private value.

Demands for systemic solutions

Data fatigue within the ecosystem:

A pervasive and omnipresent issue in the ecosystem is stakeholder fatigue resulting from continual and exploitative data requests. The overwhelming number of requests for data, surveys, interviews, workshops, and the repetition of data collection efforts contribute to a sense of malaise within the ecosystem. There is a concerning frequency of requests for the same data from different researchers, which can lead to dysfunctionality.

Less extractive approaches:

Data is often provided without clear visibility into its utilisation, leading to frustrations and eroded trust. Partnerships, particularly when there is a power imbalance, often result in the more powerful party - often foreign - extracting greater value than the local counterpart. To discourage funding projects that are extractive in design, any data collected as a result of donor-funded projects should be anonymised, included in data repositories with the prior informed consent of the data owners, and made available for controlled utilisation. This approach ensures that ventures' time and resources are not wasted.

Ecosystem imbalances:

An evident disequilibrium exists between the actors who have access to data (investors, development finance institutions, donors) and those who do not (ecosystem support actors, catalysts, entrepreneurs). This imbalance leads to inefficiencies, duplication, and wastage. Donors can work more collaboratively, adopting improved ways of working and coherence strategies that can be passed on to their implementing partners as a condition of funding. Partnerships need to be relational, long-term, and provide fair value to all involved, regardless of whether the value is tangible or intangible.

Normalisation of data usage:

Research commissioned by the UK Government's Foreign, Commonwealth & Development Office (FCDO) indicates that neither the government nor the business community habitually uses research data. Many ecosystem actors rely more on instinctive "gut-feel" approaches rather than evidence-driven decision-making. Collecting and analysing industry data systematically and consistently can help identify best practices and successful growth strategies. Attitudes towards data often lean towards competition and proprietary ownership, rather than collaboration, as seen in more mature markets.

Lack of common taxonomies:

The absence of a common data language and terminology hampers effective ecosystem alignment. Establishing a shared understanding would facilitate better collaboration and coordination.

Critical infrastructure requirements:

There is a notable lack of open data structures, mechanics, and processes, limiting opportunities to make data more accessible. Previous FCDO country research reports have acknowledged the need to establish research data infrastructure (e.g. in Rwanda) and to strengthen the role of national intermediaries in bridging the gap between research and policymakers (e.g. in Ethiopia and Kenya).

Information silos and information asymmetries persist, resulting in isolated data that receives inadequate attention. Consequently, insights into specific factors enabling scale and efforts to support potential scale-ups remain limited and less effective than desired.

Data hoarding is also prevalent, with limited access, unwillingness to release data, and a perceived value in retaining rather than sharing it. It is evident that there are data capacity challenges throughout the ecosystem.

While there may be an appetite for using data to inform decision-making, people often lack the capacity to analyse data, especially from non-traditional sources. Upskilling and simplifying knowledge about the use and application of different data sources among key innovation infrastructure audiences is essential.

“An ecosystem data strategy could improve the availability and quality of data on entrepreneurship activities and ecosystem-building initiatives. Establishing data collection mechanisms, partnerships with academic institutions, and collaboration with the private sector are all promising approaches to strengthening this support”.

Source: ANDE Phase Knowledge Brief: Lessons from Three Years of Ecosystem Building Report

Defining data collaboration

A new approach - data collaboratives:

A data collaborative represents a relatively new form of collaboration that brings together public-private partnerships. These collaborations allow participants from different fields - including private companies, research institutions, and government agencies - to exchange data in order to solve public problems.

Collaboration with data can take various forms, ranging from creating, processing and analysing data through interdisciplinary teams and groups, to sharing data, receiving feedback, and discussing it. It also involves the reuse of data in new contexts.

A central aspect of data collaboration is the establishment of a dedicated platform or data observatory. This platform serves as a facility that provides access to various data sources and tools for data analysis. With sufficient investment, the observatory can also offer training and support to help users understand and effectively utilise the data.

Additionally, it can act as a forum for entrepreneurs and ecosystem stakeholders to share information, knowledge, and collaborate on solutions to common challenges.

Who benefits from data collaboration?

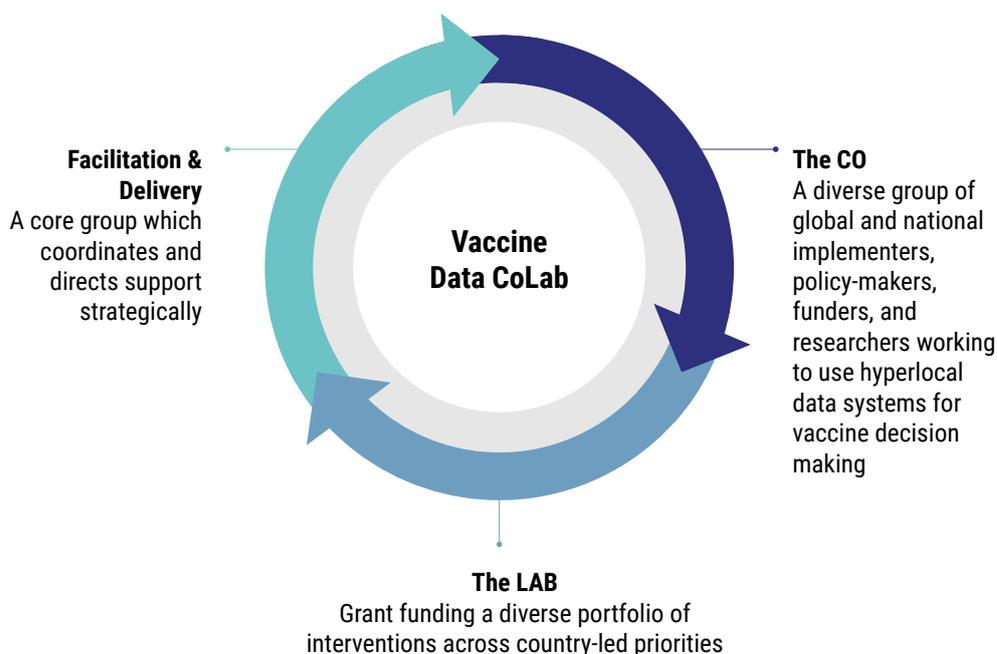
At a high level, data collaboration offers numerous advantages:

- **New insights:** By diversifying and increasing the amount of information available, researchers can uncover new insights and gain a deeper understanding of the entrepreneurship ecosystem.
- **Faster, more accurate decision-making:** Data collaboration provides stakeholders with a more complete and accurate picture of complex issues, enabling faster and more informed decision-making.
- **Improved forecasting accuracy:** By analysing disparate and interconnected data sources using advanced data analytics, stakeholders can identify new drivers for more accurate forecasts.

- **Process efficiency and coordination:** Additional insights from new data sources can optimise processes, reduce inefficiencies, and enhance day-to-day operations within the ecosystem.
- **Increased innovation:** Data collaboration enables stakeholders to identify new sources of value, leading to the development of new product offerings and innovative business models in collaboration with other stakeholders, fostering areas of shared value.

Data collaboration initiative exemplars

Notable examples of data collaboration initiatives co-funded by the government and philanthropic organisations exist. For instance, the data vaccine CoLab, born out of COVIDAction, has been established to support data-driven decision-making in global partnerships to address specific challenges. Its core focus is on providing actionable insights derived from data. This year it is funding 7 grantees looking at data policy and governance to enable better data sharing and interoperability, decision-making tools such as machine-learning powered dashboards and geospatial maps of under-vaccinated populations and related social determinants, and capacity development to equip local actors on the ground to action insight and develop targeted vaccine programmes. The aim is to capture learning and evidence on a portfolio-approach and see how interventions support one another and contribute to a bigger, more strategic picture.



Learn more here: <https://www.makingbetterfutures.org/aboutvdcl>

Tech Nation data commons

In the U.K Tech Nation developed a data commons which provided a 360-degree view of the rapidly evolving innovation economy. It includes detailed information on individual technology businesses, founders, investors, VC funds, angels, accelerators, universities and service providers to the sector. Openness was key to the effectiveness of the project with the platform providing a secure space that allows members of the tech community to pool information that will benefit the wider community. In addition to analytics and other data provided by data service providers, the database was enhanced by a broad range of third party submitted and user-generated content. All users were invited and encouraged to upload relevant information, so that an already rich well of data grew organically, providing an accurate picture of trends and activity within the tech startup scene.

Untapped potential of data sharing

There is significant untapped value in data sharing among private and public actors for the collective benefits of the entrepreneurial ecosystem, including:

Enhanced understanding for ventures:

Greater insight into the growth patterns of ventures and the identification of universal and contextually-influenced scaling factors can benefit ventures in their growth journey.

Improved support by ecosystem catalysts:

Ecosystem catalysts, often funded by donors, would greatly benefit from a deeper understanding of growth dynamics. This knowledge would enable them to provide more tailored and effective support services to facilitate scaling.

Targeted government interventions:

Government interventions, such as support and funding programs, can become more specific and targeted by leveraging insights from data collaboration. This approach would enhance project delivery efficiency, reduce asymmetries, wastage, and lead to evidence-based policy changes.

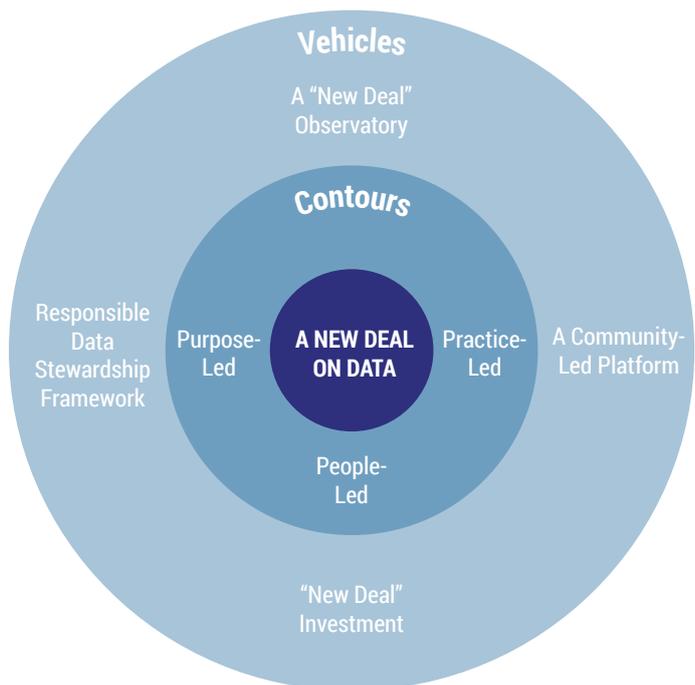
Fostering a culture of collaboration and learning:

Data collaboration promotes meaningful conversations, knowledge sharing, and the dissemination of best practices. This collaborative approach nurtures an ecosystem where stakeholders work together to address challenges and drive collective action.

The timeliness of a “New Deal on Data” in Africa

The current landscape presents an opportune moment for a “New Deal on Data” in Africa. Important efforts are already underway to advance open data policies and governance frameworks across the continent.

Initiatives by the African Union, the African Economic Research Consortium and other organisations emphasise the potential of data to drive innovation, societal value, and evidence-based policymaking. These efforts highlight the need to maximise data utilisation, foster cross-border data flows while protecting individual rights, and bridge the gap between data production and policymaking.



Catching the wave

In Kenya, the Kenyan National Innovation Agency is working on a strategic 'Masterplan' which is intended to be "aspirational, educational and informative, offering a shared vision to align actors across the wider ecosystem". It will be launched in December 2023.

In Ethiopia, the Entrepreneurship Development Institute is working on a national ecosystem strategy.

In Rwanda, projects have been instigated by the World Bank, Mastercard Foundation, and by the Rwanda Government which cover data driven support for ESOs and the broader innovation ecosystem.

The way forward: Active systems collaboration

Collaboration has been identified as the "secret sauce" for startups and industries, surpassing acquisitions and building from scratch. A collaborative approach, facilitated by data collaboratives, can create a community of practice comprising parties and innovation ecosystem data experts with shared data interests.

By actively participating in the systems design process, stakeholders can collectively create representative and inclusive collaboration models. This approach allows for the sharing of ideas, experiences, and best practices, driving innovation and establishing a robust evidence base.

Furthermore, combining diverse datasets and conducting comprehensive analyses enables a deeper understanding of the relationships between micro and macro variables. By harnessing data collaboratives, stakeholders can uncover valuable trend insights and establish clearer evidence bases, enhancing the effectiveness of decision-making and policy interventions.

Implementing a data collaborative model in East Africa's entrepreneurship ecosystem holds immense potential. By leveraging the power of data and fostering collaboration among stakeholders, it is possible to overcome challenges, drive innovation, and build a stronger and more inclusive ecosystem. Recognising the value of data coordination and establishing a foundation for collective action will empower East Africa to thrive in the dynamic world of entrepreneurship.

For further information, please contact us at contact@systemicinnovation.work
To learn more about the RISA Fund visit <https://www.risa-fund.org>