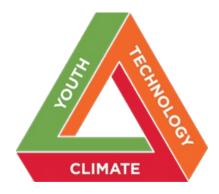


GENESIS ANALYTICS

We are an African firm with deep roots in the continent, yet we are globally competitive.

From our offices in South Africa, Kenya, Nigeria and Côte d'Ivoire, and our representation in India and the United Kingdom, Genesis has completed work in 90 countries globally.





The triangle of three forces. We have dedicated our work over the next decade to the three forces that we believe are reshaping our continent: the demographic transition (youth wave), climate change, and technology innovation. How we respond to these forces will determine our prospects as a region. Genesis helps countries, firms and organisations deliver solutions to the challenges and opportunities these forces present.

The Centre of Digital Excellence (CODE) team at Genesis co-creates value with our partners in Africa by harnessing opportunities in the digital economy. Our work is focused on three areas: digital work opportunities and their enablers, technology governance and ethics, and data-driven decision making. We collaborate with the other teams across Genesis to provide multi-disciplinary expertise on our projects. Some of the sector- and service-focused teams we collaborate with include:

Financial services Agriculture Health Education Social protection Behavioural economics Climate change | Gender | Monitoring, evaluation & learning

Competition & regulatory economics | Impact assessments | Private sector development

CENTRE OF DIGITAL EXCELLENCE

The Centre of Digital Excellence (CODE) at Genesis focuses on technology innovation and the opportunities it provides for drastically improving the development potential of African nations, as well as managing the risks inherent in an increasingly digital world.

Our purpose:

Co-creating value in Africa by harnessing opportunities in the digital economy









We work best when we work collaboratively. We are inspired by the people around us. This means we place the ultimate beneficiaries at the centre of our process, working closely with our clients and trusted experts to create meaningful solutions.

We are motivated to solve complex challenges to create real change, ultimately creating a better world than what existed before. We are driven to make a meaningful and sustainable impact.

Digital transformation is a generation-defining revolution that can change Africa's narrative. But it also comes with significant risk. We work to create responsible solutions that are awake to both the tremendous opportunities and unprecedented risks.

The digital economy is rewiring the way we live, work and interact. It speaks to familiar and frontier digital technologies; the ecosystem that enables participation and the structures which govern it. It's an exciting space to work in.

Our expertise:

- We identify and enable work opportunities in the digital economy to connect young people to sources of income. We work across the enablers required to scale these opportunities inclusively: digital and financial inclusion, digital skills and capacity, inclusive techenabled business models and policy & regulation.
- We advise our clients on technology governance and ethics. We identify the biggest risks contributing to negative market, consumer and human rights outcomes as technology become mainstream, and advise on the best approaches to managing these risks responsibly without stifling innovation.
- We support organisations to improve data-driven decision making by employing human-centred design to offer a suite of tools that collect, analyse and dynamically visualise the information required to make decisions more quickly and effectively across an organisation.

Our products and services:

- Market scoping and opportunity mapping
- Country and sector digital / 4IR strategies and readiness assessments
- Policy and programme design and evaluation
- Impact assessments and advisory
- Digital communication and data collection tools
- Big data analytics and visualisation
- Interactive decisionmaking dashboards

We have completed several national digital economy or 4IR strategies focused on **digital work opportunities and their enablers**





National 4IR strategy for Uganda

We were the technical advisors to the President's National Taskforce on the Fourth Industrial Revolution in Uganda. We worked with the Taskforce to develop a <u>national 4IR strategy</u> for the country. The strategy prioritises the **opportunities for domesticating 4IR technology to solve Uganda's development challenges, chief among them being youth employment creation and improved public service delivery of healthcare and education. It then provides a set of actions to develop the enablers required for these opportunities to be realised – including 4IR connectivity, agile governance, an upskilled population, eGovernment, and resource mobilisation. Lastly, the strategy sets out delivery mechanisms for the strategy to be executed, including an internal government coordinating mechanism, ecosystem facilitation, and CSO coordination.**



Digital Economy Strategy for Malawi

Digital work in South Africa

We convened an urgent multi-stakeholder initiative to identify the opportunities for mass job creation in South Africa's digital economy with our partners GIBS business school and Digital Pathways at Oxford University. The initiative identified three significant areas of opportunity for scaling digital work: digitally traded services, labour-absorbing digital platforms, and positioning South Africa as a frontier technology hub for the region. The initiative then identified the areas requiring immediate action for unlocking opportunities inclusively: universal digital inclusion. human capital development. government support and innovative business. The strategy document set out the key actions and stakeholders required to realise these opportunities across each of the imperatives.

We partnered with the Malawi National Planning Commission and Reserve Bank, along with our partners DIAL and Digital Pathways at Oxford University, to develop a forward-looking digital economic strategy for the country. The strategy identifies the key areas of opportunity in applying digital technology in Malawi to address the country's development challenges, including promoting smallholder productivity and market orientation. expanding upstream downstream capabilities of the agriculture value chain, digital enablement of the tourism and hospitality sector, and digital work opportunities in the information & communication sector. The strategy then conducted a digital readiness assessment to identify gaps in Malawi's ability to realise and scale these opportunities. This resulted in the formulation of a strategic action plan setting out which actions need to be taken, and by whom, for these opportunities to be realised and scaled.

We have provided landscaping, knowledge products and programme design services to address the changing requirements of **technology governance and ethics** across Africa.



Design scoping for the Africa Tech Policy Network

OMIDYAR

We partnered with the Omidyar Network who were considering the formation of an African Tech Policy Network. The Omidyar Network needed to **understand the most pressing tech governance issues in Africa** and which stakeholders had a role to play

in providing insight (research and analysis) or accountability (civil society organisations) as participants in the Network. Genesis conducted a scoping in several African countries to design a road map for the establishment of the Network that will coordinate the efforts of activists, CSOs and donors to ensure they can build expertise and **improve the governance of digital ecosystems across Africa through evidence-based policy research.**



Tech governance scoping in Ghana

We partnered with the Technology Innovation Unit in the UK's Foreign & Commonwealth Office to conduct a

scoping of the political economy of Ghana's technology governance environment. We developed a **framework for measuring the intensity and relevance of a range of technology risks across Ghana's digital economy**, and then explored the likely trajectory of these risks on the basis of how government, private sector and civil society were responding to them. This assisted the Technology Innovation Unit by **identifying clear areas of potential partnership and support with stakeholders in Ghana** to improve the country's ability to manage the new risks in the digital economy which are becoming more frequent.



Developing the 'Africa Leading the 4IR' playbook with UNDP

We partnered with the UN Development Program's Resilience Hub in Nairobi to develop an interactive online tool for building the capacity of heads of government, policymakers and civil society to manage the 4IR transition. We adopted a human-centered design approach to identify the chief learning requirements and functionalities for these stakeholders, and then designed an interactive online knowledge product to address these learning needs. The product includes a series of case studies demonstrating the impact that 4IR tech applications are having on solving development challenges in Africa, and exploring the fundamentals that must be in place to unlock these opportunities responsibly and to manage the risks inherent in 4IR applications. The playbook has a particular focus on providing policymakers and regulatory authorities with practical case studies, recommendations and tools for adopting an agile approach to technology governance.

We are increasingly working with big tech companies and others in the private sector to help them understand and improve the **impact of their tech-enabled business models**.

Impact assessment of Meta on small business in Africa

We worked with Meta (Facebook) to understand how the digital economy and social media contribute towards realising three key economic development opportunities in Africa. The study focused on the impact of the Meta's apps, namely Facebook, WhatsApp, Instagram and Facebook Messenger, on small and medium-sized businesses (SMBs) in eight African countries. We surveyed 4,020 SMBs, conducted focus-group discussions and triangulated development research to create a narrative on the role that Meta's family of apps play in allowing small businesses in Africa to find customers, conduct marketing and advertising, sourcing suppliers and accessing training and knowledge.

Assessing Airbnb's contribution to tourism in South Africa

As a disruptor, Airbnb often faces push back from established segments of the tourism and hospitality market as well as from policymakers and regulators. Airbnb commissioned Genesis to assess the positive contribution made by Airbnb at a national level, and especially in improving inclusivity in the economy. We measured their impact in four ways: overall contribution to GDP, lowering barriers to hosting, promoting increased domestic tourism and putting previously untraveled locations on the map. The report was used by Airbnb to engage regulators and local communities.

What is the value of Amazon in South Africa?

Amazon first entered South African in 2004 and has since expanded to a number of entities, including Amazon Web Services (AWS), the Amazon Development Centre and Amazon Data Services. Amazon SA contracted **Genesis to develop their social, economic and environmental impact framework, and critically assesses the company's impact in South Africa from 2004 to 2021.** The project included critical analysis of the company's positive impact achievements and areas of improvement. The report provides the foundations for a forward-looking impact strategy.



We have developed a suite of digital tools to assist with the collection, analysis and visualisation of data to help organisations improve decision making

Whatsapp chatbot for the Solidarity Fund GBV funding call

We partnered with the Solidarity Fund, established by the President in South Africa, on their gender-based violence (GBV) funding call. The Fund identified GBV as a critical area for action during the pandemic, and wanted to provide funding support to community-based organisations (CBOs) which prevent GBV or support its victims. However, many of these CBOs do not have access to stable internet connections or computers to apply for the funding using a web channel. We leveraged our in-house chatbot to set up an automated information portal and funding application channel that required extremely low data and only a smartphone to be used, making the funding application process far more accessible and inclusive among the Fund's target beneficiaries.

COVID-19 vaccine data analytics and tracker

Genesis is providing technical assistance to the South African National Department of Health (NDOH) for the COVID-19 vaccination programme. As part of this work, we have developed a dashboard to monitor and visualise the programme's progress over time. This has involved establishing and managing a large database, defining programmatic indicators, and building user-friendly visualisations in Power BI that reveal patterns in vaccination. Genesis used an iterative, agile development process for this project. This allows us to incorporate stakeholder feedback in real-time, so that the dashboard serves a wide range of users.







Developing online tool to track national masterplans

The South African government is in the process of developing a series of sector-focused masterplans as part of a comprehensive approach to economic development. The levels of coordination required for successful formulation and implementation of the masterplans represent a significant challenge. A fundamental enabler of this coordination is monitoring and reporting data on the implementation of the masterplans, including tracking tasks, challenges, KPIs and escalating blockages to implementation.

Genesis Analytics made use of **design-thinking methodology** to develop an online dashboard that monitors and visualises sector masterplans throughout their implementation lifecycle. The result is a **web-accessible dashboard that makes use of user-friendly visualisations in PowerBI**. The dashboards enable individual masterplan groups to monitor their implementation progress and aggregates the progress into a master dashboard to give decision-makers a view of their progress. **The dashboard tool enables individual masterplan implementation groups as well as decision-makers to prioritise interventions and target their economic development efforts where they are most required.**





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