

TECHNOLOGY FOR **DEVELOPMENT (T4D)**



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MISSION HOUSE

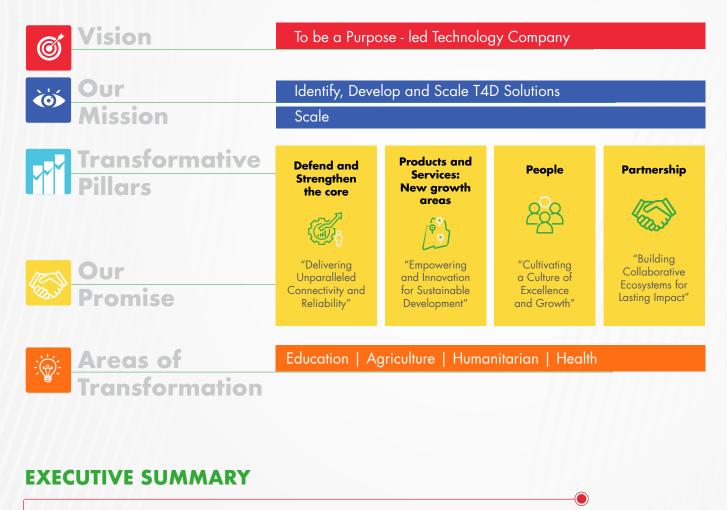






1. MISSION HOUSE

TRANSFORMING LIVES - TECHNOLOGY FOR DEVELOPMENT (T4D)



SUMMARY OF T4D

he Technology for Development (T4D) unit within Sustainable Business and Social Impact (SB&SI) Department at Safaricom PLC aims to use digital technologies to create long-term sustainable impact in the areas of Education, Agriculture, Health, and Humanitarian. Our Mission is to identify, develop, and scale solutions that catalyze long-term sustainable impact. T4D goal is to leverage on power and pervasiveness of mobile technology to improve the lives of individuals and communities, enhance service delivery, and facilitate economic growth in Kenya.

his strategic document and roadmap outline our vision, mission, goals, objectives, and activities to achieve the desired outcomes. Our strategy focuses on how we could leverage Safaricom's strengths in mobile technology and data to identify, develop and scale innovative T4D solutions.

OUR GUIDING PRINCIPLES



User Centric

Prioritizing user needs and experiences in designing solutions.

Collaborative Ecosystem

Creating networks that enable cooperation and shared value creation.



SDGs as a framework

Using the Sustainable Development Goals to guide actions for social, economic, and environmental impact.



Data and insights

Leveraging data to generate actionable insights and inform decision-making



INTRODUCTION







INTRODUCTION

t Safaricom's Technology for Development (T4D) unit, part of the Sustainable Business and Social Impact (SB&SI) department, we focus on identifying, developing, and scaling tech solutions that drive lasting impact. We harness connectivity to unlock digital opportunities in education, agriculture, health, and humanitarian efforts, addressing key challenges and creating shared value solutions for the greater good.



Vision

To lead in leveraging technology to come up with novel solutions that catalyze long-term sustainable impact validate assumptions and define pathways to scale.



Mission To leverage digital technology and data to identify, develop, and scale T4D solutions that catalyze long-term sustainable impact in emerging digital ecosystems. We aspire to improve the lives of individuals and communities, enhance service delivery, and facilitate economic growth in Kenya.

GOALS/OBJECTIVES



Identify emerging technologies and ecosystems to create growth opportunities and maximize impact.



Foster a culture of innovation, experimentation, and continuous learning.



Build, deploy, and scale impactful T4D solutions in key sectors like education, agriculture, health, and humanitarian.



Enhance Safaricom and partner capacity in new growth areas for T4D.



Develop partnerships across industries to leverage synergies and create shared value.



Measure, communicate, and drive thought leadership on T4D impact to stakeholders.

BACKGROUND INFORMATION:

he digital landscape in Kenya is rapidly evolving, with significant growth opportunities in emerging sectors such as education, agriculture, health, and humanitarian. As the leading Technology Company in the country, Safaricom is well-positioned to leverage our extensive network infrastructure, data analytics capabilities, and mobile money platform to drive meaningful impact in these areas.

CURRENT STATE OF T4D AT SAFARICOM PLC

Our T4D unit has made significant strides in developing impactful solutions in various focus areas.



platform has helped to improve the quality of education for primary school students in Kenya by providing personalized learning experiences through use of a basic phone

In the agriculture sector, our **E-fertilizer Vouchering Platform** in partnership with the Government of Kenya has registered over



DigiFarm platform has enabled small-scale farmers to access critical information and resources to improve their yields and incomes. e recognize that there is still much work to be done, and we remain committed to driving innovation and impact through technology. By leveraging our unique strengths and capabilities, we believe that we can create a brighter future for all Kenyans.

e invite esteemed leaders and partners to join us in advancing our T4D initiatives through innovation, collaboration, and shared purpose. Your engagement is essential in co-creating solutions that uplift communities and unlock transformative opportunities. Together, we can harness technology to accelerate progress and deliver meaningful, lasting impact for a more inclusive and sustainable future

To explore how you can contribute, please contact us at: Technologyfordevelopment@safaricom.co.ke

LET'S CREATE CHANGE, TOGETHER

PROPOSED THEORY OF CHANGE FOR T4D



Identify critical needs:

Conduct research to identify the critical needs in each focus area. Speak with stakeholders, experts, and end-users to understand the challenges they face and the potential solutions that could address them.



Develop innovative T4D solutions: Utilize Safaricom's technological strengths to create innovative T4D solutions that meet the essential needs in each focus area. This may include collaborating with other organizations to pool resources and expertise.



Pilot and test T4D solutions: In real-world scenarios to ensure they effectively address the critical needs of the target communities. This will involve working closely with local communities, governments, and other stakeholders to ensure solutions are culturally appropriate, sustainable, and effective.



Scale and implement: Once solutions have been tested and proven effective, scale and implement them across the relevant digital ecosystems and growth areas. This may involve collaborating with other organizations, such as NGOs and government agencies, to ensure widespread adoption and impact.



Measure and evaluate impact: Continuously measure and evaluate the impact of T4D solutions to ensure they are achieving their intended outcomes and creating long-term sustainable impact. This may involve gathering data on various metrics such as access, adoption, usage, and user satisfaction.



Continuously improve and iterate: Use insights gained from impact evaluation to continuously improve and iterate T4D solutions. This may involve refining existing solutions or developing new ones to address emerging challenges or opportunities.

SITUATION ANALYSIS



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SITUATION ANALYSIS: SWOT

STRENGTHS

- Strong brand recognition and market presence in Kenya.
- Robust network infrastructure, including 4G and fiber optic networks.
- Strong financial position, with steady revenue growth over the years.
- Long standing Relationship with development ecosystem partners, government agencies and NGOs.
- Experienced and committed leadership team.

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WEAKNESSES

- Dependence on legacy technologies, which may limit innovation in T4D.
- Limited capacity in T4D-specific skills, such as data science and machine learning.
- Limited experience in some T4D focus areas, such as humanitarian.
- Limited funding dedicated specifically to T4D initiatives.



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OPPORTUNITIES

- Rapid growth in mobile phone usage and internet access in Kenya.
- High demand for T4D solutions in the education, agriculture, health, and humanitarian sectors.
- Potential to leverage MPESA and other Safaricom products to create innovative T4D solutions.
- Growing interest in corporate social responsibility and impact investing, which may create new funding opportunities for T4D (Social contract)



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THREATS

- Increasing competition from other telecom providers and fintech companies.
- Regulatory changes that may impact Safaricom's operations or limit innovation in T4D.
- Cybersecurity risks and other potential security threats to Safaricom's network infrastructure.
- Limited access to talent with T4D-specific skills and experience.

KEY PERFOMANCE INDICATORS



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KEY PERFOMANCE INDICATORS

MEASURE OF SUCCESS

- 1. Number of T4D Solutions: Measures the total solutions launched in focus areas.
- 2. Adoption Rate: Tracks daily, weekly, and monthly usage of T4D solutions.
- 3. Partnerships Established: Counts partnerships and assesses their impact.
- 4. Impact on Target Audience: Evaluates improvements in health, education, and agriculture from T4D solutions.
- 5. User Engagement and Feedback: Measures user interaction and feedback, ensuring solutions meet beneficiary needs.
- 6. **Timeliness and Quality:** Assesses on-time, budget-compliant delivery of T4D solutions and adherence to quality standards.

PICTURE OF SUCCESS

Successfully launching several T4D solutions in the focus areas, demonstrating a track record of identifying and developing innovative solutions that have a positive impact on communities. Developing a deep understanding of the needs of target beneficiaries in the focus areas and using that understanding to drive the development of impactful T4D solutions. **Building strong relationships** with external stakeholders, including government agencies, NGOs, and academic institutions, and leveraging those relationships to develop and implement successful T4D solutions.

Creating a culture of user engagement and feedback, ensuring that T4D solutions are developed with the needs of target beneficiaries in mind and that users are engaged in the product development process.



STRATEGIC PRIORITIES

KEY STRATEGIES

1. Innovation



- Conduct extensive research to identify critical needs in our focus areas.
- Develop and implement a structured approach to identify, incubate, and scale innovative T4D solutions.
- Continuously monitor market trends and emerging digital ecosystems to inform our innovation roadmap.

2. Scalability

- Develop a scalable framework for T4D solutions that addresses the unique needs of each focus area.
- Partner with relevant stakeholders to leverage their networks and resources to scale T4D solutions.
- Continuously evaluate and iterate our scalability framework to maximize impact and sustainability.

3. Partnership



- Leverage partnerships to access new markets, resources, and expertise.
- Collaborate with partners to design and implement T4D solutions that address shared goals.

4. Community

- 5. Thought leadership

- Empower communities to create and adopt T4D solutions that are relevant and sustainable.
- Develop capacity building programs to ensure communities have the necessary skills to create and use T4D solutions.
- Develop incentives and rewards for community driven T4D solutions that address critical needs.
- Foster thought leadership in emerging digital ecosystems through participation in industry events and forums.
- Share our T4D successes and challenges to contribute to the development of the broader ecosystem.
- Continuously engage with experts, stakeholders, and end-users to inform our thought leadership.

STRATEGY EXECUTION

KEY STRATEGIES

The table below outlines the action plan, key stakeholders and partnerships, and resource allocation and budget planning for each T4D strategic priority focus area:

| T4D Strategic Priority | Focus Area | Action Plan | Key Stakeholders and Partnerships | Resource Allocation and Budget Planning |
|------------------------------|-------------|---|---|--|
| | Education | Mobile learning platforms to provide access to educational content to learners. This includes remote areas or those with limited access to educational resources. Virtual classrooms and e-learning tools to enable remote learning. | Ministry of Education, Teachers' Service Commission, County Governments, Local NGOs, Mobile Network Operators | Allocate resources for E-learning platform development and deployment, conduct training for teachers, and engage in public-private partnerships to scale impact |
| | Agriculture | Farm management systems to monitor crop growth, detect diseases, and optimize irrigation. Mobile-based weather monitoring and forecasting to help farmers plan their planting and harvesting activities. Mobile marketplaces that connect smallholder farmers directly to buyers, eliminating middlemen and ensuring fair prices. | Ministry of Agriculture, Agricultural Research Institutes, Farmer Organizations, Financial Institutions, Mobile Network Operators | Allocate resources for platform development, invest in agriculture focused research and development, and establish partnerships with financial institutions and mobile network operators to provide access to financial services |

KEY STRATEGIES

| T4D Strategic Priority | Focus Area | Action Plan | Key Stakeholders and Partnerships | Resource Allocation and Budget Planning |
|------------------------------|---------------|---|--|--|
| 3 | | Mobile health applications to improve health education, diagnosis, and treatment adherence. Remote patient monitoring systems to help healthcare providers monitor and manage chronic conditions remotely. Mobile-based telemedicine platforms that allow patients to consult with healthcare providers remotely. | Ministry of Health, County Governments, Health Service Providers, Non-Profit Organizations, Mobile Network Operators | Allocate resources for telemedicine platform development and deployment, establish partnerships with health service providers and nonprofit organizations to deliver healthcare services, and engage in publicprivate partnerships to scale impact |
| | | | | |
| | Humanitarian | Mobile-based emergency response systems to help communities in crisis Mobile payment systems to distribute aid to affected communities efficiently and transparently. Mobile-based communication platforms to help coordinate disaster response efforts, alert systems Fundraising tools | National Disaster Management Authority, County Governments, Humanitarian Organizations, Mobile Network Operators | Allocate resources for platform development, engage in partnerships with humanitarian organizations and county governments to deliver aid and support disaster response efforts, and engage in public - private partnerships to scale impact |

RISK MANAGEMENT

| Potential Risk | Mitigation Strategy |
|--------------------------------------|---|
| Limited Adoption of T4D Solutions | Implement awareness campaigns to educate beneficiaries on the benefits of T4D solutions. Also, create user-friendly and afford-able solutions tailored to their specific needs. |
| | |
| Insufficient Infrastructure | Work with with government agencies and private organizations to enhance infrastructure, including internet connectivity, electricity, and mobile network coverage in target areas. |
| | |
| Regulatory Hurdles | Collaborate with government agencies to ensure compliance with regulations and secure necessary permits for T4D initiatives. Stay updated on regulatory changes and take appropriate action to adapt as needed. |
| | |
| Lack of Funding | Create a sustainable funding model for T4D initiatives by securing partnerships and funding from government agencies, private organizations, and international donors. Focus on resource efficiency and prioritize initiatives based on their potential impact and alignment with the overall T4D strategy. |

MONITORING AND EVALUATION

1. Plan for tracking and reporting progress against the objectives and KPIs (Sample)

| Objective | KPI | Responsible | Frequency | Reporting |
|---|--|--------------------------|-------------|-------------------------|
| Increase access to quality education through T4D solutions | Number of students benefiting from T4D solutions | T4D Education team | Monthly | T4D Monthly Report |
| Improve food security through T4D solutions | Number of farmers using T4D solutions | T4D Agriculture team | Quarterly | T4D Quarterly Report |
| Enhance healthcare access and outcomes through T4D solutions | Number of patients accessing T4D solutions | T4D Health team | Monthly | T4D Monthly Report |
| Number of beneficiaries receiv- ing T4D support | Number of beneficiaries receiving T4D support | T4D Humanitarian team | Bi-annually | T4D Bi-annual Report |

| Step | Responsible | Frequency |
|---|-------------------------------|-------------|
| Conduct a review of T4D strategy | T4D Strategy team Annually | Annually |
| Gather feedback from stakeholders and end-users | T4D team | Quarterly |
| Analyze feedback and identify areas for improvement | T4D Strategy team | Bi-annually |
| Revise T4D strategy as necessary | T4D Strategy team | Annually |
| Communicate updates to T4D strategy to stakeholders and leadership team | T4D Strategy team | Quarterly |

2. Process of conducting regular reviews of the T4D strategy and adjusting as needed.

CONCLUSION

o implement this strategy, Safaricom T4D will leverage the company's extensive network and mobile financial services to deliver innovative solutions that meet critical needs. We will collaborate with partners to enhance our initiatives' impact.

Our goal is to improve access to education, boost agricultural productivity, enhance healthcare, and provide humanitarian aid, driving socio-economic development in Kenya.

We urge the leadership team to support T4D by providing necessary resources and infrastructure. With strong backing, Safaricom T4D can create sustainable solutions that positively impact millions of lives.

APPENDIX







POTENTIAL USE CASES

Safaricom M-PESA is a widely used mobile money transfer service in Kenya that has the potential to be leveraged to create self-sustaining products in each of the focus areas. Here are some potential products that could be developed:



- A mobile app that allows parents or guardians to pay school fees and buy textbooks or other learning materials using M-PESA. This app could also provide access to online learning resources, such as e-books and videos.
- A micro-loan product for students who need to purchase laptops, tablets, or other devices to participate in e-learning. The loans could be paid back using M-PESA.
- A loyalty program that rewards students who perform well in school with airtime or other M-PESA based incentives.

02 AGRICULTURE:

- A mobile app that allows farmers to buy seeds, fertilizer, and other inputs using M-PESA, and receive payments for their crops using the same platform.
- A micro-insurance product that uses M-PESA to pay out claims in the event of crop failure due to weather or other disasters.
- A platform that connects farmers with buyers and uses M-PESA to facilitate payments and ensure transparency in the supply chain.



- A telemedicine platform that allows patients to consult with doctors and pay for services using M-PESA.
- A mobile app that allows users to purchase health insurance using M-PESA and receive payouts for medical expenses through the same platform.
- A program that incentivizes healthy behavior, such as exercise or healthy eating, by offering airtime or other M-PESA based rewards.

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HUMANITARIAN:

- A platform that allows donors to contribute to humanitarian causes using M-PESA and provides transparency around how funds are being used.
- A micro-insurance product that uses M-PESA to pay out claims in the event of a disaster, such as a flood or earthquake.
- A mobile app that allows users to donate goods, such as blankets or food, using M-PESA, and ensures that the items are delivered to those in need

SHARED VALUE USE CASES AND ASSOCIATED SDGS - EXAMPLES

hared value refers to the approach of creating social and economic value by addressing societal challenges through a company's core business operations. In the case of Safaricom T4D, shared value can be created by developing products that address the challenges faced by the focus areas (education, agriculture, health, and humanitarianism) using technology.

| SDG | Product | Focus Area | Description |
|---------------------------------|--|-------------|--|
| 4 QUALITY EDUCATION | E-learning platform | Education | Develop an e-learning platform that provides access to quality education materials, including online courses, tutorials, and assessments. The platform can be tailored to the Kenyan education system, and can include features such as gamification, social learning, and personalized learning pathways. |
| 2 ZERO HUNGER | Digital agricultural extension services | Agriculture | Develop a digital platform that provides agricultural extension services to smallholder farmers, including crop management advice, weather forecasts, market information, and financial services. The platform can be accessed via mobile devices and can use data analytics to provide personalized recommendations to farmers. |
| 3 GOOD HEALTH AND WELL-BEING | Mobile health clinics | Health | Develop a fleet of mobile health clinics that can provide primary healthcare services to remote and underserved areas. The clinics can be equipped with telemedicine technologies, such as remote diagnosis tools and real-time video consultations, and can be staffed by trained healthcare professionals. |

SHARED VALUE USE CASES AND ASSOCIATED SDGS - EXAMPLES

| SDG | Product | Focus Area | Description |
|---|--|-----------------|--|
| SUSTAINABLE CITIES AND COMMUNITIES | Emergency response platform | Humanitarian | Develop a digital platform that can facilitate emergency response services during disasters and crises. The platform can include features such as realtime incident reporting, mapping and visualization tools, and communication channels for coordinating rescue and relief efforts. |
| NO POVERTY CONTRACTION CONTRA | Mobile-based financial inclusion services | All Focus Areas | Develop mobile-based financial inclusion services that can provide access to financial services, including banking, insurance, and microfinance, to underserved populations. The services can use mobile money platforms, such as M-PESA, and can include features such as credit scoring, savings and investment products, and financial literacy training. |

POTENTIAL PARTNERS MAPPING

| Potential Partners | Focus Area | Description |
|--|-----------------|--|
| Ministry of Education | Education | The Ministry of Education in Kenya can provide support for developing T4D solutions that address education challenges, such as improving access to quality education and reducing the student-to-teacher ratio. |
| Agricultural and Food Authority | Agriculture | The Agricultural and Food Authority can provide support for developing T4D solutions that improve agricultural productivity, increase access to markets, and provide agricultural extension services |
| Ministry of Health | Health | The Ministry of Health can provide support for developing T4D solutions that address health challenges, such as improving maternal and child health, increasing access to healthcare in rural areas, and reducing the burden of communicable diseases. |
| United Nations Development Programme (UNDP) | Humanitarian | The UNDP can provide support for developing T4D solutions that address humanitarian challenges, such as providing emergency response services, improving disaster preparedness, and supporting refugee and displaced populations. |
| NGOs working in education, agriculture, health, and humanitarianism | All Focus Areas | NGOs can provide support for developing T4D solutions that address specific challenges in their respective areas of focus and can help connect T4D solutions to target beneficiaries on the ground. |
| Academic institutions with relevant research and expertise | All Focus Areas | Academic institutions can provide research and expertise in relevant areas, such as pedagogy, agriculture, health sciences, and disaster management, that can inform the development of T4D solutions. |
| Mobile network operators (MNOs) | All Focus Areas | MNOs can provide access to mobile networks and infrastructure, which is essential for the delivery of T4D solutions, and can also provide technical expertise and support for developing mobile applications and services. |
| Corporate partners with shared values and objectives | All Focus Areas | Corporate partners with shared values and objectives can provide financial and technical support for developing T4D solutions, and can help connect T4D solutions to their own networks and supply chains |

