



Performance and Outcome Study of the Pathway for Integrating DFS and Health Systems: A Two Country Comparison of Nigeria and Tanzania

1. High Level Budget

For a thoughtful two country case study using locally based academic institutions and global partners, we estimate total costs of \$184,000 with the cost elements shown below.

COST ITEM	TANZANIA	NIGERIA
Expert Advice/Data Collection/Analysis/LOE	\$ 70,000	\$70,000
Transportation	\$ 7,000	\$ 7,000
Workshops	\$ 3,000	\$ 3,000
Overhead (15%)	\$ 12,000	\$ 12,000
Total: \$184,000	\$ 92,000	\$92,000

Additional Clarification for Final Application December 19, 2019: SIA has submitted a final budget in the template requested with a budget narrative.

2. Objectives and Approach

Digital Square has refined the scope of this project to call from development of 2-3 country case studies which explore/compare outcomes in similar areas that do and do not include a robust digital financial services (DFS) component. The case studies will complement a global landscape study to be conducted by a current implementing partner of USAID. Reflecting this scope, our consortium team with global and local partners proposes to conduct a two-country case study of digital health and digital financial services pathways in Nigeria (West Africa) and Tanzania (East Africa). We have selected Nigeria and Tanzania because the two countries are at different levels of policy, digital health and DFS product development and adoption. This will provide good contrasting examples of the contributions of digital health and DFS platforms and reference examples for countries to approach DFS and health integration.

Additional Clarification for Final Application December 19, 2019: The approach focused on DFS



in each country supersedes and is further developed than the concept note submitted at the initial stage of this application process.

A Tale of Two Countries - Why Nigeria and Tanzania?

Tanzania: A Mature DFS Market and Government Strategy for Digital Health Investment

Tanzania has an advanced DFS market that continues to grow in consumer adoption and use. Mobile phone subscribers hit 43 million capturing 78% of the market in June 2019. At the same time mobile money subscribers grew to 22.9 million. With an agent based of 489,015 as of January 2019, transaction volume reached 260.4 million at the end of 2018. In Tanzania the four competitive mobile money services are interoperable allowing for optimal consumer choice and ease of payment acceptance. The banking sector includes 40 local and foreign private commercial banks who offer internet, mobile and agent banking services.

Tanzania has adopted forward looking policies for digital health integration. With support from PATH and The Bill and Melinda Gates Foundation, the Government of Tanzania developed a Tanzania Digital Health Investment Roadmap (DHIR) (2017-2023) that established a Data Use Partnership (DUP). Run by the Government of Tanzania, with Path's technical assistance, the DUP is designed to enhance data systems and promote the culture of data use in the health and related sector in line with the DHIR. The DHIR includes increasing revenue collection by health facilities, use of e-payments, electronic claims management and development mobile apps for community health fund (CHF) insurance program. Data system interoperability is supported by systems such as the Muungano Gateway and Health Information Mediator (HIM) that allow for national rollout of health information systems and integration of data collected by regional administrations, local governments and other data systems at the national level. With electronic health facility planning, budgeting and financing systems, along with growing electronic medical records and an expanding GoTHoMIS, the Tanzanian developed e-health management information system, Tanzania is leading in digital health platform development.

Tanzania's trends in improved health insurance coverage are encouraging as are corresponding reduced out of pocket payments. Twenty-five percent of the country's population participates in the CHF and 7% in the formal National Health Insurance Fund (NHIF) bringing the total insured population to 32%. According to UNICEF, Tanzania saw a 13% increase in use of the NHIF between 2016/2017 to March 2018.

DATA AT A GLANCE		 NIGERIA pop: 104m	 TANZANIA pop: 30.5m
	% of health care payments made out-of-pocket	90%	23%
	% of population with an account at a financial institution	40%	47%
	% of population w/ mobile money accounts	5.6%	38.5%
	% of population w/ mobile phone subscriptions	92%	78%



Participation in the CHF grew by 9%. National Health Insurance data show 13.2 million CHF beneficiaries in 2.2 million CHF member households. Reflecting this pooled coverage, UNICEF reported that out of pocket payments declined from 47% in 2000 to 23% in 2014.¹

The study will look at the contribution of these enabling factors and collect data on specific digital health and DFS health integrations using the WHO mERA criteria. The examples will include service evaluations such as evaluation of use of mobile money in health targeted programs such as the Tanzania Social Action Fund (TASAF).

The TASAF conditional cash transfers include one health-related conditionality related to the number of times beneficiaries visit health centers per year. In order to improve consumption of the funds TASAF is implementing mobile money payments to some of its beneficiaries which was piloted to about 1.2 million beneficiaries.

Nigeria: Emerging DFS Ecosystem and State Level Roll out of Health Insurance Schemes

In contrast to Tanzania, Nigeria - the most populated nation in Africa - is in the early stages of digital health and DFS ecosystem development and just beginning to address approaches to integrate digital technologies to improve poor health system performance and outcomes. Mobile phone use in Nigeria, like in Tanzania, is pervasive. The Nigeria Communications Commission estimates as of June 2019 there are over 170 million active GSM connections providing a teledensity of approximately 92% of the market. Like Tanzania, the mobile telephony market is competitive with four providers competing for market share. Online activity also is driving consumer behaviors. According to Euromonitor International Market Research, Nigeria has the largest online market and is currently one of the leading IT markets in Africa. The surge for e-commerce advancement in telecom investment and smartphone purchases have been most notable and it has fueled growth in internet usage from 20% in 2009 to over 50% in 2019. Despite the increase, the overall penetration remains low with only 98.39 million (50%) internet users of the population connected to the internet (and only 54% of the 98.39 million access the internet on a daily basis) compared to the global average of 57% and some markets like Kenya and South Africa being at 84% and 54% respectively.

With a preference until recently for bank-led DFS, Nigeria has lagged in adoption of DFS. The World Bank's Global Findex 2017 data report only 5.6% of the population with a mobile money account. In addition, Findex data show a 5% decline in accounts at a financial institution between 2014 and 2017. These trends and renewed commitments to financial inclusion, prompted a significant regulatory shift by the Central Bank of Nigeria in 2018. Nigeria now has enabling policies that support financial inclusion and the use of mobile money and digital payments. The recent grant of approvals to Payment Service Banks that can be owned by mobile network operators highlights the realization by the regulator that traditional approaches have not yielded the desired results and with this new move the market is

¹ <https://www.unicef.org/tanzania/media/1261/file/UNICEF-Tanzania-2018-Health-Budget-Brief.pdf>



expected to open up even more. In addition, the banks have developed a shared strategy to expand their use of agent banking to provide more access points for financial services with specific commitments to reach underserved areas in the northern regions of Nigeria.

While digital technology is incorporated in many commercial sectors in Nigeria, Nigeria has one of the weakest healthcare systems in the continent. In view of the severe lack of financial resources to build the institutions, revamp the training centers and democratize medical education it has become necessary to look at new business models that can deliver healthcare at low cost. Expanding universal healthcare coverage in Nigeria will require collaboration by the private and public sectors. Of Nigeria's over 3,500 healthcare institutions, 27% are publicly owned. This includes approximately 54 federal tertiary institutions. Over 90% of Nigerians (WHO, 2013) pay for healthcare in Nigeria out of pocket.

The Nigeria insurance market records one of lowest levels of penetration globally, with less than 5% of Nigerians covered more by the elite and the formally employed. Some of the challenges that are linked with low penetration level include lack of consumer trust, low level of awareness amongst the public, low level collaboration between public and private sector, low implementation of compulsory insurance and lack of skilled professionals. The uninsured (estimated at well over 100 million) Nigerians face several health risks. Renewed efforts to support expansion of insurance are emerging at the state level. These initiatives are looking to incorporate digital as a tool for implementing those schemes. Our study will look at those state level initiatives as well as document private sector efforts to address financial protection and health system strengthening. This will include case studies such as Airtel Nigeria.

Airtel Nigeria has collaborated with MicroEnsure and Cornerstone Insurance to launch a free insurance product which offers Airtel customers life and hospitalization insurance with increasing benefits based on monthly airtime recharge.

Activities, Schedule and Deliverables

The Work Plan in Figure 1 identifies the high-level activities and time line our Consortium would follow to complete the two country case studies. It also identifies the responsible parties in our consortium. We have divided the project into five phase. A more detailed work plan broken down with deliverables in each phase highlighted in yellow is included in Annex 1.

Figure 1: Project Work Plan



Additional Clarification for Final Application December 19, 2019: SIA received comments on its technical application to provide a narrative description of the steps in its workplan.

The consortium will follow a parallel approach and methodology in performing the work in each country. The staffing will be different in the data collection and analysis of data in each country to draw on the expertise of the local academic institutions in Nigeria and Tanzania.

Phase 1: This phase of the project will be used to confirm the approach for the development of the case studies and comparative analysis to be performed. The consortium will need to coordinate closely with firm conducting the global landscaping study. In addition, given the in-country data collection and analysis we would socialize the work with the USAID Mission in collaboration with the Global Health team and relevant government ministries. This phase will also include the desk research to refine the methodology and inform the selection of case studies and geographic reference points to launch the work in Phase 2.

Phase 2: In this phase we will define the targets and approach for data collection in selected geographies and from providers with platforms and products of interest. Using the data collection methods developed informed by WHO's mERA checklist we will collect, analyze the data from key stakeholders including regulators, service providers, experts in digital health and DFS market developments and focus group discussions with consumers. Given the budget, the sample size is likely to be small. This data will be used to measure the effectiveness of digital initiatives that include DFS and those that don't yet and evaluate pathways for DFS integration. Phase 2 will culminate in the draft report and recommendations.

Phase 3: In this phase we will gather health information system indicators with current health outcomes in private and public sector and develop Health outcome tables for each country that can be used to see the opportunity for further integration of DFS across each country.



Phase 4: In Phase 4 we would begin a feedback loop through presentation the report's preliminary recommendations and findings for feedback to government authorities, the donor community, and service providers. Using this feedback will refine the report, capture lessons learned and present an action plan.

Phase 5: To share the findings with the policy and private sector influencers in the country, we propose to hold a final workshop in each country as well as a webinar with global reach.

Consortium Team

Our consortium team combines a global health firm, Realizing Global Health, www.realizingglobalhealth.com, with the expert DFS consulting firm, Strategic Impact Advisors, www.siaedge.com and two academic institutions, The Lagos Business School, www.lbs.edu.ng and the Directorate of ICT of Muhimbili University of Health and Allied Sciences in Dar Es Salaam, Tanzania, www.muhas.ac.tz.

RGH is a global health consulting company founded by Dr. Elvira Beracochea in 2005 to help achieve global health goals through systemic solutions that develop sustainable and self-reliant health systems. RGH helps client achieve the health targets of the Sustainable Development Goals (SDGs) using innovative, effective and sustainable global health assistance solutions. RGH has assisted USAID, NGOs and Global Fund Grantees in over 40 countries to improve how they manage and monitor performance and use that data to make timely programmatic decisions. Dr. Beracochea recently assisted USAID Tanzania to review its health information system portfolio, and in particular its contribution to the digital health platform being built by the Government of Tanzania. RGH also has conducted numerous global health project evaluations and designed a number of online training programs.

SIA is a global consulting firm that supports the creation and expanded use of financial services and digital solutions to transform a wide variety of economic activities, including access to finance, energy, health care and information services. SIA works at the global and country level. Globally, SIA is a technical advisor to institutions such as USAID and the World Bank. At the country level, SIA has conducted assessments and created toolkits and guidance for use by private, public and development sector actors on using DFS to achieve development outcomes across a variety of sectors. This year, SIA assisted USAID in evaluating the opportunity for DFS to improve health outcomes in its programming in Nigeria.

Lagos Business School Lagos Business School is Nigeria's premier business school and host of the Sustainable and Inclusive Digital Financial Services (SIDFS) Initiative. Through this initiative, LBS has become a leader in studying and advocating for DFS in Nigeria. Led by Professor Yinka David-West, the team is making significant contributions towards advancing the financial inclusion discourse in Nigeria. SIDFS was created to provide an evidence base and advocate for sustainable business models to



deliver digital financial services to the unbanked poor. SIDFS's main activities include to –

1. Conduct rigorous research on the Nigerian national financial services industry, identify trends and challenges within the ecosystem, and monitor and evaluate progress across two dimensions - consumers, and providers
2. Explore recurrent financial inclusion challenges and efforts in Nigeria, solutions and opportunities
3. Host nationwide industry foras where ecosystem actors constructively debate the industry and policy issues impacting financial inclusion and financial services, identify practical solutions and recommend reforms
4. Disseminate research findings and spearhead industry reform through advocacy and partnerships with the media. This includes the publication of op-eds, infographics, television approaches and holding nationwide conferences that create awareness of the financial inclusion

Some of SIDFS's accomplishments to date include three DFS State of the Market Reports (2016, 2017 & 2018):

- Nigerian DFS Consumer Profiling (2016, 2017 & 2018)
- DFS Supplier Insights (2016)
- Cost to Serve Analysis (2016)
- Customer Segmentation Framework (CSF) Report
- Cash-in Cash-out Economics in Nigeria Reports
- Six technical papers on financial inclusion and economic development in Nigeria.
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The ICT Directorate of Muhimbili University of Health and Allied Sciences The Directorate of ICT of Muhimbili University of Health and Allied Sciences in Tanzania is at the forefront of digital health developments in Tanzania. Dr. Felix Sukums, its Director, in collaboration with his team, has conducted numerous studies among them a study to document the implementation of the open source district health information system (DHIS2) and health facility digitalization in Tanzania Mainland from December 2018-October 2019. He also evaluated the implementation of the country's national eHealth Strategy (2013-2018) and led the development the new Digital Health Strategy (2019-2024) from July 2018 to September 2019.



DFS and Health - 2 Country Study Work Plan	Responsible Party	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6				
		Wk1	Wk2	Wk3	Wk4																					
Phase 1: Project Kick-off & Finalize Work Plan																										
Validate Project Expectations & Desk Review																										
Convene project kick-off to review project approach with Digital Square and USAID	RGH/SIA																									
Coordination Meeting with Global Landscaping Study Partner	RGH/SIA																									
Socialization with USAID Mission Country Leadership	LBS/MUHAS																									
Socialization with Key Government Ministries of Health	LBS/MUHAS																									
Define Scope for Desk Research on Policy and Market References	RGH/SIA																									
Conduct Desk Research State of Digital Health and DFS Integration	LBS/MUHAS																									
<i>Review-Comment on Deliverable: Desk Research Findings</i>	Digital Square/USAID																									
Phase 2: Key Informant and Stakeholder Interviews On Effectiveness and Access to Digital Health and DFS Solutions																										
Data collection participants and geography																										
Determine target areas for evaluation in each country (states/LGAs)	All																									
Develop target list of health sector participants for key informant interviews (including public and private health care delivery and insurance schemes)	LBS/MUHAS																									
Develop target list of digital health platform and financial service providers and stakeholders	LBS/MUHAS																									
Develop target list of regulatory interviews	LBS/MUHAS																									
Data collection																										
Develop qualitative tools using mERA criteria	RGH/SIA																									
Conduct FGDs with consumers	LBS/MUHAS																									
Conduct health sector and financial service provider and stakeholder interviews	LBS/MUHAS																									
Conduct interviews with regulators	LBS/MUHAS																									
Analysis																										
Analyze qualitative data collection using mERA criteria	ALL																									
Develop Recommendations and Draft Report																										
Present preliminary recommendations and findings for feedback	RGH/SIA																									
Draft Report	RGH/SIA																									
<i>Review-Comment on Deliverable: Draft Report</i>	Digital Square/USAID																									
Phase 3: Improve Health Outcomes Assessment																										
Gather health information system indicators with current health outcomes in private and public sector	LBS/MUHAS																									
Develop Health outcome tables for each country	RGH/SIA																									
<i>Review/Approve Deliverable: Final Report</i>	Digital Square/USAID																									
Phase 4: Improve Health Outcome Meetings																										
Present preliminary recommendations and findings for feedback to:																										
Government Authorities	LBS/MUHAS																									
Donor Community	LBS/MUHAS																									
Service Providers	LBS/MUHAS																									
Lessons Learned/Options and Action Plan	All																									
Phase 5: Workshop																										
Nigeria: In Country Workshop on Report and Action Plan	All																									
Tanzania: In Country Workshop on Report and Action Plan	All																									
Global Audience webinar	All																									

RGH = Realizing Global Health, SIA = Strategic Impact Advisors, LBS = Lagos Business School, MUHAS = Muhimbili University of Health and Allied Sciences