

JMKF Ideathon

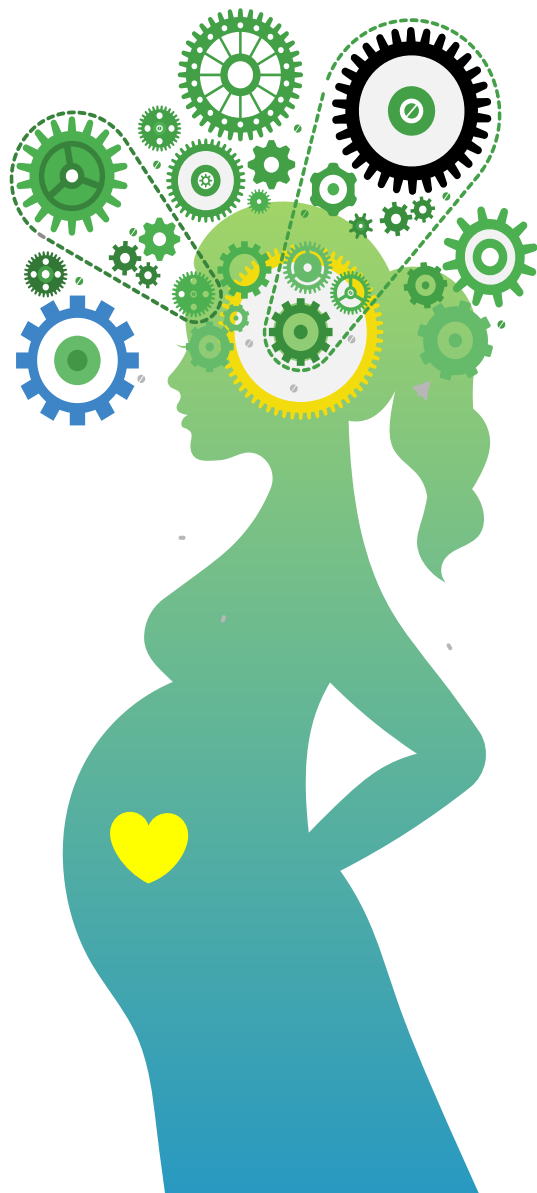
Solving Maternal and Newborn Challenges in Tanzania



Jakaya Mrisho Kikwete
FOUNDATION

JMKF Ideathon

Why The Ideathon?



What if we can **hack** maternal and Newborn Challenges in **Tanzania**.

Sub-Saharan Africans suffer from the highest maternal mortality ratio - 533 maternal deaths per 100,000 live births, or 200,000 maternal deaths a year. This is over two thirds (68 per cent) of all maternal deaths per year worldwide.

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Why The Ideathon?

What are **major** causes of **maternal and child mortality**?

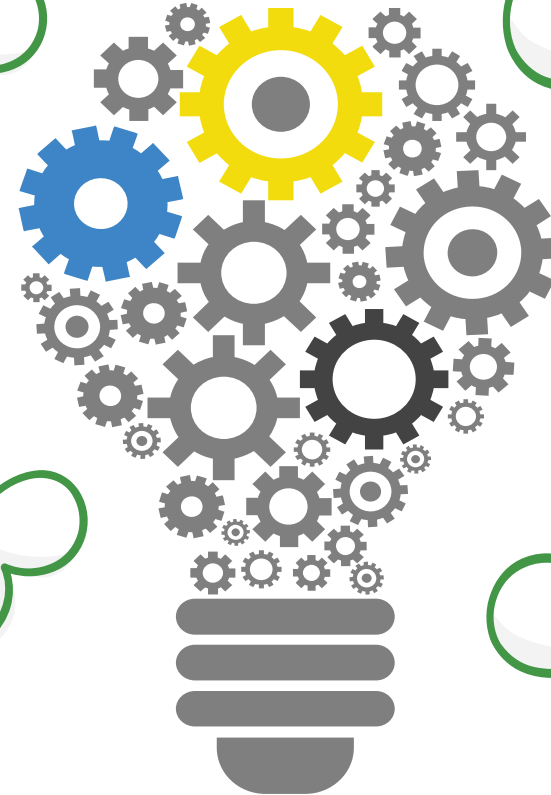
Globally, women die as a result of complications during and following pregnancy and childbirth. Most of these complications develop during pregnancy, and most are preventable or treatable. Other complications may exist before pregnancy but are worsened during pregnancy, primarily if not managed as part of the woman's care. The primary complications that account for nearly 75% of all maternal deaths are:

Severe Bleeding
(mostly bleeding
after childbirth)

Infections
(Usually after
childbirth)

High Blood Pressure
During Pregnancy
(Pre-Eclampsia and
Eclampsia)

Complications
from delivery
and Unsafe
abortion



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What is JMKF Ideathon?

What is JMKF Ideathon?

Jakaya Mrisho Kikwete Foundation (JMKF) is working with Sahara Ventures to run hackathons to generate solutions for the challenges. The solutions emerging from the hackathons are open-sourced for innovators to further develop and realize them. The goal of the Ideathon is to accelerate innovative solutions to address Maternal and Newborn Challenges in Tanzania.



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The Process and Framework of The Ideathon



Challenge Definition With Key Ecosystem Stakeholders to Understand Main Challenges Facing The Sector.

Problem Identification and Development of Challenge Statements For Hackers to Come Up With Solutions.

Hacking Session (Hackathon) With Key Stakeholders of The Maternal and Newborn Sector in Tanzania

Solution Documentation; Documenting Solutions Emerging From The Hackathon.

Solution Publication; Publishing The Identified Solutions on Open-Source Platforms For Further Exploration

Hackers Hacking The Solutions to Develop Innovative Products and Services.



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Stakeholders Engaged During The Ideathon Process



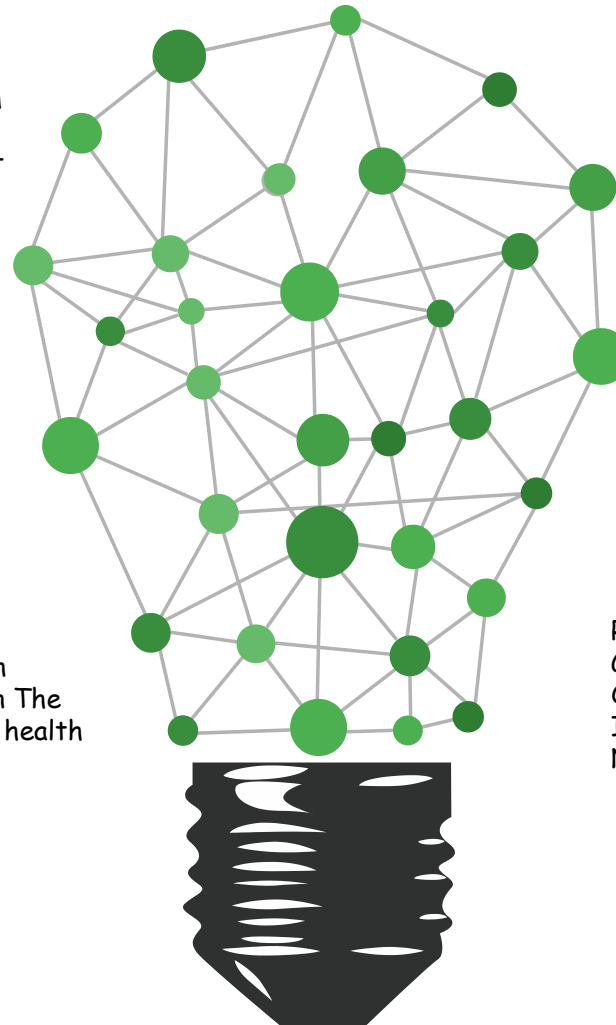
Government Representatives From The Ministry of Health Department of Newborn and Child Health and Department of Family planning.



Representatives From Local Civil Society Organizations Including Non Profit Organizations and Community Based Organizations.



Representatives From Academic and Research Institutions Working in The Maternal and Newborn health sector.



Sector Practitioners in The Maternal and Newborn Health Sector and Ecosystem in Tanzania



Innovators and Technology Enthusiasts From Local Innovation Hubs (Co-Working Space, Accelerators and Incubators).



Representatives of Youth Groups and Youth-Led Organizations With Keen Interest in Maternal and Newborn Health in Tanzania.



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Identified Challenge Statement From The Ideathon

Challenge One

How shall we enhance early booking and consistent antenatal care visits (ANC) to reduce maternal and newborn complications?



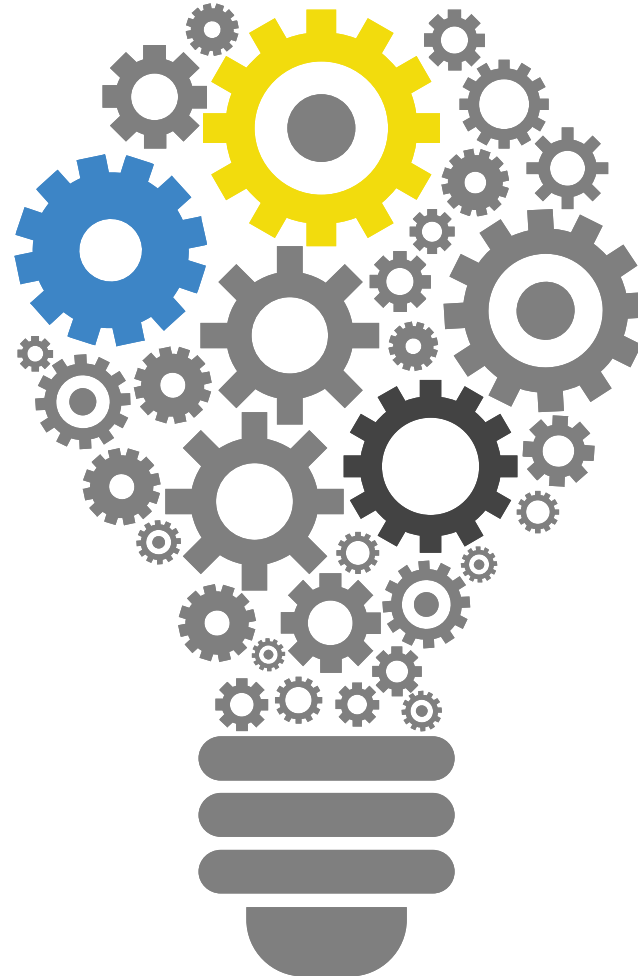
Challenge Two

How shall we increase awareness, access to crucial information, and accessibility to RAMNCAHN while adhering to practices and socio-economic backgrounds?



Challenge Three

How shall we enhance knowledge and skills to health providers in maternal and newborn complications?



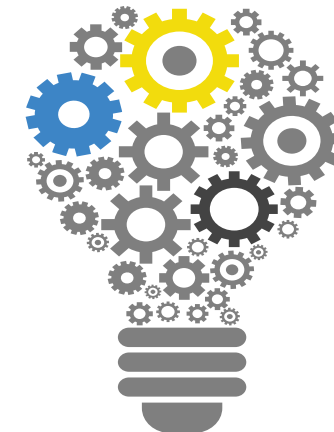
Challenge Four

How shall we enhance the availability of facilities for maternal and newborns?



Challenge Five

How shall we Increase community awareness, access and, in particular male involvement on issues related to RAMNCAHN?



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Challenge One | Enhancing Early Booking and Consistent Antenatal Care Visits (ANC)



Enhancing **early booking** and **consistent Antenatal Care Visits (ANC)**

How shall we enhance early booking and consistent antenatal care visits (ANC) to reduce maternal and newborn complications?

Enhancing Early Booking and Consistent Antenatal Care Visits (ANC) Solution Documentation

<p>Solution Space</p> <p>Development of integrated system capitalizing on feature and smartphones, which includes; basic information, detection of early signs, digitalization of Reproductive and Child Health (RCH) information and feedback mechanisms.</p>	<p>Potential Obstacles</p> <p>Receiving inaccurate information from beneficiaries and service providers. Also, access to the communication network and other digital infrastructures.</p>	<p>Value Proposition</p> <p>The solution is needed to ensure consistent attendance of the beneficiaries by providing notifications and reminder services to pregnant mothers to reduce the skipping of doses while digitizing RCH and MTUHA book for data efficiency.</p>	<p>Data Needs</p> <ul style="list-style-type: none"> • Data from MTUHA • Data from DHS-2 	<p>Technical Capabilities</p> <ul style="list-style-type: none"> • Product Designers • System Developers • Data Analysts • Health Experts • RMNCAHN Experts <p>Key Stakeholder</p> <ul style="list-style-type: none"> • Relevant Ministry (ies) • RMNCAHN NGO's • Technology Companies • Regulatory Authorities • Beneficiaries
<p>Key KPI's</p> <ul style="list-style-type: none"> • Increased attendance to clinical meetings • Increased frequency of attendance of training • Number of active and returning users of the platform. • Amount feedback from the beneficiaries. 	<p>Success Criteria</p> <ul style="list-style-type: none"> • Consistency visits • Decrease of emergency cases and hence safe delivery. • Low rate of newborn complications 			
<p>Background</p> <p>Evidence is showing many pregnant women struggle to meet early bookings and lack consistency in Antenatal Care visits. It limits them to access valuable information, and hence if complications arise is challenging to track the problem in time. Poverty, distance and taboos is the primary cause of this problem.</p>		<p>Support needed</p> <ul style="list-style-type: none"> • Digital Infrastructure • Human Resources • Financial Resources 		

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Challenge Two | Increasing awareness, access and accessibility of RMNCAHN



Increasing awareness, access and accessibility of RMNCAHN

How shall we increase awareness, access to crucial information, and accessibility of Reproductive, Maternal, Newborn, Child and Adolescent Health and Nutrition (RMNCAHN) while adhering to practices and socio-economic backgrounds?

Increasing awareness, access and accessibility of RMNCAHN Solution Documentation

<p>Solution Space</p> <p>Creating a digital platform that will enable education through mobile phone via automated SMS and calls includes education about maternal and newborn health, the male partner involvement in the Antenatal Care visits, and general notifications and reminder services.</p>	<p>Potential Obstacles</p> <p>Lack of digital literacy, especially for rural and grassroots communities. Also, access to digital infrastructure and network connectivity.</p>	<p>Value Proposition</p> <p>The solution is capitalizing on the extensive penetration of mobile phones in Tanzania, currently above 80 percent and increasing internet connectivity in urban settings. It provides easy access and automated services.</p>	<p>Data Needs</p> <ul style="list-style-type: none"> • Data from MTUHA • Data from DHS-2 • Mobile Phone Penetration Data. 	<p>Technical Capabilities</p> <ul style="list-style-type: none"> • Product Designers • System Developers • Data Analysts • Health Experts • RMNCAHN Experts <p>Key Stakeholder</p> <ul style="list-style-type: none"> • Relevant Ministry (ies) • RMNCAHN NGO's • Technology Companies • Regulatory Authorities • Beneficiaries
	<p>Key KPI's</p> <ul style="list-style-type: none"> • Increased awareness of RMNCAHN • Increased male involvement in RMNCAHN • Increased access to RMNCAHN services • Number of active and returning users of the platform. • Amount feedback from the beneficiaries. 		<p>Success Criteria</p> <ul style="list-style-type: none"> • Informed Community on RMNCAHN issues • Consistency visits of male partners. • Decrease of emergency cases and hence safe delivery. • Low rate of newborn complications 	
<p>Background</p> <p>Experience shows most of the RMNCAHN information and awareness campaigns is currently distributed and published through traditional media platforms, which struggle to catch up with recent changes in technologies hence missing a crucial group of people in the community. Also, there is little male involvement in the RMNCAHN process.</p>		<p>Support needed</p> <ul style="list-style-type: none"> • Digital Infrastructure • Human Resources • Financial Resources • Regulator Buyin 		

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Challenge Three | Enhancing knowledge and skills to health providers



Enhancing **knowledge and skills** to health providers

How shall we enhance knowledge and skills to health providers in maternal and newborn complications including; still birth, premature, poor delivery management, postpartum haemorrhage (PPH) and Hypertensive Heart Disease (HDD)?

Enhancing knowledge and skills to health providers Solution Documentation

<p>Solution Space</p> <p>Design simulation models that will help to train health providers (nurses and midwives) and facilitate everyday drills through pre-recording sessions and online app</p>	<p>Potential Obstacles</p> <p>Some of the obstacles to implementing the solution include access to the internet and computing capabilities, access to simulation models and technologies, and practitioners' overall digital literacy.</p>	<p>Value Proposition</p> <p>The solution will ensure improved confidence and competence of the practitioners, reliability and review of the service offered, uniformity of the quality of the services and timely delivery of the services.</p>	<p>Data Needs</p> <ul style="list-style-type: none"> • Contents From MoH • Simulation Models • Data from MTUHA • Data from DHS-2 	<p>Technical Capabilities</p> <ul style="list-style-type: none"> • Product Designers • System Developers • Simulation Experts • Health Experts • RMNCAHN Experts <p>Key Stakeholder</p> <ul style="list-style-type: none"> • Relevant Ministry (ies) • RMNCAHN NGO's • Technology Companies • Regulatory Authorities • Beneficiaries
	<p>Key KPI's</p> <ul style="list-style-type: none"> • Decrease of Deaths and Effects caused by complications. • Increased confidence and competence of practitioners. • Increased quality of services offered (quality of handling emergencies) 		<p>Success Criteria</p> <ul style="list-style-type: none"> • Reduced disabilities • Reduced maternal and neonatal deaths. • Improved quality of service. 	
<p>Background</p> <p>Experience has shown that most maternal and newborn health providers have difficulties attending and handling emergency cases due to inadequate knowledge and skills caused by a lack of experience and updated knowledge.</p>		<p>Support needed</p> <ul style="list-style-type: none"> • Digital Infrastructure • Human Resources • Financial Resources • Regulator Buyin 		

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Challenge Four | Enhancing availability of facilities for maternal and newborn

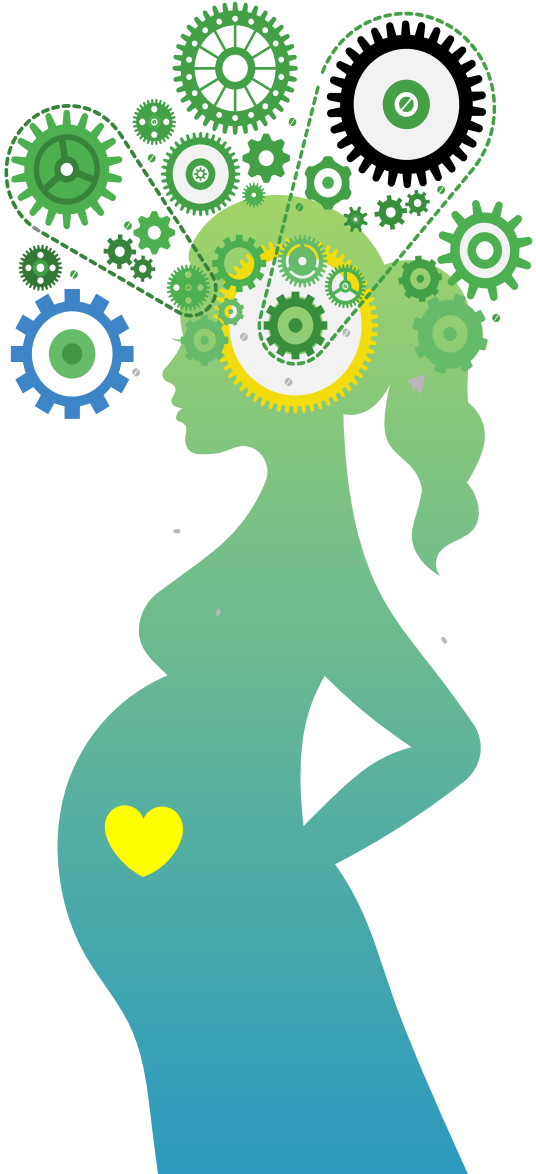


Enhancing availability of **facilities** for maternal and newborn

How shall we enhance availability of facilities for maternal and newborn including blood products, supplies, equipments, medicine and drugs.

Enhancing availability of facilities for maternal and newborn Solution Documentation

<p>Solution Space</p> <p>Design mobile solution for blood delivery and resource sharing between health facilities. The application is based on geolocation technologies. The application should operate as uber for medical resources.</p>	<p>Potential Obstacles</p> <p>Compliance with regulators and readily availability of the resources among the health facilities involved in the network.</p>	<p>Value Proposition</p> <p>Easy access to medical resources and facilities needed to address maternal and newborn challenges in local medical facilities.</p>	<p>Data Needs</p> <ul style="list-style-type: none"> • Geolocation Data • Data from MTUHA • Data from DHS-2 	<p>Technical Capabilities</p> <ul style="list-style-type: none"> • Product Designers • GIS Experts • System Developers • Simulation Experts • Health Experts • RMNCAHN Experts <p>Key Stakeholder</p> <ul style="list-style-type: none"> • Relevant Ministry (ies) • RMNCAHN NGO's • Technology Companies • Regulatory Authorities • Beneficiaries
	<p>Key KPI's</p> <ul style="list-style-type: none"> • Increased access to shared medical resources • Increased access to medical equipments. 		<p>Success Criteria</p> <ul style="list-style-type: none"> • Readily access to medical resources. • Timely access of medical facilities. • Proper allocation of resources among the facilities 	
<p>Background</p> <p>Experience has shown that most maternal and newborn health resources and facilities are scarce, hindering quality and timely service provision. In contrast, other health facilities might have enough resources. Others might lack the resources completely.</p>		<p>Support needed</p> <ul style="list-style-type: none"> • Digital Infrastructure • Human Resources • Financial Resources • Regulator Buyin 		



Are You a Hacker? Please
email JMKF to develop the
solution with us.

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