



Digital Square and USAID Present: Global Goods Map & Match for COVID-19

May 25, 2021



USAID
FROM THE AMERICAN PEOPLE

Agenda

- Digital Square overview
- Background of Map & Match activity
- Findings from our assessments
- Overview of Map & Match outputs
- How to use Map & Match country briefs
- Common questions among country governments, investors, and other stakeholders
- Final thoughts

The collage features several key documents:

- Ethiopia Report:** Titled "Digital Square approved global goods mapped to COVID-19 response use cases". It includes an introduction from the Federal Ministry of Health (FMoH) and an analysis overview stating that Ethiopia's health system utilizes 114 digital health tools, with at least 12 already deployed for COVID-19.
- Malawi Report:** Titled "Digital health systems to support pandemic response in Malawi". It includes an introduction from the Ministry of Health (MoH) and an analysis overview stating that Malawi's health system utilizes 54 digital health tools, with at least 22 already deployed for COVID-19.
- Technical Briefs:** Two documents titled "IN THIS TECHNICAL BRIEF" provide a 13-step process for mapping digital health tools to support COVID-19 response, from identifying tools to reviewing evidence.
- Summary Slides:** Two slides titled "Key Definitions" and "Key Definitions" explain the specific use cases for digital health tools, such as data collection, storage, tracking, and analysis.
- Infographic:** A large graphic titled "Understanding scale of digital health tools" features a Venn diagram and the text: "A framework and triangulation tool to measure scale of digital deployments in the context of the COVID-19 pandemic".

Logos for USAID, World Bank Group, and GIZ are visible at the bottom of the collage.

Overview of Digital Square

Digital Square addresses the need for a thriving marketplace for digital health.



Alignment &
Co-investment



Global
Goods



Regional &
Country Systems

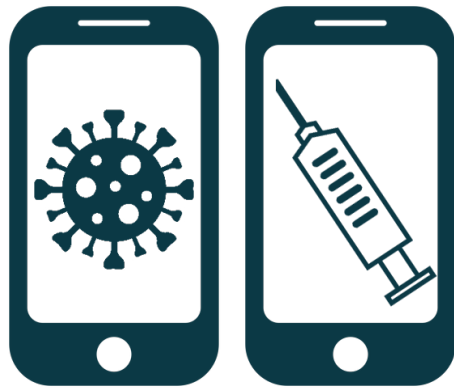
Digital Square | connecting the world for better health

Digital Square is a digital health marketplace—or ‘square’—where supply and demand come together to accelerate health equity through the development, adoption, scale, and delivery of digital health innovations in low- and middle-income countries. We help funders, country leaders, implementers, and global policy makers learn about high-quality, trustworthy digital health software that is appropriate for low-resource settings.

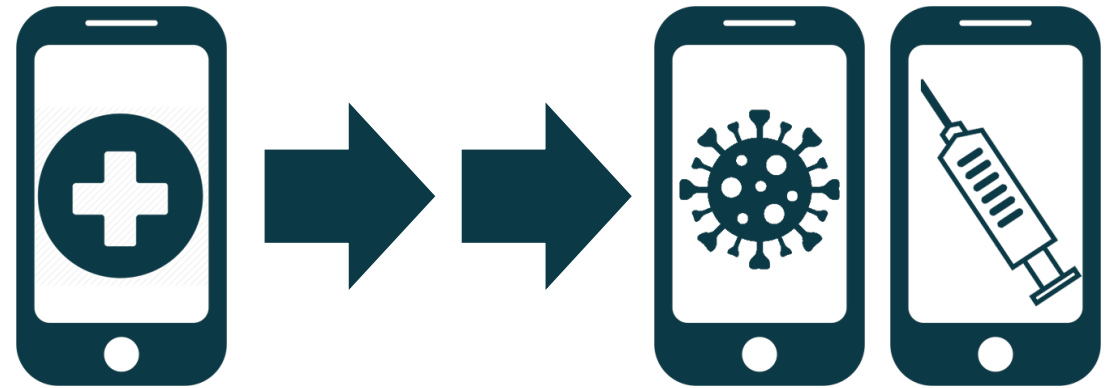
Map & Match Goals

Map existing digital health tools deployed at scale in country.

Identify digital health tools **already deployed** for COVID-19 response and vaccine distribution.



Identify digital health tools that **can be adapted** for COVID-19 response and vaccine distribution.

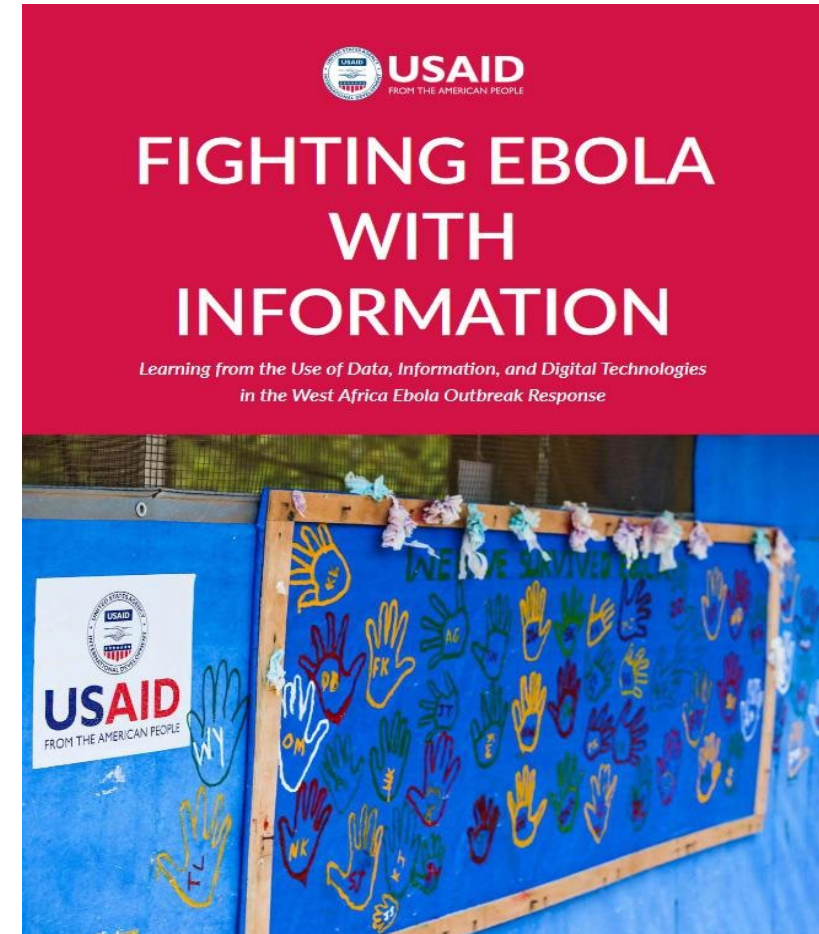


Why Map & Match?

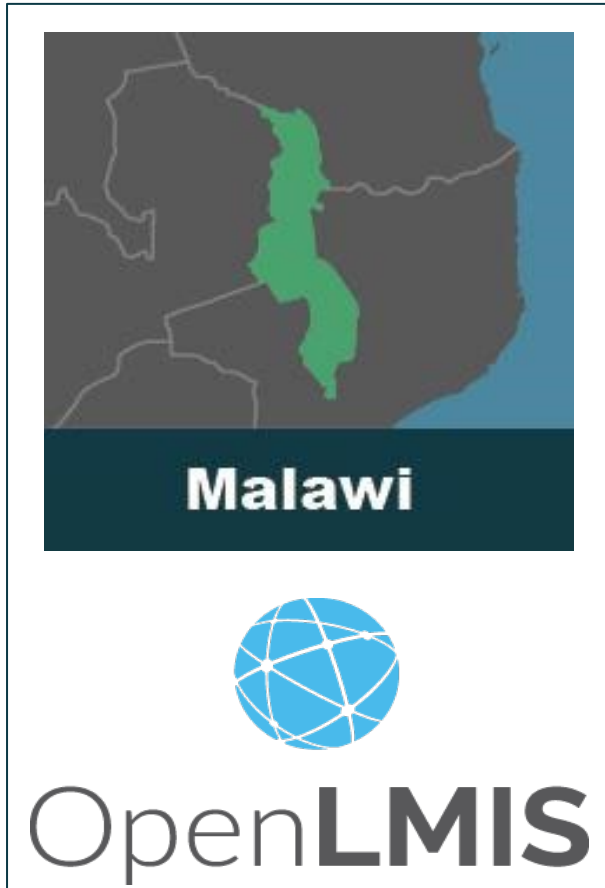
Key lesson from Ebola.

Adapting existing digital tools rather than deploying new ones helped:

- Speeds up deployment.
- Saves money.
- Reduces duplicative investments.
- Leads to sustainable tools.
- Increases government leadership.
- Enables exchange of data.

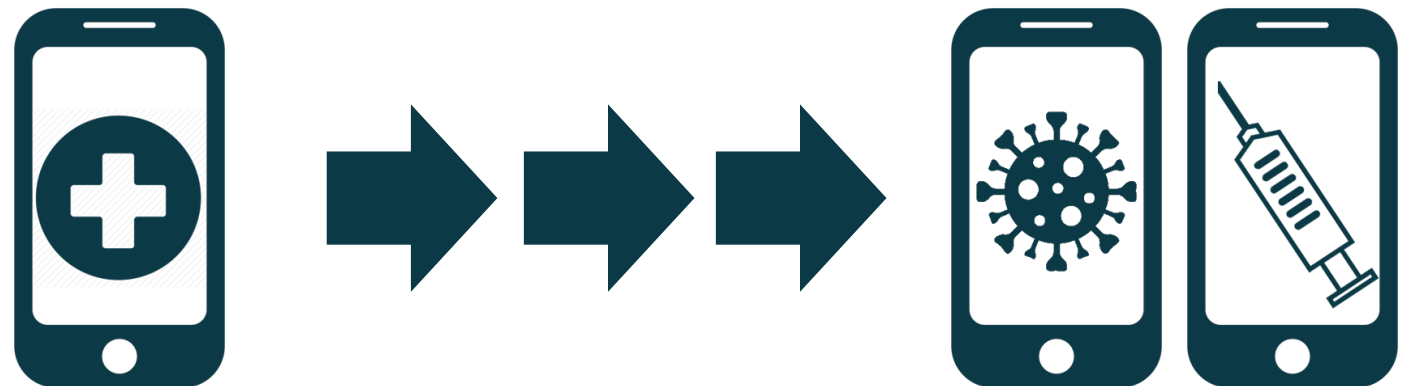


Malawi Adaptation Example

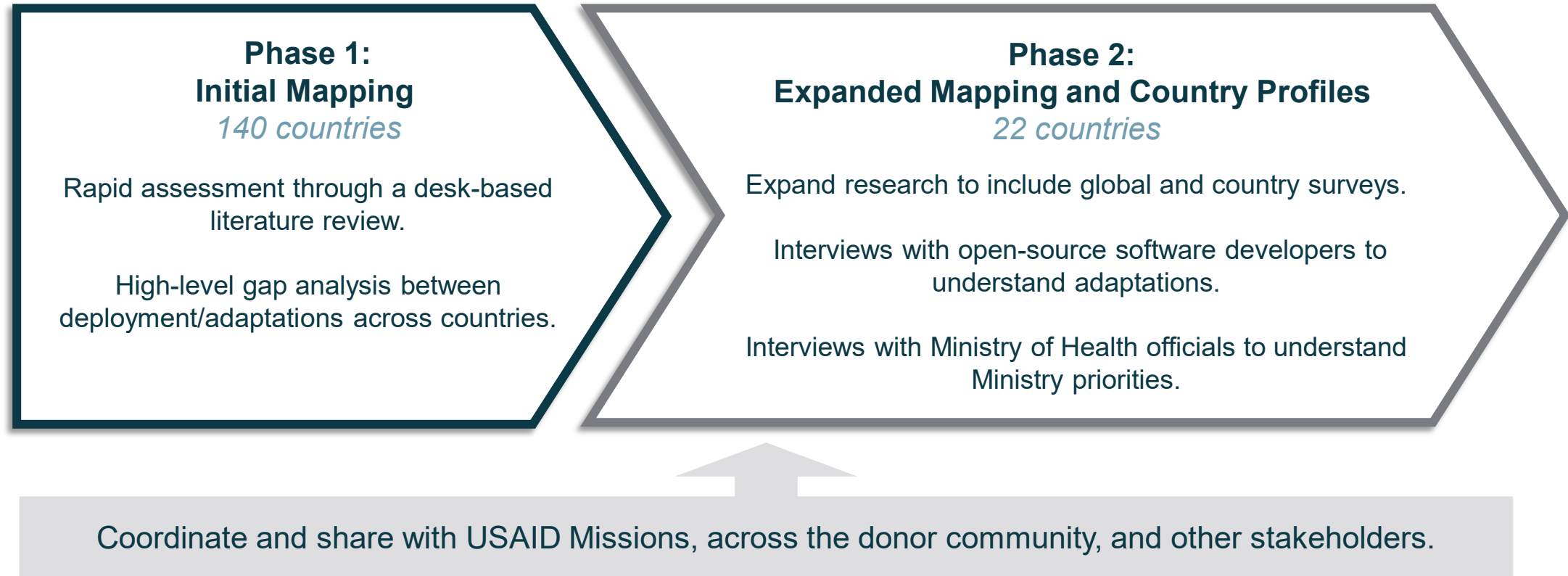


OpenLMIS is Malawi's national digital supply chain tool used in 650 facilities for over 300 commodities.

OpenLMIS launched a separate, simplified instance called OpenLMIS COVID-19 Edition, which is a lighter weight and quicker start-up tool to help Malawi manage COVID-19-related commodities based on the WHO product list.



Map & Match Methods



Investor and Partner Coordination

Coordination and alignment has been a key tenant throughout the Map and Match project.



Structuring Information: Use Cases

A 'use case' refers to a specific type of information collected, stored, tracked, analyzed, or visualized as it relates to the functional response to an epidemiological event, specifically COVID-19. One digital health tool can be deployed for multiple 'use cases'.

- Case management
- Contact tracing
- Event-based surveillance
- Health facility & provider administration
- Infection prevention control
- Laboratory systems
- Learning & training

- One Health
- Points of entry
- Risk communication & community engagement
- Routine surveillance
- Supply chain
- Vaccine planning, monitoring and delivery*

* Added for COVAX

Phase I

Literature Review

Phase I: Outreach and Feedback

Phase I: July 2020 – October 2020



277

Organizations or individuals contacted to contribute documents to the desk review.



142

Organizations or individuals submitted documents, reports, and website for review.



749

Documents, websites, reports, and landscapes submitted and reviewed.

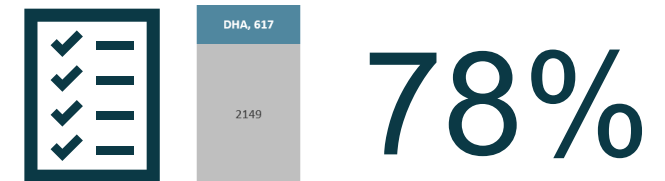
Phase I: Software and Digital System Deployment



Countries with at least one tool identified in landscape.



Number of digital tool deployments identified.



Percent of digital deployments NOT identified in the Digital Health Atlas.

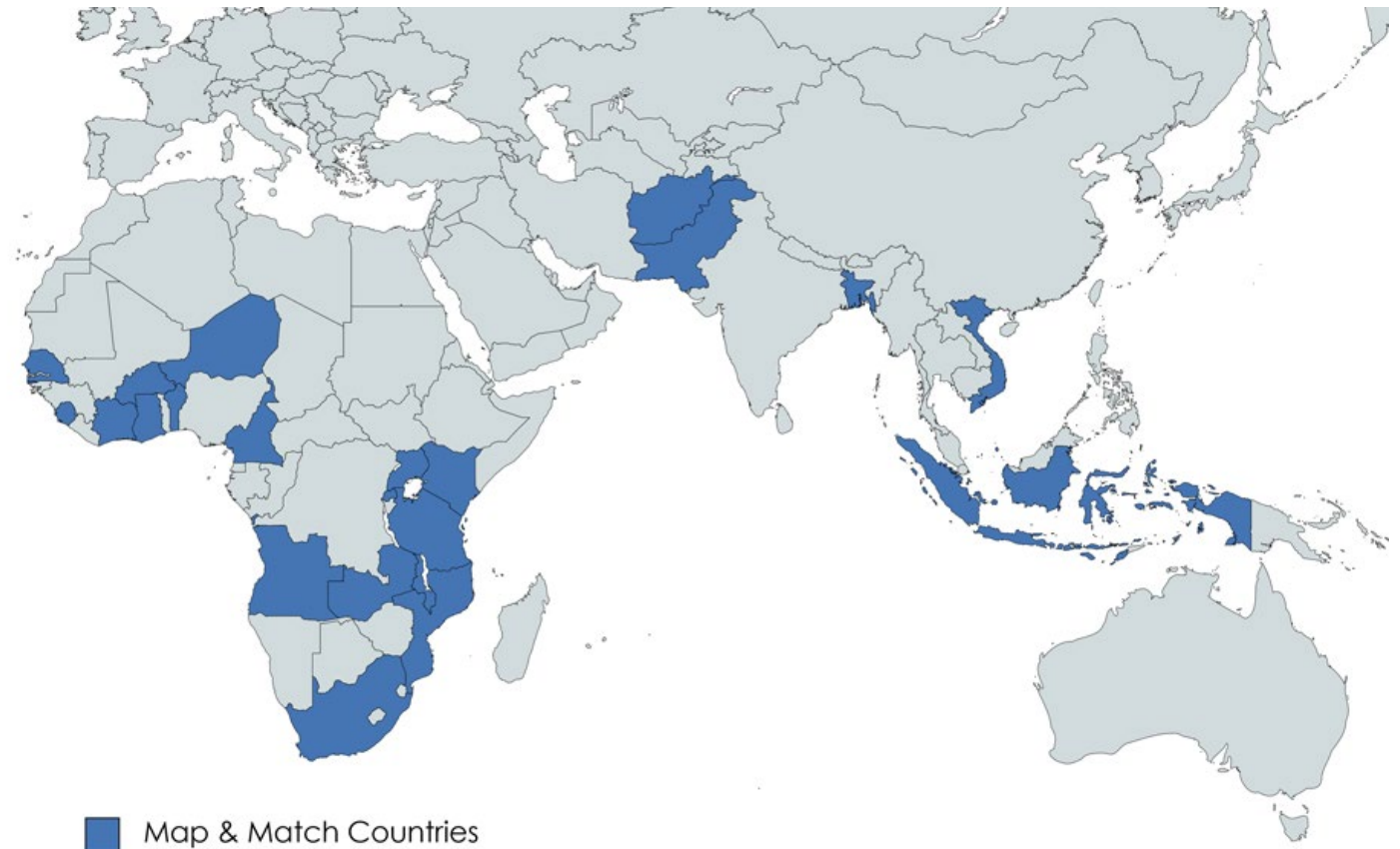
Phase II

Community-Based Data Collection

Map & Match Phase II

The 22 countries with briefs already developed or forthcoming include:

Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Cambodia, Cameroon, Côte d'Ivoire, Ghana, Indonesia, Kenya, Malawi, Mozambique, Myanmar, Niger, Pakistan, Rwanda, Senegal, Sierra Leone, South Africa, Tanzania, Uganda, Vietnam, Zambia, and Zimbabwe.



Research Objectives for Phase II

- For each of the prioritized countries, understand the depth of tools available.
 - Verify or expand on the Phase 1 tool landscaping (i.e., learn more about existing tools, use cases, and how widely tools are in use).
 - Highlight gaps in tool deployment as it relates to COVID-19.
 - Understand unique country contexts that would inform tool choice (e.g., systems integration priorities, privacy laws, language, donor and partner engagement, government resources/buy-in).
- For each country, identify tools at scale that have the potential to be used for COVID-19 response.

Methods

- Online survey tool to collect information in our focus countries.
 - Initial outreach list developed using Phase 1 data.
 - Survey tool was designed to enable snowballing, allowing us to expand outreach.
- Key Informant Interviews with selected Digital Square global goods to understand scale, deployments, challenges, and opportunities.
- Key Informant Interviews with the Ministry of Health in each of the focus countries to validate country information and understand country context.

Outputs of Map & Match

Country Briefs

Map & Match created easy-to-read analysis for each of the 22 countries in Phase II.

There is a lot of variability in the information found through our assessment. Some countries have tools for all use cases, many of which are already being adapted and used to support COVID-19 response. Many still rely on paper-based tools and have limited use and scale of digital technologies.

Digital health systems to support pandemic response in Ethiopia

Mapping digital health tools and matching deployment opportunities in response to COVID-19

January 2021

IN THIS TECHNICAL BRIEF

- 2 View a snapshot of the digital health tools mapped and matched to support Ethiopia's COVID-19 response.
- 4 Discover the digital health tools that rapidly strengthen the COVID-19 response.
- 4 Explore examples of Global for COVID-19 response.
- 5 Learn about digital health to deployment.
- 9 Take action using the Map & Match project.
- 10 Review annexes describing exploring the utility of scale Match, and illustrating the epidemiological curve.

Digital health systems to support pandemic response in Malawi

Mapping digital health tools and matching deployment opportunities in response to COVID-19

April 2021

IN THIS TECHNICAL BRIEF

- 2 View a snapshot of the digital health tools mapped and matched to support Malawi's COVID-19 response.
- 5 Discover the digital health tools ready for adaptation to rapidly strengthen the COVID-19 response.
- 5 Explore examples of global goods ready for adaptation and deployment for COVID-19 response.
- 6 Dive into an in-depth look at digital health tools to support the COVID-19 response.
- 11 Glimpse a high-level analysis of key elements to Malawi's digital health systems.
- 11 Take action using the Map and Match data and resources.
- 12 Review annexes defining abbreviations and pandemic use cases, and describing how digital health tools can support vaccine deployment.

Introduction

Ethiopia's Federal Ministry of Health (FMoH) established the Information Revolution in its Health Sector Transformation Plan in 2015 to improve the collection, analysis, presentation, and dissemination of information to support better decision-making. The COVID-19 pandemic brought a new level of urgency to these transformation efforts with digital health tools being one of the most rapid, cost-effective strategies to advance its digital health systems to accelerate Ethiopia's COVID-19 response.

Background

Digital Square conducted a landscape analysis of Ethiopia's digital systems in the 10-year period from 2010-2020 with information validated by tool implementers and designers, digital health experts, and FMoH stakeholders. The purpose was to identify the existing digital tools utilized in Ethiopia, map the tools already deployed for COVID-19 to relevant use cases.



Analysis overview

Ethiopia's health system utilizes 114 digital health tools with at least 12 that are already deployed for COVID-19. This brief identifies opportunities for existing digital tools to be adapted to meet current and future needs for the COVID-19 pandemic response and potential future epidemics. Mapping tools to the use cases revealed where there are strengths and gaps in Ethiopia's digital health systems response to COVID-19.

Gaps include **contact tracing, infection prevention control, One Health, and points of entry**. Strategic adaptation of existing digital

Key Definitions

Pandemic use case refers to the specific type of information collected, stored, tracked, analyzed, or visualized as it relates to the functional response to an epidemiological event, specifically COVID-19.

Digital health tool refers to a website, application, or other computer or mobile technology that supports data collection, storage, tracking, analysis, or visualization. The tool must have an electronic interface. One digital tool can address multiple use cases.

Application refers to components of digital tools that are primarily designed for use by clients of the health system or by health workers. Applications can be reused to

Introduction

Malawi's Ministry of Health (MOH) outlines its priority for strengthening health information systems in its *Monitoring, Evaluation, and Health Information Systems Strategy (MEHIS): 2017-2022*. Its principal objectives are to have interoperable digital systems populated with high-quality data to support data use for decision-making. The COVID-19 pandemic brought a new level of urgency to this objective. Leveraging digital health tools is a rapid, cost-effective strategy to accelerate Malawi's COVID-19 response while at the same time reinforcing the MEHIS objectives.

Background

Digital Square conducted a landscape analysis of Malawi's digital systems in the ten-year period from 2010-2020 with information validated by tool implementers and designers, digital health experts, and MOH stakeholders as part of the USAID-funded Map and Match project. The purpose was to identify the existing digital tools utilized in Malawi, map the tools already deployed for COVID-19 response to relevant uses cases, and highlight opportunities where existing tools can quickly be adapted and deployed to support COVID-19 response.



Analysis overview

Malawi's health system utilizes 54 digital health tools with at least 22 already deployed for COVID-19. This brief identifies opportunities for existing digital tools to be adapted to pandemic use case needs for the COVID-19 response and potential future epidemics. Mapping tools to the use cases revealed where there are strengths and gaps in Malawi's digital health systems response to COVID-19. For example, the analysis identified only one tool that currently supports health facility and provider administration with additional tools ready for adaptation to further address this use case.

Strategic adaptation of existing digital health tools will accelerate the COVID-19 response, offering greater efficiency and more robust support to the government, health workers, the clients, and other stakeholders.

Key definitions

Pandemic use case refers to the specific type of information collected, stored, tracked, analyzed, or visualized as it relates to the functional response to an epidemiological event, specifically COVID-19.

Digital health tool refers to a website, application, or other computer or mobile technology that supports data collection, storage, tracking, analysis, or visualization. The tool must have an electronic interface. One digital tool can address multiple use cases.

Application refers to components of digital tools that are primarily designed for use by clients of the health system or by health workers. Applications can be reused to address more than one use case, or applications can be uniquely used for only one use case.

Adaptation refers to making improvements to existing digital tools to improve their applicability and impact in the context of COVID-19.

Figure 1. Current number of digital health tool deployments mapped to pandemic use cases in Malawi.

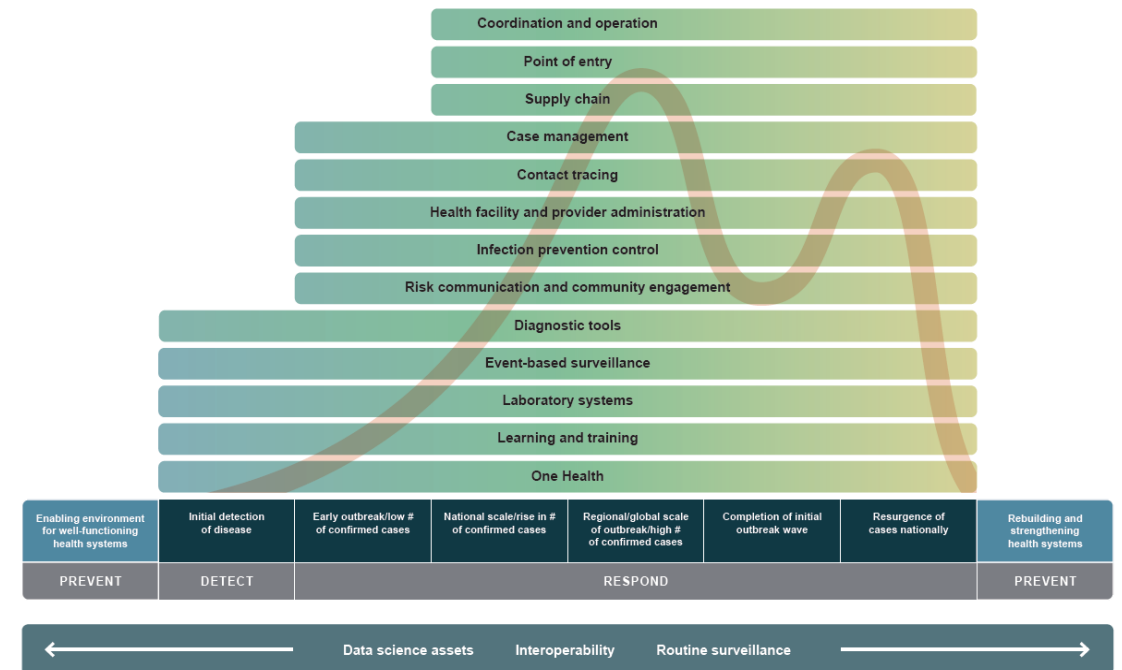


Figure 1 illustrates that many use cases are addressed using several tools in Malawi's COVID-19 response while other use cases are filled by few tools. Abbreviation: HPPA: health facility and provider administration

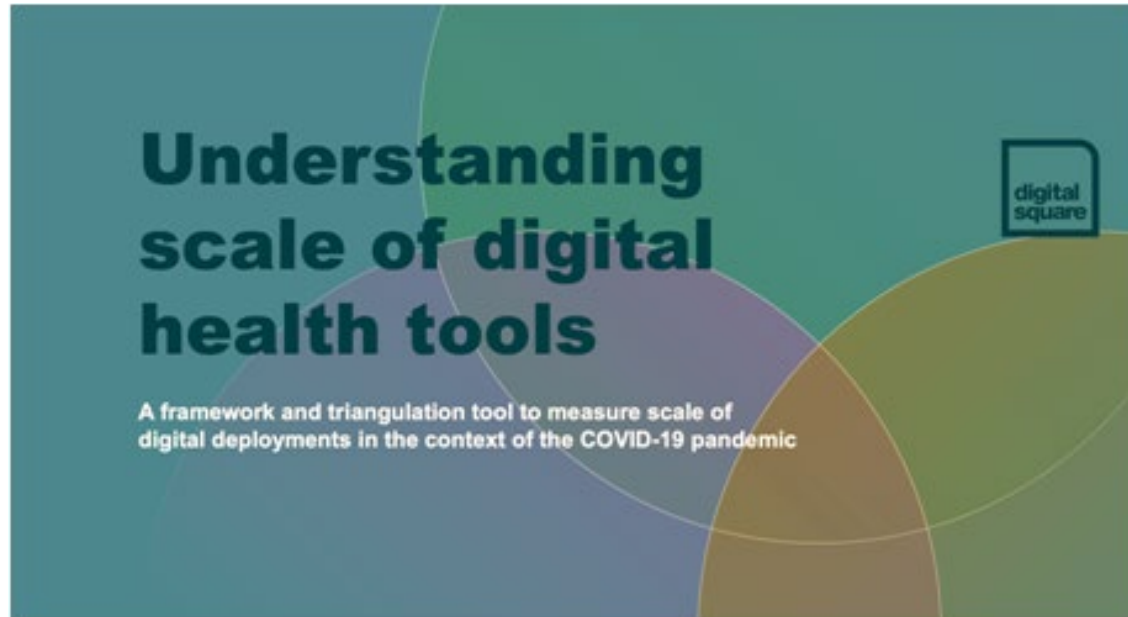


DATEC

The **Digital Applications and Tools Across an Epidemiological Curve (DATEC)** is a strategic framework for governments, investors, implementing organizations, and the digital health community at-large to better understand how existing digital tools can be adapted and used during different phases of an outbreak. This framework is meant to highlight how digital technologies, which should already be present in a country, can most strategically be leveraged to augment response during an epidemic and/or pandemic. This V1 framework is not specific to COVID-19 but uses the COVID-19 pandemic as a reference to illustrate use of digital tools, such as contact tracing, laboratory information systems etc.



Identifying Scaled Systems



Map & Match focused on identifying Scaled Systems

Number of end users: determining *who* is using a tool and *where*. Information can be evaluated using the number of health workers, number of clients, or number of facilities using a tool.

Breadth of tool use: understanding the *number ways* in which a tool is used, such as use cross health focus areas or digital health intervention areas.

Institutionalization: delves into how well the tool is integrated into the country's priorities by understanding if the tool has dedicated resources, and/or is included as a tool that is necessary for health workers to use in formal job descriptions.

Global Goods and COVID-19



Digital Square approved global goods mapped to COVID-19 response use cases

Through the USAID-funded Map and Match project, Digital Square has mapped the existing functionality of approved global goods to COVID-19 use cases described in the [Digital Applications and Tools Across an Epidemiological Curve \(DATEC\)](#).

This document provides a list of Digital Square approved global goods mapped across the use cases visualized in the DATEC. The global goods are grouped by those that *have already been adapted* to match a use case and those that *could be adapted* to match a use case (i.e., simple, easy, low-lift adaptations). More information about global good adaptations for COVID-19 can be found on the [Digital Square wiki here](#).

Coordination and operation Support emergency operation centers and other coordination response efforts that make decisions about disease outbreaks.	Existing adaptations	
	Potential adaptations	
Point of entry System to strengthen border health security, screen, and follow up with suspected infected persons at ports of entry and other border entry points.	Existing adaptations	
	Potential adaptations	
Supply chain System for monitoring facility readiness and stock levels.	Existing adaptations	
	Potential adaptations	
Case management System for documenting client details and clinical interactions.	Existing adaptations	
	Potential adaptations	
Contact tracing Identification and follow-up with people who have had high-risk interactions with infected persons.	Existing adaptations	
	Potential adaptations	
Health facility and provider administration System for managing facility accounting and human resources.	Existing adaptations	
	Potential adaptations	

We learned during the West Africa Ebola outbreak response prioritizing the reuse and adaptation of existing digital tools is vital to quickly scale access to time-sensitive disease information and data.

Many global goods can be adapted and used across different sets of use cases in response to the COVID-19 pandemic.

Why does this matter?

“During a new crisis, we’re so happy to be able to use existing tools with just new functionalities. It’s avoiding us to be overwhelmed and/or confused with a new tool again--please consider our time load.”

- Health workers and Ministry of Health staff in Senegal

Additional Map & Match Outputs

- Executive summary/overview of the project.
- Annex information about digital tools which support vaccine deployment.
- Map & Match survey tools (data model).
- Final data set of Phase I and Phase II data (will be live on M&M website by May 31).
- GIZ's Digital Preparedness Pandemic Assessment Tool and information on how to use the tool.
- Information about how we are updating data to the Digital Health Atlas.





COVID-19 Map & Match EXECUTIVE SUMMARY

Digital Square recognizes a coordinated approach to digital investments is essential to quickly scale access to time-sensitive data and information needed to inform an effective disease outbreak response. Without this critical alignment of funding to existing digital health infrastructure, there is a risk of deepening fragmentation of digital tools and data silos that could hamper COVID-19 response efforts and undermine health systems.

The purpose of the USAID-funded Map & Match project is to help countries, donors, implementers, and the global digital health community at large to leverage and adapt existing digital tools in response to the COVID-19 pandemic.

As the world learned during the West Africa Ebola outbreak response, prioritizing the reuse and adaptation of existing digital tools is vital to quickly scale access to time-sensitive disease information and data.

Through this project, Digital Square sought to understand the landscape of existing, adaptable software tools used at scale in countries, and subsequently matched those tools with potential use cases for COVID-19. After a broad landscaping in which data was collected from over 130 countries, the project narrowed the scope to validate and collect additional information for 23 countries.

For this set of countries, all in sub-Saharan Africa and Asia, Digital Square launched a survey and conducted key informant interviews with ministries of health and local partners in the country. Digital Square also conducted in-depth data collection and interviews with partners in the project's global good community.



The countries prioritized included: Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Cambodia, Cameroon, Cote d'Ivoire, Ghana, Indonesia, Kenya, Malawi, Mozambique, Myanmar, Niger, Pakistan, Rwanda, Senegal, Sierra Leone, South Africa, Tanzania, Uganda, Vietnam, Zambia, and Zimbabwe. Two countries—Cambodia and Zimbabwe—were subsequently removed from activity at the request of the local missions.

Through this project, Digital Square developed a highly visual brief for each country, identifying which tools are currently in use in the country, which tools have already been used in the country's COVID-19 response, and where there are opportunities for quick adaptation of existing tools across COVID-19 response use cases. Digital Square prioritized dissemination of the country briefs and supplemental resources with national governments, investors, and other stakeholders.

How to Use Map & Match Country Briefs

About Each Brief

- These briefs are meant to be a starting point and aim to:
 - *Provide a quick assessment of existing tools related to the COVID-19 pandemic.*
 - *Highlight where digital health tools might support gaps in the COVID-19 response.*
- Limitations of the country briefs:
 - *Only the tools related to pandemic response are featured in the briefs – additional tools can be found in the full dataset, which can be used for secondary analysis.*
 - *Briefs did not collect information about ICT infrastructure or health verticals.*
 - *Briefs are solely focused on COVID-19 adaptations.*
 - *Our data do not capture 100% accurate information as tools and adaptations are changing. Additionally, the digital health tool information was collected via landscapes and self-reported information via surveys and interviews.*

How to Read a Brief



50

**digital tools
identified**



27

**tools scaled
nationally**



16

**tools
deployed for
COVID-19**

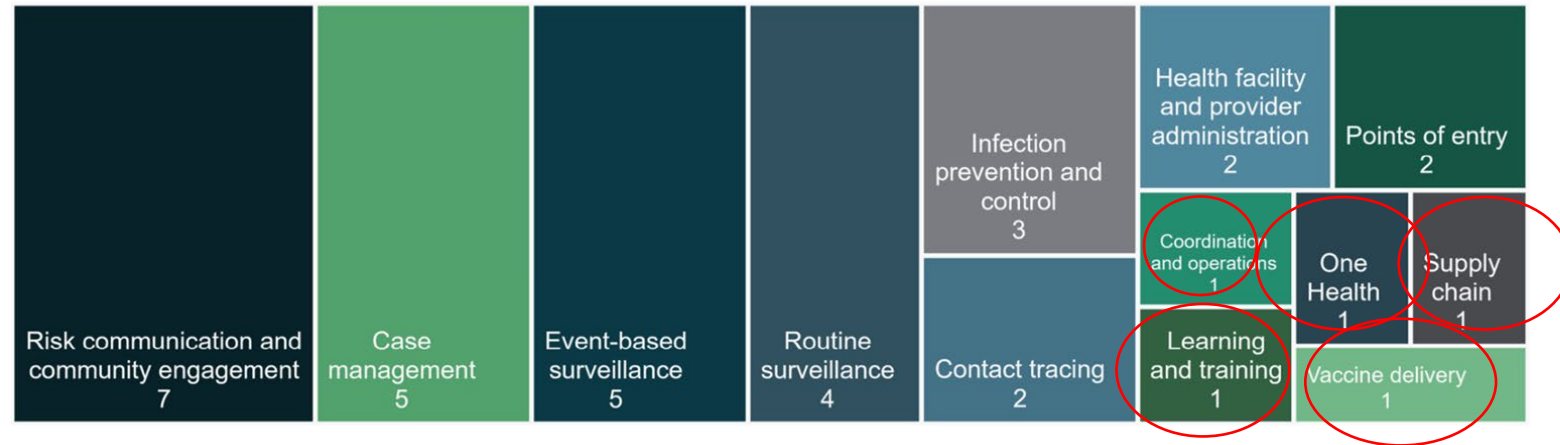


19

**tools potentially
adapted for
COVID-19**

In Senegal, our assessment found **50 digital tools**, with **27 tools** scaled nationally. There are already **16 tools deployed for COVID-19**.

High Level Analysis



The assessment found that there are **seven pandemic use cases** that did not have many digital health tools. Five use cases have one tool and two use cases (diagnostic tools and lab systems) have none. For these use cases, we have highlighted potential tools that could support Senegal's COVID-19 response.

Opportunities at a Glance

	Case management	Contact tracing	Coordination and operations	Diagnostic tools	Event-based surveillance	Health facility and provider administration	Infection prevention and control	Laboratory systems	Learning and training	One Health	Points of entry	Risk communication and community engagement	Routine surveillance	Supply chain	Vaccine delivery and planning
Arr Leen (CommCare)		Blue									Blue				
Covid-19.gouv.sn platform					Blue							Blue			
EYONE MEDICAL	Blue			Green		Blue		Green				Green		Green	Green
healthsites.io (ODK Collect)						Blue						Blue		Green	
mHero (iHRIS, RapidPro)	Blue												Blue		
Parsyl														Blue	Blue
Plateforme de gestion des alertes communautaires "Daan-Covid" (Community alert management platform)	Blue		Blue		Blue		Blue				Blue	Blue	Blue		

The briefs provide an **overall mapping** of all the tools in country, highlighting both current COVID-19 use cases (blue) and possible adaptations (green). This allows staff to quickly scan the existing tools in country and determine where the opportunities lie.

Opportunities Identified

Briefs also showcase digital health tools that can be adapted for other use cases.

For example, Senegal HMIS (based on DHIS2) a digital health tool deployed in Senegal has been adapted for COVID-19 use cases in other countries. DHIS2 can be adapted in Senegal for Lab systems and vaccine delivery use cases.

Coordination and operations

Plateforme de gestion des alertes communautaires "Daan-Covid"	RapidPro
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Diagnostic tools

CommCare	Eyone Medical
RapidPro	

Laboratory systems

CommCare	Eyone Medical
RapidPro	Senegal HMIS

One Health

RapidPro

Learning and training

Safe Delivery App	DMPA-SC eLearning and videos for health workers
eLearning and videos for health workers	Plateforme d'apprentissage en ligne du MSAS
RapidPro	The Challenge Initiative University (TCI-U)
Viamo	

Supply chain

Parsyl	CommCare
Eyone Medical	healthsites.io

Vaccine delivery and planning

Parsyl	AfriDoctor
DMPA-SC eLearning and videos for health workers	Eyone Medical
Reveal	Senegal immunization on supply chain

In-Depth Look

Table 2. An in-depth look at digital health tools to support the COVID-19 response, continued.

Digital health tool	Purpose	Use case(s)	Funder(s)	Implementer(s)	Licensing	Scale
Wellvis COVID-19 Triage Tool	Wellvis COVID-19 Triage Tool is an application that allows users to self-assess their COVID-19 risk category based on their symptoms and exposure history. It is free to users. The application also allows digital health care appointments that can be paid online.	Case management, infection prevention and control			Commercial	
AfriDoctor	AfriDoctor is an online platform that digitizes the patients' care paths and brings the health providers closer to their patients. The platform allows the patients to book online appointments with their providers and receive free SMS reminders. The platform provides providers with a calendar management tool, invoicing and medical records management tool, and visibility/referencing of health structures.	Case management, vaccine delivery and planning	eCare Group	eCare Group	Commercial	National
CommCare	The National Malaria Control Program (PNLP) uses the CommCare mobile application to carry out surveillance and track malaria cases. Providers send SMS messages from their mobile phones to monitor key indicators weekly at the health center level. The SMS messages sent from the field are compiled at the central level of the PNLN in Dakar and at the regional level where the agents can see, download, and process the data. The PNLN also uses a CommCare application to monitor the use and stock of antimalarial products by nurses at health centers in the Kolda region via weekly SMS messages. PNLN is exploring plans with Dimagi to extend this use to the Saint-Louis region and to integrate the data from the system into DHIS2.	Case management, contact tracing, diagnostic tools, event-based surveillance, health facility and provider administration, laboratory systems, supply chain	Grand Challenges International, PMI, PNLN	Abt Associates, Africare, Plan International, RTI International	Open source	Subnational

In addition to summary information, the briefs provide **descriptions of tools** used in each country, highlighting both current COVID-19 use cases (blue) and possible adaptations (green). Where the information was available, the briefs display **funders, implementers, and scale** information. **Licensing** information is also included to enable implementers to consider the price of the software upfront.

"The purpose of using digital health tools is to collect data in real time that are complete and exhaustive for decision-making at the national level. Our current challenge is that we have a few tools being used in parallel but in a disconnected manner."

—Oumou Kalsom Diallo,
Senegal Ministry of Health and Social Action

"We are using aggregated data for DHIS2 for COVID-19 response, but we would like to focus on collecting individual data moving forward too. We want to focus on patient management in digital health reform."

—Giti Azim, Dr. Shifaa,
Afghanistan Ministry of Public Health

"I would like sustainability and country-level technical capacity strengthening so that one day MISAU can fully maintain our electronic health information systems. There is a huge need to focus on building the sustainability of technical assistance support because currently the University of Oslo provides much of the technical support and there is not enough local capacity."

—Dr. Helder Macul,
Mozambique Ministry of Health

"Supply chain management is mostly manual and there are currently no large-scale solutions in Kenya."

—Onenus Kamau,
Kenya Ministry of Health

Tackling Questions about Digital Tools and the COVID-19 Pandemic Response

Questions from Country Leaders and Implementers

How can digital tools support the COVID-19 response?

The *DATEC* and *Vaccine annex* maps types of tools to different use cases. The *DATEC* is not specific to COVID-19 and can be applied to other pandemic/epidemics.

What open-source tools exist to support use cases like contact tracing or supply chain?

The *Global Goods Adaptations Across Use Cases* maps initiative approved global goods to the pandemic use cases, both where tools are already adapted to support the use case and where investments can be made to adapt that tool for additional use cases. There are other tools in the ecosystem including the *JHU Digital Solutions for COVID Response* document mapping contact tracing tools, and tools mapped as part of the Digital Public Goods Alliance housed at UNICEF.

What tools can support vaccine planning, rollout, and monitoring?

The *Vaccine annex* describes how digital tools can support diverse activities from planning vaccine introduction, enhancing communications as part a vaccination campaign, to effectively using data informing vaccine distribution.

Questions from Country Leaders and Implementers

How do I know which tools are already in my country?

The country briefs map details of known tools deployed in country. Table 1 (blue shading) illustrates tools mapped to current pandemic use cases and Table 2 provides more information about the tool, who is supporting the deployment, and high-level information on scale. For countries where M&M did not produce a brief, the full dataset has some information on tool deployment.

How can I learn if a tool I already use can be adapted for different uses to support response to COVID-19?

Many tools have opportunities for adaptation and scale. The country briefs illustrate these opportunities using a green shading. Table 1 and Table 2 have more information including details about the tools. The brief also contextualizes Digital Square global good adaptations for scale.

Questions from Country Leaders and Implementers

Who do I contact to help adapt and scale tools for COVID-19?

There are many investors who are coordinating together and can offer support, including those whose logos are included in the brief. If you have existing relationships with USAID Missions, we recommend you start there. We also recommend you coordinate with the newly formed Digital Health Community of Excellence (DICE) led by UNICEF/WHO.

How else can I use the Map and Match data?

The full dataset is available for a deeper understanding of tools in countries and other secondary use cases. You can filter to see what tools are available. You can and should use the dataset to prepopulate information you intend to gather future assessments. The DPPA for example, is organized so that you can cut and paste M&M data directly into the tool and build on that dataset where you'd like to go deeper.

Questions from Investors and Digital Health Stakeholders

What information exists about current tools used in countries?

The country briefs and larger M&M dataset highlight tools that include those currently used in COVID-19 response. The Digital Health Atlas will eventually also house this information. Digital Square is also working with DIAL and UNICEF to cross reference digital tools use for pandemic use cases and in additional mapping work done in a subset of countries.

What are the vetted tools that investors and other partners can look to in supporting countries?

Digital Square does not formally vet tools but the Global Goods Adaptations Across Use Cases maps initiative approved global goods to the pandemic use cases. The Global Goods Guidebook is also an excellent resource to learn more about the over 30 global goods supported by Digital Square.

Questions from Investors and Digital Health Stakeholders

Who are the partners working in a specific country for essential coordination and collaboration?

For COVID-19 response, coordinating with DICE can connect with you partners in country. Gavi and Global Fund coordination is also critical for COVID-19 and COVAX. In the Map and Map country briefs, we include a list of know funders and implementers for each digital tool deployed in country (based on the information we gathered).

For future assessments, what tools are recommended?

Do not recreate the assessment tool wheel. Map and Match coordinated with GIZ to align pandemic use cases to the Digital Pandemic Preparedness Assessment Tool. This tool and its resources are featured on our M&M website. The DPPA is also aligned with the Edit tool. Do not create new assessment tools – adapt and build off existing tools like the DPPA that are vetted by investors.

Final Thoughts

What's Next

- Dissemination of M&M materials and country briefs.
 - Outreach to USAID Missions to present country briefs.
 - Sharing resources across donor community.
- Work with partners who are conducting assessments to build on M&M Phase I dataset (i.e., CDC, UNICEF, GIZ).
- Conduct Map and Match assessments and create country briefs in other countries upon request.
- With additional resources, scale deployment where countries have need for COVID-19.
 - Align with DICE to highlight gaps and opportunities for countries.
 - Highlight country priorities to donors as they arise.
 - Continued coordination to support country priorities through Digital Square and partners.

Lessons Learned

- Coordination with partners and investors is essential.
- Collaboration and coordination takes time but can yield efficiencies down the road.
- Use existing data collection and assessment tools such as the DPPA. Build on data, such as the M&M dataset, that already exists.
- However, note the sector has survey fatigue. Find alternate ways for data collection such as KIIs and informal phone calls provide more information, but also take a lot of time.
- Share data to the DHA – budget and plan time, ensuring your data is aligned to their data model.
- Conversations on scale are complex.

Thank you

All Map and Match resources can be found on the Digital Square website at <https://digitalsquare.org/covid19-map-match>.

For additional questions about Map and Match, please contact Amanda BenDor at abendor@path.org.

Annex



Digital Square addresses the need for a thriving marketplace for digital health.



Alignment &
Co-investment



Global
Goods



Regional &
Country Systems



Alignment & Co-investment

Digital Square:

- Supports a shared vision.
- Grows the overall digital health sector.
- De-risks investment into digital health by making high-impact opportunities visible.

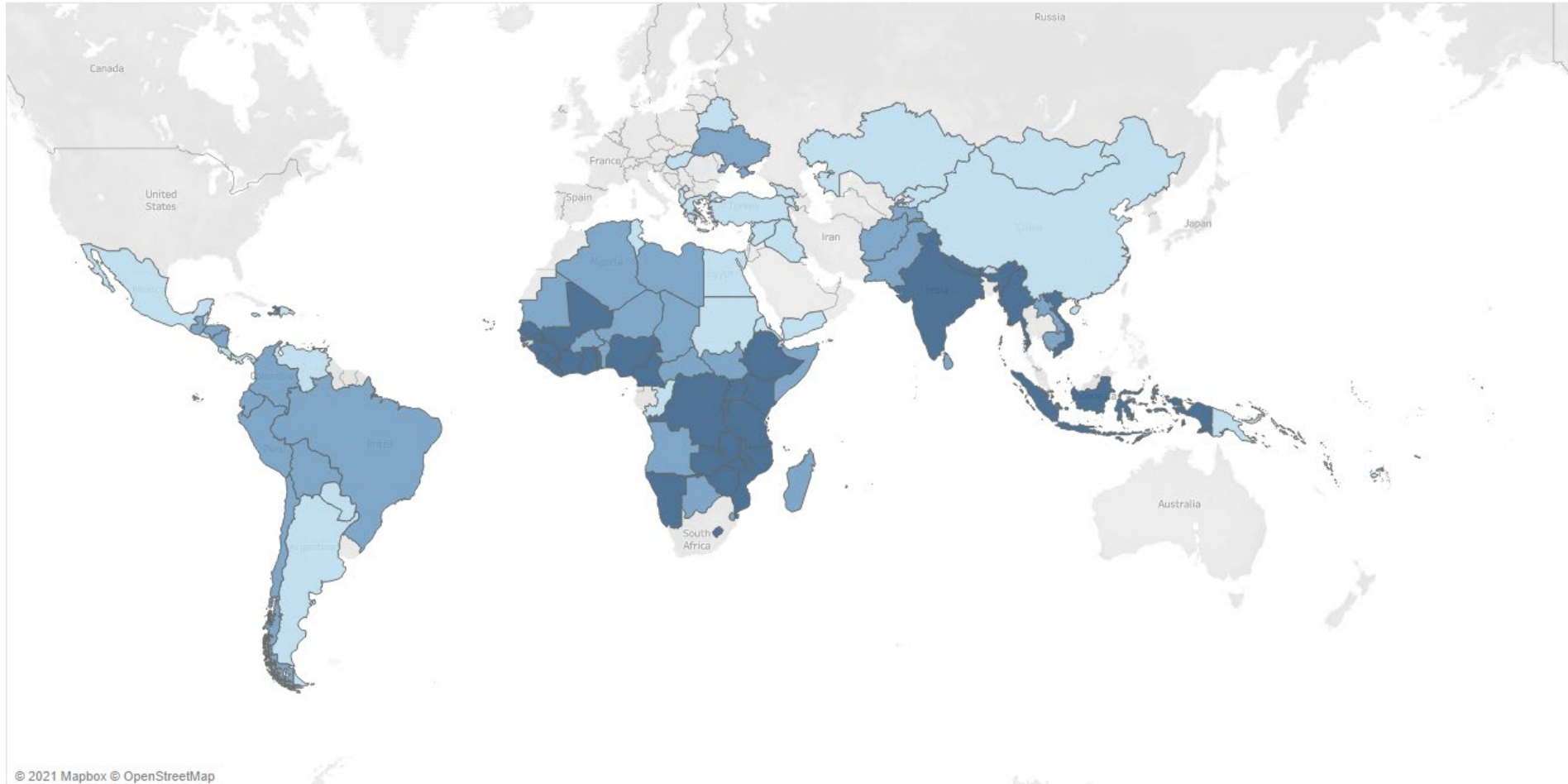


Global Goods

Digital Square:

- Allocates global good investments transparently and with community input.
- Provides rigorous yet pragmatic technical oversight on investments.
- Connects the global good community to each other and to country efforts.
- Secures investment for the maturation of global goods software.

71 countries use at least two Digital Square global goods, with many using six or more



Number of global goods deployed

- 1-2
- 3-5
- 6 or more

Source: Digital Health Atlas (DHA) and self-reporting from 28 Digital Square global goods across the 3 lowest market segments. A more thorough, complete analysis will be initiated following community input on the strategy and its metrics. Digital Square is working with the DHA to ensure that data is captured including specific interoperability capabilities between systems that are deployed in a country.



Regional & Country Systems

Digital Square:

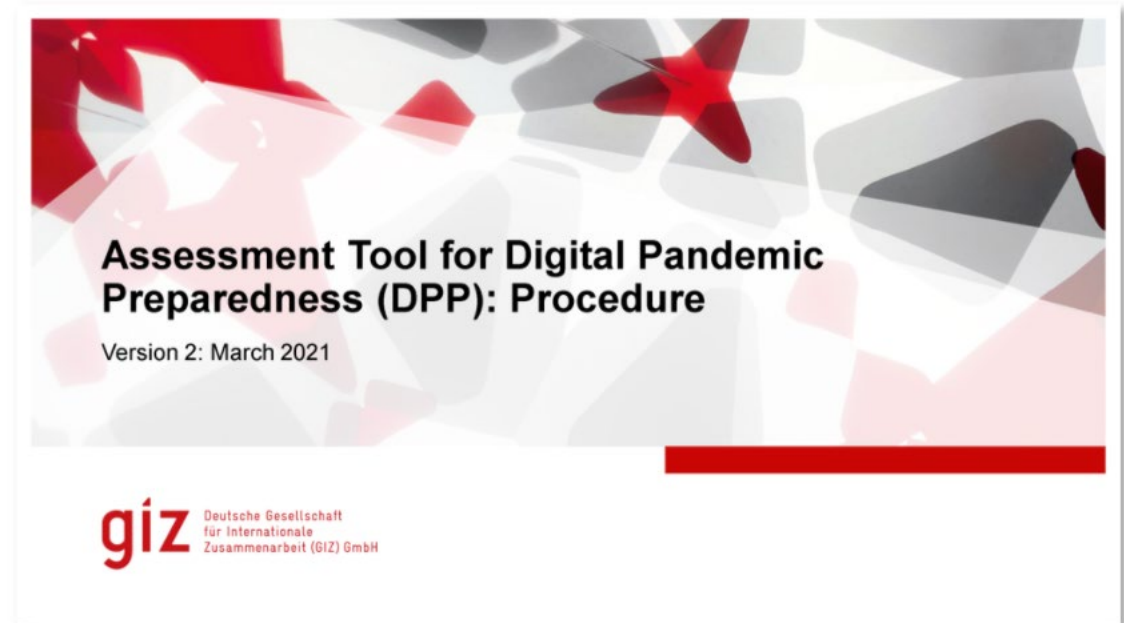
- Coordinates resources and expertise from multiple investors to support country and regional digital health initiatives.
- Supports regional and country digital health leaders to successfully lead and execute digital health transformation initiatives to strengthen health systems.

Coordination with GIZ

GIZ is developing a Digital Pandemic Preparedness Assessment (DPPA) tool. Early in the Map and Match project, GIZ and Digital Square coordinated to align on use cases and use case definitions to ground both the design of the DPPA and research protocol for Map and Match. The goal is to align findings from Map and Match and directly upload some of the data to populate the DPPA.

Understand your country context

Use existing frameworks to understand the needs for each country. Digital Pandemic Preparedness Assessment (DPPA) Tool aims to provide a systematic methodology to identify needs for digital tools that integrate with countries' existing digital ecosystem. Map and Match coordinated with GIZ to align pandemic use cases to the DPPA.



Coordination with UNICEF and other mapping efforts

Digital Square is coordinating closely with UNICEF to capture additional data from Phase II on digital tools supporting vaccine planning, deployment and monitoring. We are sharing all of our Phase I and Phase II research with UNICEF to compliment their own efforts to map the presence of tools and digital technologies used for health initiatives including a focus on COVID-19.

[UNICEF mapping](#)

Map and Match and the WHO Digital Health Atlas (DHA)

- The Digital Health Atlas is a WHO global technology registry platform aiming to strengthen the value and impact of digital health investments, improve coordination, and facilitate institutionalization and scale.
- After completing Phase 1 of M&M, WHO requested that we upload information we gathered from this exercise to the DHA to add onto the global digital health technology registry.
- The Digital Square team is currently working on with WHO to enable uploading stubs of data from 130 countries to the DHA and encourage others in the digital health space to update the missing information on the tool implementations once this is uploaded.
- Digital Square will also work with WHO to enable uploading of data for Phase II. Much of our data collection tool aligns with DHA criteria.

Coordination with other projects

- Digital Square is happy to share data collected through Map and Match with partners conducting digital health assessments
- Digital Square is happy to connect partners with GIZ, UNICEF, and other initiatives conducting digital health assessments
- Digital Square recommends partners use existing assessment tools, adding questions as needed.
 - DPPA
 - Gap Tool
 - [EDIT Tool](#) from the Kati Collective
- Digital Square recommends all data be shared to the Digital Health Atlas

What is the Digital Health COE (DICE)?

- The DICE is a multi-agency consortium with a UNICEF-WHO co-hosted secretariat. UNICEF will run day-to-day activities and will manage funding for operations.
- The DICE will provide coordinated, standardized support to Governments, initially responding to support requests for preparation and deployments of mature digital technologies to support health service delivery in the context of the COVID-19 pandemic
- DICE will align with donor agencies and support Governments to identify and apply for funding for deployments using costed investment cases (e.g. via the C19RM)



How can support be requested

- Contact the DICE secretariat to request technical assistance: contact@digitalhealthcoe.org
- Support requests should be from or endorsed by Government and have been going through existing technical/donor coordinating mechanisms
- TA should be aligned with National Vaccine Deployment Plans (NDVPs) and leverage existing Global Fund (C19RM), GAVI and other assistance mechanism
- Support will be provided through existing regional and country structures, including Government, UN, and DICE consortium partners



How to Adapt and Scale



- *Identify your holistic needs with your partners using tools like the Digital Pandemic Preparedness Assessment (DPPA)*
- *Map your needs to use case(s) using tools like the Digital Applications and Tools Across a Pandemic Curve (DATEC)*



- *Evaluate the systems based on use case, searching for adaptations and current uses on Table 2 of your country brief and other tools like our global goods use cases*
- *Do a deep dive into the systems, using Table 3 of your country brief and other resources*
- *Evaluate selected systems on other metrics like scale, with our scale framework.*



- *Reach out relevant stakeholders to select, coordinate and scale singular digital health systems*