

Costed workplan

Liberia

Draft version V3
January 2022

Summary

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Amsterdam, The Netherlands, 31 January 2022

Dear Mr Barun,

On 14 September 2021, Emeline and Geert from Akvo discussed with the WASH commission in Liberia how Akvo can support the WASH commission's efforts to develop a WASH data platform and support the WASH MIS team. Based on their goals, we've created a tailored concept note to improve data-driven decision making and boost the results of their programme. We are confident in the potential of our partnership and look forward to contributing to impact, together.

Among the numerous capacity needs identified in the Commission's Strategic Plan, establishing an integrated system that will enable WASH sector stakeholders to make smart data-driven decisions by collecting, transmitting, analyzing, visualizing, and sharing WASH information is a critical area for intervention: Since the establishment of the WASH Commission, it has struggled to establish a solid foundation for the management of WASH data and information. As a result of this situation, critical WASH data and information are scarce and unavailable to guide critical sectoral decision-making.

We propose to support in two phases : this proposal covers the first phase to start designing with a participatory approach what the WASH data platform will look like. The objective is to have a clear plan and budget for the WASH MIS implementation and capacity building of the WASH MIS team. It will help us to do some advocacy with various partners to find funding to implement the full WASH data platform in the second phase.

This concept note, covering the first phase, is therefore for 6 months, with a budget of 80 000\$. The budget will allow the WASH commission to implement some activities in addition to the design of the system. Akvo will support the methodology and also do some preliminary capacity building with the WASH MIS team. The first phase will be successful once we have managed to find the budget to implement the full WASH data platform and routine monitoring for the WASH commission.

For approval:

Akvo
Kathelyne van den Berg, Director

UNICEF WASH Manager
Jagadishwar Barun

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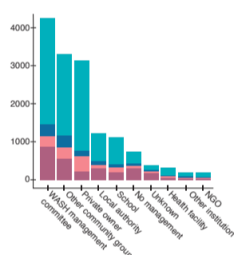
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Background

Many countries have historically struggled with a lack of reliable and up to date data on the status of WASH services and infrastructure. This data “black hole” has created a barrier for ministries to effectively steer interventions and evaluate whether these interventions have had the intended impact. With the introduction of new data technology in the last ten years, we have seen an increase in both the amount and quality of the data collected. However, significant challenges remain, such as a lack of resources (time, skills, tools and internet bandwidth), a lack of coordination between WASH actors and ministries regarding the type of data and formats collected, and the lack of data sharing between key user groups like NGOs and ministries.

UNICEF and Akvo embarked on a journey in 2016 to improve digital WASH monitoring as a pillar for improving WASH service delivery in the West and Central African Region (WCAR). Since 2013, Akvo has been working with WASH ministries from twelve countries to improve their information and knowledge of the WASH situation for better planning of scarce resources.

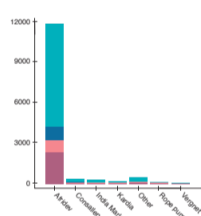
Type	Number	%
Unprotected dug well	4232	82.7%
Unprotected spring	680	13.3%
Unprotected borehole	119	2.3%
Other	85	1.7%
Total	5116	100%



TYPES OF UNIMPROVED WATER POINTS

WHO INSTALLED THE WATER POINT

- Functional and in use
- Functional, not in use
- Functional, with problems
- Broken down



DISTRIBUTION OF DIFFERENT PUMP TYPES

- Functional and in use
- Functional, not in use
- Functional, with problems
- Broken down



Training government enumerators in national water point mapping
Liberia 2017



LESSONS LEARNED IN LIBERIA'S WATER POINT MAPPING

- In the 2017 water point mapping, the Ministry took the lead in the data collection exercise with limited support from the Akvo team. In future data activities, the process of local capacity strengthening has to remain central to the cooperation.
- The officials of the Ministry decided to conduct another water point inventory in 2017, since the 2013 inventory was considered incomplete. For future large scale data collection exercises, sufficient time and alignment of all stakeholders at all stages is key in order for monitoring to take place.
- Actual use of the data requires careful planning. For the data to be used in operational decision making, the data flow has to be incorporated into existing management and monitoring structures, and data has to be easy to share between all levels of government and beyond.

Extract Poster presentation ASWA 1 program results from Akvo with UNICEF WCARO, in 2018

Since 2017 and the publication of the data from the 2017 water point inventory in a water Atlas, as well as the creation of the WASH commission, Akvo is willing to adapt and support the new institutional set up so the new stakeholders can have the best data for planning their activities. Since the establishment

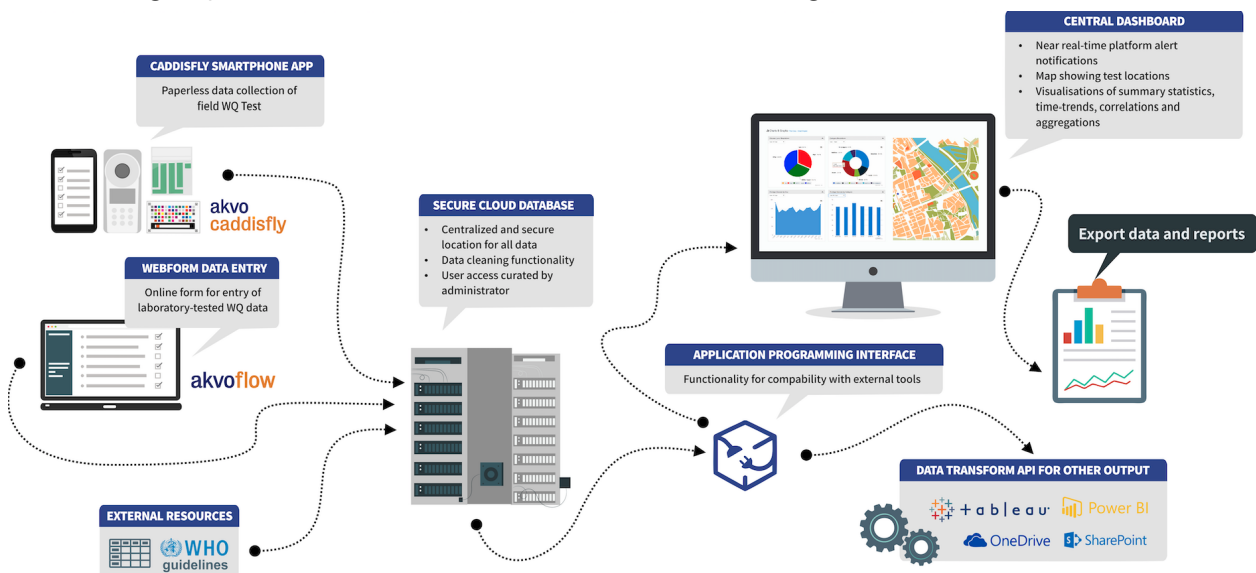
of the WASH Commission, it has struggled to establish a solid foundation for the management of WASH data and information. As a result of this situation, critical WASH data and information are scarce and unavailable to guide critical sectoral decision-making. The ability to define and implement ownership around a WASH digital platform is imperative.

Goal

In its strategic plan, the national WASH commission has identified as a critical area for intervention the establishment of an integrated digital platform that will enable WASH sector stakeholders to make smart data-driven decisions. Under the supervision and direction of the Chief Executive Officer (CEO) of the Liberia WASH Commission, – and in coordination with other WASH sector technical coordinators, and WASH sector stakeholders – the WASHMIS team should ensure that the essential information systems and datasets needed to support operational coordination, sectoral advocacy, and strategic decision-making are functional and continually refined.

The WASH commission has planned that the intervention of the WASHMIS team will improve the capacity of stakeholders for analysis and decision making through strengthened collection, processing, interpretation and dissemination of information at the intra and inter-sector level. Information is in this sense the foundation on which decision-making for a coordinated and effective response is based. The team is prepared to fully resuscitate and operationalize very key programs which have become dormant over the time, the Country-Led Monitoring System, the WASH BAT, 3rd generation of Liberia’s Water Point Atlas, WASH Sustainability Compact, EPRP, just to name a few. The WASHMIS team will shape and prepare Liberia representatives for participation at many sub-national, continental and global events, including African Ministers Council on Water (AMCOW), AfricaSan, the Africa Water Week (AWW), Sanitation and Water for All (SWA), Global Water Partnership, Stockholm Water Week, among others. This small group of highly trained and committed staff will leave no stone unturned in serving as the engine and central nerve of the WASH sector.

Based on their experience with Akvo in Liberia, the WASH MIS team has identified various components to the digital platform. It will be the basis for Information management and services for data collection,



collation, mapping, analysis, and dissemination relevant to the needs of the sector. As such, the WASH MIS should also be equipped for producing :

- Need assessment and data availability scan
- Data gathering, tools and process
- Continuous monitoring
- Dissemination and information/data sharing

Scope

Akvo wants to support the WASHMIS team in developing a WASH digital platform. What makes Akvo unique is that we can offer a full WASH monitoring solution, including the people, the data services, the data platform. This is what we call **Akvo solutions**. We have a team of experts with over ten years of experience in the sector, the right technical or domain knowledge, and the regional presence.

- **People**
 - Improve local capacity to use the tools and extract insights out of the data (WASH monitoring team).
- **Product**
 - Further develop the water atlas into a full WASH MIS system so that it works as a connector between data sources (either collected with Akvo or others).
 - Test water quality on an ongoing basis.
- **Process**
 - Increase accountability within the government and implementing partners.
 - Increase the monitoring frequency.
 - Increase reports such as the WASH sector review, which does not have data at the moment.



The proposed support is based on a 6-months period to get quick results as well as full technical

specifications and budget for the WASHMIS team and solutions to be operational. The result of this first phase is to get a clear plan and budget for the development and implementation of the integrated digital platform, in order to be able to go to donors for funding the full implementation. This first step will also involve some data collection pilot in order to have concrete results to show.

Once the plan and budget is ready for the full implementation, and funding is also secured, a second phase will start (2023) to improve and build on the tools and Water Atlas to reach the full implementation of the digital WASH platform. The WASH MIS team will be leading the whole process and implementation, Akvo will support them and bring various expertises depending on the phase and the needs. During the whole trajectory, capacity building will be also proposed based on initial assessment.

Approach



Design

Gain clarity on your goals and strategy, the problem you are trying to solve, the data you need, and the roles and responsibilities of each partner.

For this first phase of work, the Design step will be the most important one. Akvo’s approach is to do the design in an **Inclusive and Participatory Consultation**.

Developing the structure and operational plan of the WASHMIS digital platform needs to happen in close consultation with the WASHMIS team and other users that will adopt the system for reporting and decision making. Involving all relevant stakeholders from the start, will ensure the system meets the reporting and decision making needs of all different parties. This approach will ensure buy-in and a feeling of co-ownership resulting in sustainable use of the system.

In the second phase, yearly review can be conducted and based on stakeholders feedback, adjustment to the digital platform will be prioritised.



Capture

Capture reliable and high quality data from the start. Monitor your data collection to ensure accuracy and track progress.

In this first phase, a small data collection exercise will plan for the WASHMIS team to experiment with tools. It will help to further define the design and functionality of the digital platform. It should also support the definition of budget and planning, based on this experience. It is also important to highlight that various sources of data will be explored so that the scarce resources from the WASH commission are not all spent on data collection.



Understand

Extract the insights that matter. Clean, analyse and visualise your data and turn it into valuable information and knowledge.

In the same way as the capture step, the “understand” phase will be mainly done through a pilot for this first phase, with updating the Water Atlas. The main objective will be to be able to give further technical specification to the WASH MIS as well as budget indication.



Act

Share insights with the relevant people, generate dialogue, encourage decision making and continuously improve your work.

This is the most important step for the WASHMIS team to ensure they have succeeded in their work : the digital WASH platform should be used by stakeholders to improve their activities. With this end goal always in mind, Akvo will support the WASH MIS team in each steps.

Together with the series of services described above to ensure you succeed at every step of your programme, we support these services with our [open source](#) data platform and our custom tech solutions to help you capture, clean, visualise and share your data in the best way possible.

Some principles will guide the development of the WASH digital platform:

- a) **Ease of access** - Web-based system, with easy access by national /sub-national users. Network throttling testing will also be used to ensure that the components of the platform perform satisfactorily under low-bandwidth constraints.
- b) **Hosting** - The WASHMIS will be hosted on the cloud. This will help in maintaining stricter user controls on access to the infrastructure. It will also ease the process of transferring the project to a different cloud/ on-premise infrastructure, if required. Developments will always try to optimise the resources required to run and maintain the platform infrastructure.
- c) **Future iterations** - integration with other input channels such as USSD, Whatsapp etc. may be considered- if the platform supports web and mobile based quantitative and qualitative data capture. It shall use both new or non-traditional data sources that include digital data derived from social media, web content, commercial transaction data or radio-navigation (GPS) devices as well as traditional data that include field data entry via web forms, spreadsheets and mobile data. Combining data sources often provides more complete, timely and/or granular information. The platform shall allow entry materials that can be used for case study generation, e.g. before & after photos, videos, anecdotal interviews with beneficiaries.
- d) **Data Security and access control** – All data in motion between the backend and the frontend of the platform will be transferred over HTTPS (HyperText Transfer Protocol Secure). Akvo also strictly conforms to the GDPR guidelines for handling of PII (personally identifiable information). The platform will incorporate security at different levels through role/level definition, user authentication, data validation to prevent inaccurate data entry as well as an audit trail feature to inform “who and when” created and/or modified a dataset..
- e) **Futuristic abilities**– the proposed platform incorporates future expandability options to integrate digital water quality monitoring - as a measure of hygiene behaviour through water safety chain at household levels as well as more data capture channels such as U-report, SMS, USSD based data. Akvo has wide experience integrating U report with other data platforms.

Activities and deliverables

- **Assessment : WASH MIS technical specifications, process definition and capacity building needs**

Activities will be developed to allow for Akvo and the WASHMIS team co-creation of the WASH MIS system as well as capacity building. After literature review and first draft of requirement developed, first round of workshops will be organised as per sector and will address the following topics:

- Factor Analysis/enabling environment: What key factors influence Sanitation service delivery and should be tracked in the system?
- Actor Analysis: Key organisations that are active /have mandates in the sector and should be mapped in the system?
- Alignment on the intended outcomes and impact
- Defining data and reporting needs: What key information should be available in the system and in what format as input for decision makers?
- Defining data flow, user roles and permissions: What are different entry points of data into the system, how will data be validated and what different approval levels are there?

Based on the first round of consultations, Akvo will support the refining and development of indicators in conformity with the SDG6.2, JMP and GLAAS indicators. The objective is to create a system that is comprehensive and provides useful information for stakeholders, including indicators that track the enabling environment (policies, partnerships, human capacity, financing etc.), and outcome level results.

In parallel, Akvo will also assess the team capacity : it has two objectives by informing the technical specifications as well as developing a capacity building plan.

A first draft of the system will be presented, including mock-up visuals and reports will be validated with all relevant stakeholders. The second workshop will be organised as per sector and will address the following topics:

- Validation of selected indicators
- Defining personas for the users of the WASHMIS
- User stories design and validation to develop the user experience of the platform
- Validation of data visualisations, reporting formats, and level of data disaggregation
- Validation of workflows,user roles and permissions
- Identification of any major information gaps and/or concerns about the structure
- Prioritization of roadmap for system development

The consultation workshops can be organized in person, if the COVID-19 situation allows for it. In case COVID restrictions prohibit in-person meetings, Akvo has extensive experience in facilitating interactive online workshops and is comfortable to organize the stakeholder consultations virtually through any preferred video-conferencing platform. It is also possible to implement a hybrid of the two, organizing the first workshops in person and the second round online.

Apart from these two formal rounds of consultation, Akvo proposes to create a smaller taskforce with a representative of UNICEF, WASHMIS and the other main stakeholders for rural WASH that will be consulted on the development of the system structure and operational plan on a more regular basis. Akvo believes in an iterative approach towards software development in which short feedback loops with relevant stakeholders will ensure the system design will not deviate from the objectives of the stakeholders.

- **Data collection pilot**

The objectives of the data collection pilot are multiple :

- It will allow the WASH MIS team to take ownership of the data platform and test some processes to inform the design of the data platform.
- It will allow for some capacity building for the WASH MIS team with the existing tools.
- It will produce useful data for the WASH commission.

- **Water Atlas update**

Akvo has not been involved in the online Water Atlas since the last partnership with the Ministry of Public Work in 2017. While the WASH MIS technical specifications are being defined, some improvements can be made to the water Atlas to reflect the new WASH commission mandate and test a few functionalities that will be developed in the second phase.

Activity Akvo	Deliverables	WASH MIS team responsibility	Timeline
WASH MIS technical specifications and process definition	<ul style="list-style-type: none"> ● Report on WASH MIS recommendations ● WASH MIS implementation plan and budget 	Drive the process, organise and mobilise WASH stakeholders for the participatory definition of the WASH MIS platform. (at least 2 workshops)	July - October 2022
Capacity building assessment	<ul style="list-style-type: none"> ● Capacity building assessment report ● Capacity building plan and budget 	Mobilise stakeholders and participate in the assessment.	September -December 2022
Data collection pilot	Clean Data set and report on lesson learned including recommendations for national scaling	WaSH team is in charge of the full Data collection and process.	TBD

Detailed project plan

Overall Objective

High-quality data are vital for enabling national governments, local authorities, civil society, the private sector and the general public to measure progress towards achievement of the SDGs. Moreover, the very comprehensiveness of the 2030 Agenda creates the need for an unprecedented range of analysis at different levels, including those derived from official statistical systems and from administrative and non-traditional data sources. Further, informed decision-making in times of crisis such as during the COVID-19 pandemic requires integrated, relevant, timely and easily accessible information, based on the right indicators, and robust data- obtained by appropriate assessment. To achieve this and to ensure that necessary measures are taken in a timely manner, information management systems, monitoring, and reporting routines must be in place.

As Liberia gears towards accelerated implementation of Sustainable Development Goals (SDGs) including ensuring access to water and sanitation for all by 2030, a comprehensive National Water Monitoring and Information System (WASHMIS) to accelerate achievement of the SDG targets becomes imperative. We should focus our attention on planning, monitoring and evaluation of SDG indicators and all the levels of services as defined by the JMP in 2015. We need national monitoring systems in both urban and rural settings, and to assess access to services in institutions (Health Care Facilities, Schools, etc.). An integrated monitoring platform should include information on asset management as well as on service level. Availability of monitoring data shall support effective planning and improve efficiency of services by both districts and WASH commission. The platform shall link to other global monitoring systems such as WHO-UNICEF JMP and UN Water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) and IATI (International Aid Transparency Initiative).

Goal

Improved WASH access in Liberia

Outcome

1. Improved infrastructure planning and accountability
2. Improved inclusion and reach
3. Improved WASH service delivery
4. Improved data governance and collaboration between WASH stakeholders

Output : Design of the WASHMIS with the following results

1. Effective data capture strategy
2. Effective database and data exchange structures
3. Effective data analysis and visualisation strategy
4. Effective data use and data sharing strategy

Deliverable is a WASHMIS road map including :

- Ecosystem Assessment including need for information
- WASH data stakeholders assessment
- WASH MIS technical specifications and process definition including data governance
- WASH MIS development steps
- MVP (including data collection and visualisation)
- Costed work plan for WASHMIS implementation and continuous data production

To ensure we tackle this challenge in a holistic and sustainable manner, we strongly suggest taking enough time to define all aspects of the problem. This will lead to a solution that takes into account the capacity of the staff analysing the data as well as the reality on the ground for the coaches that do the actual data collection.

Some of the activities can be described as below :

- **Understanding the context**
 - Define the data challenge, create a shared vision, identify potential users and functionalities
 - Define measurable indicators of system level change, based on (i) impact (ii) external factors (e.g. labour market opportunities)
 - Map key-stakeholders in youth employment sector
 - List Assumptions and risks (e.g. “actors are willing to share data if they can access data in exchange” or “data is available & frequently updated by bureau of statistics”)
- **Research & Validation**
 - Create data inventory: What relevant data sets are out there and what is the data quality (Completeness, Accuracy, Timeliness, consistency, validity and uniqueness)
 - To what extent can the indicators be answered with the data sets? What other valuable information is in there that could be useful for sector monitoring? Potentially even organising a hackathon with youth entrepreneurs.
 - Interviews key stakeholders defined in step 1, about:
 - What external data sets are available (that we might not know about)?
 - Are they willing to share their own data in a centralised platform?
 - What are their data needs - validation of system level change indicators
 - What data challenges do they face?
- **Ideation**
 - Discuss with key stakeholders:
 - Main findings of interviews
 - Main findings of inventory & analysis
 - To what extent does this meet their needs?
 - Define/prioritise user requirements of data exchange platform (incl. Data rights for sharing and re-use)
 - User Journey: What functionalities does the data exchange platform need?
 - Prioritise functionalities

- System requirement definition and wireframes
- Visualise platform functionalities
- Collect feedback from National WASH commission
- *Collect feedback from main stakeholders*
- Costed workplan and roadmap

Budget

Result Level	Result/activity	Months					Total (NWASHC+ Akvo) in USD	Akvo contribution in USD	WASH commision	
		Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023			Cash	Supply
Progr. Output 1	OUTPUT 1: Ecosystem Assessment and goal definition for WASH MIS and stakeholders assessment						50,165.00	50,165.00	0.00	#REF!
Activity 1.1	Understanding the context and partnership building	X	X				\$ 7,185.00	\$ 7,185.00	\$ -	
Activity 1.2	Participatory design phase for definition of data solutions/digital platforms workshop		X	X			\$ 26,685.00	\$ 26,685.00	\$ -	
Activity 1.3	Research and validation	X	X	X	X		\$ 10,425.00	\$ 10,425.00	\$ -	
Activity 1.4	Capacity building strategies			X	X		\$ 5,870.00	\$ 5,870.00	\$ -	
Progr. Output 2	OUTPUT 2: Data collection and Minimum viable product						\$ 29,220.00	\$ 29,220.00	\$ -	\$ -
Activity 2.1	Data collection plan and strategy			X	X		\$ 6,565.00	\$ 6,565.00	\$ -	
Activity 2.2	Support in training			X			\$ 13,310.00	\$ 13,310.00	\$ -	
Activity 2.3	Data collection training			x			\$ -	\$ -	\$ -	
Activity 2.4	Data collection and supervision			X	X		\$ 3,475.00	\$ 3,475.00	\$ -	
Activity 2.5	Data analysis and minimum viable product			X	X	X	\$ 5,870.00	\$ 5,870.00	\$ -	
Progr. Output 2	OUTPUT 3: WASH MIS specification and process and roap map for capacity building						\$ 33,110.00	\$ 33,110.00	\$ -	\$ -
Activity 3.1	Development and validation of the WASH specification			X	X		\$ 25,100.00	\$ 25,100.00	\$ -	
Activity 3.2	Development and validation of the Road map for capacity building including private sector involvement			X	x	X	\$ 8,010.00	\$ 8,010.00	\$ -	
Sub-total for the outputs							\$ 112,495.00	\$ 112,495.00	\$ -	
HQ costs	HQ technical support (7% of the cash component)						\$ 7,874.65	\$ 7,874.65	\$ -	
Total Programme Document Budget							\$ 120,369.65	\$ 120,369.65	\$ -	\$ -

Why Akvo?

Impact driven

We strive for long term impact, for all. That means sustainable and inclusive change at the level of the communities our partners work with. We are invested in creating long term partnerships with local presence and technical solutions that last.

Collaborative

We employ a collaborative and tailored approach to all of our partnerships, bringing together a unique combination of development sector, data and technology experts. Together, we guide our partners towards impact using our proven methodology, the Data Journey.

Responsible

We prioritise responsible innovation to ensure that personal data is treated with respect and no one is left behind in the data revolution. Akvo is at the forefront of data security and has strong data privacy protection policies, frameworks and procedures in place, including GDPR. [Your imported data is owned by you.](#)

Solid track record / Sectors

Since 2006, we've worked with over 20 governments and 200 organisations in more than 70 countries to improve the way they implement development projects and make decisions using data. Read more about [our partnerships](#) and the [impact we contribute to](#).

Powerful data platform

Our data platform is designed to help you capture and understand high quality data that you can act upon. We want to make your data journey as smooth and successful as possible. That's why we focus on ensuring a robust integration between our tools, a system that supports national scale data collection, and continuous improvement based on feedback from the field.

Open source software

At Akvo, we believe that [going the open route](#) can provide substantial benefits for organisations in the international development sector and more importantly, gives benefits to those that need it the most. There's no costly lock in effect, collaboration saves money, and you can reuse the tools.