

A hand wearing a yellow nitrile glove holds a clear syringe with a needle, injecting a globe. The globe is semi-transparent, showing a world map with latitude and longitude lines. The background is a light beige color with a dark green bar at the top and bottom.

Data For Management Landscape



Organizations are dedicating resources to data for management activities.

		Technology			Systems		People		Cross-Cutting	
		Develop	Implement	Independent Assessment	Architecture	Operational Research	Professionalize Capacity Development	Change Management: Cultivating Champions	Knowledge Sharing	Technical Support
D4M PWG	GAVI Secretariat								●	
	WHO								●	●
	UNICEF	●							●	●
	BMGF	●	●	●					●	
Academia & Institutes	Purdue University						●		●	
	Vaccine Modeling Initiative (VMI)						●		●	
	William Davidson Institute (WDI)			●					●	
Organizations	CHAI		●		●		●	●	●	
	PATH		●		●				●	●
	JSI	●	●		●		●	●	●	●
	Logivac						●	●	●	●
	MSH	●			●		●	●	●	●
	Village Reach	●	●		●				●	●
	USAID								●	●

Source: Data For Management Consultation Interviews and Organizational Websites.

Organizations and Institutes

Data For Management Related Activities

Clinton Health Access Initiative (CHAI)

- Vaccine Support program has core competencies in business, economics and logistics, which are used to help national ministries of health introduce new vaccines more quickly and efficiently.
- Teams work directly with governments on large-scale game-changing opportunities in vaccine introduction to develop system innovations.

GAVI

- Supply Chain Center for Excellence to incubate PPP for design of innovative solutions to improve efficiency of supply chains.
- Supply Chain Targeted Improvement Facility to provide funding to GAVI-supported countries for improved supply chain management and cold chain systems.
- Data Quality activities led by M&E team.

MSH

- Development of tools for stock monitoring for contraceptives, essential drugs, vaccines, etc.
- Conducts assessments and provides technical assistance to countries with interest in computerizing logistics information systems.
- Strengthening Pharmaceutical Systems now SIAPS builds human capacity and governance in pharmaceutical sector and strengthens systems.

Logivac

- Three year funded project to provide technical support to increase capacity and competence of health logisticians and supply chain managers in Sub-Saharan Africa.
- Regional Reference Center in Benin for health logistics technical assistance and training.
- Generation and dissemination of vaccine logistics knowledge.
- Operational research on the impact of supply chain innovations on immunization program performance (Benin).

Organizations and Institutes

**John Snow,
Inc. (JSI)**

Data for Management Activities

- Implementation of logistics and health IS (paper and electronic) in Sub-Saharan Africa and Asia.
- Technical support to MOHs on immunization data monitoring, reporting, and use at all levels.
- Manages the U.S. Government's key supply chain management projects (DELIVER, SCMS).
- Design and strengthen in-country supply chains, leveraging information technology, including mHealth, to support program monitoring and evaluation, supervision and community mobilization, in close partnership with organizations such as Dimagi and DataDyne.

Highlighted Projects

- Provided supply chain technical assistance to the Uganda Ministry of Health EPI Division (UNEPI), including supply chain assessment and forecasting.
- MCHIP
 - Assist countries to improve the coverage and quality of their routine immunization services and to strengthen their national immunization programs
 - Countries include India, Timor-Leste, Democratic Republic of Congo, Kenya, Kyrgyzstan, Malawi, Rwanda, South Sudan, Senegal, Tanzania, Tajikistan, Uganda, Ukraine, and Zimbabwe

Organizations and Institutes

PATH

Data For Management Activities

- Better Immunization Data Initiative: Five year grant from BMGF, working with initially 4 countries in Africa to identify country-owned and led solutions to address challenges around immunization data collection, quality, and use. Other key partners include JSI.
- Knowledge-sharing.
- Data Standards for e-health.
- Technology Solutions Global Program develops and implements health technology in resource-poor settings.
- Digital Health Solution Team defines requirements, identifies or develops ICT solutions at country and global levels.

Highlighted Projects

- Health Data Dictionary
- Identification of eHealth services that transform service delivery in Ghana.
- CEM which has been implemented in India and Benin.
- Application of CRDM approach with healthcare workers in Kenya, Rwanda, Senegal and Vietnam to identify key business processes and user requirements in national supply chain systems.
- VaxTrac Stock Management System in Vietnam.
- Logistimo demonstration project in South Sudan to evaluate the value of solution in strengthening immunization programs and information use.
- OpenLMIS technical support.
- Online catalog offers complete download of more than 266 publications, presentations, and related resources on vaccines and immunization.
- Vaccine Resource Library which gathers top immunization resources in a single website.

Organizations and Institutes

Village Reach

Data For Management Activities

- Provides technical Assistance to countries to understand information systems needs.
- Provides technical assistance to improve efficiency of established information systems in-country.
- New solution development
 - OpenLMIS (partnership with PATH, JSI, and wider development community).
 - Remote temperature monitoring (collaboration with Nexleaf, UNICEF).
 - mVaccination pilot with Vodafone.
- Use and advocate for Greentree Principles in software development.

Highlighted Projects

- Expanded Dedicated Logistics System to Cabo Delgado, Niassa, Maputo and Gaza Provinces of Mozambique, where-in small number of specialized workers visit each health center once a month to deliver vaccines and supplies, repair equipment, facilitate an information system and provide supportive supervision
- OpenLMIS nationwide implementation in in Tanzania, Zambia,
- OpenLMIS in Mozambique in informed push vaccine supply chain.
- ODK in collaboration with University of Washington and initially supported by BMGF Grand Challenges.

Organizations and Institutes

Data for Management Related Activities

WHO

- Immunization Data Repository managed by IVB is a portal integrating data from existing immunization information systems maintained by partners such as GAVI, UNICEF, and others.
- Performs periodic structured assessments of vaccine management and data quality, with development of suggested improvement plans.
- Development of guidance on topic areas including computer based information systems and immunization coverage surveys.
- Effective Vaccine Management Initiative provides tools to monitor and assess vaccine supply chains.
- WHO-ITU Data Standards for E-health.
- Technet21 as an focal point for vaccine information and professional communities.

William Davidson Institute (WDI)

- Conducting Impact analysis of Logistimo solution in India
- In partnership with Village Reach, development and implementation of framework to evaluate barriers to distribution in Mozambique.

UNICEF

- The Hub in partnership with WHO.
- UNICEF innovation projects including Birth registration using SMS technology.
- Visual Vaccines is a relational database aggregating UNICEF, WHO, and country data together with aim of improving stock visibility.

Organizations and Institutes

Highlighted Data For Management Activities

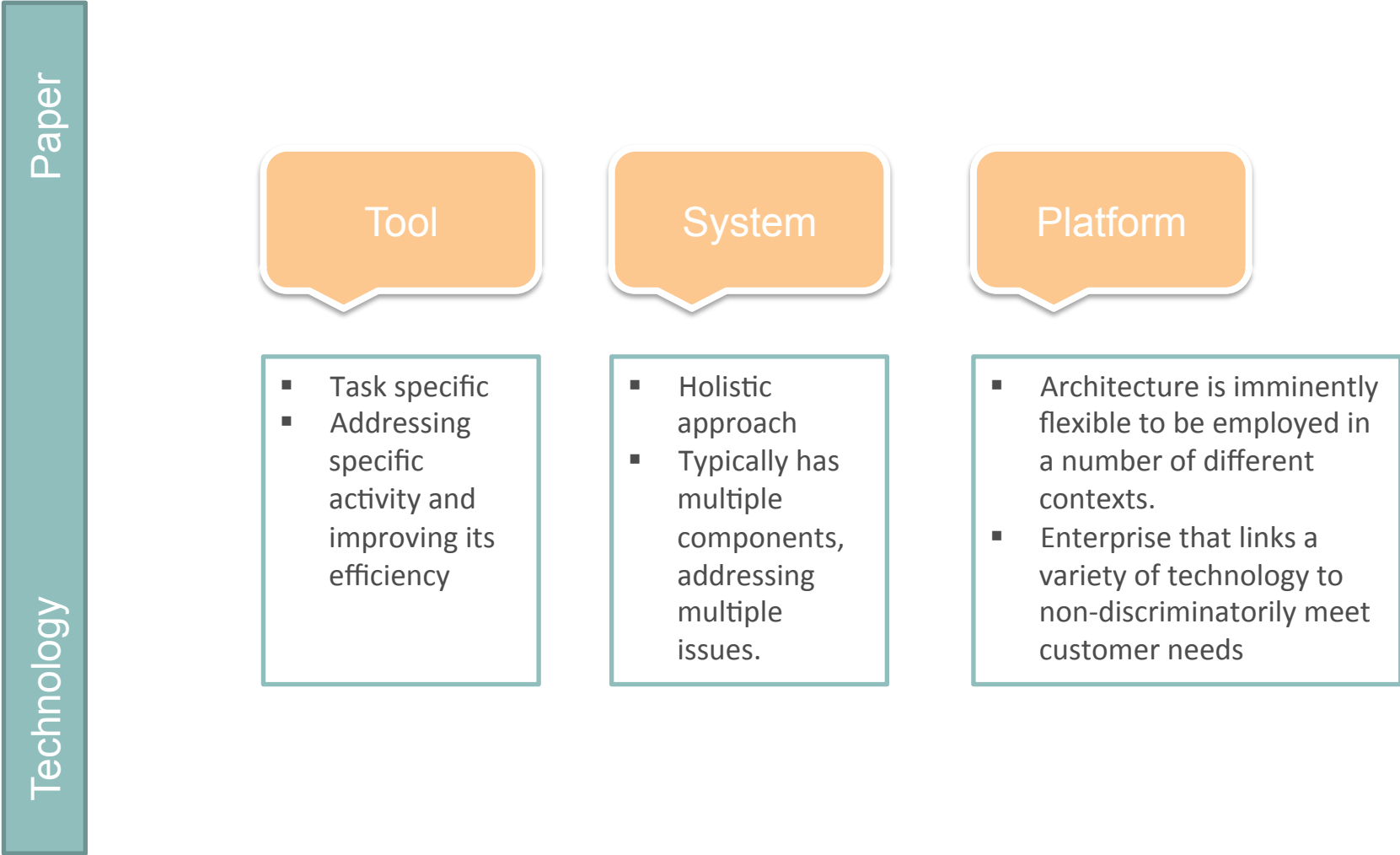
USAID

- Principles for Technology in Development co-drafted with WB, BMGF, UNICEF, DFID, SIDA, Omidiyar Foundation, US State Department, UNHCR, WFP, UNFPA, UNDP, Global Pulse, UNWomen, OCHA.
- The USAID | DELIVER PROJECT, providing procurement and supply chain management services for the President's Malaria Initiative, the U.S. Government's pandemic response program, and USAID's global contraceptive program, including for pharmaceuticals and related medical supplies.
- The Supply Chain Management System (SCMS) Project, funded by the President's Emergency Plan for AIDS Relief (PEPFAR) through USAID, providing provides global procurement and distribution for HIV/AIDS medicines and supplies.

The Bill and Melinda Gates Foundation

- Investments in technology solutions for information systems.
- Investments in initiatives to improve immunization data.
- Advocacy around immunization supply chains and the use of data in decision-making.

Solutions may be as specific as a tool to address a particular issue or as comprehensive as a platform used across sectors. Customers needs should be aligned with selection.



The Data For Management Landscape.

Technology

- Independent software developers, corporations, and NGOs are developing technologies to capture and utilize data in operations and decision-making.
- There are over 53 tools, systems, and platforms available, including mobile and cloud-based solutions, legacy software systems, and traditional access and excel- based databases.
- Donors and philanthropic organizations continue to provide catalytic funding for D4M solutions and time-limited pilots. Historically, countries have not heavily invested in LMIS.
- The infrastructure to understand the ICT market for healthcare solutions remains ad hoc, with a scarcity of independent impact assessments and the absence of a focal point for knowledge gathering and appraisal.

Systems

- At the country-level, there are a limited number of programs conducting holistic evaluations and redesign of business processes.
- In targeted countries, such as Nigeria, Benin, Tanzania, Zambia, and Mozambique to name a few, there have been significant efforts to identify, evaluate and optimize supply chain workflows and processes, with the subsequent redesign of information systems to match these processes.
- At the global level, stakeholders are advocating for an architecture for Ehealth implementation that supports interoperability and integration.
- Non-specific to immunization activities, there are efforts to develop unified data standards for Ehealth.

People

- The unfamiliarity with technology and the need for “high touch” support has been cited as a key lesson learned in pilots. However, the infrastructure for technical support from developers, NGOs, and international organizations is variable and does not capitalize on the digital paradigm.
- Where the culture of data collection and accuracy is poor and there is a misalignment of incentives to report and increase visibility, the identification of data champions has been at the crux of IS success stories.

The GAVI Alliance may play a catalytic role in the data for management ecosystem through three key strategic domains.

1

Change Management is at the crux of data use in decision-making as well as the successful use and adoption of technology. While a number of successful pilots cite the value of data champions and there is clear evidence that user-centric technology creates buy-in at the individual level, there are macro level factors that will also drive the use of data. The GAVI Alliance and implementing partners may play a role in appropriately aligning incentives and in adopting insights from other industries in creating value for users and streamlining the use of data throughout the supply chain.

2

Knowledge exchange lags behind the digital paradigm. Whether celebrating the successes and failures of implementation, developing a searchable catalogue of technology solutions, or sharing best practices, the dissemination and use of knowledge will be bounded by the way that target users interact with knowledge-sharing platforms and venues.

3

Country-specific understanding of business processes and information system needs is fundamental to country-driven identification of sustainable solutions. Global processes and requirements that support country-led initiatives and investment in local talent enable sustainable, sector-wide models.