

LogicalOutcomes' DHIS2 Services

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About Us

LogicalOutcomes is a Canadian non-profit. We offer consulting in monitoring and evaluation and stakeholder engagement. By bringing high-quality consultants and responsive approaches to each project, we help organizations to:

- ✓ Develop online **monitoring and evaluation systems** based on a major international open source platform (DHIS2)
- ✓ Design evidence-informed programs that lead to social change
- ✓ Conduct robust **stakeholder consultations**
- ✓ Deliver sound and efficient project management
- ✓ Conduct research to offer the most effective solutions and best practices

Learn more about us: www.logicaloutcomes.net

DHIS2 for non-profit monitoring and evaluation

Monitoring & evaluation (M&E) systems often fail: they tend to go wildly over budget, or over schedule, or don't deliver what they promised – or all three¹. Yet funders expect non-profits - even small ones - to evaluate their programs as though it's a simple task.

Based on [our review of 35 different software platforms](#), only one software program met the needs of our sector: District Health Information Software (DHIS2).

- ✓ DHIS2 is a free and open source program that has been in development for over 20 years. It is stable and well-supported (by the University of Oslo, plus an international network of experts and software developers).
- ✓ DHIS2 provides all the elements of a fully functional monitoring and evaluation system. It combines a data warehouse, individual client tracking, data entry forms, sophisticated reporting and geographic mapping, and individualized dashboards.
- ✓ DHIS2 is used in over 50 countries and in many major NGOs including Doctors Without Borders, The Global Fund, PEPFAR and PSI, and has been adopted as the national health information system of over 12 nations. The platform is not restricted to health.
- ✓ DHIS2 is flexible, and designed to aggregate data that is gathered in multiple formats and locations. It also provides built-in data collection apps for individual client tracking.
- ✓ DHIS2 is resilient; it is designed to handle intermittent internet connections and low cost data collection on Android and web browsers. It's also decentralized — DHIS2 is designed to be independent of any one organization or vendor.



You're probably thinking, if DHIS2 is open source, can't we set it up ourselves?

DHIS2 is complicated to set up, and requires a lot of technical skill to configure it for an agency's needs. There are also hosting and security issues to consider. We have built relationships with top global DHIS2 implementers who set up, secure, design and configure DHIS2 instances for international non-profits. By working with us, we'll tap into their expertise to get your organization using DHIS2.

¹ Powers, 2009. A Framework for Evaluating the Effectiveness of Performance Measurement Systems.
<http://bit.ly/2by8ZX7>

Project approach

Template-driven design

Our goal is to promote the spread of DHIS2 as a shared measurement system by enabling client organizations to manage their own implementations as independently as possible.

The major challenge with DHIS2 is its complexity. It takes a long time for an implementer to learn how to use it effectively, and there is a global shortage of qualified DHIS2 implementers.

Our approach includes working with DHIS2 experts (see Our DHIS2 team) to design templates based on the project requirements. Once the configuration templates have been tested and launched as part of a functioning DHIS2 system, they can be adapted by client staff for future expansions.

Responsive methodology

Our projects deliver results in several phases with a deliverable at the end of each (see Quick Start draft work plan). At the end of each phase, client staff and the LogicalOutcomes team will refine the objectives for the following phases. This approach will enable the client to use project resources as efficiently as possible by taking advantage of ongoing DHIS2 development and the learnings from the previous phase.

Open access tools and Intellectual Property (IP)

The project will use and also create reusable tools to support monitoring and evaluation systems for the international community of NGOs. We suggest including the following IP provisions in our contract to ensure that tools and templates may be shared freely with the international community:

Client will have full rights over any templates, reports, or otherwise (collectively hereinafter “Work Products”) produced by LogicalOutcomes as result of or in connection with this Contract under the terms of the Creative Commons Attribution License 4.0 International, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Any Client data which forms a part of the Work Product created under this Contract remains the property or licensed property of Client and may not be used, transferred, sub-licensed, distributed or reproduced by LogicalOutcomes for any purpose other than the development of the deliverables as described in the Statement of Work.

Our DHIS2 Team

LogicalOutcomes creates a team for each project that includes at least two highly experienced DHIS2 developers, supported by DHIS2 implementers, business analysts and a project manager.

In addition to the project team, we have access to many DHIS2 software developers and customizers through our relationships with HISP Uganda and the University of Oslo.

To request full resumes for each team member, please contact us (info@logicaloutcomes.net)

Evaluation Expert: Dr. Gillian Kerr is an organizational psychologist specializing in information systems for evaluation. She is leading the development of the DHIS2 Quick Start service.

Project Lead: Sara Gaudon works closely with clients to collect requirements, configure the database, and communicate progress. Sara has managed all of LogicalOutcomes' DHIS2 projects to date, also supporting the training modules as coach.

Online Training Lead: Nicholas Santillo is an educator and producer with experience in developing online training sessions and podcasts. Nicholas leads the development of the DHIS2 curriculum and leads the configuration coaching services.

DHIS2 Analyst: Georgi Chakarov is a Certified Internal Auditor (CIA) and business analyst. Georgi support the requirements gathering phase, including configuration of metadata (indicators, data elements), testing, and creating reports and dashboards.

DHIS2 Expert: Prosper Behumbiize leads the HISP Uganda team and is one of the top contributors to the DHIS2 community (see launchpad.net/dhis2/+topcontributors and his frequent assistance to users in the newsgroups). Prosper provides design and development support.

DHIS2 Expert: Steven Uggowitz has led several major DHIS2 implementations including Kenya's national health information system. Steven will provide the technical architecture for the project's DHIS2 instance.

DHIS2 Expert: Eric Munyambabazi is a DHIS2 development expert and Information and Computer Technology (ICT) professional and trainer. Eric is our technical development lead for the Quick Start service.

Service: DHIS2 Quick Start

LogicalOutcomes' Quick Start process enables NGOs to set up a working DHIS2 implementation quickly and within a contained budget. We have found that this process helps NGOs to clarify their broader requirements for an M&E system by using the Quick Start as a working prototype.

A Quick Start implementation takes three to six months depending on the need for internal consultations, and includes an implementation of one program.

Working closely with the LogicalOutcomes team to gather requirements, NGO staff will design, test, and implement a fully functional database and analytics engine that the NGO can expand over time. In addition, the Quick Start provides an online learning course in DHIS2 basics that is complementary with the University of Oslo's Level 1 & 2 Academies. At the end of the program, NGOs will be given all the course materials so they can customize them for their own organization.

The components of the DHIS2 Quick Start include:

- ✓ A database containing the Indicators and data elements for a single program
- ✓ Surveys and data collection tools
- ✓ Data warehouse
- ✓ Report templates and dashboards
- ✓ Hosting and technical support
- ✓ Coaching and training

Standard Features included in the Quick Start implementation

- Capacity for online and offline data entry with a range of mobile collection options
- Data visualizer and pivot tables to provide an easy to use platform for analysis, visualization, and report sharing and publishing
- Flexible assignment of organization levels and groups
- Standard form design with language translation options
- Custom assignment of users to specific forms and organization levels
- Individual client and event tracking
- GIS capability: as part of the training module, a DHIS2 coach will walk through a typical GIS set up. With geographic coordinates available, the staff team can import their own file(s). Our expert team will be available to support each step.

Quick Start draft work plan

Deliverable	Description	Timeframe
Project charter	A document that includes the statement of work with additional details on deliverables, schedule, team roles and responsibilities, communication plan, success factors, and identifies risks and mitigation plans.	Day 14
Requirements workbook	An Excel workbook outlining project requirements: <ul style="list-style-type: none"> • user roles (who will be using DHIS2 and their roles) • organization units (where the data is collected) • data sets (what information is collected from which organization units) • categories and option sets (how the information is disaggregated) • reporting needs including reporting frequency and sharing options • data collection tools and methods (including mobile) 	Day 60
Beta cloud hosted DHIS2 instance	The requirements workbook will transition into configuration spreadsheets, which will be imported into the beta instance of DHIS2. Soon after import, the client team will be asked to review, test, and give approvals before proceeding to reports and formal training.	Day 90
Basic user and system administrator training	<p>LogicalOutcomes will provide a core team of up to five staff with basic user to system administrator level training using materials created by the University of Oslo, regional Health Information Systems Programs (HISPs), LogicalOutcomes and other NGOs. Documentation, tutorial videos, assignments and quizzes will be packaged into interactive OfficeMix presentations and a OneNote training notebook²</p> <p>During the training course, participants are expected to commit to one meeting per week and time to study and practice assignments (about 3 hours per week).</p>	Start: Day 90 Finish: Day 150

² See DHIS2 Curriculum <http://bit.ly/2911JC7>

Production instance of DHIS2	<p>This deliverable is a functioning, tested DHIS2 system with six months of hosting on cloud servers. The system will include the approved project configuration, and a process for the routine import of project data. Prototype dashboards and reports will be available for the project team to customize.</p> <p>This will include hand off of the final configuration workbook (metadata for data elements, categories, options, etc. in an Excel workbook).</p> <p>The DHIS2 instance will be hosted by Knowarth³, using a technical architecture established by Steven Uggowitz. Client organizations may choose to continue hosting with Knowarth, or choose their own host, at any time during or after the project.</p>	Day 180
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Quick Start cost estimate

All figures in USD. This estimate does not consider travel. For more details and to discuss a customized service, contact info@logicaloutcomes.net

	Hours	Hourly Rate	Subtotal
Project Estimate			
Evaluation Expert	20	\$150	\$3,000
DHIS2 Technical Architect	25	\$110	\$2,750
Project Manager & Lead Analyst	150	\$60	\$9,000
Training Lead	80	\$60	\$4,800
DHIS2 Design and Development Expert	60	\$60	\$3,600
Analyst & Training Support	250	\$45	\$11,250
People Costs			\$34,400
Expenses (cloud hosting with Knowarth for 12 months)			\$800
		Project Estimate	\$35,200

³ DHIS2 Cloud hosting service by Knowarth <http://bit.ly/2bMFMIx> Note: LogicalOutcomes does not receive any monetary contributions for recommending this service.

Service: Configuration coaching

To suit the needs of small and medium sized NGOs who want to pilot DHIS2 without making a large upfront investment, we designed a brief configuration coaching service that puts your team into the driver’s seat. We provide coaching and hosting for your DHIS2 instance. You provide the people power to complete a project configuration, and build capacity to maintain the system in the longer term.

The cost for DHIS2 configuration coaching is \$10,000 USD, and includes:

1. Customized DHIS2 curriculum notebook with assignments, worksheets and Office Mix presentations
2. Regular Skype coaching calls (1-2 x per week)
3. Provision of a training instance of DHIS2 during the training
4. Custom DHIS2 instance with six months of hosting on Amazon Web Services

Objectives

Capacity building: DHIS2 user and system administrator training	Client team will be equipped to design and implement a standard program configuration, including set up of user roles, organization units, data sets, indicators, data validation criteria, and the creation of reports and dashboards. Through the online learning program, the client team will be exposed to what is possible within DHIS2, including offline data capture through android applications, integration with other data capture tools, GIS, etc..
Functional DHIS2 platform	By project closure, a usable DHIS2 instance will be configured for one client project. The client team will be equipped to perform maintenance, and configure future programs. Using materials from the DHIS2 Curriculum, the client team will be equipped to train colleagues as both power users and basic users.

A typical work plan

Deliverable	Description	Timeframe
Project Charter	Project Charter including deliverables, schedule, team roles & responsibilities, and risks and mitigation plans.	Day 7
Cloud hosted DHIS2 development instance	LogicalOutcomes will set up a DHIS2 instance with Knowarth Technologies, using high quality cloud servers and SSL encryption. Hosting will be pre-paid for 6 months,	Day 14

	at which time the client can continue with the vendor or choose their own hosting service.	
Basic user and system administration training	<p>LogicalOutcomes will provide the client staff with curated Levels 1 and 2 training materials created by the University of Oslo, regional Health Information Systems Programs (HISPs), LogicalOutcomes and other NGOs. Documentation, tutorial videos, assignments and quizzes will be packaged into interactive OfficeMix presentations and a OneNote training notebook for self-directed learning.</p> <p>By project closure, client staff will be equipped with administrator level documentation, be part of the DHIS2 user group, and able to modify program indicators, data elements, etc.</p>	<p>Start: day 1 Finish: day 60</p>
Configuration workbook	<p>During the DHIS2 curriculum, client staff will build an Excel based configuration workbook using a format provided by LogicalOutcomes.</p> <p>This Excel workbook will include configuration information for an actual project:</p> <ul style="list-style-type: none"> • user roles • organization units • Data elements (options and categories) organized into data sets • indicators • reporting needs including reporting frequency and sharing options • data collection methods and tools • data validation criteria <p>The completeness of the configuration information will vary, depending on the amount of time that client staff can invest. The worksheets will be filled out by client staff, not by LogicalOutcomes.</p>	<p>Day 60</p>
Configuration coaching	<p>LogicalOutcomes will provide coaching for the import of metadata, creation of data sets and forms, report design, and other system administrator tasks. This phase will include testing on mobile apps as required, and revisions to the configuration workbook as needed.</p>	<p>Day 60-90</p>

References

Helen Keller International: DHIS2 Quick Start and data import tool	<p>Helen Keller International (HKI) hired LogicalOutcomes to develop a DHIS2 platform for its monitoring and evaluation efforts, starting with the Morbidity Management and Disability Prevention (MMDP) Project. HKI needed a reliable and effective system to collect manage and share data.</p>
<p>Reference</p> <p>Whitney Goldman*, M&E Specialist, MMDP Project</p> <p>Email: WGoldman@hki.org</p> <p>Phone: 1-646-356-1784</p> <p>*Whitney may be on maternity leave, in her absence please contact Emily Toubali, EToubali@hki.org</p>	<p>The goal of this project was to create a working, fully functional DHIS2 system for MMDP as a prototype and scalable platform for all HKI projects.</p> <p>LogicalOutcomes worked with the HKI team to develop templates that HKI can use to expand the scope of DHIS2 to additional projects and countries. At project closure, HKI staff working with DHIS2 were equipped to collect and enter data and create, modify and share reports with key stakeholders.</p> <p>For more in the data import tool (outside the scope of a Quick Start), visit http://bit.ly/1NsUAcD</p>

American Refugee Committee: DHIS2 Quick Start for Sudan	<p>American Refugee Committee (ARC) works in ten countries around the world helping survivors of war, civil conflict and natural disasters rebuild their lives. ARC's programs in Africa, Asia and the Middle East provide health care, clean water, shelter, gender based violence prevention, legal aid, trauma counseling, microcredit, community development services, and repatriation assistance to the people they serve.</p>
<p>Reference</p> <p>Daphne Karypis, Impact & Communication Technology Manager</p> <p>Email: DaphneK@archq.org</p> <p>Phone: 1-612-874-5477</p>	<p>American Refugee Committee (ARC) hired LogicalOutcomes to develop a DHIS2 platform for its monitoring and evaluation efforts, beginning with the Sudan ODFA award and GRF, covering Health, WASH and Nutrition activities.</p> <p>The goal of this project was to create a working, fully functional DHIS2 system for the ARC Pilot Project as a prototype and scalable platform for other ARC projects. ARC may expand the scope and functionality of the DHIS2 platform to other projects and regions.</p>

<p>Nascent Solutions: DHIS2 Configuration Coaching</p>	<p>Nascent Solutions was seeking a flexible monitoring and evaluation (M&E) system to support projects in education, food security and HIV/AIDS sectors in sub-Saharan Africa. The system would enhance Nascent’s ability to design, deliver and improve evidence-based programming.</p>
<p>Reference</p> <p>Patrick Gallagher, Director of Monitoring, Evaluation and Learning</p> <p>Email: PGallagher@nascents.org</p> <p>Phone: 1-307-349-1939</p>	<p>LogicalOutcomes was hired to equip Nascent with the ability to configure and implement a standard DHIS2 instance, beginning with their Advancing Literacy through Good Nutrition (ALIGN) project. The key outcome of this project was a usable DHIS2 instance configured to support M&E for Nascent's ALIGN project.</p> <p>Nascents’ Director of M&E was equipped with skills in design, development and maintenance, and can add additional projects to their DHIS2 instance in the future.</p>

Capability Statement

LogicalOutcomes is a Canadian non-profit organization that provides evaluation and consulting to promote collective impact through more effective measurement systems.

Core competencies

- Development of monitoring and evaluation systems based on a major international open source platform (DHIS2). Includes definition of outcomes, indicators and metrics, as well as full system implementation
- Capacity-building for client staff by customized online training for a range of roles from system administrators to end-users
- Development of evaluation frameworks and results based measurement frameworks including monitoring data, systematic literature reviews, counterfactuals and scenario-building, surveys, qualitative analysis and data analytics
- Development and implementation of evaluations that incorporate gender equity and human rights
- Development of performance monitoring plans that are integrated with organizational processes
- Integration with emerging technological research tools, including mobile technologies
- Design of evidence-informed programs that lead to social change
- Facilitation of robust stakeholder consultations
- Business analysis for performance measurement systems
- Policy analysis for human services

Past performance

We help organizations monitor and evaluate their programs. International clients of our key consultants include: International Atomic Energy Agency, UNESCO, UN-HABITAT, UNEG and the State of Qatar. United States based non-profits performing international development work: Helen Keller International, American Refugee Committee, Nascent Solutions, Pathfinder International, CARE. Canadian clients include: Prosper Canada, Toronto Police Services Board, OCASI.

Differentiators

- Led by internationally recognized evaluation experts, including an organizational psychologist and a former president of the Canadian Evaluation Society
- Sound and efficient project management using agile methodologies, specifically the Dynamic Systems Development Method (DSDM) (compatible with both PMBOK and PRINCE2)
- Low overheads: As a non-profit, LogicalOutcomes offers its consultants at cost. Most contractor resources are available for \$45-\$60 USD/hour
- Highly skilled at distance collaboration
- Creative use of technical evaluation platforms to serve policy objectives
- Use of DHIS2 for monitoring and evaluation, including Results-Based Financing

Corporate data

Founded in 2013, LogicalOutcomes is a growing network of approximately 50 researchers, evaluators, and consultants. LogicalOutcomes currently offers consulting services to small and medium sized organizations in the United States and Canada. Yearly revenue under \$500,000 USD in addition to pro bono projects developing open access tools for NGOs.

DHIS2 Resources

LogicalOutcomes Resources
DHIS2 Curriculum https://github.com/LogicalOutcomes/dhis2-templates/wiki/DHIS2-Curriculum
Training video playlist on YouTube http://bit.ly/29S8ulz
DHIS2 Tools & Templates on GitHub https://github.com/LogicalOutcomes/dhis2-templates/wiki
Slidedeck: A monitoring and evaluation platform for non-profits https://zenodo.org/record/31995
NPOKI – LogicalOutcomes Webinars <i>Part 1: Customizing DHIS2 for non-profits: It's not just about the software;</i> 2015-09-10 https://vimeo.com/139075831 <i>Part 2: Customizing DHIS2 for non-profits: Technical Deep Dive;</i> 2015-10-13 https://vimeo.com/142306156 <i>DHIS2 Self-Guided Study for NGOs;</i> 2016-05-17 https://vimeo.com/167033856
Other Resources
Official DHIS2 Site from the University of Oslo (includes official demo site, academies, expert list, etc.) https://www.dhis2.org/
DHIS2 user group https://launchpad.net/dhis2