

DHARMA PLATFORM: YOUR IMPACT-FIRST TECHNOLOGY PARTNER

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Data makes the invisible, visible. From supporting the most at-risk and marginalized communities to measuring the full impact of your programs, data can empower all levels of your organisation to achieve their full potential. Nevertheless, gathering high-quality, clean data—not to mention storing it in a secure, compliant, and interoperable format—remains a time consuming and costly process. The promise of technology was to reduce the effort and expenditure associated with gathering and gaining insights from data, but—especially for most of us working in the impact space—our reality is still paper forms, spreadsheets, and expensive consultants. At Dharma Platform, our goal is to leverage technology to make high-quality, actionable data a reality for everyone.

Because many of us at Dharma Platform have worked in the same environments, on the same kinds of projects, and with the same objectives, we understand the urgency, complexity, and necessity of your mission. That's why Dharma Platform built its data collection and management platform from the ground-up, with the technology needs of the impact space at the center of our design. Dharma Platform's

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goal is to empower you, your team, and your partners to deliver the highest-quality and most effective programs and services by providing strategic advice and a data solution that is interoperable, is scalable, works anywhere, functions in any language, and runs on any device. For your organisation, Dharma Platform means being equipped to drive change—both internally and externally—in the challenging technology contexts where you often operate.

Founded in 2015 by an experienced team of international NGO workers and technologists, Dharma Platform provides mobile-enabled data collection and real-time analytics in the most extreme environments for technology. Simply put, our mission is to enable people and organisations across a range of technical backgrounds—from experienced organisations, researchers, and data managers to teams with little-to-no technical or data expertise—to rapidly design, implement, and scale a robust, compliant, secure and complete ecosystem for data, regardless of connectivity or spoken language, on any device. Using Dharma Platform, individuals and organisations are deriving actionable insights from their everyday work in real time, replacing brittle spreadsheets, complicated tools, and expensive third-party consultants. Simply put, Dharma Platform empowers its users with the insights they need to make better decisions and collect high-quality, meaningful data with less time, effort, and cost.

Headquartered in Washington D.C., with teams based in the UK and Switzerland, Dharma Platform is being used by those responding to some of the most challenging and sensitive worldwide emergen-

cies — e.g., delivering healthcare in rural Africa, providing for refugees, and responding to natural disasters — by tracking crucial supplies, securing sensitive information and medical records, managing performance, and helping teams in their work to save lives and restore dignity. We are increasingly the software solution of choice for nonprofits and NGOs of all sizes and their implementing partners in remote and challenging environments who stand to benefit most from our unique offline capabilities.

The Dharma Platform family comes from diverse backgrounds—software engineering, international development, cybersecurity, humanitarian and emergency response, research, public health, business management, and data science—but are united in the belief that the ability to harness the power of data should not be a privilege, restricted only to those with the capital to hire business-service teams. We believe that good data is the currency for a better world and can belong to everyone.

HOW CAN DHARMA PLATFORM EMPOWER YOUR ORGANISATION?

Dharma Platform's impact first data management solution allows for scalable data collection, ingestion, and analysis by health, dev. aid, humanitarian, research, social impact and academic organisations via a web client or mobile application (tablet or smartphone, Android or iOS). With offline and collaboration technology, Dharma Platform enables researchers to capture immediate, accurate ground truth information and accelerate identification of trends and risks.

Your project data are stored securely in a cloud database with redundant, offsite backup and can be exported in a variety of open-source, interoperable formats. You, your organisation, and/or funder(s), retain sole ownership and access privileges to all data collected and stored using Dharma Platform. As a result, Dharma Platform's storage, sharing, security, and archiving standards follow both European Union General Data Protection Regulation (i.e. GDPR) privacy regulations and US National Institutes of Health/National Science Foundation (NIH/NSF) data management requirements.

Our partners, including: Riders for Health, Seva Foundation, Secretaria De Salud Mexico, World Bank and Doctors Without Borders, have all successfully used Dharma Platform for large-scale, field data collection efforts. Dharma Platform is able to immediately process and analyze collection results on both the web and mobile versions, providing real-time data for collectors, data managers, project administrators, decision makers, and principle investigators. Dharma Platform's offline and mesh networking capabilities enable collectors to gather and share data—even without an Internet or broadband connection—and synchronize data back to your cloud database any time a user on the mesh network has connectivity.

Dharma Platform can be set up in minutes and, via our easy-to-use web client, users can custom design complex, multi-form data collection projects without any programming. In addition, we provide hands-on training, 24/7 customer and DevOps support, and can provide on-location implementation support. Dharma Platform provides real-time results dashboards and staff tracking, which facilitate data validation and, because metadata are captured automatically, collectors can focus attention on gathering data and managers have more reliable information for validation. What follows is a more detailed description of how Dharma Platform can serve as your end-to-end data collection and management platform.



HOW CAN YOU MANAGE & COLLECT DATA WITH DHARMA PLATFORM?

Dharma Platform provides data collection tools via a web client and mobile application. Web input is performed in the browser and runs on any modern operating system and browser (e.g., Chrome, Safari, Firefox, and Internet Explorer). The mobile app works on any smartphone or tablet installed with a recent version of either the iOS or Android operating system. Using the Dharma Platform web client, users can design custom collection devices to gather any combination of: multiple choice, numeric, free text (i.e., open response), date/time, location, currency, signature, barcode, calculated, or image data points. Collection devices (e.g., surveys) can be longitudinal, hierarchical, or single-point, coded in multiple languages, organized across multiple research sites, and can utilize complex skip logic. A variety of metadata fields, including user information, GPS location, date/time, and hardware version are captured automatically, which reduces the burden on collectors and provides critically important information for data managers and project administrators tasked with validating data and monitoring the progress of collectors.

Historical data can either be manually entered or added to your database using Dharma Platform's automated flat-file ingestion tool. For manually entered data, Dharma Platform automatically checks for records that were simultaneously modified by different users, provides staff tracking data (including location, data entry time, and number of records completed), and can identify duplicate records. These features provide key information for data managers and project administrators who are tasked with monitoring data input.

HOW ARE DATA STORED AND HOW ARE THEY SHARED?

Once collected, data are stored in a secure, privacy compliant cloud database. The privacy and security standards are in compliance with the GDPR. Data are encrypted on device, are re-encrypted during transit to the cloud database, and re-encrypted again once in the cloud database. These standards are in-compliance for securing personally identifiable information associated with at-risk populations. If necessary, Dharma Platform can provide HIPAA-compliant storage or a custom deployment to a cloud environment of your choice. Data associated with this study will be stored indefinitely, are shareable via a number of open-source and interoperable formats (including flat text), and can be integrated with a variety of analytics and visualization environments. As a result, we provide an end-to-end data management solution, which is in compliance with the US NIH/NSF data management and sharing requirements.

Project members (e.g., collectors, data managers, administrators, and principle investigators) can search for records via pre-specified "data keys." When constructing a collection device, any combination of fields can be designated as keys. Once your collection device is built, a secure and privacy-compliant cloud database is automatically created, and project members have immediate access to the collection device, existing data, results dashboard, and staff tracking. No additional installations, aside from the Dharma Platform app on mobile devices via the Google Play or App Store, are required. You, and your organisation, retain sole ownership over and access to the data.

At this point, data can be entered via either the web client or mobile app. Using the mobile app, data can be captured offline and can synchronize across devices when a mesh network is enabled. When a mesh network is active, devices can also "share" broadband or wifi connectivity to send data back to



your cloud database. In addition, a variety of metadata fields, including GPS location and collector information, are automatically stored. Data managers can track staff and monitor data input in real-time and all project members with sufficient permissions can see aggregated results via real-time dashboards. Dharma Platform allows for substantial flexibility in user role and access, which facilitates privacy during data collection and external sharing data.

DHARMA PLATFORM PROJECTS ARE EASY TO DESIGN AND HIGHLY FLEXIBLE.

Dharma Platform employees will work with you and your team to develop and organize the forms, questions, and procedures to drive your data collection process. Dharma Platform has partnered with global organisations in creating data instruments to collect direct and indirect mortality rates with populations in challenging data collection environments. As discussed earlier, Dharma Platform's staff tracking and data quality features will assist data managers with the task of flagging records for additional review and/or requesting follow-up interviews. In particular, our automated staff tracking tool allows data managers and project administrators to see real-time data on location, per-question response time, and form collection time at the individual collector-level.

Dharma Platform was built from the ground-up to facilitate high-quality data entry and to enable data managers/project administrators to quickly identify potential data issues. In addition, Dharma Platform uses algorithms to scan for probable duplicates and conflicted records in your database. Our primary goal in all machine-assisted, decision-making tasks is to make jobs easier and to pare responsibilities down to a manageable size for human decision makers. As a result, the algorithms can flag data as “suspected duplicates” or “suspected record conflicts” and then will prompt the project administrator(s) or data manager(s) to merge or resolve potentially duplicated/conflicted records.

Data transfer primarily occurs from either PCs or mobile devices via a wifi, wired, or cellular data connection to your Dharma Platform cloud database. Users are able to quickly determine which data have been sent back to the server, and which records are still stored locally. Once sent to the server, all users with appropriate permission are able to see records in real-time. Data are stored in redundant, offsite cloud databases. If necessary, we can deploy a custom instance of Dharma Platform on a local server and provide for hard-wired synchronization of data from PCs to the server. However, storing data on a local server is not in compliance with GDPR privacy regulations nor with US NIH/NSF data security and sharing requirements. As a result, we would need to carefully design a custom deployment to ensure your data are secure and in compliance with funders/regulatory agencies.

Data in Dharma Platform are stored in a PostgreSQL database, which is an open-source, interoperable format. At any time during (or after) the collection, a project administrator may download the PostgreSQL schema associated with their projects. Users with appropriate permission can access a live, single-tenant PostgreSQL instance via any PostgreSQL-compatible client (e.g., Stata, R, Tableau, Salesforce, PowerBI, psycopg2, RStudio, RPostgreSQL, or other GUI/programmatic client). In addition, users can download data in CSV, XLSX, and SQL (PostgreSQL) formats. These open-source, interoperable formats ensure that your Dharma Platform data and project follow both GDPR privacy regulations and NIH/NSF data management requirements.



WHAT'S NEXT?

At Dharma Platform we're constantly innovating and working to improve our product and advance your capacity to deliver impact. Whether you're an experienced practitioner or entirely new to the space, we'd love to hear from you. We've helped numerous organisations, large and small, make the transition from paper forms and spreadsheets to cloud technology and mobile data capture. If you'd like to learn more about how Dharma Platform can provide the data management solution you've been searching for, please contact us to arrange a demo or speak with one of experienced team members about how data and technology can help you and your organisation drive social impact.

READY TO GET STARTED ON THE IMPACT-FIRST JOURNEY?

Find out what's happening on the ground today.

[Get a demo](#)

