



ACTION FOR ECONOMIC REFORMS

Monitoring, Evaluation, and Learning in Data-Driven Development: The Role of Data in Adaptive Management

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Monitoring, Evaluation, and Learning in Data-Driven Development: The Role of Data in Adaptive Management

BY

Tara Abrina

Monitoring, Evaluation, and Learning Officer and Development Data Lab Associate of the COLLABDev Project

COPY & STYLE EDITOR

Bing G. Camacho

LAY-OUT ARTIST

Erica Jane Navelgas

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ACTION FOR ECONOMIC REFORMS

Action for Economic Reforms, Inc.

West Trade Center, 132 West Avenue, Quezon City

Tel. Nos.: (632)842-65626; (0995)716-6014; (0999)489-2242

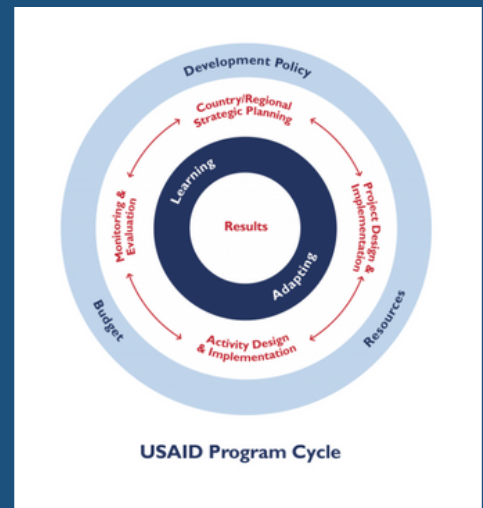
Email: collabdev@aer.ph; aer@aer.ph

Website: www.aer.ph/collabdev

Overview

Adaptive management is a distinct approach to international development problems that are complex in nature. While some of its aspects are not necessarily new, what makes it distinct as a management approach is that it recognizes that most development problems are complex, emphasizes course-correction during the project instead of simply between projects, and aims for pragmatic and incremental changes rather than revolutionary changes to systems¹. Thus, timely as well as high-quality data within a Monitoring and Evaluation (M&E)

framework are needed to inform adaptive management². Resources for collective analysis must also be programmed into the project plans and budget, which then constitutes the 'Learning' in Monitoring, Evaluation, and Learning (MEL). For the COLLABDev project, the Action for Economic Reforms developed several tools for both external as well as internal monitoring, and used these tools to inform its adaptive management approach.



What are COLLABDev's MEL Tools?

External Tools

First, partners' data-related perceptions and behaviors were self-assessed using a Baseline³ and Endline⁴ Survey. The ten modules of the baseline and endline survey are the following:

1. **Data capacity**
2. **Knowledge of available data**
3. **Format of data collected**
4. **Timing of data collection**
5. **Data management policies**
6. **Data management practices**
7. **Accessibility of data**
8. **Data sharing**
9. **Usage of data collected**
10. **Perceptions on importance of data, assistance, and investment**

¹ "Adaptive Management: What It Means for CSOs". Bond, 2016.

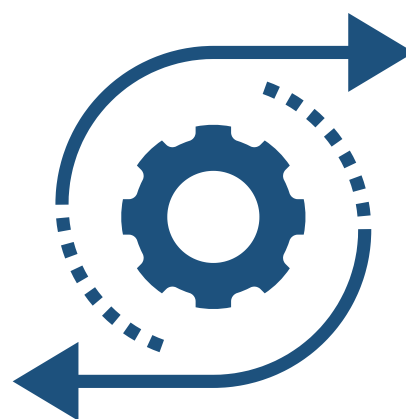
² Raimondo, E. (2016, June). What difference does good monitoring & evaluation make to World Bank project performance? (Policy Research Working Paper). Washington, DC: World Bank.

³ <https://collabdev.aer.ph/2021/10/31/aer-releases-policy-paper-collabdev-baseline-survey-report/>

⁴ <https://collabdev.aer.ph/2023/08/14/the-development-data-lab-unveils-the-endline-report-for-the-collabdev-project/>

The results of these surveys can be accessed on the COLLABDev website (Footnotes 2 and 3). Including these elements in the baseline survey serves a crucial purpose in understanding the baseline data practices of local government units (LGUs), state universities and colleges (SUCs), and civil society organization (CSO) partners. First, assessing data capacity reveals the readiness of these entities to handle and utilize data effectively. Knowledge of available data and the format in which it is collected provides insights into the existing information landscape, helping design data collection strategies that complement or fill gaps. The timing of data collection helps align project schedules with data needs. Data management policies and practices are essential to gauge the quality and security of data handling. Accessibility of data and data sharing reflect transparency and collaboration potential. Understanding how data collected is used and perceived in terms of importance, assistance, and investment informs adjustments in project design, ensuring that it aligns with the partners' capabilities and goals for more effective and meaningful outcomes.

The Theory of Change and design of the project activities were based on the assumption that good quality data were already available and what was lacking was Data Analysis for evidence-based Intervention(Figure 4, Data Value Chain). However, the results of the baseline survey showed that most LGUs were data deficient; thus, our strategic approach needed to undergo some refinements. We shifted our focus toward promoting digital data collection



methods and strengthening activities from the Source (Figure 4).

To support this transition, we initiated a comprehensive capacity-building effort. This included the implementation of data lab series covering topics such as data collection techniques (through Kobo Toolbox), data privacy, and security. Moreover, the baseline survey played a pivotal role in aligning our project with the priorities of our partners. It offered invaluable insights into the specific sectors that our LGUs, SUCs and CSO partners wished to prioritize, thereby enabling a more targeted and effective project design to meet their needs and aspirations.

The second tool was developed with partner Cirrolytix Research Services, and it became known as the Rapid Data Assessment Tool (RDAT). To complement the perceptions and behavior assessment in the form of the baseline/endline survey, the RDAT assesses LGUs' systemic and sector data maturity in their input/activities, the modules of which can be found in Figure 1 below. As opposed to the baseline/endline survey, the RDAT was conducted every year.

- Within systemic maturity, there are five modules:**
- ▶ **Policy**
Assesses robust policy mechanisms in the LGU around data governance and the presence of budgetary allocations.
 - ▶ **People**
Measures the presence of empowered LGU officials and their drive to build alliances and manage data governance.
 - ▶ **Process**
Assesses the effectiveness of the LGU to collect, use, manage, secure, and innovate using data.
 - ▶ **Technology**
Evaluates the quality and robustness of managing information using platforms, sensors, big data, and analytics.
 - ▶ **Outcomes**
Assesses the quality of outcomes around data-driven governance.
- Within sectoral maturity, there are four modules:**
- ▶ **Data availability**
Analyzes the availability and speed of quality data from various sources.
 - ▶ **Data usage**
Measures how data is used to drive organizational goals and strategic decision-making.
 - ▶ **Data shareability**
Measures the readability, accessibility, and availability of existing platforms for sharing data internally and externally.
 - ▶ **Data management**
Measures the infrastructure, systems, and processes that support how data is managed, accessed, and controlled in the LGU.

Figure 1. Rapid Data Assessment Tool modules

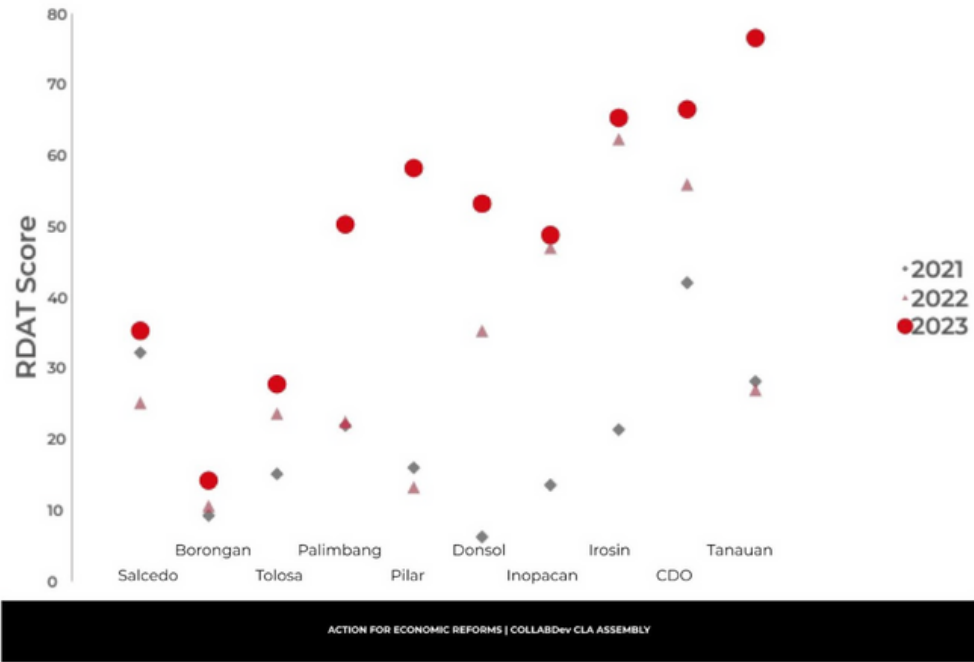


Figure 2. Rapid Data Assessment Tool (RDAT) Scores per COLLABDev Partner Site per Year of Project Implementation (Lifted from Go, 2023)⁵

⁵ 1 2023 CLA Assembly - ABSs - LGo.pdf

Figure 2 shows the partner sites' progress in terms of RDAT scores through the project. All 10 sites increased their RDAT scores throughout the project. During the first year, the 10 sites increased their baseline RDAT scores by 95.74% on average. By the end of the project, the RDAT baseline scores improved by 136.77% on average. The target of the project was only to improve the RDAT scores by 10%.

These modules were based on the data assessment implemented by India's Ministry of Housing and Urban Affairs and that subsequently became the blueprint or guide for the capacity building, messaging, and overall output targets of the project. While both the survey and RDAT are self-assessments, the COLLABDev Development Data Lab goes over the survey results with the respondents to verify their answers and ask for proof or documentation.

Lastly, one novel methodology that was developed by the project team was used during the Data Audit⁶, an assessment of data sharing practices of LGU partners (by virtue of Freedom of Information laws) with regular citizens who have no affiliation whatsoever to the project (like a mystery shopper). This was



designed as an outcomes-based approach to supplement the first two tools which were based on self-perceptions and self-rated data practices and inputs⁷. By observing the way LGUs address data requests by "regular citizens," LGUs' perceptions, behaviors, and maturity around data for development and transparency may be inferred.

While the results of these assessments were published in official papers by the Development Data Lab of COLLABDev, they were discussed informally during the team's regular meetings to tailor fit the interventions/approaches to each of the partners sites.

⁶ <https://collabdev.aer.ph/2023/07/04/data-audit-shows-state-of-data-readiness-of-lgus/>

⁷ Although one of the RDAT modules includes assessment of Data-related Outcomes, these questions are still self-assessed: Data Stories/Blogs, Data related use cases (for example, using data for E-health Services, Digital Emergency Response, Fraud Prevention, Food Supply and Demand, Social Media Analysis and Response etc), and [using data for] Alerts & Notifications. These are arguably still Output-based.

Internal Tools

While the tools mentioned above were external (and arguably, more formal) assessments of the project sites, internally, the project management team regularly practiced unstructured assessments that resolve in action points. These were the core feedback loops of the project that also served as opportunities for learning. Not only were these modified retrospectives⁸ conducted with the core team (the positions in Figure 3 in light blue), Expanded Team Meetings with the same framework were also conducted regularly with all the local coordinators (LCs; positions in green). The organizational chart in Figure 3 shows that each LC was assigned to coordinate activities in areas where they have worked in the past⁹. Although each region had its own challenges and contexts, the activities and tools were the same across regions and all LCs needed to follow the same set of administrative and finance protocols. Thus, the Expanded Team meetings were conducted with all the LCs present so that each LC could learn from the experience of others.

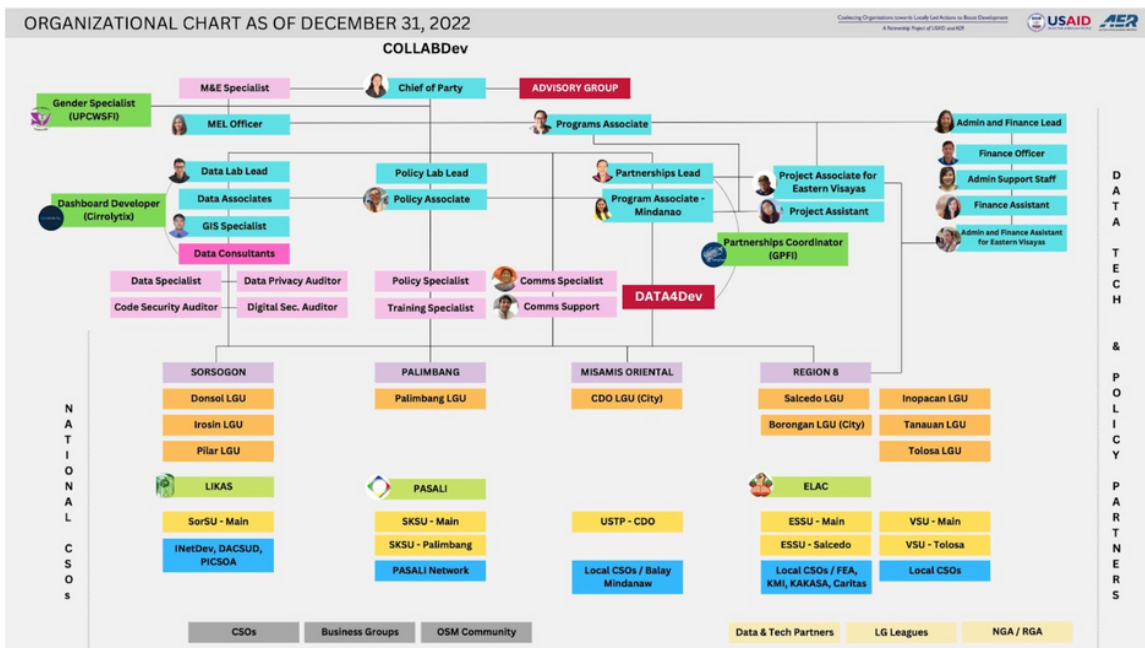


Figure 3. COLLABDev Organizational Chart as of December 31, 2022

Meetings with the project sites (orange, yellow, and blue) were also conducted quarterly, which were called Local Coalition Meetings. However, the project site could also set ad hoc meetings with the core team. The core team is divided into three labs that provide technical support for either data, policy, or partnerships (third row of light blue positions). These labs correspond to the

⁸ Modified retrospectives are based on the Agile project management philosophy. The project team tried using a retrospective tool/web app called Retrium, which facilitates retrospectives using the Agile approach. This was dropped when the activity started to feel repetitive and too structured; hence the word 'modified' is used in this statement.

⁹ (e.g. LIKAS was assigned to coordinate for Region V sites DonsoL, Pilar, and Irosin; ELAC was assigned to coordinate with all the Region VIII sites, and PASALI was assigned to Mindanao - Palimbang.)

distinct activities of the data value chain¹⁰ (Figure 4), thus, they can work independently from one another. Each lab can attend meetings with the project sites and their LCs to provide the needed technical support and elicit feedback without the need for the full core team to always be present.

Likewise, the project site has a coalition of representatives from the local government, academe, and civil society, called Data4Dev (in red). Although the coalition meets with the core team every quarter, members of the coalition can work independently from one another and meet with the COLLABDev lab that can provide technical support that is specific for their role. For example, each coalition has data focals who meet with the Data Team regarding more technical data-related concerns such as the digitization of data collection tools for the community mobilization and data cleaning. Then, when the data focals of all the sites began expressing similar concerns, the Data Lab would arrange ad hoc forums or workshops, not only to cascade information more efficiently but also to provide a forum for the focals to learn from one another.

During the latter half of the project, these coalitions met more frequently in person without the need for the core team to always be present. This was crucial since the community mobilization activities during the latter half required more inputs and collaboration from the coalition members as opposed to the first half of the project where capacity building activities were designed by COLLABDev and its technical partners that were simply cascaded to the communities. For most of the sites, the LCs met with the coalition to conduct modified retrospectives during this phase, usually at the end of each day of the community mobilization activity. For example, the community mobilization in Tanauan involved barangay health workers and senior citizen volunteers in collecting data on senior citizens using tablets and the application Kobo Collect. At the start of each day of the activity, the LC for Eastern Visayas would brief the volunteers on their assignments and targets for the day. The team would huddle at the end of the day to debrief, share their accomplishments, and give suggestions on how to improve the activity for the next day. With a volunteer pool that had varying learning curves in using the technology, progress and productivity fluctuated daily; there was that constant need for adjustments to the plans. This was facilitated by digital data collection: the data focal can easily see the number of senior citizens who were successfully interviewed, which volunteers were working fast, and which ones needed more support. With the data focal in constant communication with the LC, the LC would then reassign the workload accordingly.

More than just cascading technical know-how from the core team to the partner sites, the culture of openness and iterative management was passed down to the community/coalition level. Inadvertently, this allowed coalitions to lead their own projects and truly take ownership of them. This had an unintended but most welcome consequence for the core team. Because planning, iterations, and adaptation were already programmed into the management, the Pause and Reflect

¹⁰ The work of partnerships is technically not part of the primary activities of the data value chain; Porter (1986) distinguishes between primary and support activities in his conceptualization of the generic value chain. Within the framework of the generic value chain, partnership design falls under the support activities, which is also a silent but integral part of the data value chain shown in Figure 4.

(P&R) could then be used for solidifying enabling conditions for Collaborating, Learning, and Adapting (i.e., Culture and Processes) within the Expanded Team, internal data-related capacity building to be able to “practice what we preach”, team building, and touching base with the impact and Theory of Change. To inform the P&R, the MEL Officer needed to visit the sites, observe all places of work, and interview/take note of the needs of the project staff, including the LCs.

Thus, in the COLLABDev experience, three important elements were needed to be able to cascade adaptive management to communities. First, the organizational structure needs to be both flexible and functional. The labs correspond to the activities in the data value chain and had counterparts in the coalition, which means they could work independently but are still linked together by virtue of the value chain. However, they were also vertically modular, meaning the core team could expand its meetings to include LCs or what was called “partnerships huddle” every other Thursday, while coalitions could meet with certain labs only or the entire core team. Second, retrospectives needed to be conducted in an organic, less formal way in order for it to become an enjoyable habit, especially in communities. This entails thinking of ways to ask the same questions creatively every time: What worked? What didn’t work? What should we continue? It also required that the action points were followed through by the management. Third, the budget and activities need to be responsive to realities on the ground, even if these realities were not taken into account in scenario planning. The activities that arguably concretized the project to the local coalition were those that were not in the original plan: the ad hoc Data Lab workshops (called Data Lab Series and Data 360), mapping activities, and the Community Mobilization activities. These activities, the expenses of which were ultimately five times that of their original budget, were only made possible because of the higher exchange rate midway through the project.

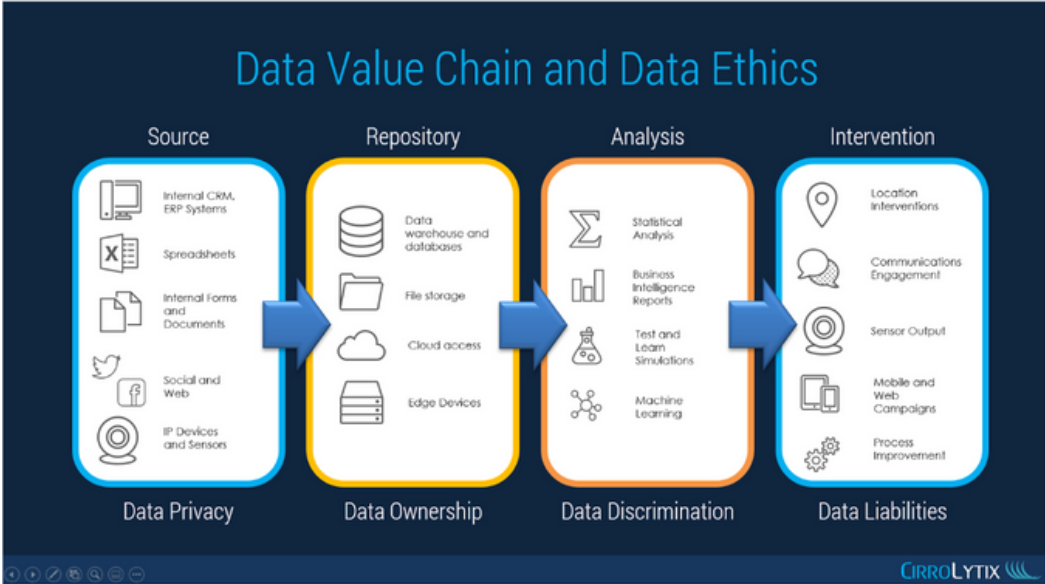


Figure 4. Data Value Chain (Cirrolytix Research Services)

Policy Recommendations

When designed well and with the subject in mind, assessment tools can also be used as the roadmap for developing capacities and achieving outcomes/outputs. Infrequent and structured assessment tools are useful for monitoring technical progress and skills over time; however, project management teams must also have frequent and diverse tools for eliciting feedback that allow for more granular course-correction such as monthly modified retrospectives.

Modular organizational structure allows more flexibility in decision-making. In the literature on development projects financial flexibility was also one of two major conditions for management to be adaptive. However, major changes to the budget and plans must be based on timely and good-quality M&E data. The other condition, according to the literature, lies with the flexibility of the donor/funder.

Cascading adaptive management down to the community level frees up time for the project team to upgrade skills and improve internal working relationships. Further, within the context of the community, the openness that is required in adaptive management is cultivated by retrospectives that are enjoyable and informal as opposed to rigid and repetitive.

Conclusion

The role of data in adaptive management cannot be underscored enough. There is a diversity of tools that are available to be able to monitor the project both externally (i.e., partner sites' progress) and internally (i.e., project team members). However, in order for data to be used to inform management, several structural design principles that are designed for flexibility must be present on top of the capacity for data collection: (1) organizational structure; (2) administrative and financial protocols of the implementing agency; (3) administrative and financial protocols of the donor/funding agency.

The two-year experience in the COLLABDev project is consistent with the literature.



¹¹ "Adaptive Management: What It Means for CSOs". Bond, 2016.

"Navigating complexity: adaptive management and organizational learning in a development project in Northern Uganda." Allana and Sparkman. Knowledge Management for Development Journal 10(3). 2014.