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EMME: Online Access Anywhere to Real-Time Project Success Stories and Results

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Prepared by

Niamh Darcy
RTI International
Health, Social, and Economics Research
Research Triangle Park, NC 27709 USA

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ABSTRACT

Monitoring and evaluation (M&E) systems[1] play a crucial role in strong project and program planning, implementation, and learning. This paper aims first to discuss the role of M&E in project delivery, and second to explain ways that EMME[TM], a unique and flexible Web-based tool, facilitates project use of the most relevant M&E information. Combined with M&E technical expertise, EMME can improve the efficiency of M&E systems, allowing project staff to focus attention on using the most relevant M&E information to improve project and program performance and thus overall impact. EMME provides a variety of reports so that users (clients, project team, partners, etc.) can see filtered reports that focus on the most relevant M&E indicators and get an immediate view of the key project performance. EMME provides secure access to real-time project results as entered and maintained by designated project staff. It puts critical M&E information at the fingertips of team members, counterparts, and funding organizations.

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[1]Information systems include structures, processes, and communication networks whether paper based or in various electronic formats.

PROJECT MONITORING AND EVALUATION (M&E)

Monitoring and evaluation, or M&E, is a core and necessary component of all projects and programs. While implementing project teams often relegate M&E to the bottom of the list of project priorities due to budget constraints, it is necessary when implementing any project to understand what results the project is achieving and to communicate these results to project stakeholders. In order to communicate results achieved, it is necessary to define indicators that can be used consistently to measure project results. When all parties agree on concisely defined indicators and on the ways to collect and analyze relevant data in a timely fashion, empirical evidence is brought to bear on project or activity effectiveness, cost-effectiveness, accountability, and other results-based management during the project lifecycle. It is also important to allow users of this information to see summarized reports of the most relevant indicators so they can get immediate access to critical project results to inform decisions. Such M&E supports evidence-based decision making in project management through rigorous approaches to collecting and using quality data on performance, results, and impact.

M&E Systems

"M&E systems" is a general term used to describe the various systematic approaches taken to M&E in projects. M&E systems include defined processes for how information is used in decision making and by all information actors, as well as defined results and indicators (or measures of these results). M&E systems can be purely people- and paper-based systems or can combine people, paper, electronic, and process-based systems. In international development, it is critical for project success that the development of an M&E system includes local stakeholders, including project implementers, associated donors, project partners, and local counterparts such as ministries, local government officials, school management committees, etc. This ensures that the group discusses and develops an M&E methodology that works in the local context, with clear local ownership and understanding, and ensures that relevant data is collected and analyzed in a timely fashion, and that all parties have access to the information they need to make informed decisions at any level.

The information users include groups that view summarized results (e.g., policy makers, citizens) so they can make decisions based on relevant information, groups that contribute information such as project implementers, partners, M&E specialists, Non Governmental Organizations (NGOs) and potentially Civil Society Organizations (CSOs) and also groups that configure reports for the different users that view summarized information. EMME provides a variety of reports so that users (clients, project team, partners, etc.) can see filtered reports that focus on the most relevant M&E indicators and get an immediate view of key project performance. It is important that after the project is completed all parties continue to have access to the information they need. Developing an M&E system that works during the life of the project, where the M&E processes are learned by local organizations with local ownership of the M&E system, is critical for overall project success and future sustainability.

M&E Systems Model

RTI International applies a three-principled approach to using information systems: access, content, and use. Information systems include M&E systems, which are used to improve the quality of life in developing countries. In our international development projects, we practice M&E to strengthen international initiatives cost-effectively with systems designed to support reporting to the donor but prioritize relevant **content**, timely **access**, and routine **use** of M&E information. M&E information systems built on these principles are intended to foster local ownership, promote evidence-based decisions, and build sustainable local capacity.

Access

Millions of people in developing countries lack access to the economic, political, and social benefits of information systems. Access issues encompass education, culture, policy and regulation, infrastructure, and public facilities. Having timely access to M&E information allows all parties to make informed decisions.

Content

Useful content is current, relevant, and valuable to users. It is not useful to any parties involved to have access to information that is not relevant to their work. In the design of the M&E system, for the project and for post-project work, local stakeholders collaborate with the project team to develop a system that provides a common body of information that is relevant and useful to the stakeholders. All other information that is tangential to the primary information needs can be omitted from the M&E system.

Use: Communication and Promotion

Good communication with stakeholders is essential to the success of any M&E system. We work collaboratively with all stakeholders to understand their needs, raise awareness, promote new capabilities, and build local ownership. EMME is used to communicate M&E status for multiple projects.

Donor M&E Requirements: USAID Model

M&E is a core part of all USAID projects. USAID uses a results framework to define their prioritized expected results at a country level as well as at the project level (where projects are part of the country portfolio). It is critical to define relevant indicators[2] to measure results in order to be accountable for project delivery. For each project, a Performance Management Plan (PMP) is developed that defines project results and the indicators used to measure these results. Indicators must be well defined and data values must be tracked for baseline, targets, and actual data values. Reporting periods vary per project—from quarterly to annually—and these reporting periods are defined contractually. Each year the PMP is reviewed and re-approved so that the project team can interpret project progress and make adjustments to the implementation plan as needed to achieve the higher-level project

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[2]A well defined indicator includes a brief description, a detailed definition, a clear understanding of the unit of measure, the numerator and the denominator, and critical assumptions about how the data is collected and validity and source of the data, as well as detailed descriptions of any data quality issues.

results. USAID continually has demands from their funding decision makers (e.g., Congress) that may require the project to change their indicators or re-define existing indicators to support the performance reporting requirements. For example, the new USAID Common Indicators requirement has added to the complexity for performance management and reporting.[3]

Along with M&E systems, USAID also collects Project Success Stories, which add human-based anecdotal information describing the personal impact of project results. While these are not usually based in quantitative information, they provide a level of information for a broader audience that may be more meaningful.

Tracking Project Results Leveraging ICT

Both of the following projects follow our M&E model of having the right **access** (easy access to the City of Austin Web site means this is available for all citizens), relevant **content** (useful performance measures with up-to-date data on performance) and **use** (with citizen access to this data citizens can provide input). Both of these projects make use of ICT to support their M&E and information processes, so that results can be communicated to citizens and project sponsors.

Association of Ukrainian Cities

Regional Offices for the Association of Ukrainian Cities (AUC), USAID, 2000–2003. RTI has worked with the AUC to improve professional municipal management through training and to produce—and air on national television—a series of ten films to educate the public in the role of local government in the Ukraine. In June 2002 RTI helped the AUC design and produce the AUC Web site: *AUC Dialog: The Voice and Experience of Ukrainian Cities* (http://www.auc.org.ua) based on our ICT expertise. This Web site has proven to be a powerful tool in improving communication among the nearly 400 AUC member cities and towns. The project Web site was used to disseminate project results, which were updated in real time so that immediate results were available to the project team and client, in this case USAID.

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[3]The USAID document "How We Assess Performance"
   (http://www.usaid.gov/policy/par05/mda_0404.html) describes this in greater detail.

Performance Indicator	Description and Unit of Measure	Base-line 2000	Results by December 2001	Cumulative Results by December 2002	Cumulative Results by October 2003
Cities that incorporate citizen input into decision-making on strategic planning	Number of citizen input from cities task forces, advisory committees and public hearings into decision-making on strategic planning	-0-	-15-	-24-	-35-
Cities using RTI-developed methodology FAM in their offices	Number of RTI-developed Financial Analysis Models (FAM)	-0-	-42-	-58-	-68-
Cities using public procurement methodology	Number of RTI-developed public procurement methodology in their offices	-0-	-26-	-40-	-45-
Progress in various stages, leading to and including passage and implementation of local government autonomy legislation	AUC gathers information from cities and analyses legislation on: • Amendment of Law on Local Self-government • Budget Code • Budget Resolution • State Budget Total Score:	-	New USAID score board introduced December 2000	-	-
Cities that use task forces, advisory boards, etc in local decision-making	Number of task forces and advisory committees. Regional Offices maintain a) signed statement from mayors of cities establishing committees and b) documents indicating that the committee is planning to implement methods that will use public input to resolve problems.	-0-	-106-	-193-	-244-
Cities where Public Hearings and / or town meetings are held on consistent basis	Number of public hearings are held on various topics are held on consistent basis	-0-	-54-	-121-	-179-
Municipalities that systematically provide information on FAM to the public and media	Number of publishing budget information on FAM to the public and media	-0-	-65-	-85-	-90-
Improvement in local government support organization, Association of Ukrainian Cities (AUC)	Effectiveness index measures: financial resource base; organizational capacity (membership, boards, regular meetings); financial management; internal democracy (elections, consultation with members, regular meetings); strategic planning and vision; networking and coalition building; communication (regular newsletter, mailings, webpage); Impact in areas of training, technical assistance, advocacy & lobbying; public awareness.	-	New USAID scoreboard introduced December 2000	-	-

Figure 1. AUC Project Web Site Results

All project progress was tracked in real time, with up-to-date supporting information such as city council meetings, public hearings details, newspaper articles, photographs, participant information, etc. Based on information and communications technology (ICT) experience, a project Web site was built with role-based access control that gave different users different rights. It was centrally administered with a webmaster updating project results in real time and making these available to different user groups. This proved very useful for our client, USAID; they could respond to requests for project status from requestors without having to wait for updated project status reports from the project team.

City of Austin

Another example where ICT was used to disseminate performance measures and results is the City of Austin Web site (http://www.ci.austin.tx.us/). The City of Austin was a leader in the introduction of Performance Based Budgeting (PPB). The city has very progressive management, and an active and caring group of citizens concerned that their taxes were being spent on priority items. The City Council funded communication, training, tools, and systems to implement PPB and to publish the results to the city Web site so that citizens could see relevant and timely information on how tax money was being used.
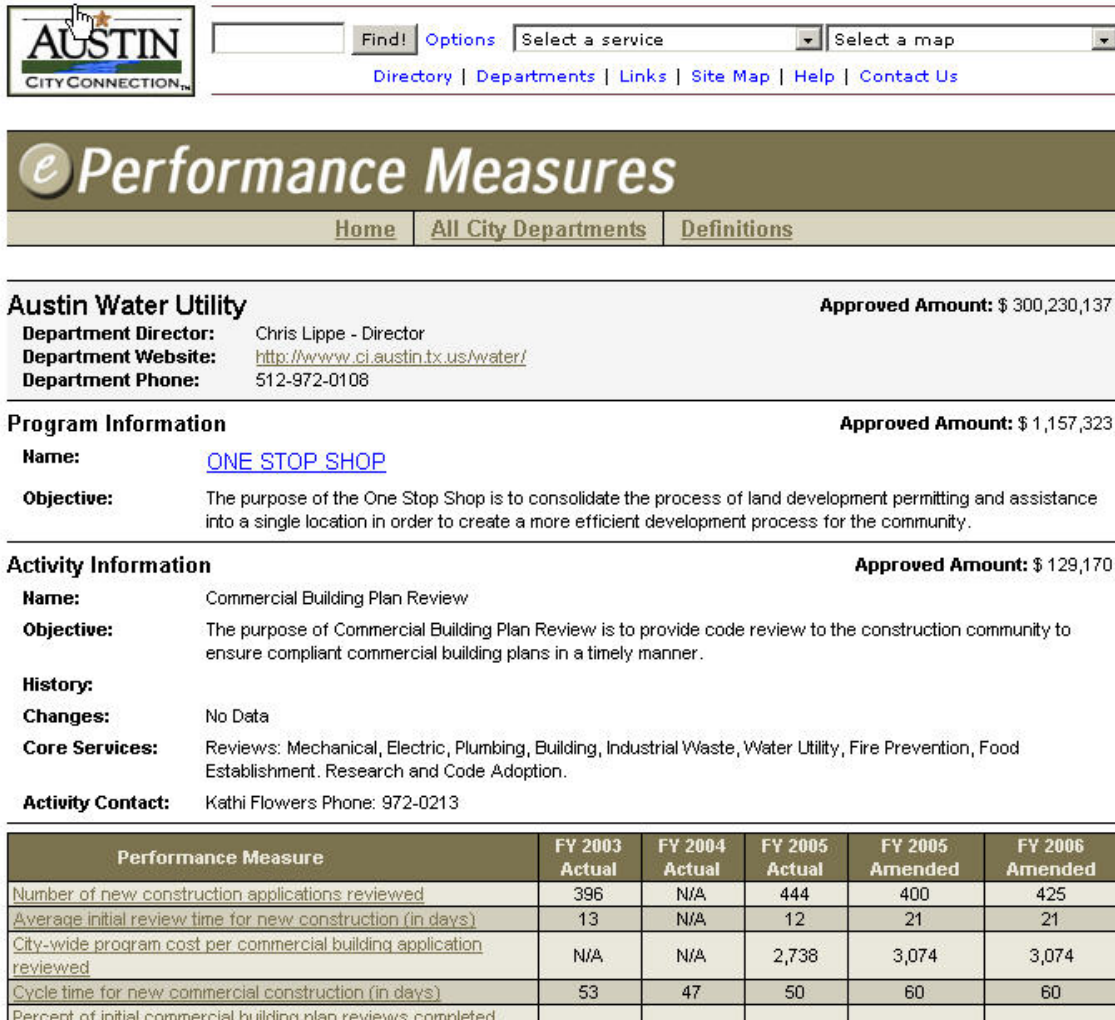
Figure 2. City of Austin Performance-Based Results

Citizens can search by department, program, activity, and then performance measures for each activity, and can see trend information for the last few years, as well as city council decisions.

USING ICT TO SUPPORT PROJECT M&E

Both of the previous examples illustrate how "information systems" assist making relevant M&E performance information available to different audiences, so they can make timely and relevant decisions, both during a specific project implementation and beyond. Having a consistent M&E "language" that audiences understand so they can use the information is critical to ensuring that results are understood and that projects can be re-directed when the results are not being achieved. Having this M&E language, along with the M&E systems model makes a project more transparent to the various audiences who want to understand the project and helps them see whether results are being achieved or not over the life of the project and beyond. M&E sustainability is critical to sustainable impact beyond the project. Using ICT can facilitate information collection and dissemination for performance

monitoring, but it is critical to make the "appropriate" use of ICT. If an ICT implementation costs too much, if the people performing data collection and dissemination tasks are not skilled in the particular technology, if the user interface is non-intuitive and confusing, if there is insufficient infrastructure (e.g., power and connectivity), if the ICT system does not support well-defined role-based security, then the project may be viewed as a failure in terms of results collection and dissemination as this ICT system is not sustainable. When developing the M&E system, the M&E systems model and language must be assessed and developed for this project, and M&E information system put in place should be the most appropriate one that can be sustained beyond the life of the project.

The following points describe the most critical aspects of developing sustainable M&E systems, based on experiences in several different projects and countries.

Know Your Audience!

RTI International's work in the Ukraine with AUC led to a broader understanding of the usefulness of ICT to facilitate results dissemination, given an audience who were willing to use a project Web site to view project results. As with all projects and project audiences, it is critical to understand the most common level of access for your audience to ensure that results can be disseminated using the appropriate infrastructure, whether Web-based, e-mail based, electronic media based, or paper based. For AUC, USAID made use of Web-based technology to access project results.

For RTI International, the work on AUC was a core part of the impetus to develop EMME™, a Web-based M&E system for use across RTI International projects.

For the Municipal Budget Reform project in Ukraine, we are using EMME™ to disseminate project results with USAID, our client. At the local level, the project is introducing Performance Based Budgeting into 140 municipalities, and the PPB software creates the package of documents for the City Council to review, in electronic and paper format as the City Councils. A Pocket Budget is also created; this summary document has the most useful information to help determine what is being reviewed by the City Council. Our experience on many projects has taught us that it is critical to provide project results in multiple formats to meet audience needs for access to information.

Sustainability: Changing Attitudes and Behaviors

Our work in the Ukraine was built on our M&E model which focused on improving transparency and participation through information sharing and use. Successfully **changing attitudes and behavior** with respect to **access, content,** and **use** of information can be difficult, especially in environments rife with uncertainty, and creating sustainable change can be not only difficult to achieve but also difficult to measure. The persistence of positive practices among local leaders and citizens in Ukraine with respect to sharing information and using relevant and timely data in making decisions can be illustrated through AUC-related events subsequent to the close of the Regional Offices project, during the 6 weeks in 2004 known as The Orange Revolution.[4] The Orange Revolution refers to the democratic protests, including hundreds of thousands gathering to demonstrate in Independence

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[4]http://www.rti.org/newsletters/witw/2005aug-sep/index.htm

Square in Kyiv, that eventually led to reversal of the officially-announced but widely discredited results of the presidential election run-off (21 November 2004) between Viktor Yankovych and Viktor Yushchenko.

> "AUC's and RTI's transparency-building efforts paid off during the Orange Revolution," said Bohdan Radejko, an RTI governance specialist. "AUC Dialog was one of very few outlets where municipal officials could effectively reach a national audience without censorship."[5]

RTI built M&E and information systems capacity in Ukraine but also learned lessons as a project implementer through the Regional Offices project. M&E and project information systems were again developed as an integrated package in the proposal for follow-on development and governance work in Ukraine, and RTI is now implementing the Municipal Budget Reform (MBR) project (2005–2008).

HOW EMME WORKS

EMME Overview

EMME is a Web-based Monitoring and Evaluation tool used to keep project information and success stories at our fingertips from anywhere via the Internet. On-demand access accelerates communication and feedback and enables our team leaders and managers to use project information to make timelier and better-informed project decisions. ICT tools are only useful to audiences when they solve a specific need and have associated technical assistance, in EMME's case expert M&E technical assistance to build local M&E capacity. This expert M&E technical assistance includes training the team on the use of EMME and how it can facilitate results reporting. EMME was developed based on RTI's M&E systems expertise; using EMME on a project leads to the project team's following this specific M&E systems approach, which leads to a consistent view across all audiences of project M&E.

M&E experts, project managers, and counterparts work together to establish clear objectives, identify key results, and define useful indicators, including baselines and targets, and enter this information into EMME from anywhere on the Internet.

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[5]"Enabling Open Discussion during the Orange Revolution," *Where in the World is RTI* (August-September 2005), http://www.rti.org/newsletters/witw/2005aug-sep/index.htm.
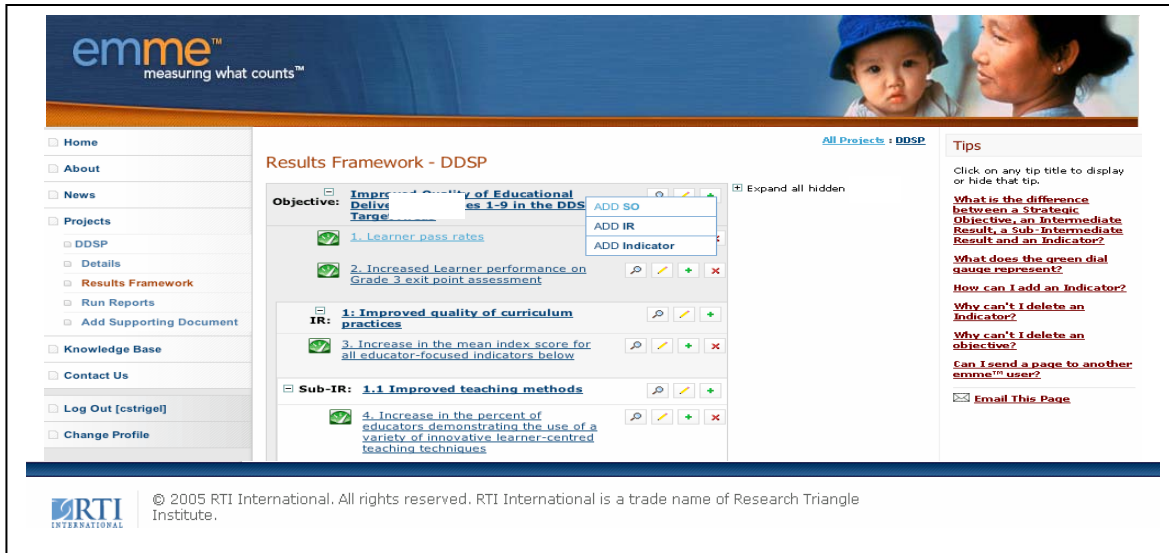
Figure 3. EMME Project Results Framework

A role-based security system prevents unauthorized users from making unwanted changes to project data. The Web-based administration puts designated project team members in control of project security. Designated project managers can easily determine which project team members are permitted to enter, change, and view project data. Project managers can also permit clients, project partners, and local stakeholders to view data and reports in EMME.

Unlike project Web sites, which are used on many projects as citizen-facing resources with project information, dialogues, and promotion, EMME is used to track M&E information, as well as project status information to the client and other partners.

Figure 4. Project Success Stories

Project staff and partners can develop and manage the project results framework, update indicators, and capture indicator data values and supporting documents. They can link

performance reports to real-life success stories and report on project status using tables and maps. Supporting documentation can include scanned PDF documents, Microsoft Word files, images of town meetings, newspaper reports, and many other kinds of documents.

EMME performs some data validation checks when data is input to the system; it also keeps a detailed audit trail of all changes, which improves data quality.

Project teams can modify objectives and indicators over the life of a project, if needed, to adapt to changing conditions. An internal auditing system keeps track of changes to objectives and indicators, so it's always easy to see who changed what, when, and why.

With many flexible features, EMME was designed with multiple audiences in mind. As such, it is critical for each project to decide how their M&E system will be designed and used on the project, and whether EMME will work in their project environment. EMME can be used by home office and field staff, and its document management capabilities allow multiple versions of documents to be stored, allowing field staff to always have access to the correct version of content. Field users can download information in the field and update it off-line, and then, when an on-line connection is available, upload the new information. They can also communicate information via telephone and rely on the main office to validate and enter data.

For each project, EMME allows RTI, partners, and clients, to run reports in different standard formats, such as USAID Performance Data Tables, Performance Management Plans, and Results Diagrams. Performance Data Tables, as displayed here, enable project teams to meet standard reporting requirements with minimal effort. EMME tables and maps give project teams and funding organizations powerful basic reporting tools. Users can also export data to Microsoft Word, or Microsoft Excel for easy distribution, integration into other reports, or import into other systems. The EMME team plans to extend the data export capabilities to enable users to further analyze results.

EMME integrates with a Geographic Information System, allowing users to view project-specific maps showing indicator values, baseline, target, and actual values geographically, depending on how the indicators are defined. Indicators can be tracked at the country level, the state or provincial level, the region or district level, and the community level as well as via point data including cities and municipalities, schools, and any other point data needed for a project.

EMME is currently being used to track indicators and results on Iraq TMPP by the home office and main field office in Baghdad and is used to communicate all project status with USAID. The results framework lists all key results, with all indicators defined and tracked in EMME.

Figure 5. Performance Management Plan

Figure 6. GIS Indicator Viewer in EMME

EMME is currently being used on the project that followed AUC, by the MBR home office, by the main field office in Kyiv, and by regional offices. Some indicators are tracked at a national level, and some at a specific municipality level. RTI M&E experts continue to help our field team through Technical Assistance and by training Ukrainian experts in Monitoring and Evaluation and the use of EMME. RTI M&E experts also help us pull everything together —with data-based lessons learned at every stage, providing immediate access and up-to-date information on project success stories and results to our client. EMME is an integral part of our project's monitoring and evaluation efforts, and has already proven its value to the overall project management and implementation. However, RTI will continue to work on EMME implementing relevant project experiences and lessons learned.

DISCUSSION AND RECOMMENDATIONS

Using EMME on multiple projects has allowed RTI International to standardize its approach to building M&E systems in projects in many different countries. It has also assisted promoting the awareness of the importance of integrating M&E into the overall project delivery. EMME supports local ownership with its delegation of project responsibility to a project manager group who control what parts of project information different audiences can see, and can determine how near to real time project results are published to the client, general public, and other audiences. As with any project, ICT is used to support the project implementation, and EMME is used as a supporting tool where appropriate (for larger projects with reasonable internet connectivity), backed with strong M&E STTA and local M&E expertise. On several projects, EMME has also become the information repository for communicating with the project client, with a complete audit trail, which has proven useful in meeting contractual requirements from a project management perspective.

After having used EMME on several larger projects as an ICT implementation of RTI's approach to M&E systems, we've determined that the following key points are critical to the successful delivery of relevant project results for any donor-funded project.

Integration of M&E into Project Delivery

It is essential that project M&E is considered as an integral part of the project delivery; without this integration, the M&E system stands to produce information that is not necessarily relevant to overall project results. Project activities should only be implemented if they contribute to project results, which are tracked in the M&E system.

M&E Expertise

Without adequate M&E expertise, good M&E system design, good results framework with well-defined and useful indicators including a focus on data quality, and project team and client buy-in to the use of ICT tools to assist with M&E, it is not worth building M&E tools. As with any ICT implementation, local and expert knowledge in the subject area that the ICT implementation is assisting is critical to developing the right implementation. Without the M&E expertise, the M&E system will not meet all audience requirements, and the data and results will not be reliable.

M&E Roles and Responsibilities

Defining M&E roles and responsibilities in detail, with appropriate capacity building for staff taking on these roles, is critical for project success. Without a clear division of labor across the project lead and project team members, who, for example, are reporting on project results versus client-specific results, there is confusion about what information is being presented to the client. With the project results framework, it is critical to understand who is responsible for collecting data for each indicator, and to roll this data into reports that are created and posted for the different audiences to see. EMME supports multiple roles in the project team, so that only people who need to execute certain functions are given those rights. The project manager controls which people have access to which functions, fostering local ownership of all M&E information that is collected and disseminated.

Local Ownership

For any M&E system to be successful, local stakeholders must be involved in developing the M&E system and stay continually involved in review of the results framework, indicators, and project results. The need for indicators that support the needs of the client (or donor) can conflict with the needs for local indicators that are sustained beyond the life of the project and used by local stakeholders after project completion. It is essential that these considerations be accounted for in designing the M&E system, even if this means that the M&E system changes at the end of the project, evolving into a system used solely for local purposes.

Integrated M&E and Information Systems

The M&E systems model, which focuses on the importance of access, relevant content, and use (including promotion and communication) of data for informed decision making, is the exact same model used to deliver information systems. M&E systems and Information systems are built on the same founding principles.

Information Viewing

Deciding what pieces of information go to the client, to partners, and what you want to monitor internally within a project is key to successful project communication. Communicating information when this has not been validated may lead to misperceptions in the different audience members of the project's success or the project team's capabilities. The project manager decides which members of the audience have access to which information, so it is necessary at the project start, for the project manager to have a clear communications plan defined for all M&E information, so that it can be communicated appropriately.

Near Real-Time Information

EMME is a repository for project results and success stories. By providing secure Web-based access to different audience members, the project team can make near real-time information available to their clients, which means the client can always find the most accurate and up-to-date information in the same place, with clear versioning comments. Details about what information has been communicated to the client and other members of

the audience, and when it was communicated, are all available, eliminating a great deal of confusion.

General Project Reporting Tool

After having used EMME on several projects, we have found its document repository capabilities to be an effective way to communicate all project reporting documents with our USAID client, not just M&E reports and project success stories. A single repository allows USAID to always have access to both older and recent project documents, so there is a clear audit trail for any communication between the project team and the donor.

CONCLUSION

Combined with M&E technical expertise, EMME can improve the efficiency of M&E systems, allowing project staff to focus attention on using the most relevant M&E information to improve project performance and thus overall impact. M&E information systems and M&E systems model are key conceptual necessities for evidence-based sustainable improvements in any topic or policy or social arena. Using EMME, critical M&E results are made available transparently to a wide range of audiences. In post-conflict areas or countries, having local multi-stakeholder ownership for critical M&E results that are relevant to all stakeholders can lead to better collaboration and understanding among the stakeholders.

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