BIGD

A Conceptual Framework for Monitoring and Evaluation for Learning and Adaptation (MELA) in NGOs

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Abstract

The significance of organizational learning in general and learning roles of monitoring and evaluation (M&E) in non-government organizations (NGOs) in particular are widely recognized. However, in many instances, the normative frameworks or recommendations tend to be overly theoretical or only partial to its real entirety, which limit their practical applications. This paper aims to contribute with a conceptual framework for monitoring and evaluation for learning and adaptation (MELA) specifically in NGOs. The MELA framework follows an organizational learning approach to construct a learning process that encompasses planning for learning, evidence generation, and adaptation based on the learning from M&E activities. The paper introduced the continuum of learning and knowledge types, the planning process of adaptive management, characteristics of MELA, methodological implications for learning, and programmatic adaptations at operational, tactical, and strategic levels.

Key word: M&E for learning and adaptation (MELA), adaptive management, organizational learning, NGO

List of Abbreviations and Acronyms

ALPS	Accountability Learning Planning System
CART	Credible Actionable Responsible Transferable
COP	Community of Practice
CSO	Civil Society Organizations
FCDO	Foreign Commonwealth and Development Office
LEAP	Learning through Evaluation and Planning
MELA	Monitoring and Evaluation for Learning and Adaptation
MIS	Management Information System
NGOs	Non-government Organizations
OECD	Organizations for Economic Cooperation and Development
PPT	People Process Technology
R&D	Research and Development
RBM	Results-based Management
RCT	Randomized Control Trial
SMART	Specific Measurable Achievable Relevance Time-bound
SPICED	Subjective Participatory Interpreted Communicable Empowering Disaggregated
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development

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Introduction

While there is a widespread conceptual consensus regarding the accountability and learning roles of monitoring and evaluation (M&E) for development effectiveness, achieving an equitable balance between them in practice remain uncommon. This is largely due to underestimating the complex dynamics of learning process by M&E in an organizational setting grounded in societal context. Therefore, this paper aims to develop a practical conceptual framework of monitoring and evaluation for learning and adaptation (MELA) in non-government organizations (NGOs). This integrated framework will be constructed by combining, contrasting, and building on existing theories of organizational learning, M&E methods, and knowledge management. The paper is structured into four sections. The introduction section discusses organizational learning theory in relation to related theories, the practical context of learning-focused M&E, and the scope of the paper. The second section on methodology selects and justifies the method of the paper. Then, the third section introduces and expands upon the MELA framework, leading to conclusive highlights in the fourth section.

1.1.   Congruence and Conflict of Theories on Learning and Adaptation

To avoid bias for or against particular theories, it is crucial to understand the congruence and conflict among the learning theories in an organizational context. Some of the most widely known such theories and concepts include organizational learning, learning organization, organizational adaptation, adaptive management, and knowledge management. The much-discussed discourse between 'organizational learning' and 'learning organization' comes first. Organizational learning, as defined by Argyris and Schön 1978, is the process of creating, retaining, and transferring knowledge within an organization for present and future adaptation. A decade later, Senge 1990 coined the term, learning organization, which is defined as an organization where individuals, teams, and the organization as a whole engage in the process of continuous learning to improve both at the personal and organizational levels (Qutoshi & Rajbhandar 2016). Although literature often draws a dichotomy between the two, they are closely connected. Recent research considers the two theories mutually inclusive and communally contributory (Huysman 2000, Odor 2018, Qutoshi & Rajbhandari 2016). Easterby-Smith et al. (2000) observed that for many years, researchers and practitioners studying learning in organizations using one of the two concepts were essentially discussing the same phenomenon from different angles. The use of organizational learning as a theoretical framework intuitively calls for considering the principles of a learning organization, and vice versa. In other words, organizational learning is the activity and process by which organizations may eventually reach the ideal state of being a learning organization (Schwartz & Rist 2016).

How does organizational adaptation relate to organizational learning? Early literature on organizational learning made a distinction between learning and adaptation. For example, Fiol and Lyles (1985) reviewed the definitions and showed the difference that learning involves changes in cognition, while adaptation involves changes in behaviour. But lately, researchers have come to agree on a broader definition of organizational learning, involving both the cognitive (learning) and behavioural aspects

(Skerlavaj et al 2007, Easterby-Smith 2000, Turi et al 2018). Learning, in general, is a holistic process of adaptation to the world (Kolb 1984). Within organizational theory, adaptation is an intentional decision making undertaken by organizational members, leading to 'observable actions' that aim to reduce the distance between an organization and its economic and institutional environments (Sarta et al 2021). However, the intentional decision for adaptation requires informed learning. So, the behavioural (adaptation) approach to organizational learning theory plainly reiterates what the organizational adaption process considers as 'observable actions' by its members.

How does adaptive management relate to organizational learning? Adaptive management is increasingly on the attention of funders and practitioners (Wild & Ramalingam 2018, O'Donnell 2016). This is more a management domain than an organizational theory. However, two principles of adaptive management – intentional learning and taking action based on the learning (Rogers & Macfarlan 2020a), have substantive similarities with two approaches of organizational learning - cognition and behaviour. Adaptive management[1], as Rogers and Macfarlan 2020a defined, involves deliberately taking actions to learn and adapt as needed in the face of uncertainty. Hence, while theoretically, they are from two different disciplinary domains with different approaches, practically, they are referring to largely similar functions of organizations – learning for adaptation.

How does knowledge management (KM) relate to organizational learning? The concept, knowledge management originated at least a decade after the origin of organizational learning. But, they quickly began referring each other with notable significance and even more frequently. Pun and Balkissoon (2011) found that since 2008, organizational learning and KM had moved towards the integration of concepts and practices. Castaneda et al 2018 in a systematic review even concluded that organizational learning has been conceptually absorbed within KM. In particular, the organizational learning processes of knowledge creation and acquisition are now essential parts of KM definitions. Nowadays, a discussion using OL as framework quintessentially discusses KM.

The organizational theories or concepts discussed above have some differences in their approaches but they often have mutually complementary elements[2]. Among them, organizational learning, the conceptual origin of subsequent developments like learning organization, knowledge management, and adaptive management, seems having remarkable inclusivity and complementarity for and with other theories. Organizational learning can nurture the complex interplay of learning and adaptation across processes and levels (Crossan et al 1999). Hence, organizational learning can be a meta level overarching theoretical background for M&E for learning and adaptation (MELA) which will be further discussed in 3.1 sub-section.

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[1] It is necessary to be aware of the difference between adaptive management (AM) and organizational adaptation (OA). While OA is concerned with the organization as a whole thriving in a dynamic environment, adaptive management is about adjusting interventions and strategies based on ongoing learning to achieve better outcomes in a specific domain (e.g. project management).

[2] The focus of organizational learning is on cognitive change through learning with intention and action for behavioural change; organizational adaptation and adaptive management hold their exclusive focus on behavioural change (adaptation) based on the learning; knowledge management promotes organizational learning culture for learning and knowledge for organizational performance; learning organization is an ideal state of organization trait which has all the characteristics discussed in other concepts here.

1.2. Overly Generic Concepts and Minimal Practice

Result-based project management (RBM)—in which development plans are grounded in a theory of change and are monitored and evaluated against the targeted results, generally organized in a logical framework — is a dominant management approach in development organizations (Lainjo 2019, Vähämäki & Verger 2019). In this approach, M&E is the main operational instrument to plan, track and assess the results against the targets in a logframe. The responsibility of reporting the progress against pre-set result-targets (what status) is known as accountability role of M&E and the analytics of such status (why, how) is categorized as learning role of M&E. Broadly, even though the complexities in development realities demand more learning roles of M&E during program design, implementation, and in their completion (Khagram et al 2009, Rogers 2008), the accountability role of M&E in NGOs often overshadows its learning and other roles (Gugerty and Karlan 2018). Current funding modalities require them to deliver activities and results, preferably to report in numbers committed in the logframe, often leaving behind learning and innovation opportunities, which could otherwise improve efficiency, outcomes, and sustainability. Nonetheless, the efforts for better balance between accountability for results and learning for results have been driving the innovations in development management since 1990s. For example, even though the United Nations agencies, the OECD, influential donors, and even public institutions have upheld the primary focus of RBM on 'accountability for results', they have begun to enhance the 'learning for results' aspect of RBM by reviewing and updating the guideline publications on RBM (Bester 2016, Örtengren 2016, Vähämäki & Verger 2019, Roberts & Khattri 2012, Global Affairs Canada 2022)[3].

A review of Oxfam's global performance framework (GPF) shows that accountability agenda for their stakeholders especially the donors is prioritized over the learning purpose of M&E (Hutchings 2014)[4]. This, in fact, is the typical situation of how learning roles of M&E is overshadowed by their accountability roles. However, like this example of Oxfam, NGOs and their stakeholders are moving towards learning-focused M&E approaches slowly but steadily.
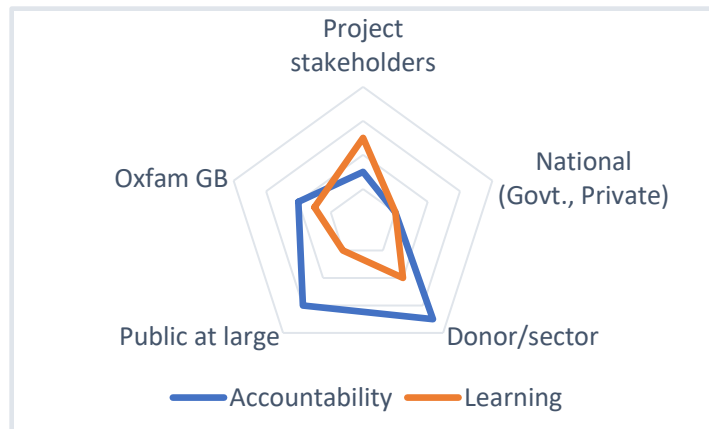
Figure 1: Accountability vs. learning roles of Oxfam's GPF

Management guidelines and research articles are widely available on the methodologies and protocols for M&E in program management. However, the literature precisely on the topic, 'M&E for learning and

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[3] All references here are either review or revision of their previous publications on RBM. Some value additions of these revisions are more explicit guidelines for defining results, key terms, ways of institutionalization, and strengthening the learning process through rigorous causal assumptions and adaptive management. Despite criticism of RBM being inflexible to adapt with complex context of development (Bajwa & Kitchlew 2019), many examples of such revisions of RBM guidelines in last one decade imply its relevance to last by improving a better balance between accountability for results and learning for results.

[4] The presentation from a sampled data of their global operation compared learning and accountability agenda for each of the five stakeholders – individual projects, national actors (government and private sector), institutional stakeholders within Oxfam GB, donor community and development sector, and the public at large.

adaptation in NGOs' has limitations. Some publications are too generic in disciplinary domains to implement them in practice for a particular (sub) domain. For example, learning incentives and processes of NGOs are significantly different from public and business organizations because of different performance motives and investment sources (Oswald & Taylor 2010, Roper & Pettit 2002). So, overly broad inductive reasoning on organizational learning may not be applicable across different types of organizations. Meta level frameworks on organizational learning are critically important but require more work for practical application for NGOs. For example, a framework on learning process in NGOs without a functional definition of learning may make difficult for managers to decide what and what not to consider as learning (see continuum of learning and knowledge types in Figure 2). Some contribute to a specific topic of M&E and tend to make overly narrow deductive conclusions, which may be flawed. For example, a discussion on learning mechanisms of M&E should not provide extensive conclusion on learning uptake because learning from M&E does not automatically translate into action. Practically, actual adaptation of the learning into programs is equally complex process requiring cultural and resource facilitation by the organization[5]. Hence, existing literature needs to consider both the broad picture of theories and specific operation dynamics of NGOs to pinpoint on M&E system for learning and adaptation.

1.3. Definition of Learning in Organizational Context

The definitions of organizational learning by influential academic authors were critically reviewed to grasp the core principles and elements they entail (Argyris & Schön 1978, Senge 1990, Kolb 1984, Levitt & March 1988, Huysman 2000). Three elements of the definitions of organizational learning stand out: (i) a process of construction or reconstruction of knowledge (what); (ii) intention to improve present and future performance for adaptation (why); (iii) explanation through detection, correction, interaction, and reflection (how). To understand the practical application of those definitions, six purposive[6] organizations including donors, United Nations, and international NGOs were sampled who have working definition or guideline of learning.

- FCDO: It defines learning as the extent to which FCDO gains and uses knowledge to influence its policy, strategy, plans and actions (ICAI 2014). Their report makes a distinction between the knowledge FCDO collects and how it is actively applied, which they term as 'know-how'.
- USAID: Learning approach at USAID aims to improve decision-making at all levels within the Agency by obtaining, analyzing, using, and sharing meaningful information about program performance and impact (QED and USAID 2012). Its Collaborating, Learning, and Adapting (CLA) framework emphasizes the need for continuous learning and flexibility. It also includes agency-wide policies, a learning agenda, and annual evaluation plan, as well as efforts to strengthen knowledge management systems and learning culture.

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[5] Theoretically, internalizing and objectifying a knowledge does not automatically guarantee its externalization. Because, a successful externalization, the actual ownership and use of the knowledge by the members of the organization (the learning uptake) requires organizational level cultural and resource facilitation (Huysman 2000).

[6] The search found that even though organizations acknowledge and strategize for organizational learning, they do not tend to define it explicitly. So, organizations which had more explicit definitions of learning were chosen.

- United Nations: Learning [through the annual project report] should provide information on what went right or what went wrong, and the factors contributing to success or failure (UNDP 2019)
- UNFPA: Learning is the process of acquiring new – or of modifying existing – knowledge, behaviors, skills, values or preferences (UNFPA 2019). Thus, learning involves the reflection and consideration of results information to enhance knowledge, skills and understanding.
- World Vision: Learning is change in thinking and action through reflection on sound information about present and past experience (World Vision International 2007)[7].
- ActionAid: Learning follows a participatory review and reflection process to explain the success and failure of the works so as to improve their responsiveness and quality (Actionaid International 2014). It further clarifies, 'ALPS[8] defines our standards, not only about what we do but also how we do it'.

The MELA framework proposes a functional definition of **learning as the acquisition of knowledge about why and how development purposes and their assumptions either succeed or fail**. This definition aligns with the core principles established by academics and practitioners but distinguishes itself with a clear focus on the substantive nature of knowledge.

- First, learning is seen as a knowledge acquisition process. This process needs a development purpose to be assumed, observed, and measured for its outcome.

- Second, it requires knowledge to be substantive—tacit or explicit—explaining the reasons and processes behind the success or failure of development purposes and assumptions. While this process-oriented approach clearly defines what learning is, it also implicitly indicates what learning is not[9].

- Third, the definition addresses the purpose of learning. The acquisition of knowledge involves not only the collection and analysis of knowledge but also its application and integration into practice (Castaneda et al., 2018). Furthermore, by referring to 'development purposes,' it upholds the purpose of learning for organizational and programmatic improvements.

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[7] This working definition of learning is from World Vision's LEAP approach. Learning through Evaluation and Planning (LEAP) is their common approach to design, monitoring and evaluation.

[8] ALPS denotes accountability, learning, and planning system. It is a framework that sets out the key accountability requirements, guidelines, and processes in ActionAid International.

[9] Some exclusion criteria about what learning is not in MELA can be useful. First, organizational learning theories should be distinguished from individual and pedagogical learning theories. Additionally, a progress report against a target, a situation report, or a cross-sectional study may not qualify as organizational learning if they only describe a situation and the amount (the "what") and do not explain the process (the "how") and reasons (the "why"). Third, data and information, which can contribute to knowledge creation, should not be confused with learning.

Moreover, another area of confusion in the definition of *learning* (the "why") is its distinction from *findings* (the "what") and *lessons* (the "how"). When learning explains why an assumption succeeds or fails, a finding is limited to reporting the situation or status (the "what") often without explaining the reasons behind it. Lessons, on the other hand, conclude with how the learning should be applied in practice.

The distinction between intentional learning and incidental learning can be useful in the organizational context to clearly understand how organizations approach learning[10]. Some organizations plan for learning as an essential management strategy, while others find learning to be a mere by-product. The two approaches differ in both their processes and results. Incidental learning does not anticipate new learning, so organizations may not be ready to fully analyze and utilize its benefits. However, intentional learning does not exclude the possibility and utilization of incidental learning; rather, it can leverage both types of learning.

	Strategic Management		[Intentional] Learning Examples
Explicit	Learning agenda assumptions	**Org**	Causation and sustainability are proved
	Choosing between programs		Education program creates long term impact
	Choosing between models		Engaging men improves gender interventions
Implicit	Knowledge management		Old knowledge from organization repository
	M&E to focus on learning	**Group**	Cross-validation of finding gives new analytics
	M&E to focus on accoutability		Baseline-endline difference shows changes
	MIS		Large deviation of target questions feasibility
	Procedural guidelines	**Individual**	A procedural sequence changes effectiveness
Tacit	Learning-by-doing		Something works better in different ways
	Individual experience		Observation of significant contextual change
	Operation Management		**[Incidental] Learning Examples**

Figure 2: Practical continuum of learning and knowledge types

Knowledge is the result of a learning process, whether intentional or incidental. Knowledge can be tacit, implicit, and explicit. Figure 2 presents the practical continuum of learning and knowledge types. It provides the examples of explicit knowledge within strategic management in the one hand and examples of tacit knowledge within operation management on the other hand. Understanding the continuums between two immediate types (e.g., tacit vs. implicit; implicit vs. explicit) is important both for knowledge generation and knowledge uptake. Explicit knowledge (also expressive knowledge) is knowledge that can be readily articulated, codified, stored and shared. However, one of the critical challenges of knowledge management is to identify, use, and translate the tacit knowledge into explicit because, tacit knowledge often occurs at individual level, mainly through their experience, which is often unplanned or undocumented. Intentional learning also tends to create more explicit knowledge, while incidental learning often results in more tacit knowledge.

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[10] The distinction between intentional learning and incidental learning is more commonly applied in learning theories focused on individuals, particularly within education research. Intentional learning refers to using strategic thinking processes that have learning as a goal rather than an incidental outcome. Intentional learners, whether individuals or organizations, are decisive about what to learn, as well as why and how. (see, Steel & Stagg 2020, Mollman et al 2024)

1.4. Scope of the Research

The paper aims to develop a conceptual framework[11] of M&E for learning and adaptation (MELA) specifically in NGOs. While the paper considers several concepts related to organizational theories, its key focus is on the role of M&E for learning and adaption for programmatic improvement and organizational development. This follows organizational learning approach to set the explanatory background of the research topic and then put together the practical dynamics into real world operations for planning for learning, their implementation, and adaptation based on the learning. The paper has a primary research question and three specific research questions. The primary research question explores how NGOs can institutionalize an M&E system where learning and adaptation are considered important management strategies. The specific research questions to elaborate further are:

- How can intentional learning approach be mainstreamed into their program planning process?
- What are the methodological implications for generating credible evidence from M&E?
- How can their knowledge management system facilitate translating that learning into programmatic improvements and organizational development?

The scope of the paper remains quite open to consider important theories and practical dynamics affecting the learning process of NGOs through M&E while purposefully classifying them into one of the three sub-constructs – planning for learning, credible evidence, and adaptation. A careful balance between real-world dynamics and theoretical validation was maintained.

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[11] The paper is a conceptual framework because of its interpretative approach, a construct from several concepts, indeterministic on causation and prediction, and qualitative procedure of data analysis (Jabareen 2009).

Methodology

The paper uses the framework synthesis approach, using a review of related literature to construct a priori (working) framework[12] and adapting the framework in subsequent iteration and interpretation stages (Figure 3). The systematic reviews on framework synthesis argue that it

Learning organization		
Organizational learning		
Organizational adaptation		
Adaptive management		
M&E in NGOs as case		
Learning plan in M&E	**Credible evidence**	**Adaptation from learning**
What (attitude?)	What (aptitude?)	What (amplitude?)
Why (advantage?)	Why (incentives?)	Why (learning culture?)
How (learning agenda?)	How (M&E methods?)	How (KM?)

Figure 3: A priori framework for iteration

is a useful method that allows researchers to conduct an initial investigation of their research questions using the most suitable pre-existing theory or priori framework, yet modify, add on, and revise the priori framework based on new analysis (Brunton et al 2020, Carroll et al 2013). The method is a good fit for this paper because the overarching theoretical approach, organizational learning, has a strong existing theoretical base which will be revisited in the light of the the three sub-constructs (planning for learning, credible evidence, and adaptation) for the contexts of NGOs.

Based on the initial literature review, the proposed priori framework has four thematic areas of literature. The explanatory theme uses the theories of learning organization, organizational learning, organizational adaptation, adaptive management, and M&E in NGOs to set the background of the framework. The relational themes are (organizational) plans for learning, factors and methods for credible evidence, and adaptation of acquired learning from M&E. The three themes follow similar 'what', 'why', and 'how' questions, which are directly aligned with three of the four research questions of the paper. Under each of the three themes, the literature will be selected to explore the meaning of the theme (what), the reasons (why), and the process (how) of the action.

The paper will use the terms including knowledge, learning at organization, and organizational learning as synonyms of learning. This clarification is needed to avoid confusions about the functional meaning of learning in the context of organization[13]. Similarly, the term, 'program' in this paper will be used as an inclusive connotation for project as well[14].

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[12] The priori framework is supposed to be proposed from existing theories, hypothesis, or data pattern to organize and analyze the data extracted from the included studies (Brunton et al 2020, Carroll et al 2013). The priori framework of this paper (Figure 3) was proposed both based on the existing theories and data patters of the reviewed studies.

[13] See more in sub-section 1.3.

[14] For example, program management will also mean project management.

Conceptual Framework of MELA

This third section will introduce and elaborate the conceptual framework of MELA. It starts drawing an evolutionary trajectory of M&E approaches and chalking out the characteristics of an integrated and ideal learning-focused M&E, MELA. The conceptual framework of MELA will be defined, depicted, and described. In further description, three sub-constructs of the framework will be explained from conceptual and practical perspectives.

3.1. M&E for Learning and Adaptation

3.1.1.   M&E evolution towards MELA

A broad understanding of the historical evolution of M&E approaches can be helpful for understanding the trends, gaps, and value additions in the emerging approaches. In the aftermath of the Second World War, development aids were channelled from the developed countries to the newly independent countries through public and private arrangements. Management modalities of those aids evolved in the following decades and so did their M&E systems. Starting with only pre-intervention assessment, M&E systems of development management have now become much more diverse and mature. Mierlo, B. V. et al (2010) delineated three distinct approaches to M&E based on purpose and process: result-oriented, constructivist, and reflexive (Table 1).

Table 1: Difference of three M&E approaches.

Areas	Result-oriented	Constructivist	Reflexive
Goal	Accountability and steering	Learning and making adjustments to activities	Learning how to contribute to system innovation
Paradigm	Reality can be defined objectively	Reality is constructed by interaction and negotiation	A new reality has to be developed
Focus	Predefined objectives	Meanings and values, based on negotiations	Putting the prevailing values and institutional settings up for discussion

Pritchett et al (2012) made similar classification of M&E approaches, primarily based on the methodological progression of M&E practices. A brief of his classification are as follows:

    a.   First[15] generation M&E (1950s to 1990s):

This early generation M&E follows a logical framework approach and defines a 'development project' as inputs, which are translated by an implementing agency into specified activities to produce useful outputs. These outputs have the goal of outcomes and impacts of higher well-being for the intended beneficiaries.

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[15] This is the period when a number of management approaches were introduced in public and private sectors. USAID introduced logical framework approach in 1969. This was followed by project cycle management model (PCM) introduced by the World Bank in 1980s and spread in 1990s by European Commission. Result-based management (RBM) in 1990s built on the good practices (e.g. LFA) till then. At the state level, new public management (NPM) to introduce market-based principles to empower citizens originated in 1980s to widely spread by 1990s.

Funding agencies use monitoring data for accountability, making sure that inputs are used only for the agreed activities and follow the agreed upon processes.

b. Second generation M&E (2000s to 2010s):

Impact evaluations started receiving increasing attention from the beginning of the 21st century, which focuses on the impact and outcomes, not necessarily inputs and outputs, and utilizes rigorous quantitative methods like randomized control trial (RCT). Influential research organizations like IPA, established in 2002, J-PAL, established 2003, and 3ie, established in 2008, partnered with donors, UN agencies, academicians, NGOs, and governments to rigorously evaluate social development models with causal explanation. While these quantitative impact evaluation methods are deemed reliable for determining the impact of a project and are generally based on a theory of change, these methods, on their own, do not capture the variabilities and challenges with implementation and context, which are crucial to understand for effective organizational learning.

c. Next generation M&E (2010s onwards)

The new generation M&E is termed 'structured experiential learning'. This thought is founded from the observation that M&E is still a top-down strategy for implementation, and thus learning in development projects is not participatory enough. Learning of 'what works' has to be flexible and dynamic with more explanation for 'how'. While it is important to evaluate the impact of development projects through rigorous methods like RCT, these studies should be designed to capture the inner workings of the projects to better explain the causal mechanism and generate learning for implementation[16]. Carefully designed mixed-method studies, for example, combining an RCT with qualitative interviews, can serve the purpose very well. Simultaneously, a strong, well-documented, real time monitoring data can play a crucial role towards achieving this goal.

The emerging M&E approaches discussed above have multiple implications for learning-focused M&E practices in NGOs. They are interested in learning questions on 'why' and 'how' along with 'what' worked. For instances, the learning-focused M&E approaches, like, theory-based evaluation (White 2009, Rogers 2008, Khagram et al 2009), complexity-aware M&E (Hertz et al 2021), adaptive management (Hernandez et al 2019, Pasanen & Barnett 2019), and a growing demand for mixed method are designed primarily to learn 'why it works' and 'how it works'.

Nevertheless, it needs organizational level readiness to implement learning-focused M&E practices. Project level initiative for them is often insufficient and may create inconsistent results and uncertainty of their use. Because, to implement them successfully and consistently, organizations need the intention and capacity for planning for learning, capable M&E team to implement them credibly and timely, and organizational learning culture promoting the use of evidence for program iteration and organizational performance. This demands a broad but actionable conceptual framework for NGOs to facilitate who are ready to learn and adapt in a changing environment of implementation.

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[16] IPA was specialized in impact evaluation research with experimental designs. But, in recognition of the importance of experiential studies, it started a new wing called, 'Right-fit Evidence' under which they conduct non-experimental M&E services important for program implementation.

3.1.2.   Three sub-constructs of MELA framework

The proposed MELA framework, a conceptual construct based on the organizational learning approach, outlines a learning process that concurrently encompasses planning for learning, generation of credible evidence, and uptake of evidence from M&E activities in NGOs at individual, group, and organizational levels. It promotes learning for adaptation by continuously analysing the development purpose and associated assumptions. It requires planning for learning from M&E, methodology for credible evidence, and a sound knowledge management system for establishing a continuous and effective learning loop. A simplified pictorial presentation of the MELA framework is in the Figure 4.
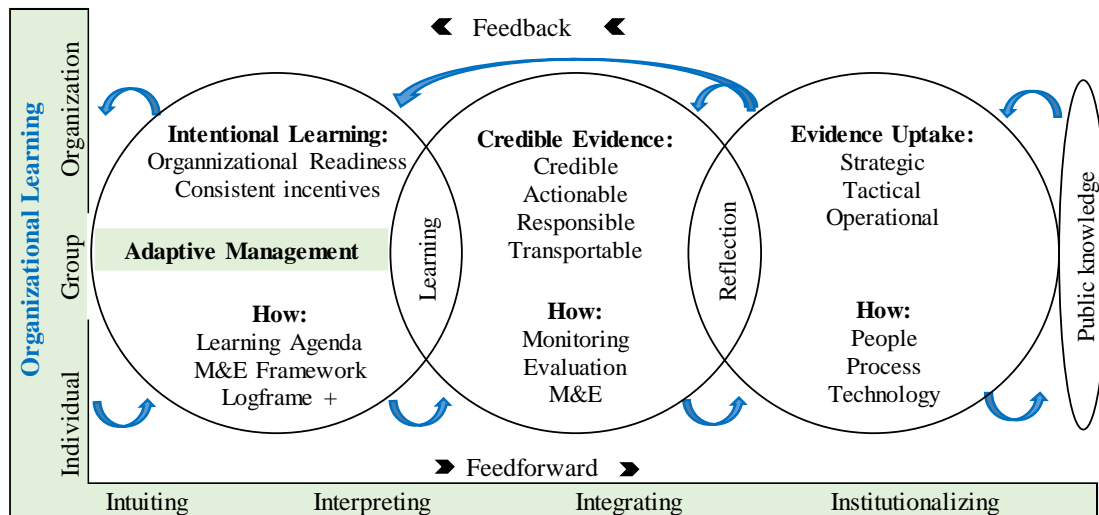

Figure 4: Conceptual framework of M&E for learning & adaptation (MELA)

The MELA framework follows the organizational learning approach as it posits that M&E can consistently generate programmatic and organizational learning only when an organization deliberately chooses learning and adaptation as core management strategy. There are many scholarly works on the organizational learning process, but the seminal '4I' model of organizational learning by Crossan et al (1999) is particularly known for its comprehensive framework to explain the dynamic learning process of organizations at multiple levels. The 4I model explains how organizations learn through four related (sub)processes—intuiting, interpreting, integrating, and institutionalizing—that occur across individual, group, and organization levels. The three learning levels define the structure, and the four processes form the glue that binds the structure together[17]. The entire dynamic process balances the tensions between assimilating new learning (feed-forward from the individual to the group to the organization) and exploiting or using what has already been learned (feedback). The feedback and feedforward processes

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[17] Once an individual intuits potential learning from the environment, they must consciously interpret by engaging in sensemaking about its relevance. Then, integration at the group level leads to shared understandings and decisions to adjust practice. If integration is successful in penetrating a large enough percentage of the organization, institutionalization can occur. This feed-forward process from individual to institutionalization is more difficult than feedback.

make the learning loop keep working. The MELA framework considers the four (sub)processes at three different levels relevant for understanding and institutionalizing the learning process from M&E for programmatic and organizational development.

The MELA framework has three interrelated sub-constructs. The first sub-construct is the plan for learning. The organization's readiness to learn should be reflected in its strategy documents that promotes an organizational learning culture. A functional definition of (organizational) learning, thematic interest, and process of learning across organization should be in written and practice to plainly orient all individuals and stakeholders. Programs and projects should clearly define their learning objectives by listing specific learning questions and outlining their experimentation plans. Learning agenda is an example of a written plan for learning. Any learning agenda should be relevant and part of the overall program planning process and the M&E system. Such cross-reference and management coordination are possible only when the (learning) process is governed and incentivised by the adaptive management principles. This part has been further explained in sub-section 3.2.

The second sub-construct of the framework is the generation of credible evidence. Generation of credible evidence and availing them in real time are two important responsibilities of a capable M&E system. The plan for appropriate M&E methods, necessary resources, and the use of those data should be well justified so that the type and amount of data are just what is needed for the learning in plan. Because, more or less data and irrelevant data may simply jeopardize the purpose of the M&E activities and drainage the resources. Yet, a capable M&E team is essential to maximize the efficient implementation of the learning plan. This part has been elaborated in sub-section 3.3.

The utilization of evidence is the third sub-construct of the MELA framework. Getting the learning to be used for ongoing program iteration and future program design is often conditioned by different factors – capacity, credibility, incentives, and even disincentives depending on who needs to adapt what, why, and how. The intensity of the challenges also depends on the levels of adaptation – strategic, tactical, and operational. A sound knowledge management process, an important enabler for organizational learning, can facilitate organization-wide learning and adaptation by organizing right people, appropriate process, and user-friendly technologies (PPT). This part has been described in details in sub-section 3.4.

The characteristics of MELA from a blended perspectives of normative and practical evidence can be distinguished from M&E for accountability as shown in Table 2.

Table 2: Difference between MELA and M&E for accountability

Areas	MELA	M&E for Accountability
Organizational learning	MELA must be embedded into the organizational learning culture, which promotes 'learning for results' as management strategy at individual, group, and organizational level. It aligns with adaptive management principles.	An M&E unit is mandated to facilitate 'accountability for results' for programs. It is not suitable for complex context because it cannot adapt with any changes of program assumptions.

Plan for learning	It plans for intentional learning by incorporating a learning agenda into program implementation plan and M&E plan.	M&E is mainly for accountability. It is often limited to incidental learning unless any learning (study) is committed in the funding proposal.
Credible evidence	Credibility of evidence is important. It is process-oriented to explain why and how along with what. It prefers to be participatory, context-specific, and mix methods.	It is reactive and opportunistic to use methods more to establish what works. It is result-oriented and it prefers generic observation.
Evidence uptake	Knowledge management facilitates learning culture for program iteration and organizational adaptation.	Learning uptake is challenged because of unavailability of credible evidence in time and lack of incentives.

Source: Author

3.2. Organizational Readiness for Learning as Strategy

3.2.1. Intentional learning from M&E

Organizational readiness is crucial for ensuring consistent performance in intentional learning at the individual, group, and organizational levels. While organizations can learn without a formal plan, intentional learning necessitates certain conditions to be integrated into daily operations. Key organizational conditions include visionary leadership, prioritizing learning and adaptation as essential management strategies, providing adequate resources and technology, integrating learning with performance management, and fostering collective reflection and adaptation as part of routine knowledge management process. These conditions if practiced for a long period can develop a culture of learning that promotes intentional learning.

M&E, if incentivized well, can be the most important mechanism of organizational learning in NGOs. Oswald and Taylor (2010) identify four key incentives that can enhance the connection between M&E and organizational learning: the incentive to understand why, to learn from lower levels, to learn collaboratively, and to embrace the risks associated with making mistakes. However, in practice, these incentive processes cannot work effectively and consistently unless the appropriate organizational conditions are established.

An organization should clearly define the learning roles of M&E during program design, implementation, and assessment. An organization with an intentional learning attitude stipulates the importance of organizational and programmatic learning in their strategy documents. Learning agenda, learning and development strategy, organizational learning plan are some examples of learning strategy documents to define the learning gap, ways of learning, and learning uptake.

Learning agenda involves setting learning objectives, identifying key learning gaps and associated learning questions, and M&E methods to explore the learning questions. The nature of learning questions and methods will have direct implications on the capacity of M&E team and resource allocation. This will

also require engaging important stakeholders in the planning process for their feedback and buy-in. There are guidelines for learning agenda making (OES-GSA, Himmelstein et al 2017) which is beyond the scope of the paper.

In program management, M&E framework should be in alignment with learning agenda. In brief, M&E framework is a plan of M&E activities, their timing, methods, implementers, and usage of learning while learning agenda elaborates the scope of learning and its management. From a broad perspective, logframe is the most common reference tool for program planning; M&E framework is a plan for M&E activities; and learning agenda is an intentional learning plan in program management. Ideally, logframe, M&E framework, and learning agenda should be managed in close coordination and cooperation in accordance with the principles of adaptive management. Because, it is adaptive management that strategies for intentional learning and promotes adaptation in the logframe and subsequent management plans.

3.2.2. Logframe-based planning process and beyond

In a broad sequence, program life cycle in NGOs involves designing the program, its plan and implementation, monitoring and evaluation, and dissemination of the results and learning. Figure 5 shows the main conceptual terms, their sequence and direction, and categories used in program design and planning. The basis of any program design is some development assumptions about the social problem and its solution. Quite sequentially in concept, every program or project identifies a social problem it

Figure 5: Logframe and associated concepts in program design and planning

intends to solve. Then, a logical explanation of the change pathways is proposed to design the solution; this is called theory of change. Similarly, and often in the light of the theory of change, a matrix of logics is created with progressive change logics in the vertical column and accountability plan in the horizontal row. This four-by-four matrix is well known as logical framework or logframe. Inputs (resources), activities, outputs, outcomes, and impacts are the progressive change logics or result statements in the horizontal rows of logframe. Its vertical columns elaborate the result statements with indicators[18] and means of verifications. Each change logics of logframe are further explained by the context dynamics in terms of assumptions (enabling conditions) and risk (uncertain events). In fact, logframe is considered as the center of program planning. Logframe and its associated concepts are used in all stages of program life cycle – design, implementation, M&E, and reporting.

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[18] Indicators should be SMART and SPICED. SMART denotes for specific, measurable, achievable, relevant, and time-bound indicators whereas SPICED denotes for subjective, participatory, interpreted, communicable, empowering, and disaggregated indicators. SMART indicators were criticized because of their quantitative and static nature and in response, SPICED indicators were proposed to supplement them which are more qualitative.

Despite discussion and debates, the logframe-based[19] program planning process is widely considered as a good practice in program management (Freer & Lemire 2019, Himmelstein et al 2017, White 2009, Dearden et al 2003). However, rising question is what happens if the development assumptions and the change logics of a program are too weak to remain true in (complex) reality. For risk reduction, the first thing is to know the category of the program so that right competencies and return on investment for the program can be maximized even in complex situation. Crawford et al 2006 proposed three categories of programs based on the flexibility in their planning and M&E framework – blueprint programs, learning programs, and emergent programs[20]. Determining the categories of programs are important to choose the appropriate program management approach. The three mostly referred management approaches to development programs are predictive, adaptive, and hybrid approaches (Gemino & Serrador 2020, Krupa & Hajek 2022). Blueprint programs, for example, follows predictive management approach where monitoring and evaluation are conducted against the pre-defined results in the logframe. Contrarily, learning programs and emergent programs would follow adaptive or hybrid management approach where program strategy and activities are adapted in response to the learning from M&E.
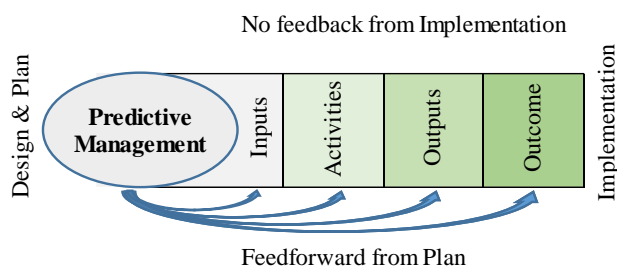
Figure 6: No feedback is expected in predictive management

Comparing the two contrasting management approaches – predictive and adaptive can further reveal the program management process dynammics in NGOs. In predictive management, the intervention (inputs, activities) and results (outputs, outcomes) are planned in advance and the results are pre-defined and predicted. Logframe is the summary matrix of this plan. However, no learning or feedback is expected from M&E and program implementation (Figure 6). Success is measured based on how exactly the logframe and associated plans could be implemented. Any deviation from the original plans is considered as failure of the management.

Under adaptive management, changes in logframe and other management plans are allowed based on the learning during implementation. In practice, this may bring changes in the amounts and nature of the intervention (inputs, activities) and results (outputs, outcome, and impact). Figure 7 shows the planning process of adaptive
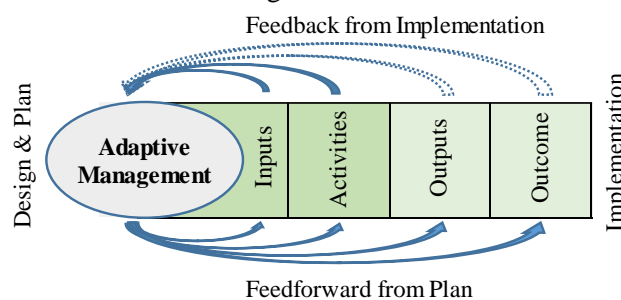
Figure 7: Feedback is required in adaptive management

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[19] Both theory of change and logframe are tools for assumption-based program planning process. The debate over the preference for either the theory of change or the logframe is undermining its significance. Several pieces of literature have argued and demonstrated that they actually serve complementary roles (Freer & Lemire 2019, Prinsen & Nijhof 2015). In practice, they are often used in program proposals together.

[20] *Blueprint* programs have well-defined goals and implementation plans in stable environment with strong assumptions and M&E framework to measure pre-determined indicators of success. *Learning* programs operate in more uncertain and dynamic environment; they are designed to evolve based on ongoing learning from M&E. *Emergent* programs deal with high levels of complexity and uncertainty; M&E emphasizes understanding and documenting the process of change and the factors that influence it.

management where feedback from implementation and its M&E is fed into the process of re-planning the logframe and associated management. Learning from M&E keeps this learning loop continue between implementation and plan. In some cases, even if it allows changes in intervention (inputs, activities) and does not allow changes in results (outputs, outcomes), it may still resonate the principles of adaptive management. More precisely, such a management with mix approaches is called hybrid management.

3.3. Credible Evidence in MELA

3.3.1. Credible evidence in time

Generating credible evidence requires balancing various factors, including appropriate methods, time and resources, and the collaboration of different actors and organizations. Therefore, M&E teams and program team often struggle to determine the scope of their M&E work in relation to the needs and resources of the organization. Gugerty & Dean Karlan (2018) introduced CART principles (credible, actionable, responsible, and transportable) for 'right-fit' monitoring and evidence system that support learning and improvement. To further explain the justifications and use of data collection for credible evidence, they suggest to collect high quality data and analyze them accurately (*credible*), collect data only when the team can commit to use them (*actionable*), ensure benefits of data collection outweigh the costs (*responsible*), and collect data that generate knowledge reusable for other program (*transportable*). The four principles are relevant and useful for program managers and M&E managers to determine the scope of learning and appropriate methods.

The capacity of the M&E team is crucial for both ensuring the credibility of the learning from M&E and making that learning available when needed. Investing with resources and skills development for M&E team is important. Even if an M&E team does not do everything by themselves, they need the skills to outsource the right collaboration and skills relevant for the methodological requirement of the M&E activities. The use of technology in M&E like mobile-based data collection, auto analytics, and linking them with programs and knowledge management system can contribute increasing the visibility and uptake of M&E findings.

3.3.2. M&E methods for learning

Distinguishing M&E methods based on whether it can create learning or not may be misleading[21]. In fact, all M&E methods can create learning about the program in one or other form. Rather, the important question may be, 'What methods to use to learn what learning needs?'. This sub-section discusses how monitoring and evaluation methods on their own and jointly (M&E) can contribute to learning[22].

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[21] Some studies (Pasanen & Barnett 2019, Valters et al 2016) provided examples of methods suitable for learning.

[22] The list of M&E methods here is not exhaustive but includes commonly used methods. It excludes research and M&E works which may be relevant for M&E activities but more for socio-economic and organizational context analysis - political-economy analysis, market analysis, context monitoring, compliance monitoring (also covered by audit), and financial monitoring (also checked during audit, progress and process monitoring).

Monitoring	Evaluation	M&E	
Progress	Impact	Formative Evaluation	Developmental Evaluation
Process	Operation	Process Evaluation	Outcome Mapping
Outcome	Economic	Nimble Evaluation	Outcome Harvesting
			Contribution Analysis

Figure 8: M&E types by methods and purpose

While the classification between monitoring and evaluation is an established practice, considering M&E together as a distinct type is new. Figure 8 delineates the types of 'monitoring', 'evaluation', and 'M&E'. Two characteristics distinguish 'M&E' from monitoring and evaluation – (i) M&E tends to use mix methods and multiple sources of data including monitoring, evaluation, and data on internal and external contexts; (ii) M&E uses both the process and results of a program in their analysis. Table 3 describes each of those types by learning purpose, method preference, and time of their application.

Table 3: Difference among monitoring, evaluation, and M&E

Topics	Monitoring	Evaluation	M&E
Learning purpose	This measures "progress" against the planned results. This creates learning about whether a program is on track and why.	This measures the size or the change of the "results". This has learning potential about causation, context, and components of a program model.	M&E is a process-oriented approach for learning. It mostly explores learning for iteration and results for contribution analysis.
Methods and timeline	It involves more quantitative data collected throughout the implementation. It may also use qualitative data.	This entails a more quantitative approach, typically involving data collection at the beginning, during, and upon completion of the program.	It is often flexible in choosing multi-methods and mixed-methods preferring to qualitative. Timing of its application is sometimes flexible.

Monitoring is to assess progress of program performance in terms of quantity (inputs, activities), quality (process), and results (outputs, outcome) against planned targets, resources, and time. Its practical use is often limited in reporting the progress against plan. However, monitoring data is collected throughout the program's life cycle, making it larger in amount and more frequent than evaluation data. This provides ample opportunity of using monitoring data for programmatic improvement. In fact, using monitoring for learning and improvement is the single most important change most organizations can make (Gugerty & Karlan 2018). The three types of monitoring—progress, process, and outcome—and the learning questions[23] associated with them are explained in the following Table 4:

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[23] The learning questions in the tables primarily represent the main learning questions and the types of learning the associated methods can support. In practice, they should follow any pre-listed questions and can be customized to meet the program's specific learning needs.

Monitoring Types	Learning Questions
Progress monitoring: It assesses the progress on activities, inputs, and outputs. Management information system (MIS) is commonly used to collect the information against the preset numeric targets in the logframe. To get useful insights from the MIS data, it may be analysed in different ways[24]. With an early detection of any deviation from plan, it gives clues for qualitative process monitoring on impending risk topics. It may create assumptions for new learning questions. This helps managers in taking quick corrective measures.	What are the reasons of any deviation in inputs, activities, and outputs against the targets in terms of quantity and time?
Process monitoring: This explores the critical processes of service delivery and thus comments on the quality of the activities, outputs, and even outcomes. Progress monitoring looks at the number of training sessions held when process monitoring focus on the delivery procedures of the training and its effectiveness. Process monitoring is critical for understanding why and how some activities failed or over-performed. This result-focused learning helps the program team by implying immediate iteration of the process and future design adaptation.	If a process was followed or not, what were the reasons of those non-compliance?
Outcome monitoring: Outcome monitoring assesses the progress on the outcome indicators. It is not based on a cause-effect framework. It shows the change from the baseline and the likelihood of reaching its target by the program timeline. The findings from outcome monitoring can be a good source of learning. For example, internal validity within the findings like increasing trend of income without income source improvement can hint areas of learning and action.	What are the reasons of any deviation of outcomes against targets in terms of quantity and time?

Evaluation is to assess the long term results (outcomes, impact) of a development purpose between its before and after status(operation evaluation) or with and without counterfactual (impact evaluation). Evaluation can be of three types: operation, impact, and economic evaluations (Table 5).

Table 5: Evaluation types and learning questions

Evaluation Types	Learning Questions
Operation evaluation: It is also known as performance evaluation. These evaluations compare the results (mainly outcomes) before and after the midway or completion of the program and thus assess the changes of the	Is it feasible to generate the results by the time and resources they were planned?

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[24] Some examples of progress monitoring data analysis include progress vs. plan, inputs vs. outputs, male vs. female, and time series analysis.

M&E Types	Learning Questions
results by time.[25]. Beyond its assessment on result targets, it can provide learning insights about program feasibility, correlation within variables, and costing of the activity units.	
Impact evaluation: Impact evaluation is a systematic process used to assess the changes that can be attributed to a particular program. By creating a counterfactual, it assesses the attributable results (impact) by a program. It can explain the causal relation between result variables (outcomes) and explanatory variables (intervention). From the information of benefits and costs, it is also used for cost-benefit analysis.	Does the program model create attributable results? If any, how?
Economic evaluation: Economic evaluation approach determines whether the benefits of a project outweigh the costs and whether resources are being utilized optimally. Assessment of costing, cost-benefit analysis, and similar cost related analysis provide critical insights for future program roll-out.	What are the cost drivers to improve benefit-cost ratio?

There are M&E methods, which can use multiple sources of data including monitoring and evaluation data to analyse progress, process, causation, and contribution. These process-oriented methods provide a wide range of learning about program and management (Table 6).

Table 6: M&E types and learning questions

M&E Types	Learning Questions
Formative evaluation: It is aimed at shaping and improving the design of a program before its full-scale implementation. Its primary purpose is to identify potential challenges, strengths, and weaknesses during its conceptualization or early implementation. It focuses on design, delivery, and content of the program. Its learning is used to make adjustments and enhancements to the particular component or the overall design of the program.	Are the proposed activities feasible and likely to produce the desired outcomes?
Process evaluation[26]**:** Process evaluation monitors and documents 'how well' the program has been implemented against the initial assumptions and plan. It defines and measures key performance indicators (KPI) for implementation quality and compliance such as reach, effectiveness, adoption, implementation, and maintenance (RE-AIM). It also considers the influence of external factors affecting the intervention delivery.	What are the results in KPI of implementation? If any deviations from plan, what were wrong and what should be the changes in design?

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[25] Outcome monitoring is ideally on limited number of outcome variables and a smaller number of participants. But operation evaluation requires a representative sample size and measures all outcome variables.

[26] Process evaluation is different from process documentation. The latter documents the implementation process for reference. Frontline staff need them for manuals, flowcharts, and job description of the staff. Process documentation documents the 'how' of a process whereas process evaluation assesses the 'how well' a process performs.

Performance reports and recommendations from process evaluation help in making informed decisions to enhance process efficiency and effectiveness.	
Nimble evaluation: Nimble evaluation, also known as agile evaluation is often designed as a means of testing multiple hypotheses about an intervention to distinguish its most effective version. It helps organizations remain agile and informed, allowing them to make evidence-based decisions quickly in the face of uncertainty and change. It uses different methods based on immediate needs or emerging issues.	What strategies are more adaptive and effective for the most effective version of the program?
Developmental evaluation: This approach is specifically suited for complex and innovative initiatives, particularly those focused on social change or system change. Unlike traditional evaluation methods that focus on assessing the success or failure of a program based on predefined criteria, it emphasizes real-time learning, adaptation, and continuous improvement. Continuous engagement of evaluation team with program team is important to co-design the intervention, its M&E plan, and iterate based on the learning from M&E reports.	How can the success or failure factors be better managed to maximize the results?
Outcome Mapping: It is a planning, monitoring, and evaluation approach that focuses on understanding the changes in behaviours, relationships, and actions of stakeholders involved in a program. It maps out the changes of behaviors (progress markers) of boundary partners (whom program wants to influence) influenced by the program strategy and activities. It is particularly suited for complex and dynamic programs that aim to influence multiple actors within a system and when cause-and-effect relationships are not linear.	What roles of the main stakeholders of the program were influential in system change?
Outcome Harvesting: It is an evaluation approach that involves identifying, documenting, and analysing the outcomes (intended and unintended) of a program retrospectively. It is particularly useful when the outcomes of a complex program are difficult to predict or predefine. It first designs the outcome harvest to gather data on program outcome and contribution. The initial findings are substantiated with external experts to analyse and finalize the report to share with harvest users.	Did the program produce significant outcomes; if any, how?
Contribution analysis: This evaluation approach assesses the causal contribution of a specific program to observed results. It is particularly useful when the evaluation seeks to determine the extent to which the intervention has contributed to the observed changes beyond other external factors or influences. Contribution analysis often employs a logic model (theory of change) to describe the causal pathway. From diverse sources of data, it creates a contribution story of the program.	What were the factors which could be better utilized to increase the size of the causal contribution of the program?

Planning with right learning questions, selecting appropriate M&E methods, and implementing them with appropriate research protocols are crucial for credible evidence. All M&E methods can create and contribute for learning for program management. Some are suitable for designing new programs (formative evaluation), some are for improving efficiency and effectiveness (process monitoring, nimble evaluation), some are for attributable impact evaluation, and some others are more for complex social issues (developmental evaluation). Process-focused methods such as process monitoring, process evaluation, contribution analysis are more appropriate for exploring 'why and how' learning questions.

3.4. Evidence Uptake in MELA

3.4.1. Collective reflection and collaboration for action

Collective reflection on learning and adaptation is a process of involving the members of a group to share their perspectives, experiences, and insights to collectively understand the challenges and successes of their shared experiences and practices (Blust et al 2021, Rantatalo & Karp 2016). When credible evidence from M&E reports are ready, collective reflection in the form of reflection meeting, learning workshop, validation meeting, feedback session, project post-mortem, sharing in community of practice (COP), or sense making event is considered as a good practice among NGOs. These events or sometimes series of online and in-person reflections help the stakeholders understand the practical meaning of M&E findings and thus promote the use of learning.

The main challenge of such collective reflections is to provide an organizational environment that allows practitioners to learn from each other (Blust et al 2021, McLean & Sen 2019,). This is the organization that needs to facilitate such an environment in which M&E findings, even if on failures or disagreement, can and should be discussed collectively and openly. Allowing enough time and resources for collective reflection on M&E findings is important. Organizational learning culture, a set of shared norms and values, can create such learning environment that empowers and encourages members to share, validate, and learn from each other (Choi 2019, Skerlavaj et al 2007).

Table 7: What to adapt in M&E and program management

Management levels	What to Adapt How	
	Adaptation in M&E	Adaptation in Program
Strategic (Policy)	Changes in overall assumptions and impact (theory of change)	Examples include changes in organizational priority, program design, and program dis/continuation
Tactical (Guideline)	Changes in outputs and immediate outcomes (results)	Examples are adjustments in standard operation procedures, training modules, curriculum, management organogram, and resource re/allocation
Operation (Execution)	Changes in inputs and activities (intervention)	Examples are iteration in quality, quantity, and frequency of intervention

Collective reflection on M&E findings in NGOs may lead to changes in two areas at three levels of management: adaptation in M&E and program management at strategic, tactical, and operation levels[27]. Table 7 shows what and how to adapt in response to evidence from M&E. Changes in M&E plan can

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[27] For three levels of management – strategic, tactical, and operational, see Nechkoska et al 2015 and Skerlavaj et al 2007; for adaptive management at different levels in civil society organizations, see O'Donnell 2016.

originate from changes in logframe and such changes may be in the intervention part (inputs and activities), results part (outputs and immediate outcomes), and/or overall assumptions (theory of change). Each level of change in M&E and logframe can result in changes in program management. For instance, operation level changes in inputs and activity plans would bring changes in program operation in the form of their quality, quantity, and frequency. Similarly, strategic level changes in overall assumptions and impact may require to changes in organizational priority, program design, and decision to its continuation. When many organizations may easily cope with operational adaptation, it may become progressively difficult for M&E and the program teams to timely agree and act on tactical and strategic adaptation.

Collaboration among stakeholders is more critical for utilizing evidence than for generating it. Right collaboration of relevant stakeholders is also important to effectively adapt with the context of the learning process - internal and external. Administratively, the skillset of the M&E team and the mindset of the program team are the two most significant conditions needed for learning and adaptation in NGOs. Organizationally, fostering a learning culture is essential to promote learning incentives, facilitate collective reflection, enhance collaboration between M&E and program teams, and establish a robust knowledge management system that integrates people, processes, and technology.

3.4.2. Knowledge management for learning and adaptation

Availing evidence is sometimes quite straightforward but the politics of getting findings used is more challenging. In fact, credible evidence from M&E is just one of the conditions for high uptake; the uptake of learning from M&E depends on the program context and the organizational learning culture where the program is implemented[28]. Learning uptake requires to facilitate the multiple actors and factors in organization (Patton 2008). Knowledge management (KM) is such an important enabler for organizational learning (McElroy 2000). Sound knowledge management practices are so important that they can significantly enhance technical capacity for uptake, organize incentives for learning, and promote collaboration for learning-focused M&E within organization and beyond. KM is a process where people, process, and technology (PPT) are organized together to promote knowledge acquisition, storage, distribution, and use (Gonzalez & Martins 2017, Goswami & Goswami 2013, Pee & Kankanhalli 2009).

A meta-analysis by Basten and Haamann 2018 followed the PPT categories to divide the most potential organizational learning approach and practices[29]. This paper triangulated similar references and enlisted most common practices to promote learning and knowledge uptake across organizations (Gonzalez & Martins 2017, Vathis 2016, Garfield 2017). Good practices of organizational learning approaches categorised into people, process, and technology are presented below.

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[28] McLean and Sen 2019 studying research uptake of 170 studies found that there is no clear trade-off between the rigor and the utility of research; learning uptake rather depends on multiple contextual factors and actors constituting the environment the research takes place.

[29] Basten and Haamann 2018 shortlisted 45 organizational learning approaches from a long list of 405 publications to finally recommend 18 approaches and grouped them into PPT; majority of them are here.

People:

Dedicated officials for KM: Depending on the size of the organization, dedicated officials responsible for knowledge management at different levels can play important role for promotion and uptake of learning. Such officials at senior level can create a KM infrastructure, builds a knowledge culture, and manages results. As the leader of KM teams, s/he should offer a clear sense of direction and strategy. Knowledge officials under their senior take the role of identifying information needs, understanding appropriate ways of collecting and storing knowledge, and ensuring that the knowledge is reliable and up-to-date.

Dyadic relationships: Liaisons in which a coach or mentor (i.e., more experienced, senior employee) acts as a social supporter or counsellor for a protégé (i.e., less experienced, junior employee) concerning the protégé's personal career development. This provides the opportunities to encourage and incentivise the junior employees for learning and uptake of knowledge at operational and tactical levels.

Events for informal interactions: Events to encourage conversation, open communication, and informal knowledge sharing, where ideas can be discussed across all organizational levels can be some good places to diffuse a learning culture. This may create an environment of collaboration and trust between M&E team and program.

Job rotations: It is an organizational process in which members of an organization change their projects, positions, and areas of responsibility for varying periods to gather experience in different knowledge domains and positions. This can encourage voluntary cooperation and knowledge sharing among different programs including M&E team.

Skills management: This is an approach that aims to catalogue the skills mastered by each individual and make it available organization-wide so that other individuals can identify and contact appropriate experts for specific problems. Profiles can be generated and maintained manually by individuals or by automatically extracting information.

Process:

Communities of practice: Groups of individuals who meet voluntarily — due to common interests and areas of expertise—to exchange experiences, identify or develop best practices, and establish new inter-individual relations. The groups are built on mutual agreement, loosely connected, and self-managed. Learning from each other also promotes uptake.

Post-mortem evaluations: Events after project completion in which project members meet to reflect their positive and negative experiences and compose their lessons learned as post-mortem reports/stories. Data collection typically involves group discussions, semi structured interviews, or focused discussions. Learning from such events can provide important feedback during the replication of the same program.

Research and development (R&D): In case of NGOs, many INGOs along with M&E team have their own research and evaluation unit. This provides them additional convenience of diverse capacity, efficient management of M&E activities, and keeping the learning experiences in-house.

Leaving expert debriefing: There can be a structured arrangement (i.e., interviews or workshops) to capture knowledge of a leaving expert, which is especially helpful in the case of aging or highly specialized workforces. This is important especially to collate tacit knowledge from experienced staff.

Project briefings: Need basis structured or unstructured workshops are useful to transfer project-related (technical) knowledge, such as evolving issues, requirements, and the attainment of project members in newly started projects. Briefing research plan or learning agenda may improve research compliance by program officials.

Technology:

Knowledge repositories: Many organizations have digital knowledge storages for the long-term storage of experiences, documents, reusable code, etc., which are easily accessible with reusable content. Whereas some types of knowledge repositories serve only as storage systems, wikis, for example, additionally support employee collaboration and conversation. Organizations may use a knowledge portal which typically integrates different repositories and supports KM processes.

Online communication and dissemination: All INGOs and many national NGOs have their website. Websites are the Facebook of the organizations. Evaluation reports and research briefs in the website are effective ways of knowledge dissemination. Such availability of knowledge by internal and external viewers promotes learning, sharing, and uptake of knowledge.

Virtual worlds: Characterized as any computer-generated physical space, represented graphically, virtual worlds can be experienced by many people at once. They are electronic environments in which individuals interact in a realistic manner in the form of avatars.

Conclusion

The paper proposed a conceptual framework of M&E for learning and adaptation (MELA) which is grounded in organizational theories and evidence from existing good practices. The framework follows organizational learning as explanatory background and encompasses three inter-related sub-constructs: plan for learning from M&E, generating credible evidence, and evidence uptake. All the three sub-constructs need to be mutually supportive for continuously intuiting, interpreting, integrating, and institutionalizing the learning at the individual, group, and organizational levels.

There are growing number of funders and organizations which are acknowledging and acting on learning-focused M&E like MELA for development effectiveness[30]. This framework should contribute to those practices and literature of M&E linked with organizational learning in NGOs.

Institutionalizing the MELA in an NGO is more of an organizational challenge than a technical one. Therefore, organizational readiness for MELA is crucial. MELA is a learning-focused M&E system, where learning and adaptation are considered as key management strategy of the organization. It requires an alignment of organizational strategies, procedures, and technologies with the needs of learning-focused M&E and adaptive management. An organization might have a learning strategy and a capable M&E team, but it is the organizational learning culture that can sustain the effectiveness of the MELA. An organization with organizational learning culture is a learning organization.

The organization-level learning strategy and the program-level learning agenda can serve as entry points for intentional learning. A learning strategy can clarify the functional definition of learning and roles of M&E. Within the MELA framework, learning is defined as acquiring knowledge about why and how development purposes and assumptions succeed or fail. Furthermore, the plan for learning, such as a learning agenda, should be an integral part of program design, planning processes, and the M&E framework. This coordinated approach to learning throughout program design, planning, implementation, and evaluation is central to adaptive management in NGOs.

Availing credible evidence in real time hinges on both the reliability of the evidence itself and its timely availability. The capacity of ensuring a credible M&E process, resource efficiency, commitment of using the findings, and the findings to be transportable to other contexts are some essential principles to decide the methodology of M&E. While all M&E methods can contribute to program learning in one or other form, their selection process should consider the methodological relevance and particular programmatic contexts.

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[30] Monitoring, evaluation, research, learning, and adapting (MEARLA), a framework for evidence-based program improvement tested in more than 20 countries (Stelmach et al 2021); Strategy testing, a highly interactive monitoring system at Asia Foundation (Ladner 2015); Accountability, learning and planning system (ALPS), a framework for accountability and learning by Actionaid International (2006); Learning through evaluation with accountability and planning (LEAP), a learning framework by World Vision International (2007); and Global performance framework, a global outcome indicators tracking by Oxfam GB (Hutchings 2014) are some examples of initiatives where organizations deliberately plan for learning, create evidence, and facilitate to use those evidence for programmatic and organizational adaptation.

Ensuring that the evidence is used by the program, organization itself, and other organization is not straightforward. Different levels of adaptations—operational, tactical, and strategic—require different types of evidence from M&E. Although many M&E systems can cope with operational adaptation, it may become progressively difficult for M&E and the program teams to agree and act on tactical and strategic adaptation without strong organizational support. A sound knowledge management system involving a combination of people, process, and technology can be a critical organizational enabler for translating evidence into action.

In the coming decades, management approaches like complexity-aware management (Bajwa & Kitchlew 2019), result-based management, and adaptive management will continue searching for better balance between accountability for results and learning for results. Success of such management approaches and associated M&E methods will largely depend on the level of their 'learning for results' roles without compromising the 'accountability for results' roles. Sustainability and complexity dynamics of development management will significantly influence this process of evolution.

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