

# Till Time (and Poor Planning) Do Us Part: Programs as Dynamic Systems—Incorporating Planning of Sustainability into Theories of Change

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**Abstract:** *This article describes the need for, and challenge of, representing the sustainability of a program as a dynamic process. Part of what enhances the complexity of programs is the challenge of dynamic complexity—the complexity of the program evolves over time through the interaction of actors and their environment. This paper describes the need for, and challenge of, representing the sustainability of a program as a dynamic process. The problem is not just one of representation but also of planning—specifically planning for sustainability. We argue that an essential part of any accountability regime is planning for sustainability. Using the concept of programs as dynamic process, we argue that planning for sustainability needs to be a critical aspect of the impact chains of all theories of change. Both the representation and testing aspects of such a formulation are discussed.*

**Keywords:** *dynamic change, evaluative thinking, planning, sustainability, theory of change*

**Résumé :** *Cet article décrit la nécessité de et le défi de représenter la durabilité d'un programme en tant que processus dynamique. La dynamique de la complexité- le fait que le programme évolue dans le temps à cause de l'interaction entre les acteurs et avec leur environnement- explique la complexité croissante des programmes. Cet article décrit les défis et le besoin de représenter la durabilité d'un programme comme un processus dynamique. Le problème n'en est pas seulement un de représentation, mais aussi de planification, particulièrement la planification dans une optique de durabilité. Tout système imputable se doit de planifier la durabilité. En nous appuyant sur une conception dynamique des programmes, nous soutenons que la planification à des fins de durabilité doit être un aspect important des chaînes d'effets pour toutes les théories du changement. Nous abordons à la fois la question de la représentation de cette proposition et la question de sa mise à l'épreuve.*

**Mots clés :** *changement dynamique, pensée évaluative, planification, durabilité, théorie du changement*

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Interventions are “complex systems thrust amidst an existing complex system” (Pawson, 2006, p. 106; Pawson, Greenhalgh, Harvey, & Walshe, 2004). The focus of evaluation is frequently on immediate impacts, and whether such impacts are sustained after the intervention’s funding has ended is often not formally explored (Cekan, 2016). For example, researchers at Valuing Voices reported that according to the Organisation for Economic Co-operation and Development (OECD), \$5 trillion has been spent by governments on development aid since 1945, and \$137 billion spent in 2014 alone, yet in reviewing approximately 4,000 documents from databases of major donors and major multilateral banks, the Valuing Voices researchers found only 370 publicly available ex-post or post-completion evaluations out of a total of 950 evaluations that were said to have been conducted after the projects ended (presumably to determine what remained or what was sustained), and nearly 600 were desk studies (Cekan, 2017). However, the challenge does not simply rest on developing empirical evidence of the connection between the intervention and its context in producing sustained impacts. A theoretical imagination is often missing in conceptualizing the planning for sustainability as part of the impact chain.

Sustainability can be thought of in three ways: sustaining components of the intervention, sustaining impacts after the program ends, and mainstreaming or incorporating active ingredients of the intervention into other programs. We also subscribe to the following definition of sustainability by Scheirer and Dearing (2011, p. 2060):

the continued use of program components and activities for the continued achievement of desirable program and population outcomes. Other terms that have been used by previous researchers in this domain include continuation, confirmation, maintenance, durability, continuance, and institutionalization. There are some nuanced differences among these terms, but they all usually refer to the continued use of program components and activities beyond their initial funding period and sometimes to continuation of desired intended outcomes; this is what we mean by sustainability. Generally speaking, the likelihood of sustainability is heightened when there is an alignment, compatibility, or convergence of (1) problem recognition in the external organizational environment or community, (2) the program in question, and (3) internal organizational objectives and capacities.

Our main interest in the above definition is focussed on the “continuation of desired intended outcomes.” We explore the role that planning for sustainability can play in sustaining impacts and argue for the inclusion of sustainability considerations in theories of change (ToCs), both for program planning and for evaluative purposes in assessing programs.

Shediach-Rizkallah and Bone (1998) argue for the importance of moving from a passive to an active approach to sustainability: sustainability is not an accident but requires active planning. In their words, “[u]nderstanding the conditions under which programs are most likely to continue is required to move from a ‘latent’ or passive approach to sustainability towards active attempts to modify

conditions to maximize the potential for long-term sustainability” (p. 98). They further identify that the factors that influence planning for sustainability include project-design and implementation factors, organizational factors, and factors in the community environment.

In this paper we use a case example of a poverty-reduction project and examine the intervention against the framework of the COM-B (Capabilities, Opportunities, Motivation, and Behaviour) Based Theory of Change model developed by John [Mayne \(2017\)](#). The COM-B model is a further iteration of [Mayne’s \(2015\)](#) useful theories of change paper, which has been well received in the evaluation community.

Compounding the above-mentioned challenge in complex problems like poverty reduction or improving maternal health in resource-constrained environments is the fact that the “impact journey” typically encountered by a client rarely takes the form of a linear trajectory. For example, consider the case of a poor client living in a disadvantaged community, with very few job opportunities, trying to set up a viable business with the assistance of a community development agency. From the client’s perspective, the impact journey rarely corresponds to just a series of training workshops in building their knowledge and skills that will lead to their setting up a business and earning an income. The metaphor we find useful is that the typical journey is one of a “rugged landscape” in which there are multiple hills to climb and descend. The process by which an intervention can change clients’ capabilities, influence their motivation, and provide them with multiple opportunities to set up and then run a business can be circuitous and heterogeneous—in other words, different clients might have very different journeys ([Sridharan, Jones, Caudill, & Nakaima, 2016](#)). The evaluator’s challenge in exploring this impact journey is further compounded by the fact that impacts might occur well after the time frame of the evaluation ([Sridharan, Campbell, & Zinzow, 2006](#)).

Interventions need to be planned with an understanding of the temporalities involved in affecting capacities, motivations, and opportunities for the difficult impact journeys ([Mayne, 2017](#); [Michie, 2015](#)). Despite the short length of some interventions, they need to incorporate some planning for sustainability ([Sridharan, Go, Zinzow, Gray, & Gutierrez Barrett, 2007](#)) that integrates knowledge of the timeline of the impact journeys and the heterogeneous nature of the impact journeys of different clients. Providing support at different stages of the impact journey, which involves “multiple hills” that need to be traversed, is part of the successful implementation of complex interventions.

This paper focuses on how thinking about theories of change can help with facilitating such complex impact journeys. We focus on planning for sustainability as an explicit part of how interventions can affect individuals over time. The paper has important implications for programs that seek to take a person-centered lens (see, e.g., the [American Geriatrics Society Expert Panel on Person-Centered Care, 2016](#)) in program planning. A person-centered lens recognizes that different individuals have different needs, preferences, and values, and that programs

need to incorporate knowledge of such heterogeneities into their planning and implementation. Our focus is on the need to incorporate planning for sustainability (Sridharan et al., 2007) as part of theories of change.

These ideas are important, given the push toward evidence-based programming. In this context, there is an implicit assumption with the commissioning of most evaluations that the evaluation findings will help in deciding whether or not to sustain a program. The implicit causal chain of programming decision making and the role that evaluations play is often as follows:

***Plan intervention → Implement → Evaluate → Decide whether to sustain the program***

In our experience, the above sequence rarely corresponds to how programming decisions are made. Decisions about sustainability often need to be made well before the evaluation provides evidence of impacts—this is because, as noted above, realistic timelines of impacts are often not considered in planning evaluations (Cook, 2000) and because decision-making cycles by policymakers may not be aligned with the timing of evaluation results (Leviton & Hughes, 1981). Hence, planning for sustainability needs to happen much earlier, and we argue that planning for sustainability should be an integral part of what we consider to be a useful theory of change. This is important because incorporating planning for sustainability can change the nature of the program itself (Sridharan & Gillespie, 2004).

We believe that these arguments may have far-reaching consequences. The arguments in this paper are important because most guidance on theories of change (Chen, 2015; Funnell & Rogers, 2011; Mayne 2015, 2017; Morra Imas & Rist, 2009; Patton, 2008; Rossi, Lipsey, & Freeman, 2004) ignores planning for sustainability as a construct that needs to be incorporated into the theory of change itself. As stated above, there is a need to move beyond demonstrating immediate impacts towards a greater focus on sustained impacts (Cekan, 2016).

The title of our paper, “Till Time (and Poor Planning) Do Us Part,” is driven by our experience in multiple evaluations focused on reducing poverty and interventions focused on enhancing health equities. In our experience, programs often come to a sudden halt as funding dies out without attention to providing a continuity of care to clients or implementing strategies to better ensure that the outcomes achieved during the intervention can be maintained after the program ends. We think that theory-driven evaluation, with its potential focus on theorizing clients’ impact journeys, can help mitigate this problem by more explicitly recognizing that individuals have very heterogeneous landscapes underpinning such impact journeys and that periods of success and failure are typically part of participants’ impact journeys. Our theories of change therefore need to be driven by knowledge of such heterogeneous impact journeys and what context of supports, capacities, opportunities, and motivational incentives clients might need after the program ends. This is not to suggest that a program is fully responsible for what happens after it ends, but

rather than planners and policymakers envision what needs to be in place (perhaps at the system level) to at least maintain the gains achieved and then to plan and take steps toward, for example, partnerships with other agencies that have the capacity to carry on, or equipping participants with needed capabilities and resources to carry on themselves. We argue that planning for sustainability is one useful device in addressing such challenges.

This paper is organized as follows. We first demonstrate our ideas through an economic empowerment program aimed at reducing poverty for women in an immigrant community in Canada. We demonstrate how a linear, somewhat mechanical view of the change process can be contrasted with a view that explicitly incorporates planning for sustainability, arguing that the economic empowerment program would have been very different if planning for sustainability had been taken more seriously at the initial planning and implementation stages. We end by discussing the implications of what planning for sustainability would mean for the practice of theory-driven evaluation and how, as a field, we can be more focused on sustainable impacts by incorporating issues of sustainability into theories of change.

## **CASE STUDY: AN EXAMPLE OF AN ECONOMIC EMPOWERMENT PROGRAM**

We use the case example of a women's economic empowerment and entrepreneurial program in a neighbourhood with a predominantly immigrant population in a large Canadian city to demonstrate both the importance of planning for sustainability and how the program could have benefitted from a more serious application of the COM-B model. The strength of the COM-B model is that it gets program planners and implementers to reflect on how the program will affect participants' behavior change through addressing capabilities, opportunities, and motivation of individuals. One shortcoming of the COM-B model as it currently is represented in the literature (Mayne, 2017) is that as a tool for planners and implementers of programs or for use in analysis by evaluators, it does not explicitly lead the user of the tool to consider notions of sustained impacts, or long-term and dynamic notions of capabilities, opportunities, and motivation. For example, what can a program do now that may influence a participant's motivation after contact with the program has ended?

The case example is a place-based intervention that was developed to help lift residents out of low-income ranges by providing appropriate supports to assist them in generating more income through home-based businesses. The implementing community organization was aware of informal networks in the community composed of women supporting each other with provisions of child care, food preparation, and selling clothing and jewellery to one another from their homes. The main idea of the intervention was to leverage these skills and build other entrepreneurial skills needed by individual women, and also to help facilitate their access to business financing and markets outside of the neighbourhood.

The program supports included one-on-one counseling; training workshops on topics such as a business planning, financing and loans, and social media, and a food handler's course delivered by a public-health unit; a resource "library" for borrowing sewing machines, chaffing dishes, and large cooking pots; referrals to other services as needed, such as language classes; facilitation of group meetings to encourage cooperative or collective business arrangements between women with complementary skills, such as fashion designers with seamstresses; communications sent out to participants about upcoming community markets, opportunities to showcase one's business, and so on; and coordination of business-related field trips. The program was run by a director, a case manager who delivered all of the client counseling, and two part-time community animators.

The neighborhood is a multicultural community where 70% of the residents are immigrants—some are recent immigrants, but the majority have lived in Canada for 8 to 20 years. In a reflection of the difficulty for immigrants to enter the job market in Canada, the neighborhood has a high unemployment rate (more than 1.5 times higher than the average for the city as a whole) and a substantial low-income population (twice as high as the average for the city as a whole). Most of the women participating in the economic empowerment program were well educated (holding university degrees), had substantial work experience in their former countries, and spoke English. At baseline, a clear majority of participants rated their competence in various business-related skills and leadership as average to very high. Many of the women had left employment to care for their young children at home; but many more than expected either did not have children or had children who were grown adults (therefore, the need for child care was not a barrier to employment).

One view of the entrepreneurial program is depicted below (see [Figure 1](#)) using the COM-B (Capabilities, Opportunities and Motivation, Behaviour) model, which "postulates that behaviour (B) occurs as the result of interaction between three necessary conditions, capabilities (C), opportunities (O), and motivation (M)" ([Mayne, 2017](#)):

Capability is defined as the individual's psychological and physical capacity to engage in the activity concerned. It includes having the necessary knowledge and skills. Motivation is defined as all those brain processes that energize and direct behaviour, not just goals and conscious decision-making. It includes habitual processes, emotional responding, as well as analytical decision-making. Opportunity is defined as all the factors that lie outside the individual that make the behaviour possible or prompt it. ([Michie, Van Stralen, & West, 2011](#), p. 4).

[Mayne \(2015\)](#) states that the research suggests that the causal package for behaviour change needs to include each of the components: knowledge, skills, aspirations, attitudes, and opportunities. One of the strengths of the COM-B model is its recognition that for a program to affect behaviour and benefit the participant, it requires an attention to multiple types of capacities, including paying attention to the individual's capabilities, opportunities, and motivation.

If not for the COM-B model, the evaluation team likely would have focused on the delivery of the services and the results for participants in terms of changes in their knowledge, skills, attitudes, and behaviour; the focus on opportunities might have been missed. Many of the well-accepted theories in the health-promotion and behaviour-change fields—for example, the Health Belief model (Becker, Maiman, Kirscht, Haefner, & Drachman, 1977; Rosenstock, 1974), the Transtheoretical model (Prochaska, DiClemente, & Norcross, 1992; Prochaska & Velicer, 1997)—do not explicitly focus on the idea of “opportunities” (although the literature often identifies a lack of opportunities under the construct of “barriers to access”—for example, see Daly, Sindone, Thompson, Hancock, Change, & Davidson, 2002; Walker, Keane, & Burke, 2010). A key challenge often cited in the health-promotion and behaviour-change literature is long-term maintenance of behaviour change (Kwasnicka, Dombrowski, White, & Sniehotta, 2016; Middleton, Anton, & Perri, 2013)—long-term maintenance is a sustainability issue.

There has, for example, been a lot of research done on cardiac rehabilitation (Sridharan et al., 2008); the participants are highly motivated after the scare of death from a heart attack. The literature is rife with studies of exercise programs that show good results after 12-week programs; however, after these programs end, follow-up studies show that very few participants have maintained their practice of exercise (Daly et al., 2002). Some reasons provided have to do with opportunities—for example, there are no appropriate gyms, or safe walking paths, or convenient transportation near their homes. Some initiatives have been undertaken to address these barriers that limit the opportunities for individuals to exercise—for example, cardiac rehab program staff at hospitals train neighbourhood gym staff in how to safely and appropriately accommodate elderly clients who may have experienced a heart attack (Sridharan et al., 2008). What we learn from the cardiac rehab literature is that while individuals may be highly motivated and their capabilities enhanced (e.g., through exercise training), if there is a lack of opportunities, the sustainability of behaviour changes will be unlikely. Consequently, individual benefits and well-being will not be affected, despite successful accomplishment of all the previous steps along the theory of change.

The COM-B representation is useful in thinking about the economic empowerment program described in this paper. In discussion with the program director we were able to highlight early on that participants would need opportunities both to showcase their products and services and to access markets outside of their neighbourhood (see Figure 1). Although the program was very successful in its reach efforts, successful in initially counseling participants to help them find their focus, direction, and setting of action steps, it failed in creating opportunities to reach the marketplace. This was partially because the program budget was too limited to hire a staff member with the expertise to facilitate access to markets, but it was also due to lack of sufficient planning for sustainability. The extent of the planning for sustainability consisted of the organization looking to apply for additional funding (with unsuccessful results)

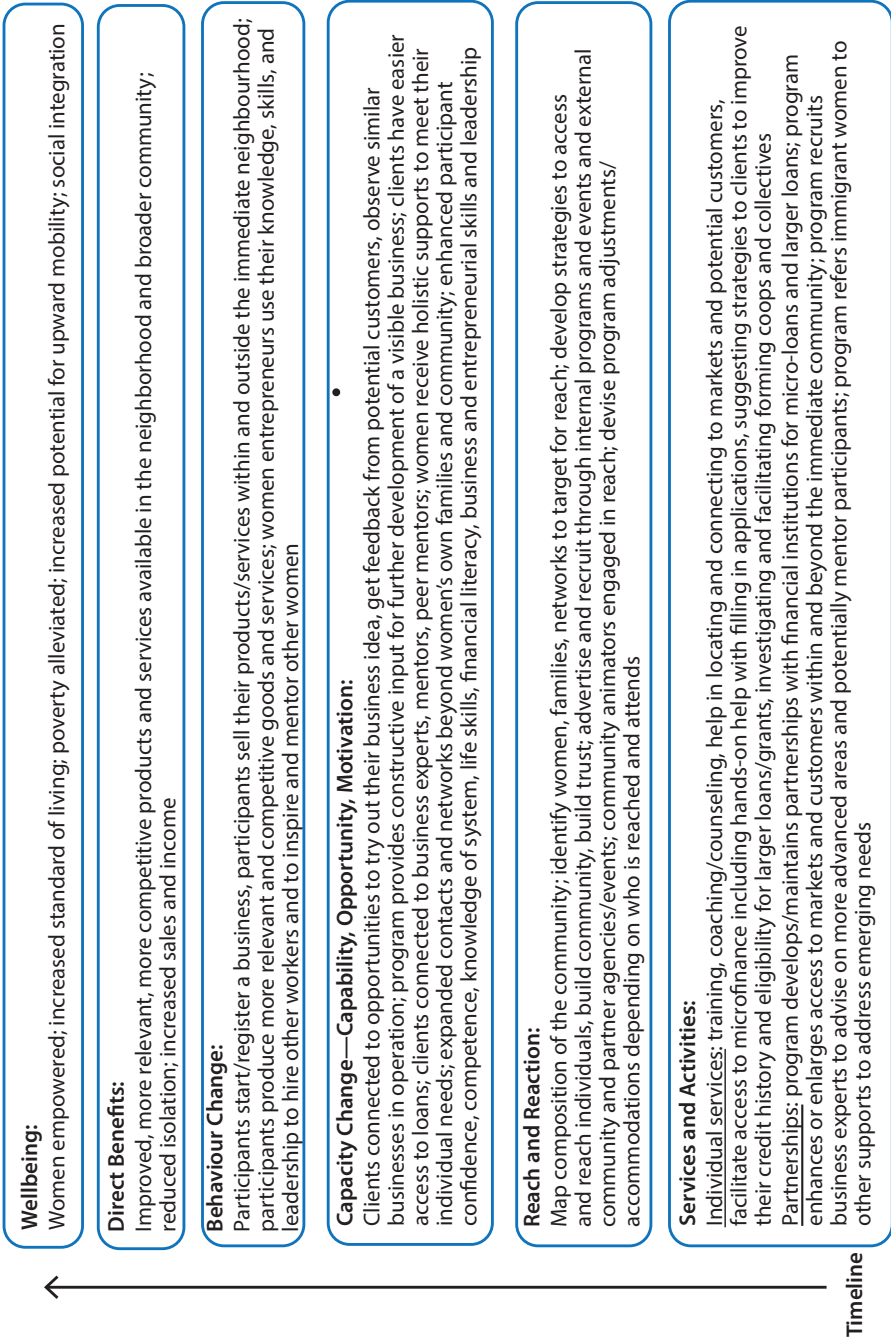


Figure 1: The COM-B model for women's economic empowerment



to keep the program staff employed (not to say that's not important). Some ad hoc attempts were made to increase connections outside of the community—for example, when municipal representatives visited the community organization, the food catering entrepreneurs were invited to cater the event. However, such attempts at providing opportunities for the women were not executed with the same strategic vigor that was paid to reach and counseling activities. The plan was to sustain the one-to-one counseling and training workshops—i.e., more of the same—but little thought was given to facilitating opportunities so that participants could make progress in their business development beyond needing the organization for more support. At the end of the program, clients were thankful for the support they received and had very good things to say about the program staff, and some reported that their knowledge and skills had increased, but no one had appreciably increased their sales, income, or standard of living through the entrepreneurial efforts (a few individuals found jobs during the course of the intervention and reported increased income).

### ***Some challenges of implementing the economic empowerment program***

Most of the key challenges in the implementation of the program related to a lack of planning for sustainability—by this we mean an absence of an explicit process of thinking about the dynamic nature of supports needed for clients through their impact journeys, despite the good intentions of the organization and the program staff and their commitment to improving the lives of clients. Key lessons for us from this case study included the following:

- (a) *Change is not a mechanical process:* We think that the problem of enhancing capacities, whether it is individual capabilities, motivation, or opportunities, requires very careful thought about the level of support involved. It is not clear that a set of trainings would suffice to build an individual's capability to develop a business. It might require more sustained efforts in which the set of workshops is supplemented with a number of other dynamic supports to build the client's capabilities (including supports that might be needed after the end of the program funding), locate opportunities, and sustain the client's motivation. Similarly, as any job seeker knows, developing linkages to employers or markets is a dynamic problem that requires a sustained strategy. In a similar sense, there is also a need to understand what it takes to change an individual's motivation. Our key point is that a set of dynamic supports is needed to help facilitate the impact journey. Thinking about sustainability should occur not only at the organizational level but also at the client level: the theory of change is one instrument to promote such thinking.

Further, there was little discussion within the program leadership regarding which of the mechanisms related to building capabilities and motivations and enhancing opportunities would directly benefit

specific clients. There was a mechanical view that training could enhance the skill sets of developing a business plan without paying attention to the inspirational, motivational aspects needed to do the work of writing a business plan. The sequencing between the capability, opportunity, and motivational components were not considered or deliberated on. Further, there was little discussion about how the offered supports aligned with the staff's strengths in terms of helping clients to access markets. For example, there was a sewing and design group component of the program in which the facilitator did not have deep knowledge of design businesses (for example, she did not know where the fashion industry was located in the city, or where to purchase wholesale fabric, and suggested that the client search online; and because some of the keenest clients were newcomers, they needed help in locating streets where wholesale outlets were in relation to their neighborhood and information on how to get there). Unfortunately, the evaluation abounds with such examples of simple client needs not being addressed. It was unclear how the opportunities for clients could be enhanced without such knowledge. Given that establishing a new business, making contacts and developing relationships with customers, getting advertising out, product testing, getting a handle on the flow of production, setting up systems, and so on all takes a tremendous amount of time and might take one to two years or longer to establish, having support during the various uphill struggles for clients seems necessary if the organization is serious about clients establishing businesses—not just developing a business plan or developing samples, but actually getting the machinery rolling and income coming in. There is a need to pay attention to the supports that clients would need over time in navigating the above complex processes.

- (b) *Not paying attention to heterogeneities*: There must be an active focus both on the heterogeneous needs of clients and the required capacities of staff to address such a diversity of needs. In the intervention, there was no formal systematic process adopted to understand and respond to the heterogeneity of person-centered needs, or to the contexts and supports required to address those needs.
- (c) *The limited role of relationships*: In our experience, one mechanism of sustaining the impact journey is building the relationships between clients and staff. Person-centered care and impact journeys require a focus on relationships. For example, credit for the successful reach effort can be given to both their reach strategy and the two community animators hired specifically for this task. Reach was ongoing, so the community animators were employed until nearly the end of the funded term. However, as they and the case counselor developed relationships with the participants who engaged more with the program, more thought should have been given to how the organization could retain these staff

members in some capacity. Instead, the community animators were let go with little notice when their contracts were ending. Such abrupt departures had consequences for clients' engagement with the program over time.

- (d) *Not paying sufficient attention to timelines:* The timeline of the intervention was 21 months. The assumption was that this timeframe would suffice in enhancing an individual's capacity to develop a business. When it did occur, discussion of timelines focused on the timeline of activities; there was very limited focus on timelines of impacts or of client trajectories. For example, there was very limited focus on what it would take to enhance capabilities (and consequently very limited discussion on the timelines of impact of capabilities). A discussion around the mechanisms by which project-level funds could serve as a catalyst to build longer-term relationships with the clients did not occur. As noted earlier, the assumption was that just by providing these services and activities there would be an almost mechanical movement toward the benefits.
- (e) *Building and enhancing organizational capacities:* It is also important to pay attention to organizational capacities themselves in order to implement such complex poverty-reduction initiatives. For example, although there was discussion around what staff backgrounds would be needed to increase motivation, build opportunities to markets, and enhance capabilities, the actual execution was only partially realized. The program staff knew that their team lacked expertise in accessing markets, yet they did not bring in an expert consultant. They made funding decisions in favor of more general workshops. The "opportunity costs" of such decisions meant that clients did not have the benefit of expert advice, coaching, or in-person introduction to markets outside of the immediate community.

## THINKING ABOUT SUSTAINABILITY

There are multiple definitions of sustainability in the literature. [Lennox, Maher, and Reed \(2018\)](#) divide the multiple dimensions of sustainability into the following five distinct classes of definitions: continued program activities, continued benefits, capacity building, further adaptation, and recovering costs. [Johnson, Hays, Center, and Daley \(2004\)](#) describe the following ten terms related to sustainability: confirmation, continuation, durability, incorporation, institutionalization, level of use, maintenance, routinization, stabilization, and sustained use.

Rather than delving too deep into the multiple definitions in the literature for each dimension, our interest in sustainability is related to the concept of an impact journey. We think the important question to ask is this: What would it take to maintain and make the journey (in our example from not having employment toward starting a business and earning an income)?

Our focus in this paper is informed by three different dimensions of sustainability aided by how the organization can continue to help clients with their impact journeys. We raise the following three questions related to sustainability:

- Sustainability as mainstreaming—What is being done to ensure that the interventions (in some form) have been sustained over time?
- Planning for sustainability—What specific processes are adopted to plan for sustainability? How does planning for sustainability figure into the theory of change?
- Sustainable impacts (and not just immediate impacts)—Will the intervention have sustainable impacts on clients after the funding has ended?

As described earlier, given the heterogeneous landscapes associated with such a journey, the question becomes: what would it take to sustain supports for a client to make the journey? From a mainstreaming perspective, what can be done to ensure that the supports from a project for which the funding is supposed to end are mainstreamed into the organization to provide post-funding supports? From a planning-for-sustainability perspective, how does the organization plan to mainstream the support structure that was developed to support a specific intervention? From a sustainable-impacts perspective, how does the organization ensure that the impacts are sustainable post-funding?

The causation model that guides the view of sustainability is also important. It is useful to differentiate between a successionist and generative view of causation:

Successionists [*sic*] locate and identify vital causal agents as “variables” or “treatments.” Research seeks to observe the association between such variables by means of surveys or experimental trials. Explanation is a matter of distinguishing between associations that are real or direct.... Generativists, too, begin with measurable patterns and uniformities. It is assumed that these are brought about by the action of some underlying “mechanism.” Mechanisms are not variables or attributes and thus not always directly measurable. They are processes describing the human actions that have led to the uniformity. Because they depend on this choice making capacity of individuals and groups, the emergence of social uniformities is always highly conditional. Causal explanation is thus a matter of producing theories of the mechanisms that explain both the presence and absence of the “uniformity.” (Pawson, 2008, n.p.)

This distinction between the different models of causation is important because we need to move from a preoccupation with the variables that generate sustainability to the mechanisms that are informed by the “choice making capacity of individuals.” A view of mechanisms that pays attention to the resources and reasoning of individuals as they make the impact journey needs to inform our theoretical understandings of sustainability. The question from a generative perspective is this: What kinds of resources (supports, etc.) does a program

provide to help impact the “choice making capacity of individuals” to navigate the long-term impact journey?

The key idea here is that sustaining an impact journey, given limited funding, is not an accidental phenomenon. It requires recognition of the following:

- 1) Planning for sustainability needs to be an explicit part of the consideration of the impact journey.
- 2) An intentional explicit plan for sustainability is needed. Such a plan needs to focus on mechanisms that can help sustain the impact journey.
- 3) There needs to be clarity on how the implemented program connects with the rest of the organizational system; the nature of such connections matters.

In other work, we have focused on planning for sustainability in comprehensive community-initiatives settings (Sridharan et al., 2007). We used eight items to analyze multiple community strategic plans to uncover their plans for sustainability: (i) a plan and timetable for ongoing data collection; (ii) a process to revisit goals in an ongoing manner; (iii) a clear organizational structure to oversee implementation of recommendations; (iv) clear communication mechanisms established between collaborating members; (v) an understanding of staff needs and anticipated turnover; (vi) clear identification of funding sources; (vii) clear establishment of accountability mechanisms; and (viii) proof of interagency collaboration established through a memorandum of understanding.

In light of the concept of an impact journey, the thinking for planning for sustainability needs to be substantially different from the example presented above for comprehensive community initiatives. Key questions that need to guide the thinking in planning for sustainability to make the journey include the following:

- Is there an appreciation of the heterogeneous needs of clients? Are the planned activities able to address such needs?
- Do the program and the organization have the capacities to address the heterogeneous needs of clients?
- What resources are available from the program’s organization to help clients with their impact journeys? Is the funding enough to bring about change? If not, what is the role of the evaluator in helping bring realism to what impacts can be expected?
- What plans are in place to provide supports to the clients after the funding for the program ends? Will partnering organizations be able to provide such supports after the program’s funding runs out?

In our view, such questions need to be answered as the theory of change is developed. A theory of impact that aims to explain the potential impact journeys of clients should be informed by answers to the above questions.

There is a need to move from a theory of impacts to a theory of sustained impacts.

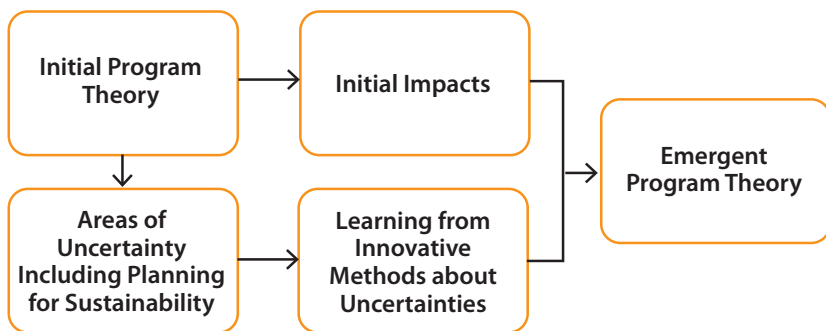
## DISCUSSION

In this paper we have described the importance of planning for sustainability using the concept of an impact journey of clients. Adopting the COM-B approach, and using a case study of economic empowerment of immigrant women, we have argued that the increases in capacities are rarely ever a mechanical process. We have argued that theories of change need to be better guided by the barriers and the metaphors of heterogeneous landscape and multiple hills that are involved in the journey toward achieving outcomes. The above comments are especially true when addressing difficult problems like health inequities, poverty, and maternal and neonatal mortality in resource-constrained contexts.

Another focus we have found missing in descriptions of guidance on developing theories of change is that theories of change in most settings that we have encountered are highly incomplete (Sridharan & Nakaima, 2012; Sridharan et al., 2016). For example, we tend to have only partial knowledge of the timelines of impacts and heterogeneities at the outset of an evaluation (Sridharan et al., 2016). We think that there needs to be an explicit attempt to understand both the heterogeneities and timelines of impact in developing such theories of change. We have argued in prior papers (Sridharan & Nakaima, 2012; Sridharan et al., 2016) that given that initial theories of change usually are incomplete, we need to be more explicit about the initial uncertainties in the theory of change, as illustrated in Figure 2.

This concern about incompleteness is of course related to uncertainties in our understanding of the theory of change at the outset of the intervention. One area where such uncertainties abound is in a plan for mapping how supports needed for heterogeneous impact journeys of clients can be sustained over time. There is a need to be far more explicit about our uncertainties about the theory of change, including knowledge of how best to plan for sustainability. Our view is that the evaluation has a role in making such uncertainties explicit. Figure 3 describes some of the uncertainties that evaluators need to be more explicit about.

Another implication of our thinking is that the implied causal logic in models like the one presented in Figure 1 needs to more comprehensively address the



**Figure 2:** An approach to being explicit about uncertainties in developing a theory of change

### Taking Stock of the Intervention Theory of Change

- Map the uncertainties in the theory of change
- Map the connections between the intervention and the rest of the organizational system
- Explore the heterogeneities of client-level needs
- Explore key barriers that individuals will face in the intended impact journey
- Explore if the program resources are consistent with the resources required to make the impact journey
- Explore the potential timelines of impact
- Explore the dynamic supports needed both during and post-funding stages to assist with capabilities, motivation, and opportunities
- Explore role of boundary partners in enhancing organization capacities and provide dynamic supports over time

**Figure 3:** Areas of initial uncertainties that need to be made explicit in developing the theories of change

relationship between the causal impacts of the program and long-term outcomes as well as the specific mechanisms by which the program can assist clients to achieve such long-term outcomes. One important mechanism by which such outcomes can be achieved is to plan to sustain supports over time, including after the funding for the program has ended. It is possible that some of these supports need to be provided by organizations outside the program.

#### ***Revising the theory of change: Incorporating sustainability***

How would incorporating a planning for sustainability lens alter the theory of change and the implemented program in the case study described above? In our view, there needed to be a more explicit focus on how the project-level funds could be leveraged to expand opportunities in the wider community and build relationships between program staff and clients, and retain key staff in the organization well beyond the life of the project. Key staff members were told with only one week's notice that the project funding for their positions was ending. Other aspects that needed greater attention include the following, which build upon the recommendations in [Figure 3](#):

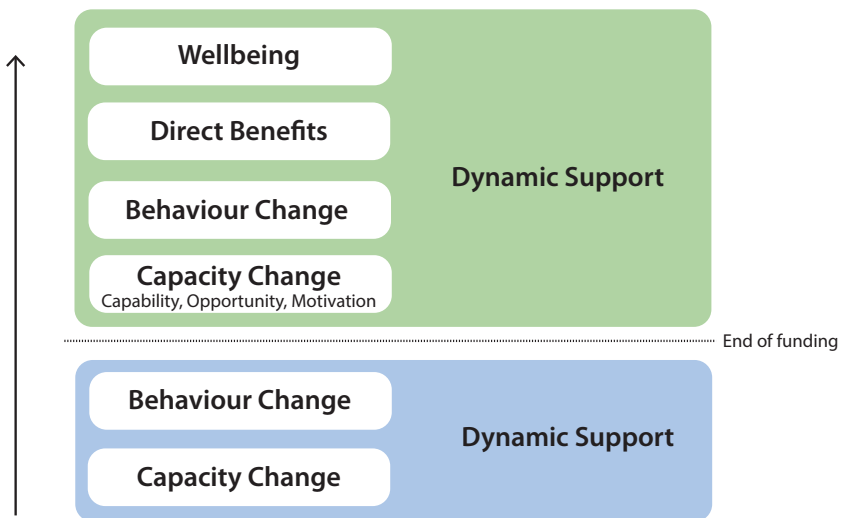
- a) a greater focus on mapping individuals and understanding needs;
- b) more deliberate processes ([Sridharan et al., 2016](#)) to better understand the heterogeneities of impact journeys;
- c) a better understanding of the dynamics of supports needed;
- d) a better understanding of the sequencing needed for the multiple interventions targeting capacity, motivation, and opportunities;

- e) a better upfront understanding of the resources needed to make the impact journey;
- f) a clearer role of partners: one important shortcoming in the causality implied in [Figure 1](#) is that a single organization might not have the capacity to facilitate client access to markets on its own. The theory of change needs to explicitly recognize the importance of building partnerships to enhance opportunities for clients.

[Figure 4](#) describes one illustrative approach to modifying the COM-B model to incorporate a planning for sustainability lens that is explicit about dynamic post-funding supports into the case study described in this paper.

***Rethinking what constitutes a useful theory of change***

If the arguments we have made in this paper are correct, then one of the consequences is the need to re-think what constitutes a useful theory of change ([Mayne, 2015](#)). Our concern is that a number of theories of change that we encounter tend to focus on the activities/services of the program without enough representation of the client’s perspective/journey and without explicitly depicting how long-term outcomes are theorized to be affected. In [Mayne’s \(2015\)](#) paper on useful theories of change, he explains that “[t]heories of change represent how and why it is expected that an intervention will contribute to an intended result” (p. 127). Often the intended result is meant to be ongoing and remain in the long term (for example, healthy eating, or exercise-routine compliance, or income from a business); therefore, in evaluating interventions with such intended results, issues of sustainability have to be taken into account, and as the focus on learning and



**Figure 4:** Incorporating a dynamic support perspective into the theory of change: A conceptual illustrative model



accountability grows in Canada and internationally (see, e.g., UN Sustainable Development Goals [United Nations, n.d.]), accountability agreements will likely include achieving sustainable impacts. Mayne goes on to explain that “[t]he intervention activities can then be said to be a *contributory cause* to the results. In these terms, *a theory of change is a model of the intervention as a contributory cause*; it is a model of the causal package showing just how the contribution to the results are [*sic*] to be brought about” (pp. 127–128). This is not inconsistent with what we argue in this paper for sustainability considerations to be included in developing and assessing theories of change.

We suggest that a useful theory of change should:

- (i) be grounded in the realism of the heterogeneous impact journey of clients;
- (ii) highlight the barriers, challenges, and heterogeneous landscape of the impact journeys;
- (iii) help programs plan for sustainable supports to help clients make the journeys, bring greater reflection on the organizational capacity to support such complex impact journeys, and, if such capacities are found wanting, go through a process of planning that can complement the organizational capacity by bringing in other boundary partners;
- (iv) help understand the sequencing between the different activities and build a better understanding of the resources needed to make the impact journey. While the mechanisms of capacity, capability, motivation and opportunity are useful, they imply multiple different causal processes. For example, it is important to be clear about the skill sets needed for lead staff and frontline staff who are charged with building capacities, enhancing motivations, and strengthening opportunities. Organizations need to be encouraged to sustain the capacities and recognize that the roles played by these actors are very complex and that proper incentives need to be given to keep such individuals around.

## CONCLUSIONS

To summarize, we suggest that taking a planning-for-sustainability lens will encourage a recognition of programs as complex systems thrust into other complex organizations; a sustainability lens will not simply argue for the causal impacts of a specific program but will also demonstrate how a program implemented within specific organizational contexts can serve as a catalyst for a variety of organizational-level interventions and inputs to provide supports for the clients through their impact journeys. A sustainability lens will also pay attention to realistic timelines of impact (Sridharan et al., 2006), rather than seek to establish impacts within a pre-determined bureaucratic frame. A sustainability lens will also be guided by the heterogeneity of needs and capabilities of clients. Different individuals will need different levels of support, and the potential timelines of

impacts might depend both on individual-level capabilities and the capabilities of the organization to provide the needed supports.

The ideas presented in this paper suggest that there also needs to be greater recognition of organizational-level capabilities to actually bring about sustainable change. Programs should not be seen as a mechanical set of activities that can automatically build individual-level capabilities. An organization needs to pay careful attention to the types of capabilities that can help clients make the journey from needs to outcomes.

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