The Building Blocks of programme theory: how to get better at driving behaviour change

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1. INTRODUCTION

This paper introduces a tool designed to help embed more consistent theory into programme theories of change. The process of change is stripped back to its essential elements, or 'Building Blocks' so we can better understand what is actually happening when interventions work and improve our ability to design for success.

The Building Blocks apply in any situation where you are trying to get someone to do something differently. It was designed for application to complex change processes in international development but applies just as well to corporate internal change projects, marketing new products, or just getting yourself off the sofa to go for a run.

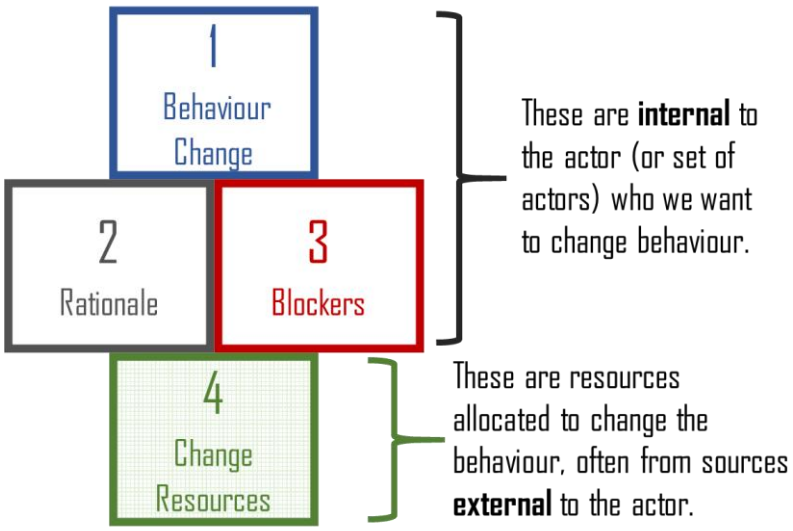
2. BUILDING BLOCKS

The diagram below outlines a basic model of how behaviour change happens. We first have in mind an intended **behaviour change** – something we want someone to do differently. This 'someone' might be an individual, a firm, a government department, an organisation, or even ourselves. Whoever it is, we'll call them an *actor*. This could be a specific individual, several actors, or indeed a whole population. Where there are several they may be grouped as a *set* of actors. Our first question to answer is "*What is the behaviour change we want for what actor?*"

The second question is "*Why would they want to change their behaviour?*" The starting point for any desired behaviour change by a given actor (or set of actors) is to figure out what the **rationale** is for that actor to change their behaviour. This is essentially a cost-benefit analysis, or a 'business case'; if the behaviour change doesn't deliver some net benefit for the actor, it is going to be very difficult to sustain.

If there is a decent rationale for behaviour change, the next step is to ask ourselves: "*Why haven't they changed their behaviour already?*" or to put it another way, "*What is stopping them from changing their behaviour?*" If it's such a good idea – as the rationale hopefully demonstrates – there must be some other factors stopping the actor from changing their behaviour. We'll call these factors **blockers**.[4]

Our final question is *"What is needed to overcome the blockers?"* The fact that the actor hasn't changed their behaviour already suggests that they need something new in order to shift their behaviour. We'll call this something new '**change resources'.** Maybe they need information about the benefits of the change, some technical expertise to help implement the change, or a promise to pay for any losses incurred. Whatever they are, change resources must address the actor's blockers to behaviour change (or else inform them of an improved rationale) or the intervention won't work.



[4] Following Lomax & Shah (2018), which built on work on incentives and capacities by the Springfield Centre (2015).

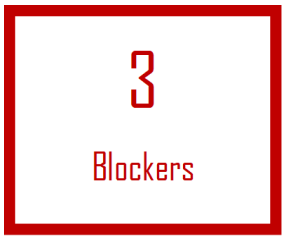
2.1 DETAIL ON WHAT'S IN EACH BLOCK[5]

Behaviour change is an actor *doing something new or different*. This can be a change in *whether* they do something, *what* they do, and what inputs they do it *with*. See What is Behaviour Change (Lomax 2020a) for more information. We are usually interested in an ongoing behaviour change, which needs to be sustainable. However, we can also analyse one-off steps towards that behaviour change if necessary. See The Antidote to Systemic Change Frameworks (Lomax 2020b) for more information.

EXAMPLE BEHAVIOUR CHANGE: Seed importers start importing higher quality seeds.

The **rationale** is the reason why the actor might change their behaviour. It is the actual benefit – of any kind - the actor will receive. But this benefit is in the future, and dependent on the actions of a range of other actors. As such it is inherently uncertain, and we can only estimate what benefits actors will actually receive. Rationale incorporates more than just financial incentives. For example, it may comprise information incentives (e.g. learning), or political and social incentives (e.g. acquiring power or gaining admiration). The risk and timing of these outcomes is included in the calculation.

EXAMPLE RATIONALE: Evidence-based estimate that seed importers can increase net profits on sales by 25% if they import higher-quality seeds.



If there is a good rationale for behaviour change and yet the actor is not changing their behaviour, there must be one or more **blockers**. This might be a straightforward lack of capacity, such as inadequate skills or finance. Or it might be an issue with the information about the rationale, the actor's perception of the rationale, or their preferences with respect to the rationale. For example the actor might not know about the potential benefits of changing their behaviour, or they might be very uncertain that they would actually realise the benefits, or they might be prioritising other interests and so not focused on this behaviour change whatever the benefits might be. See Unpacking Incentives and Capacities (Lomax & Shah 2018) for more information on blockers.

EXAMPLE BLOCKER: Seed importers are uncertain of estimated profit gains.

Change resources may be introduced – deliberately or incidentally – by external actors such as international development agencies or by existing actors within the system. Broadly these change resources are of three types: new input resources (for example, technical information about how to go about changing behaviour), new information about the existing rationale, and new information about a *changed* rationale). The quality and credibility of the change resources is important in order to overcome perception blockers given the uncertainty often inherent in behaviour change.

EXAMPLE CHANGE RESOURCE: New market information from a seed importer's own existing customers on their willingness to pay for higher quality seeds.

[5] These four Building Blocks represent an extension of the Mechanisms of Social Change (MOSC) language for describing systems and systemic change at the actor level (Lomax 2018). MOSC has three main components of a 'static' system state: resources, decisions and actions. The Building Blocks are used to represent system state dynamics, but may also easily be translated into the same three basic components.

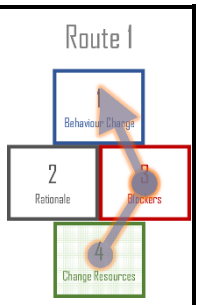
2.2 BUILDING BLOCKS FOR BETTER THEORIES OF CHANGE

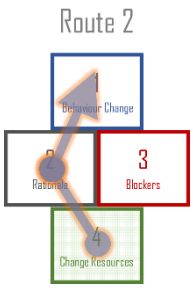
We have numbered the Building Blocks in the order they are used for constructing theory. But the theory is operationalised in the reverse order, predicting how the change resources we introduce will ultimately change behaviour.

So, like theories of change, results chains and log frames, the causal theory in Building Blocks goes from bottom to top. An added benefit with Building Blocks is that generalisable actor-level causal theory is built into the structure to form an easy-to-understand package.

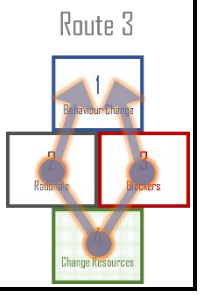
There are three causal routes through the hopscotch grid to behaviour change.

BLOCKERS ROUTE (1): where there are blockers, but rationale is strong. The route to behaviour change requires the actor to access new input resources that address capacity blockers, or new information about the existing rationale that addresses the information, perception or preferences blockers they are facing. Then, as the rationale is already strong, the actor changes behaviour.





RATIONALE ROUTE (2): where there are no blockers, but rationale is weak. The route to behaviour change requires other actors to change their behaviour, or to express an intention to do so, such that this strengthens the rationale for our actor's behaviour change. Two things are needed. Firstly, the increase in expected net benefit needs to be sufficient for them to change behaviour. Secondly, and importantly, the actor needs to access change resources comprising credible new information about this changed rationale. Then, because there are no blockers, this leads directly to behaviour change.



TWIN TRACK ROUTE (3): where there are blockers AND rationale is weak. In this case, the changes described in the two routes above are both needed in order for behaviour to change.

We therefore have four main jobs when seeking to drive behaviour change:

i. Identifying appropriate behaviour change(s) for appropriate actor(s).
ii. Researching and testing the rationale.
iii. Correctly identifying blockers to behaviour change.
iv. Ensuring that the appropriate change resources are produced and disseminated to the actors.

If we are looking to achieve widespread and sustainable change, the last of these jobs particularly will involve some considerable effort. Enough new input resources need to be produced and disseminated on an ongoing basis (i.e. by actors other than those doing short-term interventions), and, where necessary, enough actors need to change behaviour that this shifts the underlying rationale.

This means we're not only looking at one actor's behaviour change, but at multiple interlinked behaviour changes across multiple types of actors, with each actor in the sequence providing change resources to the next actor. Because we then need to stack our sets of Building Blocks, they begin to resemble a hopscotch grid. The next section introduces these 'hopscotch results chains' and a process for using them.

3. HOW TO MAKE A HOPSCOTCH RESULTS CHAIN

For those working in international development, guidance is already available on the basic process needed to design good interventions with scale and sustainability in mind.[6] The process guidance set out here is focused more narrowly on how to use the Building Blocks to construct and then test strong programme theory. The process here complements existing best practice, while supporting a more rigorous structured approach to theory that will help to ensure interventions produce the intended results.

3.1 HOPPING OUT: INVESTIGATING THE ROBUSTNESS OF YOUR PROGRAMME THEORY

Our intervention team starts with the 'target' actor that we want ultimately to change behaviour. For development programmes this is the 'impact' level, and we want these actors particularly to derive some benefit from their behaviour change.

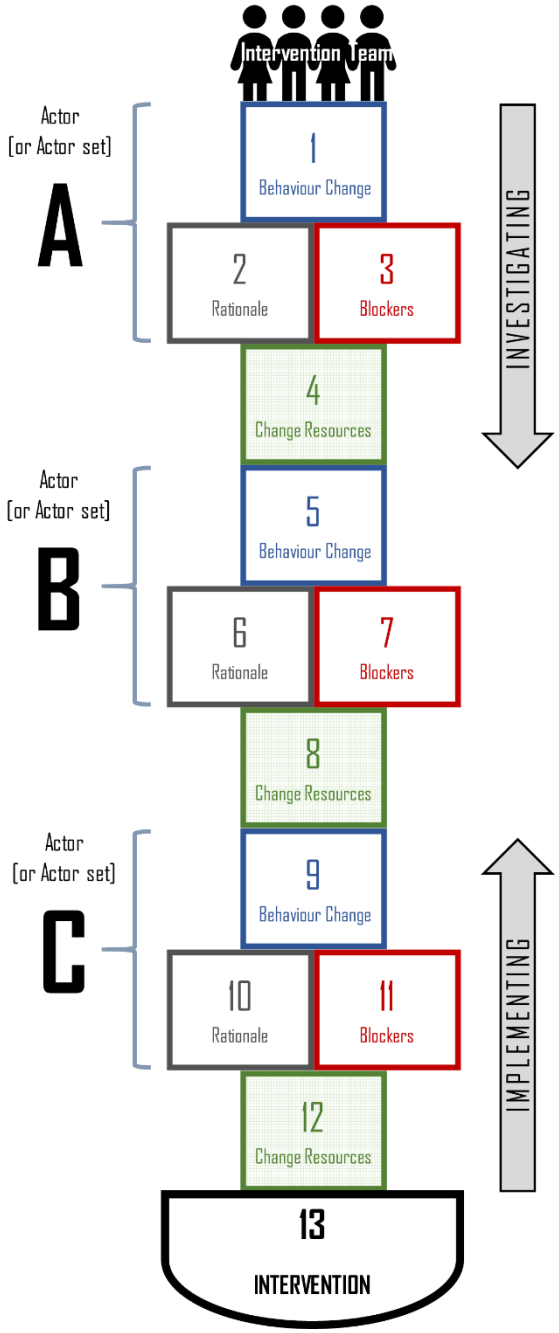
The target group here is Actor Set A. Our intervention team are lined up next to Actor Set A in the diagram, ready to start investigating.

Following the Building Blocks, we'll ask, in sequence, the following questions.

- What is the behaviour change we want for this actor (set)?
- Why would they want to change behaviour?
- What is stopping them from changing their behaviour?
- What is needed to overcome the blockers?

If that's as far as we go, and we provide the change resources identified in Question 4 ourselves, this should effectively change behaviour. But if we want to see sustainable behaviour change at scale we have to go further. Because normally there are a lot of people in the 'target' actor set, and we are unlikely to be able to dole out change resources to each of them on an ongoing basis. In other words, if we provide the change resources ourselves, we probably won't influence very many people's behaviour, and the behaviour change may not last beyond our intervention.

Instead, we'll identify another actor set in the system that is better positioned to provide these change resources to the target group on an ongoing basis. This is Actor Set B. We then need, for Block 5, to articulate precisely:



[6] See for example the *Operational Guide to the Making Markets Work for the Poor Approach* (Springfield 2015), and the *Six practical steps to assess systemic change* (Lomax 2020b).

- What behaviour change by Actor Set B will provide the change resources we need Actor Set A to receive?

Then we repeat Questions 2-4 for Actor Set B, thereby doing our rationale (Block 6) and blockers (Block 7) analysis and identifying requisite change resources for Actor B (Block 8). But there might still be thousands of actors in Actor Set B. Can we reach all of them sustainably? Probably not. So we turn to Actor Set C, who we think can, and figure out for Block 9:

- What behaviour change by Actor Set C will provide the change resources we need Actor Set B to receive?

We again repeat questions 2-4, this time for Actor Set C, doing our analysis for Blocks 10 and 11 and working out the change resources that Actor Set C needs (Block 12). And this is where, in this case, our intervention will happen. Our intervention provides change resources to one or more of the actors in Actor Set C.[7]

By following this process, we hopscotch in investigation mode from top to bottom through the grid. Don't miss a block as we might have in hopscotch as a schoolchild. We're trying to change the world, not messing about in a playground! Skipping steps results in missed opportunities, wasted resources, and failure.

3.2 HOPPING BACK: TEST WHILE YOU'RE IMPLEMENTING

You're now stuck way out in your intervention zone, a long way from the target group where you started. Building good programme theory doesn't stop once you get to the intervention. As you start implementing interventions, there is lots to be learned to strengthen and adapt your programme theory.

While hopping all the way back to the original target group (Actor Set A), make sure you keep testing your theory with evidence through all the steps. Whether you take the Blockers Route or Rationale Route at each step, you'll still need information about every block. So, as you go, keep asking:

- Do the **change resources** introduced for each actor actually address the blockers (or provide information about a changed rationale where required)? Are enough change resources produced and are they transferred effectively?
- Do more **blockers** emerge as behaviour changes? Not only might we have not accurately identified blockers (it's difficult to do this well), but external circumstances might change, and changed behaviours can themselves reveal unanticipated blockers.
- Does the **rationale** stack up? You calculated some hypothetical benefits of behaviour change – did these turn out to be accurate? Has the rationale changed as other actors change their behaviour?
- Did **behaviour change**? Did it change as expected, or in slightly or very different ways?

For simplicity we've described hopping back as a single process following intervention. In reality it is good to hop back and forth rather more frequently in the design phase, testing the theory with each actor as you go through piloting and applied research.

[7] Note there won't always be three sets of actors – this is just an example!

3.3 MULTIPLE HOPSCOTCH GRIDS

The same Building Blocks can be used to represent detailed scale theories, actor-level and system-level feedback loops, and other complex features of system change. Underlying each of these is the possibility that any one behaviour change creates multiple different forms of change resources. A behaviour change may produce change resources to be accessed by any of the following:

- Self [i.e. the actor themselves]
- Buyers [those buying the actor's outputs]
- Suppliers [those providing input resources that the actor needs]
- Peers [other individuals or firms performing the same action as the actor]
- Overseers [e.g. regulators, media, researchers]

In value chain and market systems development programmes, the main results chain often represents the production of change resources that follow the supply chain pathway, so the change resources are produced for the actor's customers or buyers. It is important not to overlook other consequences of change resource production. Any of these additional hopscotch grids can be linked onto the main intervention logic through to the target group.[8] A couple of examples of the composition of these additional hopscotch grids are described below.

To produce a theory of scale we want to know how behaviour change spreads through a peer group. Let's say we want a theory of how change will spread amongst competitors of Actor C. In that case, instead of Actors A, B and C in our hopscotch, we'll have Actors (or Actor sets) C1, C2, C3, and so on, each of whom perform the same action in our system. We might structure these actor sets by their connection to the intervention, or by some characteristics that we think will be related to their adoption of the behaviour change.

Behaviour change may scale through these actor sets through various mechanisms, any of which may be represented using the Building Blocks. Behaviour change by one actor may be observed by their peers, providing information about the possibility of doing it and about how to do it. Seeing the change demonstrated might also yield information about the benefits of behaviour change, which provides peers with more certainty about changing their behaviour. Or, one actor's behaviour change might cause their customers to start buying a new product and lose interest in the old product. Once this information filters through to those selling the old product, this changes their behaviour change rationale. All these different forms of information produced by one actor's actions are change resources for their peers to change their actions.

We can also use the Building Blocks to examine the process of behaviour change in more detail at the actor level. For example, some substantial changes to a firm's business practice may comprise a number of steps. Each interim step can be set out as a sequence of behaviour changes that lead to the ultimate behaviour change of interest. Here we would have a hopscotch labelled to show how one or more behaviour change steps by one actor (or actor set) lead to the production of the change resources required for the ultimate behaviour change we are seeking.

[8] Further guidance will be published by 3sd Research to provide more detail on this process.

4. CONCLUSION

Building Blocks of programme theory can support the design of interventions that are more effective at driving behaviour changes through to impact, and to reaching scale sustainably. Using them doesn't mean throwing out existing logic models – it provides a way to make them stronger. Hopscotch grids can be used to inform and test existing results chains and help to identify any gaps in theory.

What's more, they can support a much more ambitious cross-programme learning agenda than is possible without such a structured approach to programme theory. The more detailed our approach to setting out the rationales, blockers and change resources for each intervention, the more we'll know about what combination of change resources work to produce behaviour change in a context defined by any particular rationale and set of blockers.

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