# Meeting the challenge of adaptive management

OLCA: Outcome Likelihoods and Causal Analysis

October 2020

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# Adaptive management



## Wicked problems need adaptive management. But adaptive management needs exceptional evidence to navigate

Imagine that you're in charge of programme that by its own admission has potentially limited, but hopefully significant, influence over an important outcome. Furthermore, that outcome is only likely to emerge from the complex interplay of multiple factors.

Imagine also that it's not easy to get 'hard' or definitive objective evidence on which to judge progress in that non-linear and complex world.

As a manager leading strategic programmes you may well find this familiar, and so do many others.

The concept of 'adaptive management' has been getting increasing attention. Adaptive management is clearly valuable but needs effective monitoring, evaluation and learning (MEL) to enable iterative programme (re)design and to support structured adaptation.

> "Adaptive management is an approach to programme delivery that seeks to improve desired outcomes and impacts through the systematic, iterative and planned use of emergent knowledge and learning throughout programme implementation."
>
> (Annual Evaluation Report 2019-20, FCDO)

Many existing approaches have a role in adaptive management – such as theory-of-change/logic modelling; Outcome Mapping, Strategy Testing and Developmental Evaluation.  But two defining characteristics of adaptive contexts continue to present challenges for managers:

- Complex causality; and
- Uncertainty

# How it can be

Our vision for adaptive management is to have easy-to-handle tools that combine new evidence and option appraisal.

These tools clearly show decision impacts and prospects of success under change

### Exploration, decisions and double-loop learning

OLCA allows users to simulate and explore options, to test 'what if' questions and to determine the sensitivity of estimates to assumptions in their theory of change. Using OLCA helps unpack beliefs about causality that drive strategic decision-making and promote strategic thinking and learning among users.

### Accommodate subjective and objective data equally well

OLCA can handle both to create systematic evidence in a rigorous way.  Most importantly, OLCA provides managers with a structured tool to 'update' their models 'in-flight' – as new learning arises. In many adaptive management scenarios, it is rare that conclusive 'objective' information is available.  Judgements about progress and prospects are formed by combining multiple pieces of evidence – both objective and subjective.

### Understand changing prospects and communicate your knowledge

Changes frequently occur in the external environment that impact perceived prospects of success.  OLCA is a tool that helps teams clarify exactly what difference the changes make and why, providing insights for corrective or mitigating action focused on areas considered likely to have most effect.  The results can be tracked over time, helping managers engage stakeholders and communicate performance clearly - in spite of the complexity.

# Starting with OLCA

## OLCA has the potential to make a breakthrough contribution to adaptive management in strategic programmes

### Where do we begin?

Developing (or refining) your theory of change (ToC) using participatory processes is the starting point. Then taking the ToC a step further, OLCA creates your causal model in a graphical and interactive form.

In doing so, OLCA unpacks and analyses underlying beliefs about causal influences and assumptions on outcomes. Using probabilistic algorithms and data the model leverages incomplete knowledge (uncertainty).
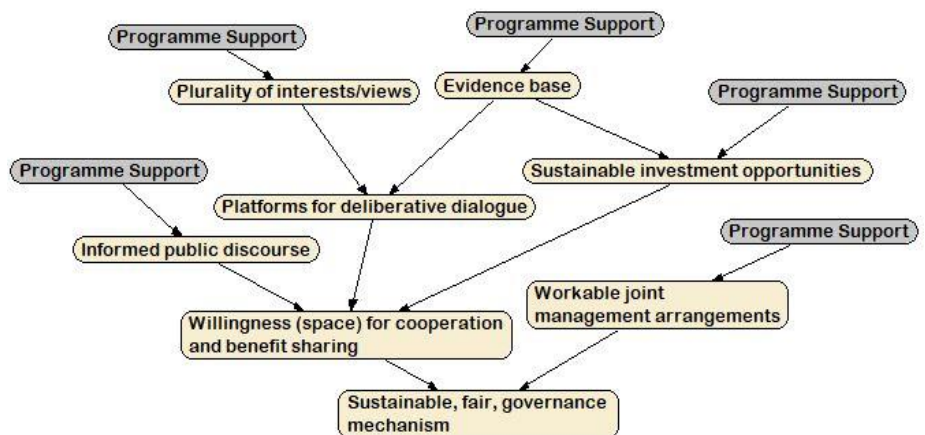


OLCA, being 'theory based', fits well with adaptive management approaches that navigate using an (evolving) theory of change, such as Strategy Testing and Outcome Mapping. It offers a structured and transparent way to evaluate how changes (in the operating context or new information) affect managers' beliefs about the underlying problem and/or confidence in strategies.

## OLCA creates a robust causal model of how change is believed to happen

# Exploring with OLCA

OLCA augments existing adaptive management practices

It capturing beliefs about the strength of influence and levels of uncertainty

## Analysing strategy based on a better understanding about causality

OLCA combines structured mapping with expert beliefs about the causal relationships underpinning a programme strategy. Innovative quantitative approaches and software compiles this evidence – using the Bayes algorithm – to provide insight.

- What's the likelihood that the activity will have the planned effects?

- If an activity does (or doesn't) succeed, how does that affect prospects of other critical steps on the way to the final outcome?

- What are the chances for overall success – achieving the 'last step' – and how are changes in the operating environment affecting them?
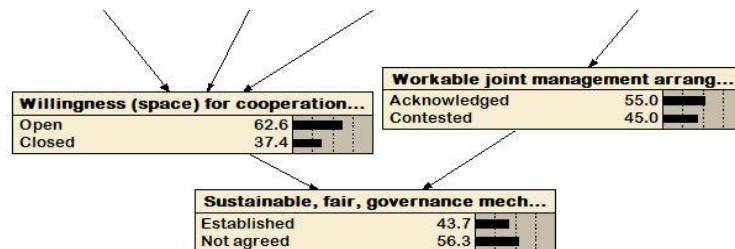


As an interactive tool, OLCA enables mangers to test the sensitivity of their strategy to key assumptions.

- is the programme effort focused where it can achieve the greatest traction?

- What are the implications of if support is ineffective at different points of intervention?

# Navigating with OLCA

OLCA's key advantage is the ability to incorporate in-flight learning in rigorous, informative ways.

## Updating beliefs in the light of new evidence or changes in context

Managers can 'update' the model as they learn and their knowledge becomes more complete. As a result, conclusions become more solid. Strategic implications of new information or shifts in the operating context during implementation can be explored, along with their predicted effect on the prospects for success.

In-flight updating can take different forms:

- Confirming the (previously unknown) status of key events/factors with new evidence
- Revising previous beliefs about the strength of causal influence to reflect learning from experience
- Redesigning the model entirely to reflect a major shift in strategy.

In all three instances, the updating process takes a structured approach to treatment of new information and fosters reflection and learning. In all three, OLCA facilitates assessment of the implications for strategy.

## An indicator to track and communicate improving prospects over time

OLCA also provides revised estimates of the likelihood of success over time. With this, managers have an indicator that they can track over time to highlight evolving prospects and engage stakeholders.