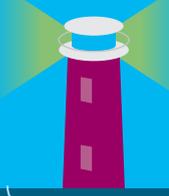# Using Program Theory and Complexity Science to Improve Adaptive Management

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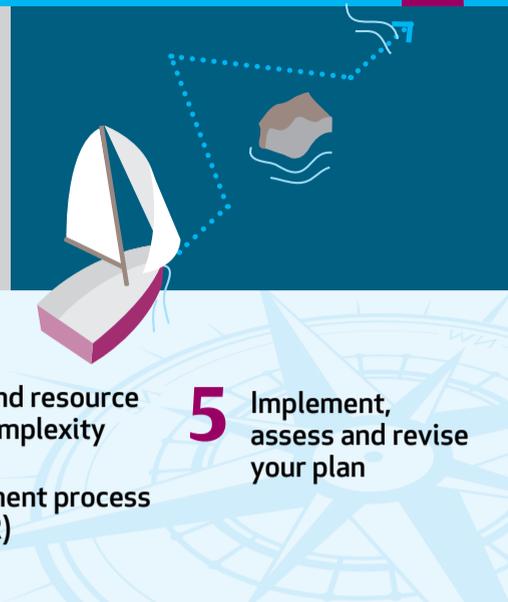
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CHART YOUR COURSE: Adaptive management at a glance:

1 Determine your project's degree of complexity

2 Determine your strategy to respond to that degree of complexity

3 Determine leadership, staffing, and resource needs based on that degree of complexity

4 Establish your adaptive management process to Review, Reflect, Respond (RRR)

5 Implement, assess and revise your plan

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1 How can a program "do" evidence-based adaptive management? **Successful adaptation requires not only an effective monitoring plan that provide timely data, but also a culture of critical reflection, the right resources, supportive leadership, and a whole-of-team approach**, among others.

Effective adaptive management also requires a system tailored to the unique needs of a program's operating context, its objectives, and its implementation strategy.

Pact has conceptualized adaptive management as an iterative process rooted in complexity science and program theory.

2 With program theory, Pact differentiates a program by its underlying **theory of context**, **theory of change**, and **theory of action**:

THEORY OF CONTEXT
A theory for how the system produces the problem the project wishes to address, and the extent to which that system can be understood

THEORY OF CHANGE
A theory for how an improved system would operate if the problem were to be addressed, and the extent to which there are evidenced causal relationships to realize that improved system

THEORY OF ACTION
A theory for what can be done through an intervention to effect that change, and the extent to which there are evidenced approaches that will lead to the desired results

3 Using a simple program theory questionnaire, Pact is able to **categorize a project** as either simple, complicated, complex, or chaotic:

SIMPLE
Simple operating environments and associated problems have highly evidenced theories, so project strategy can rely on **proven best practice**.

COMPLICATED
Complicated operating environments and associated problems have moderately evidenced theories, so project strategy can rely on **good practice**

COMPLEX
Complex operating environments and associated problems do not have well-evidenced theories, so projects have little ability to transfer successes from one context to the next. Projects must rely on **emergent practice** by testing and scaling to ensure theories are correct and relevant.

CHAOTIC
Chaotic operating environments and associated problems have little to no evidence to develop theories of change. Project strategy must rely on **novel practice** and consistently test and adapt approaches.

4 Based on a project's degree of complexity, the project team can **tailor its adaptive management system**. For example, depending on its degree of complexity, a project will differ regarding:

ACTIVITY ADAPTATION
What level of adaptation should you expect for project strategies or activities?

THEORY REVIEW
How often should you review and potentially revise the theory of context, change, or action?

BUDGET FLEXIBILITY AND CONTENT
How flexible does your budget need to be to allow for adaptation? What additional items should you consider including in your budget during project design or modifications?

MONITORING FRAMEWORK
What monitoring framework is the most appropriate for projects with different adaptive management needs?

EVALUATION DESIGN/APPROACH
What evaluation design is the most appropriate for facilitating decision-making and adaptation?

5 With clarification on the kind of system a project needs, a project team can then **build its customized system** based on Pact's "RRR" process:

REVIEW
Rapid assessments, performance monitoring, and in-depth research are all ways in which projects can rigorously collect and analyze data to generate useful evidence about the project context, theory of change, and implementation and operations.

REFLECT
Through management meetings, learning summits, pause and reflect sessions, and scheduled site visits, projects should review and analyze evidence to determine its meaning for the project's progress and how it should proceed.

RESPOND
Use flexible grant or technical assistance mechanisms, strategically add or change approaches, activities, partners or geographies to attain the project's ultimate goal and impact

6 For all of these steps, Pact has an **Adaptive Management Toolkit** with step-by-step guidance:

1. Adaptive Management Intensity Self-Questionnaire
2. Staff Roles and Responsibilities in Adaptive Management
3. Scenario Planning Decision Matrix and Template
4. Context Indicator Guide for Adaptive Management
5. RRR Meeting Agenda Template
6. RRR Slide Deck Template
7. How to Prepare for Learning Review Meetings
8. Decision Tracker for Adaptive Management

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