

PHASE 5: LEARNING YOUR WAY FORWARD At this time in the Wayfinder process you move from assessment and planning into action. This requires an important shift in mindset. The focus is on learning your way forward by building a 'learning-by-doing' approach to implementation, where actions are implemented in a way that allows you to continually test assumptions, fill knowledge gaps and improve your understanding while navigating towards a more sustainable, safe and just future.

PHASE CONTENT

Module A: Preparing for learning-by-doing implementation

Module B: Developing a framework for learning, monitoring and evaluation

Module C: Designing implementation

Evaluation, reflection and sense making

INTRODUCTION

The Wayfinder process now becomes about real-world application and testing your Change Narrative by implementing your Action Plan. Establishing a strong learning culture around implementation and management, one that questions, tests and refines knowledge and assumptions, provides the best foundation for dealing with the complex and dynamic social-ecological systems in a rapidly changing world.

This phase is where many change processes falter. For a whole variety of reasons, the Action Plan developed may not create the change you had anticipated. You might not have had a good enough understanding of the system dynamics, or the actions that you designed were maybe not as effective as you thought in influencing system dynamics given that the climate also is changing, or your strategies might be difficult to implement is the political situation has changed. To still make progress, it is critical that you have an adaptive approach that builds your knowledge about the system, which will allow you to understand why things might not work. Depending on what you learn here you will probably want to revisit a previous Wayfinder phase, for example, to change the composition of the coalition, to bring aboard

other stakeholder groups, or to come up with alternative strategies for change. And so a new iteration of the Wayfinder process begins. It is important that all the stakeholders affected by the Action Plan in one way or another are involved in its implementation. Broad participation here strengthens the coalition and will build a sense of cohesion and coordination that will be of crucial importance for your continued Wayfinder journey.

PHASE CONTENT

Although you will not ever really "be done" with the implementation phase, we have for the sake of clarity still organized Phase 5 into three modules. Module A is about preparing for learning-by-doing implementation. The focus is first on establishing a strong learning culture in your own organization and beyond, and then to assemble a skilled implementation team, committed to the learning approach, that can support the coalition.

Module B is about developing a learning framework that will allow you to move forward effectively. A first important task here is to create a framework that enables deep learning and reflexive practice. The next task is to develop a detailed monitoring and evaluation plan that fits into this framework, and that will highlight the right kind of variables, processes and issues to measure in order to learn your way forward. Module C is about designing the implementation. The focus here is on developing small-scale pilot experiments that will allow you to test your actions and strategies, and then planning for how these could be embedded in institutional structures to allow for broader uptake, application and spread of the ideas. A last step is to formulate an Implementation Plan that will support and guide how you will implement your Action Plan moving forward.

OUTPUTS

A first output of Phase 5 is an Implementation Plan that details how the Action Plan will be put into practice. The more meaningful output of this phase is, however, the real-world developments that will follow, and which hopefully will help you to navigate towards a more sustainable, safe and just future.

MODULE A

PREPARING FOR LEARNING-BY-DOING IMPLEMENTATION

MODULE CONTENT

Work card 34: Establishing a learning culture

Work card 35: Assembling a skilled implementation team

WORK CARD 34: ESTABLISHING A LEARNING CULTURE

We live in a complex and rapidly changing world. Establishing a strong learning culture around implementation and management, one that questions, tests and refines knowledge and assumptions, is the only viable approach for navigating towards a more sustainable, safe and just future. This work card discusses how you can grow this kind of learning culture.

EMBRACING A LEARNING APPROACH

All interventions in complex systems will produce a range of results, including those we have not been able to foresee. This is both because our systems knowledge is imperfect and because conditions constantly change. Therefore, Wayfinder emphasizes the need for a learning approach to management, where you treat your Change Narrative as a hypothesis that you continuously test through implementation of your Action Plan. These implementation experiments are designed to probe the system, to gain experience, to engage new partners, explore key assumptions that you have made as you have assessed the system and planned for how to change it up to date. Over time this will allow you to refine your Change Narrative, guiding the next cycle of interventions and strategies for change.



Establishing a strong learning culture around implementation, that continuously questions, tests and refine assumptions, provides the best foundation for dealing with the complex and dynamic socialecological systems in a rapidly changing world. Photo: iStock.

Embracing a learning approach to implementation requires a major shift in thinking and practice. Much of what we do today is dictated by misguided demands for efficiency, whereas in reality what is really inefficient is not learning from what we are doing. Despite best efforts, it is highly likely that many of the actions and strategies that you have developed will not be successful. That does not mean the assessment and planning process has been a failure. The 'failure' is actually an opportunity to rapidly improve your understanding about the system. We typically learn more from failure than from success, but you need systems in place to recognize and capture that learning.

A SHIFT IN MINDSET

Achieving the necessary mind-shift can be difficult, but it is very important to spend sufficient time on building a learning culture before implementing your actions and strategies. Having a strong and consistent leadership that will advocate for this approach is necessary. Many funders and agencies have unrealistic expectations about the amount and rate of change that can be achieved in complex systems. A critical issue is to manage their expectation. Early on in the implementation phase, make sure that you engage with leaders in your own organization and beyond, to talk about the need for a learning-based approach to management, and that learning needs to be shared among concerned stakeholders. While this may be challenging, establishing a learning culture, where implementation is viewed as an opportunity to test knowledge and assumptions, is one of the most powerful things we can do to manage complexity and navigate towards sustainability in the Anthropocene.

WORK CARD 35: ASSEMBLING A SKILLED IMPLEMENTATION TEAM

To enable the learning-by-doing approach you need a governance structure to oversee implementation – an implementation team. This team will be responsible to test new actions and strategies, to reflect on monitoring information, to communicate to partners and stakeholders, and to navigate sensitive issues of power and politics. This work card describes important issues to consider when building your implementation team.

OVERSEEING IMPLEMENTATION

The implementation team provides a reference group to design and test new actions, to review and reflect on monitoring information and to connect and communicate with partners and stakeholders who are involved in implementing the actions. You can think of this team as the custodians of the evolving knowledge and learning, who will be able to make detailed contributions to updating the Change Narrative over time.



To enable the learning-by-doing approach you need to put together an implementation team. As the Wayfinder process shifts character in this phase and becomes about real life testing and practical work on the ground, members of this team needs a wide range of skills and capacities, including both the know-what and the know-how. Photo: iStock. The implementation team should include people from the Coalition, but it may also include other key people that have participated in the Wayfinder process, and some additional people with specialist knowledge about the system or the cultural or political dynamics in the system.

Navigating change requires a range of capacities and skills at different scales, from the individual to the project team and the larger organizations involved. Think about knowwhat and know how, see box 35.1. Use the attached discussion guide to help you reflect on how to put together a capable implementation team that has the range of skills required.

NAVIGATING POWER AND POLITICS

One of the major challenges of this type of sustainability work, where the explicit goal is to move away from business-as-usual and change the development trajectory of a system, is that vested interests will want to maintain status quo. Changing the system dynamics means that the distribution of benefits among actors in the system will change, which will translate into the loss of resources, status and power for some people or organizations in the system. These power dynamics often only emerge when change starts to happen in a system. At this time, however, power networks that have not been obvious may start to emerge, counteracting the emerging change. It is important that the implementation team is prepared for this, and its members probably need to practice their skills for navigating power and politics. Below, we list a few useful tips for navigating power and politics.

- Try to understand the power dynamics at play, particularly who benefits from the current system configuration and how.
- If possible, engage with powerful actors to understand their views and make them understand the views of other actors in the system.
- Ensure that the implementation process empowers other voices than those already in power.
- Ensure there is strong ownership and buy in of the aspirations and higher-level goals of the Wayfinder process from the majority of stakeholders.
- Focus on joint aspirations and goals during discussions about power and vested interests.

BOX 35.1 – RESILIENCE PRACTICE SKILLS AND CAPACITIES TO BE DEVELOPED AND NURTURED AT DIFFERENT SCALES

Individual: Self-reflection, communication skills, curiosity, empathy, humility, questioning of one's own assumptions and biases

Project team: Leadership, linking actions with conceptual models, testing assumptions, reflexive practice, communicating and sharing information

Organizational: Leadership, learning culture, linking actions with conceptual models, creating new routines and practices to reinforce systems thinking and practice

Cross–organizational: Creating networks through communities of practice, developing shared visions, creating a common language, creating shared conceptual models, agreeing on measures of change and success, sharing and devolving power

MODULE B

DEVELOPING A FRAMEWORK FOR LEARNING, MONITORING AND EVALUATION

MODULE CONTENT

Work card 36: Creating a framework that enables deep learning

Work card 37: Setting up monitoring and evaluation in a deep learning context

WORK CARD 36: CREATING A FRAMEWORK THAT ENABLES DEEP LEARNING

Learning can occur at many levels but creating a learning framework that allows for deeper insights to emerge is of crucial importance for navigating towards sustainability. This work card describes what to think about to create a framework that enables this type of deep learning.

LEARNING VERSUS MONITORING AND EVALUATION

There has been a large body of knowledge developed in recent years on Monitoring, Evaluation, and Learning (MEL), especially in the international development sector. Typically, these MEL schemes have focused on accountability, which means demonstrating to donors and others that resources have been spent appropriately. While this is obviously an important activity, it does not necessarily lead to deeper learning and will not really help you to navigate towards more sustainable futures.



When working with complex systems, deep learning approaches are needed to question and challenge your underlying assumptions. Within this type of framework any specific kind of monitoring an evaluation can be developed. Photo: iStock.

Rather than starting to develop specific indicators for success, the most critical task is actually to establish a learning framework that enables deep learning. Within this framework any specific monitoring scheme can be developed later but starting with a learning framework means you are likely to ask the right questions at the right level for the right reasons, rather than just developing sets of indicators and measures that may not drive real learning and change. See the attached case from AWARD in South Africa, an organization that uses a deep learning approach in their projects to tackle issues of sustainability, inequity and poverty.

DIFFERENT LEVELS OF LEARNING

Learning can occur at many levels. Basic learning, or "single-loop learning", can come from simply asking questions about the expected outcomes from an action. For example, in a project to restore fish populations in a river, after a series of interventions you may ask by how much the numbers of fish increased. This level of learning is useful for assessing the efficiency and/or effectiveness of an action towards achieving an outcome in a context of certainty rather than uncertainty, but it is unlikely to drive deeper change in how people think about the river system. It is, for example, very unlikely that you capture any unintended consequences of the fish restoration activities. When working with complex systems, a "double-loop" or "triple-loop" approach to learning is more appropriate. These types of approaches push you to deeper levels of enquiry; questioning and challenging your underlying assumptions. So, in the fish example above, following on from the initial evaluation

questions about the relative success of achieving the increase in fish numbers, you might also ask questions about the broader consequences of your actions and the objectives of the project, for example:

- In addition to influencing fish stocks, what other effects did the intervention have?
- Why do we want to increase fish numbers?
- Who will benefit from increasing fish numbers?
- Who may be disadvantaged?
- What are the key assumptions we are making when we assume increasing fish numbers will improve food security for local people?
- What are the important assumptions we are making about the data and information relating to fish populations and the ecosystem?

These types of questions can then drive deeper reflections about the system, about the process of setting the objectives, and about the assumptions that were made at the time. This may drive more fundamental system change, reorganizing structures and changing power dynamics, and in some cases, transformative change can emerge. These kinds of triple-loop questions include, for example:

- Who set the objective of increasing fish populations?
- Was the process fair and transparent?
- Was it open to all stakeholders, including the less powerful or marginalized?
- How well does the decision-making process match the scale and dynamics of the system and issues?
- Is the long-term vision for the system a truly sustainable and fair one?

MAKING SURE THAT YOU LEARN DEEPLY

Setting up a learning framework that allows for this type of deeper enquiry, will force you to confront deeper issues about the underlying purpose, the structure and the function of your focal system. This type of framework will provide a good foundation for assessing if your action strategies continue to move you towards a sustainable, safe and just future in a highly uncertain and rapidly changing world (figure 36.1). Discuss with your Coalition and additional members of the Implementation team how you can develop such a framework to capture the outcomes of your implementation process.



Figure 36.1. When working with complex systems, a deep learning approach is best suitedas this will force you to confront deeper issues about the underlying purpose, the structure and the function of your focal system.

WORK CARD 37: SETTING UP MONITORING AND EVALUATION IN A DEEP LEARNING CONTEXT

Once you have established a framework that enables deep learning, you are ready to develop a detailed scheme for monitoring and evaluation. This work card helps you identify relevant indicators for system change at different levels, in the short term and long term

DEVELOPING RELEVANT INDICATORS

While it is difficult to give very specific recommendations about which variables to monitor and evaluate, since this will of course vary a lot with different systems and contexts, there are a number of generic recommendations that still can be made. First, it is important to try to assess both how critical system dynamics change and how the option space changes following your interventions. Indicators must also cover both ecological/environmental variables as well as variables related to human wellbeing and stretch across relevant system scales. Where possible, include the people that are involved in testing the actions and are influenced by them in determining what appropriate indicators are, and in measuring the effectiveness of the actions. Asking people what the earliest indications would be that your actions are creating the desired change can reveal important information about system dynamics.



A farmer using his laptop in the field, India. While relevant variables to monitor will vary with the context, you should think about including both short-term and long-term indicators, reflecting social and ecological outcomes and processes. Where possible, involve stakeholders in the monitoring and evaluation. Photo: iStock.

SHORT-TERM INDICATORS

In the short term, try to identify indicators that:

- Provide a rapid feedback about how well the implemented action strategies are creating the desired change, especially considering those that are
 - focused towards key knowledge gaps and important assumptions that you have made
 - focused on changes across system domains (use your systems models to guide your thinking about key social, ecological and economic variables here)
 - easily measured or observed (i.e. low cost, easy to collect)
- Reduce the risk of doing harm in the system, especially those that are
 - focused on detecting unintended consequences
 - focused on vulnerable groups of people
- Are located in key learning 'nodes' in the system, look for changes in
 - language, metaphors, and conceptual models
 (these are all indicators that thinking is changing)

- practice and routines for how people manage and relate to their landscapes
- \circ networks and flows of information

LONG-TERM INDICATORS

In the longer term, try to identify measures that identify:

- Changes in feedbacks
 - for example, where traps start to destabilize, or where feedbacks shift from reinforcing to balancing
- Changes in structures and contexts of the system
 - changes in key system variables, for example, the appearance of a new important factor in the system
 - \circ $\,$ changes in network structures and resource flows
 - changes in representation of people on decision making bodies, including empowerment of previously disempowered groups
- Change in the system option space

- Changes in important option space dimensions.
 Are they increasing or decreasing? Have existing trends changed pace?
- Change in the trajectory of the system;
 - Changes in goals, purpose and vision for the system

MODULE C

DESIGNING IMPLEMENTATION

MODULE CONTENT

Work card 38: Introducing small-scale pilots Work card 39: Enabling change at broader scales Work card 40: Formulating an Implementation Plan

WORK CARD 38: INTRODUCING SMALL-SCALE PILOTS

Having established a learning culture, assembled an implementation team, and developed a learning, monitoring and evaluation framework, it is time to design the actual implementation of your action strategies. This work card describes the first part of this process – how to introduce small-scale pilot actions to learn more about your system.

STARTING SMALL

The first step in designing your implementation process is setting up small-scale pilots that will help you test the impact of your action strategies in reality. Because of the large uncertainty associated with all interventions in complex systems, it is better to start with this rather than roll out large-scale interventions. Look at your strategies and your list of possible actions and try to identify a small number of actions that could be tested in a first round and look for settings where these pilot projects could be implemented. While this could be done in different ways, you should target interventions that will reveal the maximum information about the system. For example, you could start with an action that could be implemented within two different communities at once to test social or cultural factors that might be a barrier to the implementation process. Alternatively, you could start with actions based on assumptions that have high consequences but weak evidence. There are often long response times in both social and ecological systems but consider where or how you could intervene with small, short term projects that will rapidly increase your knowledge, your experience or understanding of the system.



Fish aquaculture and feeding station, Eidi, Farao Islands. The first step in designing your implementation process is to set up a series of smallscale pilots that will help you test your action strategies, and your underlying assumptions. Photo: A. Maslennikov/Azote.

Keep in mind that you are intervening in a complex system, which means that there is no way of anticipating all the effects that your actions will have. Remember also that it is critical that your actions do not produce harm, especially to those that are already vulnerable. Before starting any pilot projects, use the discussion questions below to make sure you are sufficiently prepared.

EVALUATING THE PILOTS

When you feel confident that your interventions can fail without harming anyone, you are ready to start the pilot testing of specific actions. In evaluating the progress in these pilots, make sure that you ask questions that will inform your wider knowledge and understanding of the system, for example:

• What have you learned about your system during the design and implementation of these smallscale pilot projects? Has the process revealed any new insights about leverage points in the system?

- In particular, have any new dynamics emerged that have the potential to contribute to a sustainable, safe and just future? How could these dynamics be nurtured and spread?
- What are the implications for scaling the pilot projects so that it can be more widely applied and taken up? Does the intervention need to change to give it a wider reach?
- What barriers or challenges to more widespread implementation has the piloting phase identified?

WORK CARD 39: ENABLING CHANGE AT BROADER SCALES

Unless there is a concerted effort to translate the small-scale pilots into more permanent change at wider scales, it is unlikely that your action strategies will contribute to a more sustainable, safe and just future. This work card describes how you can enable change at broader scales by embedding your actions in the wider system structures through institutionalization.

SCALING UP AND OUT

There is no shortage of promising biosphere-based innovations, but it is rare that they produce sustained impacts over time on larger scales. Unless there is a concerted effort to translate the successful small-scale pilots that you are conducting into more permanent change, the system will likely 'slip back' into old patterns, or the pilot will remain an isolated success story. This is especially the case where there are reinforcing feedbacks keeping the system locked-in on a business-as-usual trajectory.

If a new innovation, or a practice or an approach is going to have a substantial impact in the system, it needs to be 'scaled out', in the sense that it can be applied more broadly in the system, and beyond. This requires 'scaling up', i.e. embedding the innovation/practice/approach in the wider system structures, for instance through new regulations or social norms, which leads to an "institutionalization" of the change. Depending on the innovation and the opportunity context, this may be met with more or less resistance, and thus be more or less possible. Over time, the process of institutionalization will create a new culture, and new ways of doing that will be better aligned with your strategies.



Swedish politicians at an environmental conference in the EU Parliament, Brussels, Belgium. If a new innovation is to have a substantial impact in the system and beyond, it needs to be embedded in the wider system structures, for instance through new regulations, or changes in social norms. Photo: A. Maslennikov/Azote.

<u>Click here</u> to learn more about innovation and scaling of innovations with Per Olsson, Researcher at the Stockholm *Resilience* Centre and Michelle-Lee Moore, Deputy Director of GRAID at the Stockholm Resilience Centre

EMBEDDING CHANGE IN DIFFERENT WAYS

Admittedly, scaling up and out are difficult tasks, and this guide can only provide limited advice. However, embedding your change strategies could take a number of different basic forms. Having successfully piloted your action strategies, you could consider the following options for increasing their reach and impact:

- Increasing the control among stakeholders over the process, transferring more power or resources to people in the system to 'own' the process and adjust the action to their needs.
- Working with decision makers to change existing laws, rules, and guidelines in favor of the action.
- Working with changemakers and other types of actors to change social norms in support of the action.
- Changing the structure of the system in a way that makes the intervention and its impacts more likely to persist and spread. For example, forming a new cross-scale governance structure, or reintroducing a cultural practice that would support the change.

THE RISKS OF 'MAINSTREAMING'

It is important to be aware that scaling approaches often takes the form of "mainstreaming", which ususally means adapting the innovation or the approach so that they fit into existing institutional structures and social norms, rather than the other way around. Not surprisingly, this usually means that the innovation loses its edge. Through this process they go from being transformative to adaptive. One example is the biofuel hype that started two decades ago with a promise to revolutionize the energy sector, by making biofuels a viable alternative to fossil fuel. However, as biofuels become integrated into existing fossil-domainted fuel supply chains, and as they to a large extent are cultivated in the South for export to the North, with severe consequences in terms of land, water and food security for local populations, it is becoming increasingly clear that the "biofuel revolution" at best reflects a smaller adaptation of the current energy system, with many negative spill-over effects in other sectors.

When considering how to embed your innovative strategies and actions in the larger system, try to reflect on whether or not "mainstreaming" it would move you closer towards your goal.

WORK CARD 40: FORMULATING AN IMPLEMENTATION PLAN

In the last formal step of the Wayfinder process, you should develop an Implementation Plan that will support the practical use of the Action Plan, and which weaves together your learning framework, piloting principles and strategies for embedding your actions in the wider system. This work card describes what to think about when creating your Implementation Plan.

A PLAN TO GUIDE THE DAILY WORK OF IMPLEMENTATION

By now you have planned thoroughly for implementation of your Action Plan by establishing a learning culture, assembling an implementation team, creating a framework for learning, monitoring and evaluation, introducing a range of small-scale pilots that test your action strategies, and by considering how these can be embedded in wider system structures. The last formal task in the Wayfinder process is to sum everything up into a brief Implementation Plan. This should support and guide you, the implementation team, and other partners during the day to day work of implementing the Action Plan.



In the last formal step of the Wayfinder process, you should develop a short Implementation Plan that will support the day to day work from now on. This plan should weave together the learning approach and framework, the role of the implementation team and your principles for piloting and scaling. Photo: iStock.

The Implementation Plan should contain a statement about the foundational learning approach, principles regarding the roles and responsibilities of the implementation team, key elements of the learning framework, and the principles for piloting that you have agreed on together with your ideas for embedding the change strategies in the wider system. Keep the plan as simple as possible while providing practical guidance, and keep focused on the main task; that is navigating towards a more sustainable, safe, and just future.

EVALUATION, REFLECTION AND SENSE MAKING

EVALUATION

Take some time to evaluate, reflect on, and make sense of the work that you have done so far. This is crucial to make sure you are moving in the right direction. A first step here is to evaluate the quality of the process you have conducted so far, along with the quality of the data, information and content generated through this process. Use the list of conditions below to guide your evaluation.

- You have a skilled implementation team in place
- You have a framework in place that enables deep learning

- You have identified preliminary monitoring and evaluation indicators of both success and lack thereof
- You have a plan for setting up small-scale pilots that will enable you to test assumptions and fill knowledge gaps
- You have a strategy for how to embed the action strategies in the wider system to allow for more widespread impact
- You have strengthened commitment and support from implementation partners to move forward

REFLECTION

Having evaluated your work, it is useful to reflect a bit more deeply on what you have learned from the Wayfinder process so far. Use the questions below to guide this exploration. Make sure to capture your learnings, they will be important to guide you on what to do next.

- How was your Change Narrative wrong?
- Where was the systems model wrong?
- Where did the action strategies work/where did they not work?

- Should the coalition change? (And regardless, what is your succession plan for it?)
- How has your view on your own role and task in the system evolved?

SENSE-MAKING

Nurturing the capacity

for adaptation and transformation is a continuous process, which means that the Wayfinder journey will not end here. Try to make sense of what your lessons learned so far means for your ambition to navigate towards a sustainable, safe and just future. Let your findings guide you back to one of the previous process phases: 1) Building a coalition for change, 2) Creating a shared understanding of system identity, 3) Exploring system dynamics, or 4) Developing innovative strategies for change, where a new iteration of the Wayfinder cycle starts.

– This is not the end –

After a first iteration of the Wayfinder process, you will re-iterate, learn, transform, and transform again.

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And please share, build upon, or adapt Wayfinder to suit your needs, and help others that need transformative change.

> Good luck! /the authors