

Advanced *Change-mapping*

Exploring, resolving and addressing issues
of any size and complexity



Tom Graves with Joseph Chittenden

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Preface

Tackling large and complex issues

How do you tackle a truly immense and complex issue?

This has been the concern of the author for over thirty years. He found that many people, while comfortable in their own disciplines, have struggled if they encountered a different context. They would try to force fit what worked for them in different situations, with at best mixed results.

He developed a system called *Five Elements* which allowed the user to work in any context. While *Five Elements* achieved the author's aims, it was quite difficult for non Enterprise Architects to pick up. *Change-mapping* took the underlying *Five Elements* methods and presented a simple system that could be used for any issue in any context.

While this book explores large and complex issues, it works exactly the same way as described in the first two books.

As with those the principal aim is to gather ideas, insights and information and be able to get that information in any form to those that need it, when they need it.

Tom Graves
Bendigo, Australia
June 2022

A big thank you!

To our co-creators and valued patrons

This book would not have existed without all of the people who over the years have helped to bring *Change-mapping* to a wider audience.

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Nate Gerber (Canada)

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The author would also like to thank all the valued Patrons at www.patreon.com/tetradian who helped fund the production of this book.

They have also given excellent feedback and helped with testing the materials.

How you can get involved!

To find out more about Change-mapping visit: www.changemappingbook.com

www.changemappingbook.com

If you would like to be involved with the development of new tools, testing and more then head over to Patreon to get involved.

www.patreon.com/tetradian

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Tom Graves

Tom is known as a highly innovative thought leader on the futures of business. With a keen eye for systems and structure, he has nearly 40 years experience in knowledge management, skills research and software development.

He is a prolific author, and experienced presenter on radio and television, at conferences and in workshops and seminars.

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What is Change-mapping?

A quick overview



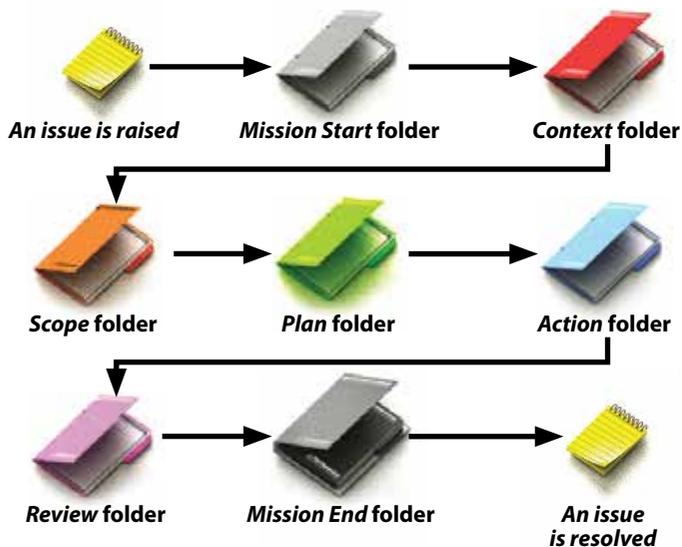
The first two Change-mapping books

Inside the first book: **Change-mapping**, you learn how to run small Change-mapping missions, see it in action and avoid common problems. There is also a complete set of basic tools to help you learn how to use Change-mapping. It is available on Amazon and other book retailers. ISBN 978-1906681401

The second book: **Tools for Change-mapping** introduces a set of detailed tools to help you explore, resolve and address issues of any size and complexity. It is available on Amazon and other book retailers. ISBN 978-1906681425

This book is the follow-on to the previous Change-mapping books (see left). We recommend that you read those books before reading this one.

What happens if you have an issue which needs to be resolved? A typical response is to plan how to resolve the issue and then resolve it. While this is fine in principle, it can miss out vital steps, such as 'Why does the issue need solving?' or 'Is this the best way to resolve the issue?' Change-mapping is used to answer these types of questions. It does this by using a simple map system which breaks down any issue into manageable parts, as shown below.



All these parts make up a **mission** to explore or resolve an issue. Every **mission** is run by a small team of **Explorers**, who are assisted by a **Pathfinder** who keeps the mission on track and an **Observer** who records all that is found. When running a **mission** the team use tools to gather ideas, information and insights. How the tools work is discussed on the next page.

What is a Change-mapping mission?

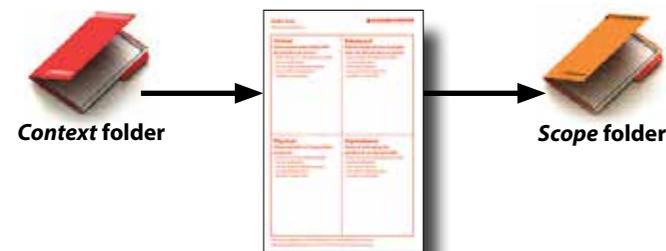
Exploring, resolving and addressing an issue

Within the first *Change-mapping* book were a set of basic tools which were deliberately simplified, so that you would not be daunted when first learning how to use them. Using these tools was done using missions.

In the first book a mission was seen as finished when the folders (see left) were all completed.

In this book we show how to link missions, allowing you to explore, address or resolve large and complex issues in more detail. Linked missions are made up of a set of missions. For example we show in the first part of this book a Linked Mission made up of 13 missions.

Each mission has folders inside it just like in a single mission (see left). Inside each folder are tool-sheets such as the one shown below.



Scenarios allow you to see how each mission inside the Linked Mission would typically be used.

For example the **Far Future** mission is shown on page 36, exploring the ramifications of updating an Enterprise Resource Planning system.

Note though that *any* mission can be used within *any* scenario. For example the **Far Future** mission could be used to explore the ramifications of making a city more sustainable (see page 36).

So read through the scenarios to see what the missions and their associated tools are used for and then use them in your missions!

See page 4 to find out more about Linked Missions.

What is an enterprise?

The word 'enterprise' is mentioned throughout this book.

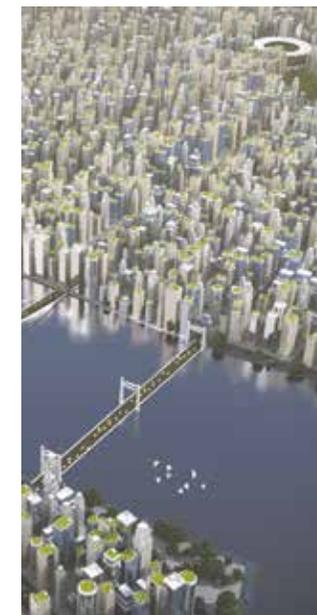
An organisation is part of an enterprise but it is not the enterprise.

If we imagine a city council, their enterprise is to run the city for all stakeholders. Running the city involves a huge amount of individual issues which need to be resolved.

This continual resolving of issues is the enterprise.

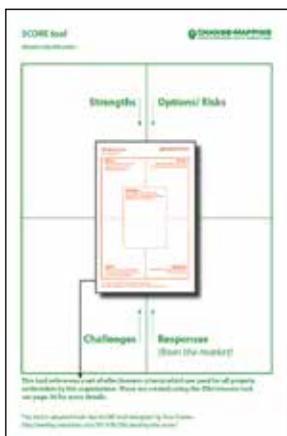
Inside the enterprise will be the organisation, suppliers, customers, equipment and much more.

For more information see www.slideshare.net/tetradian/the-enterprise-is-the-story/



What is a Change-mapping tool?

Gathering ideas, information and insights



A sample tool-sheet

Here is an example of a typical Change-mapping tool. This is the **SCORE** tool (see Book 2, page 74). This tool has five sections to be answered by the **Explorers***. The **Observer*** would actually write down what the Explorers find out. This then becomes a record of what was found and is kept inside the folder. Each tool is associated with a particular folder, for example this tool is used in the **Plan Folder***

*See page iii

As mentioned on the previous page, *Change-mapping* uses missions which contain folders, which themselves contain tools. The tools shown in all these books are paper-based tool-sheets designed to pose questions. They are not meant to supply answers, as logically it is impossible to provide answers for every possible issue. They work with the **Explorers** (see page iii) trying to answer the questions posed on the tool-sheets. Book 1 introduced some very simple tools, while Book 2 expanded the tool-set with more detailed tools. This book also describes some new tools, which are described in detail in this book (see right).

One of the key points of *Change-mapping* is that tools are connected so that people can see where they are used and if they have been filled in. When you are running a simple single mission it should be easy to store and share the tool-sheets and what was written on them. But when you tackle large and complex issues, potentially thousands of tool-sheets could be needed. Then a more dedicated method of storing, tracking and sharing the tool-sheets is required. And why we used a particular tool.

This is discussed in the **Library** section (see page 64).

The tools described here are paper-based, but really anything could be used as a tool, such as a PEST tool or an interview or a physical prototype. Therefore when we mention gathering information, we mean in any form.

Downloading the new tools

Using the tools for your missions

You can download blank versions of the Red tool-sheets used in the Linked Missions (such as the one below) at: www.changemappingbook.com/advanced-change-mapping-book

CHANGE-MAPPING
SUSTAINABLE BUSINESS TOOLS TO CHANGE CHANGE

Review mission tool
Mission identification:

Mission 12 of 13 Answer all questions using Change-mapping techniques (Book1, page 18).

How long after the issue is resolved will the review take place?

Was the issue successfully resolved?

Was the plan effective or did you have to adapt the plan?

Did you stay true to the enterprise's and organisation's vision and values?

How might the enactment change if it was scaled up?

What would we do differently if the enactment was repeated?

Have stakeholders embraced the change brought about by the issue's resolution?

How did the equipment, materials and location perform during the enactment?

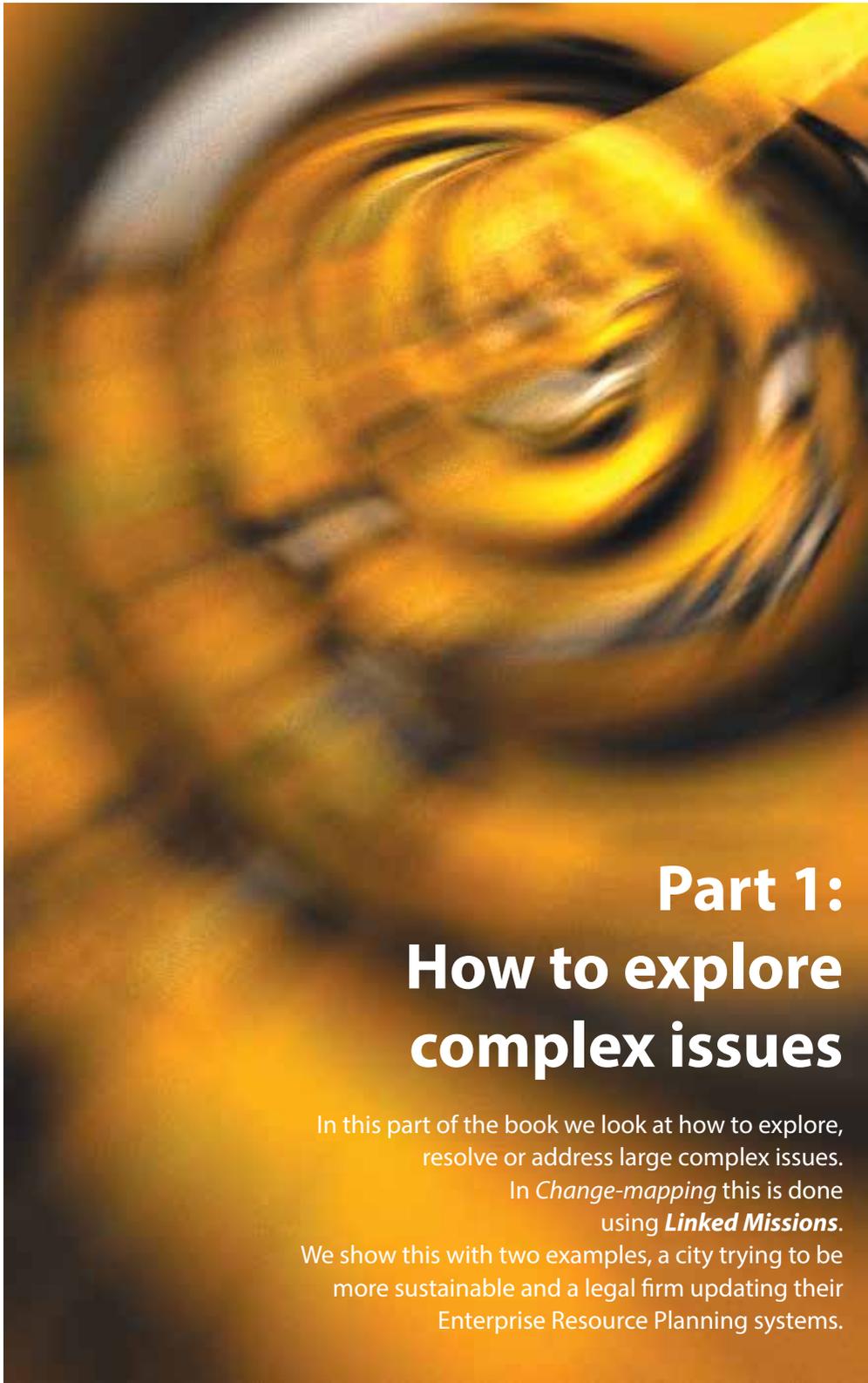
How did the people involved with the enactment perform?

Was there enough time, money and information available for the enactment?

Download a blank copy at: www.changemappingbook.com/advanced-change-mapping-tool

A list of the new tools

While this and the other books focus on Tetradian tools which have been designed to work with *Change-mapping*, there is nothing stopping you using other tools to get the information you need. You will see in Book 2, page 106 a diagram showing a sample list of tools and how you could add them to your missions. Many of the pages in this book also list useful tools and when to use them inside Linked Missions.



Part 1: How to explore complex issues

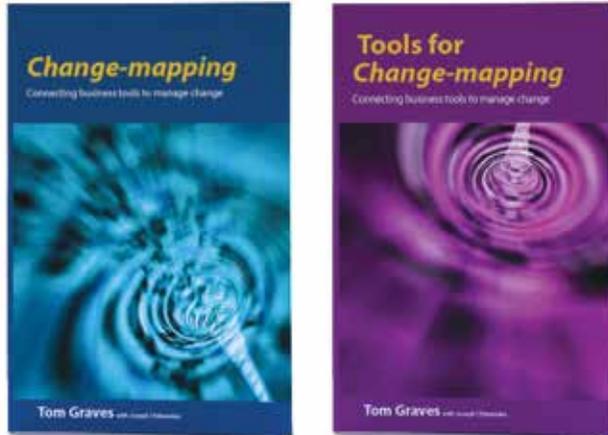
In this part of the book we look at how to explore, resolve or address large complex issues.

In *Change-mapping* this is done using ***Linked Missions***.

We show this with two examples, a city trying to be more sustainable and a legal firm updating their Enterprise Resource Planning systems.

What is a Linked Mission?

Exploring, resolving or addressing a complex issue



Tackling an issue

In *Change-mapping* we explore an issue to see if we might want to change it. We might also resolve an issue. Finally we can address an issue where we continuously resolve it. In this book we will use the word **tackle** which covers: exploring, resolving or addressing an issue.

An overview

In the first two *Change-mapping* books (see above) we described a system to explore project level issues. But when you need to explore much larger issues, which may take place in different countries and take years to address, then a **Linked Mission** would be used. A Linked Mission works in the same way as a normal mission, except that each mission is linked and tackles a specific part of the issue. Each mission has a status dot: green for complete, orange for in-progress, red for incomplete and black for archived. In addition each mission has black arrows showing that you work your way down, but that you can also loop back. There are also pink arrows which show the flow of information through the main Library (see page 64) and your Linked Mission. Inside each mission you will use tools which are described in the following pages.

How does a Linked Mission compare to project management?

Projects are familiar to everyone as an approach to exploring, resolving or addressing issues. *Change-mapping* aligns with many of the stages of project management. The diagram on the far right shows the typical stages (the blue text) of a project and how they align with a typical *Change-mapping* Linked Mission. At first sight the typical project seems simpler, but it can gloss over vital parts that allow an issue to be explored, resolved or addressed effectively.

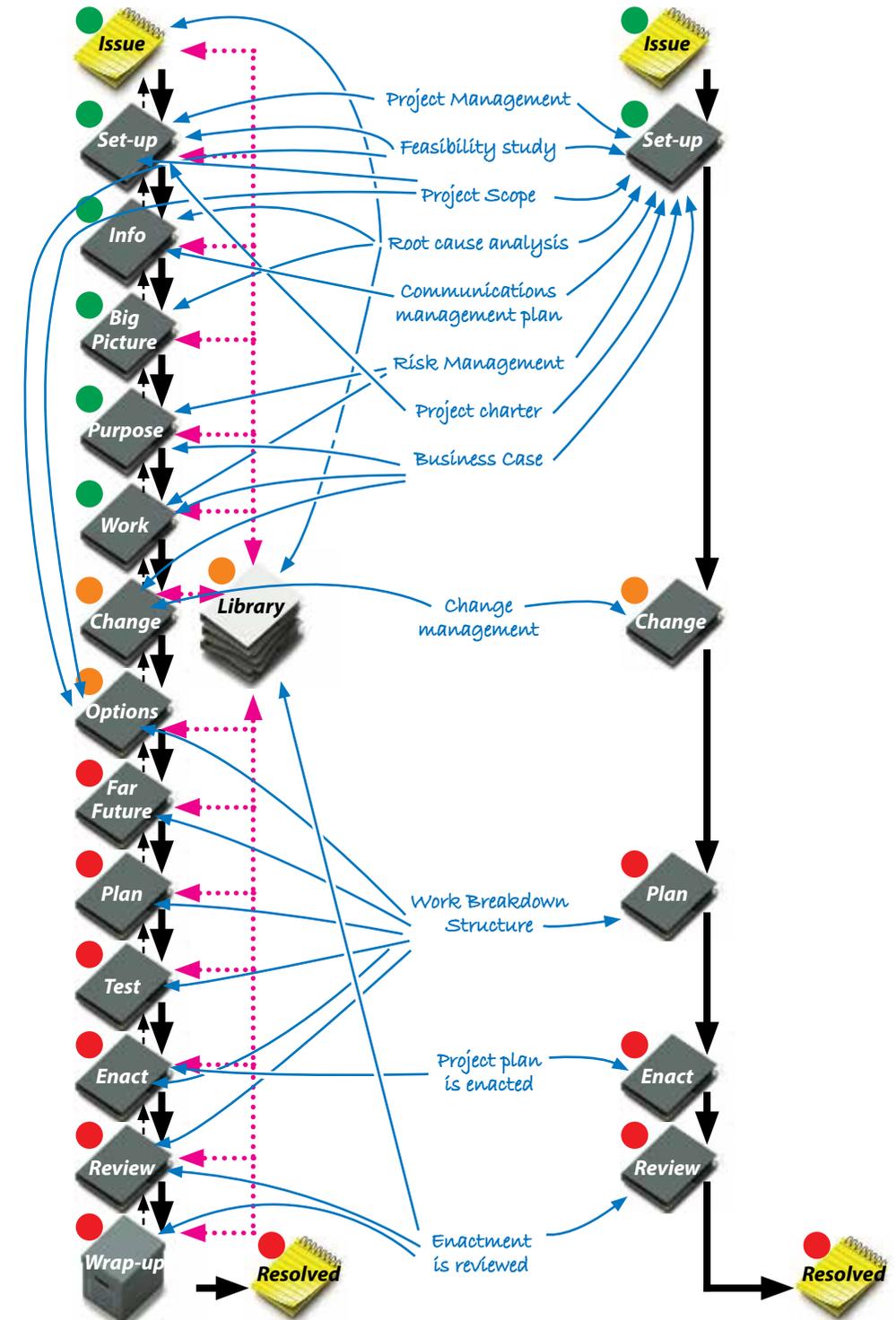


Diagram showing a typical Linked Mission

Diagram showing a typical project

An issue is raised

An issue needs to be explored, resolved or addressed



In brief

In this part of the Linked Mission an issue is raised. Here we establish what the issue is. For example, a city council raises the issue that they want the city to be more sustainable.

What is the issue?

Often when an issue is raised there can be a rush to resolve that issue. In that rush, assumptions can be made which can sometimes prove incorrect. Often to try to remove risk, various tools are used to build up a picture of what is happening. This again can cause problems as the tools are not connected, giving fragments of information. The Linked Mission helps to give a simple, adaptable framework to tackle any issue of any size and complexity. The first stage of a Linked Mission is to raise an issue and define that issue, which is described on the following pages.

Worked example

A legal firm in Melbourne, Australia uses ERP to help manage people and assets within their organisation. The COO has received reports that their current ERP solution is struggling since the opening of the new office in London. At the next board meeting the COO raises the issue of the need to update the organisation's ERP. The COO states his reasons for updating the ERP. With such a potential transformation of the organisation, the board expresses caution. After the meeting the COO assembles the Strategy team. "How can we update our ERP, is the issue I have raised". The strategy team ask for a overview of the issue. Based on the answers to these questions, they feel that for such a large and complex issue a Linked Mission could help.

Raising the issue

In our example the strategy team ask the COO for an overview of the issue. They need to work out what the issue is and if it needs to be explored, resolved or addressed. To help them decide this they use the Sense-making tool (Book 2, page 10) to obtain general information about the issue. After using the tool they see that the issue will involve a large amount of exploration. They decide to use a Linked Mission to break down the complex issue into smaller parts. They have used the tool as part of an informal briefing, before the Linked Mission was started.

CHANGE-MAPPING

Sense-making tool
Mission identification:

What is the issue?	When is it thought the issue occurs or occurred?	Where is it thought the issue occurs or occurred?
How is it thought the issue occurs or occurred?	Who is thought to be affected by the issue occurring?	What is it thought to cause the issue occurring?
Why does the issue need resolving?	What apart from people is thought to be affected when the issue occurs?	Why is it thought the issue occurs?

↓

Statement about the issue:

This tool is adapted from a blog by Tom Graves
<http://weblog.artsand.com/2018/03/14/sensemaking-into-the-world/>

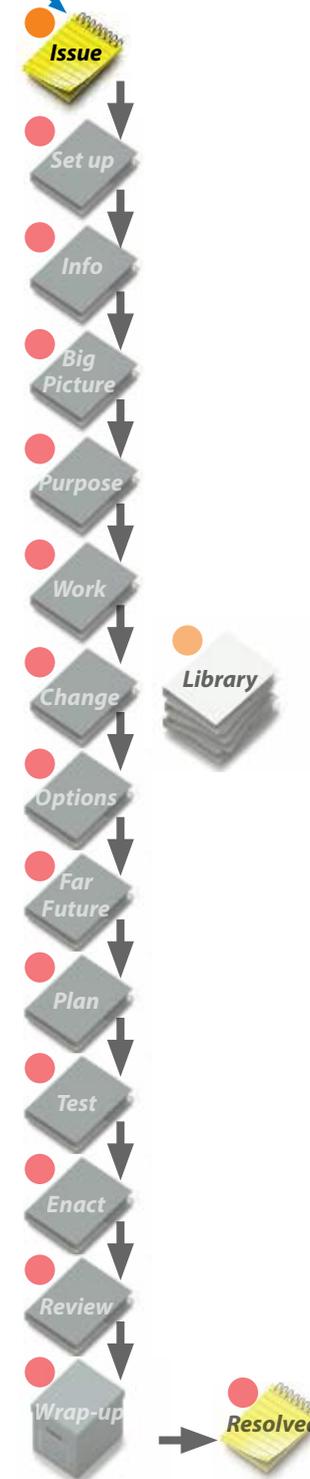
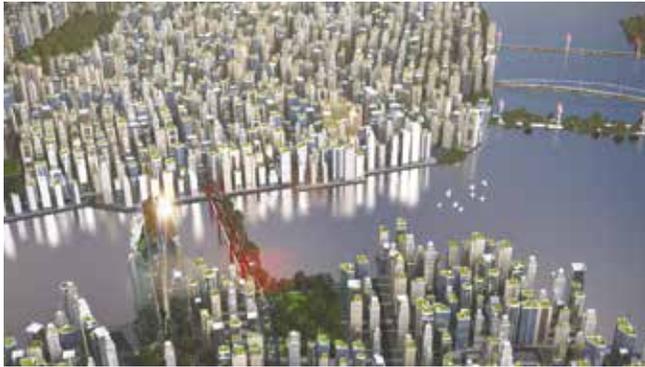


Diagram showing the start of a Linked Mission

The Set up mission

Setting up a Linked Mission



In brief

In this part of the Linked Mission we explore how we will explore the issue raised. For example, how would a city council explore the issue of how to have a more sustainable city.

Setting up a Linked Mission

If we need to tackle a large and complex issue, **how** we tackle the issue will need to be worked out. This mission is used to work out who will be doing what in each of the following missions. For example, who will be involved with the **Test mission** (see diagram on the right). What resources, people and time will be required? Exploring all of these aspects of the entire Linked Mission allows forward planning and avoids bias in certain areas. Once you have all of the above examined, you should have everything in place to explore and resolve your issue.

Worked example

In our example the strategy team approach the PMO to help with planning how the Linked Mission will be run. Both teams use this mission to break down the issue. They start to break down how long will exploring the issue take and what budgets are involved. If this exploration confirms updating the ERP will indeed benefit the firm, then they will start planning the actual update. This would include the skills, people and equipment needed to enact the change. Working out all of the above will take time and so the two teams are allotted two weeks to produce an initial schedule. This schedule is put to the board for approval. In this way each mission within the Linked Mission acts as a gateway. Allowing the board to have clear gateways at which they can pull the plug, rather than initiating an ERP system update that might not even be needed.

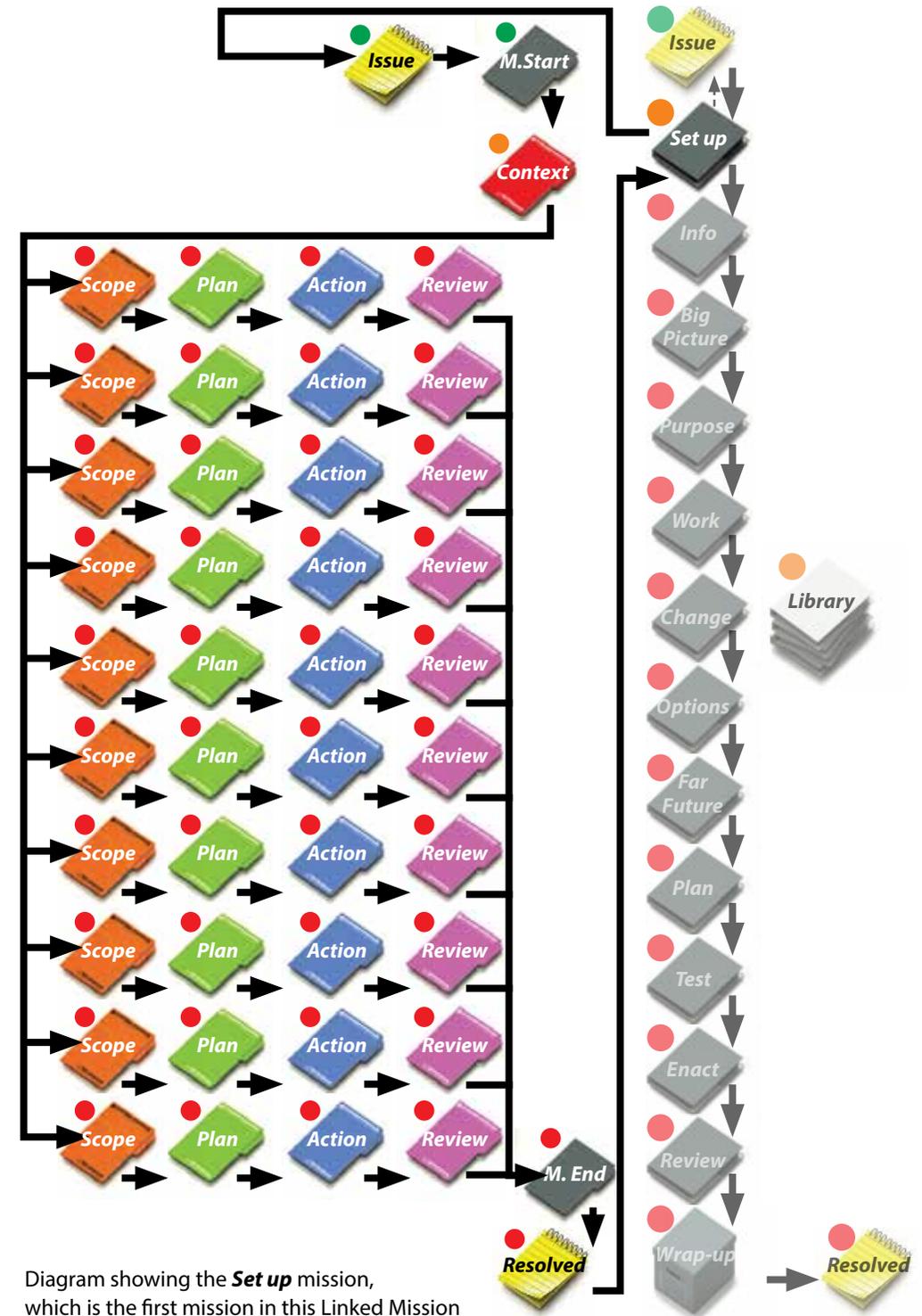


Diagram showing the **Set up** mission, which is the first mission in this Linked Mission

Using non-Change-mapping tools in this mission

- Project management tools
- Feasibility study
- Project Scope document
- Project Charter
- RACI
- PRINCE2

These tools could be used alongside the questions shown on the right.

How to use this mission

How can this mission help you?

This mission is used to set up the Linked Mission itself. It describes who will be doing what and what you want to achieve, such as resolving an issue.

What needs to be done before using this mission tool?

Ideally before the mission starts you will have a detailed description of what the issue is and other information such as that shown on the tool (see right). This would be gathered in the **An issue is raised** stage (see page 6) which acts like a pre-mission briefing.

Who is typically involved in this mission?

Project managers, Programme managers, Portfolio managers Vice-presidents, IT Change leads.

Warning signs while running the mission

- Rushing to start the Linked Mission without considering how the Linked Mission will be conducted.
- Not having a clear picture of what the issue is.
- Resolving or addressing the issue without first exploring the issue.
- Not having a clear picture of what you want to achieve.
- Rushing to the plan mission.
- Analysis-paralysis
- Poor leadership and decision-making.

What works well with this mission?

- Γ Detailed notes from the issue raiser, see page 6.
- Δ The **Holomap** tool for defining who does what, when resolving an issue (Book 2, Page 22).
- Θ The **Where to start** tool for idea generation while resolving issues. (Book 2, Page 78).
- Λ The **Decision** tool for reviewing decision making (Book 2, Page 44).
- Σ The **Basic Context tools 2/3/4** for specifying what you want to achieve (Book 1, Page 72).
- Φ You will need to refer to the **Big Picture Mission** (page 16), the **Purpose Mission** (page 20) and the **Work Mission** (page 24) to cross-check that resolving the issue aligns with the values set in those missions.

Set up mission tool

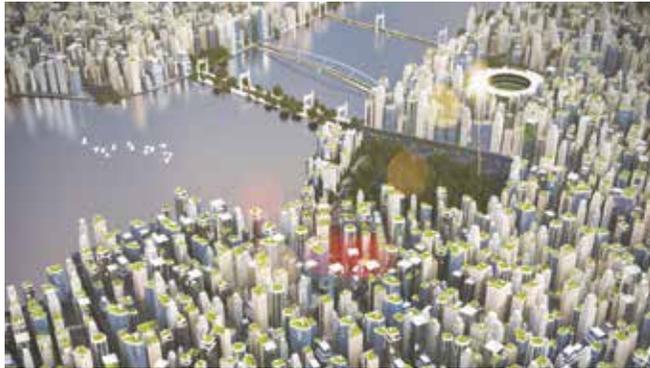
Mission identification: *Linked Mission to update our Legal firm's ERP system*
2OCTOBER2032-MISSION-02048

Mission 1 of 13 Answer all questions using Change-mapping techniques (Book 1, page 18).

<p><i>Why is the issue to be explored, resolved or addressed?</i> The COO has called for the ERP system to be updated in response to calls from various stakeholders.</p>	Γ
<p><i>When is the issue to be explored, resolved or addressed?</i> Ideally we will take a month to explore the issue. If that exploration shows we should proceed with the update then will continue the Linked Mission with the aim of resolving the issue. Meaning we will have updated the ERP system.</p>	Θ
<p><i>What is the issue to be explored, resolved or addressed?</i> The COO believes the ERP system should be updated to the latest version.</p>	Γ Θ
<p><i>Who will explore, resolve or address the issue?</i> We (the strategy team) need to discuss with the PMO who will first explore the issue. A different set of people will be involved if our legal firm decide to update the ERP system.</p>	Δ Θ
<p><i>Where is the issue to be explored, resolved or addressed?</i> The issue will be explored in our legal firm. Most likely the resolution (if it happens) may take place in a virtual environment before being tested in a small scale staggered roll-out.</p>	Θ
<p><i>What equipment/info is needed to explore, resolve or address the issue?</i> We most likely will need a NESTED MISSION (Book 1, page 114) to see what we will need. For exploration mostly info gathering and interviews. The IT dept will specify what equipment they would need for a roll-out.</p>	Θ
<p><i>How will decisions be made during the Linked Mission?</i> We will use each mission inside the Linked Mission as a gateway for decision making. But we also need to avoid rushed, uninformed decisions.</p>	Λ
<p><i>What would happen if the issue was not explored, resolved or addressed?</i> The missions will confirm this, but at a guess either we will carry on as before or we will be less adaptable to changing circumstances.</p>	Φ
<p><i>What would a successful outcome of the Linked Mission look like?</i> If we knew that updating the ERP was in our best interest and then that the update was done as smoothly as possible (INSIGHT A trade-offs tool, would be useful here. For example time versus money).</p>	Σ Φ
<p><i>Which standards, regulations and laws do you need to be aware of?</i> We will need this information before a resolution took place, I imagine that we would get this info in the following missions and then come back to this mission and fill in this section.</p>	Φ

The *Info* mission

Gathering all relevant information



In brief

In this part of the Linked Mission we establish how any information* that we find will be shared and stored. For example, how would a city council store and share all the information they find while exploring how to make the city more sustainable.

*Information such as data, physical prototypes and more.

Is there any available information?

For Change-mapping to be effective you will need a Library of information. Part of that information will be generated inside your Linked Mission and part will be gathered from outside the Linked Mission. This mission is used to setup how all that information is stored and shared, so that all that need it, can access it. The information you gather will help your Linked Mission and may also be useful to people running different Linked Missions. The Library allows that sharing of up-to date information. The main Library is discussed further on page 64.

Worked example

In our legal firm example, they have a main Library which handles all legal documents, financial records and so on. Inside this Library there is a section dedicated to Change-mapping.* In our mission the team make contact with the Library to inform of their needs and to ask if they have any useful information which could be used in the ERP issue. The Linked Mission itself has its own mission Library which is used to share information inside and outside the mission. The strategy team who are running the Linked Mission will stay in regular contact with the main Library. This will allow them to keep updated on other teams working on similar issues and to share what they have found with other teams.
*Our Library keeps information from Linked Missions run by other teams exploring other issues. Because information found in other Linked Missions may be useful to us.

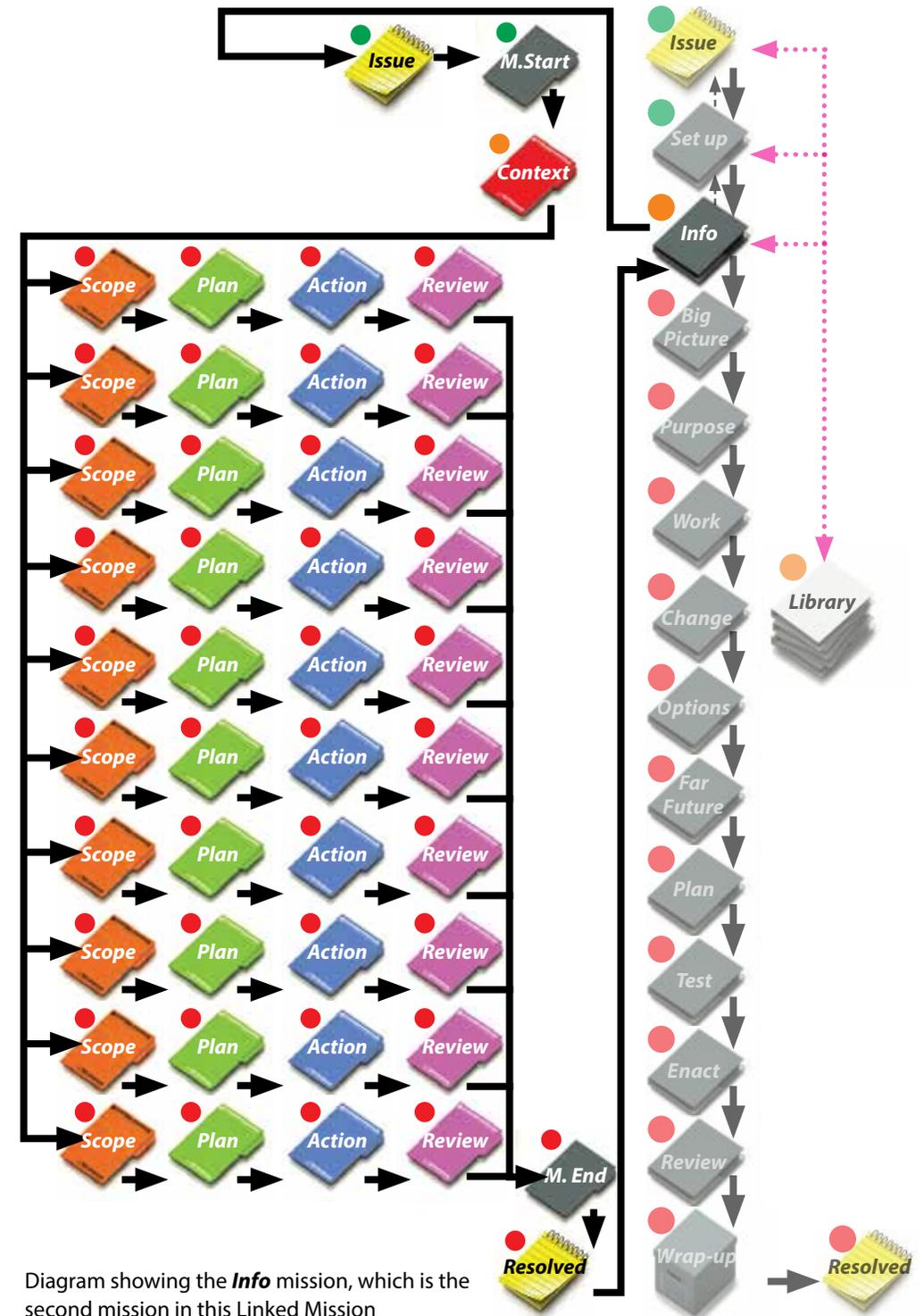


Diagram showing the *Info* mission, which is the second mission in this Linked Mission