Tools for *Change-mapping*

Connecting business tools to manage change

PRE-PRODUCTION SAMPLE

Tom Graves with Joseph Chittenden

Change-mapping tools

Expanding the Change-mapping tool-set

"Quote."
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Tom Graves with Joseph Chittenden

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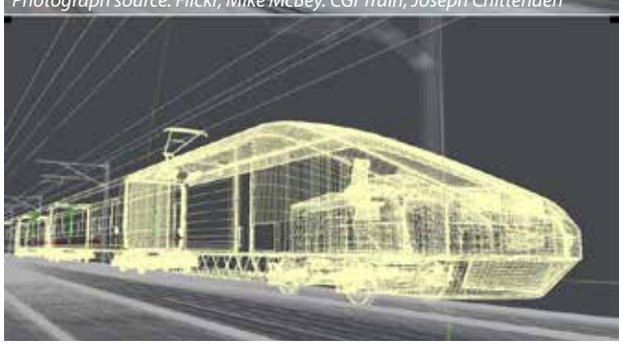
Preface

Expanding the tool-set

The first *Change-mapping* book set out to show what *Change-mapping* is and what it can do for organisations. But it was a balance between a system which was too complex or too simple. The author decided to split the book into three books, one purely about how to learn the basics, one about the tools and one about more complicated uses of *Change-mapping*. This book introduces nineteen new tools which extend the power of *Change-mapping* while still being easy to use.
The author wanted to show the tools in action and so a set of scenarios were chosen which give a good idea of when and how to use each tool. So each page uses a real world example as well as clear instructions about how to use each tool.
Another point to cover was that other tools can be used with *Change-mapping* such as GANTT charts, so there is a small section which shows some of these tools in use with *Change-mapping*.
Throughout the book you will see images created for this book, which help keep the tools grounded in the real world, as the ultimate aim of this book is to provide tools to help explore and resolve real world issues.

Photograph source: Flickr, Mike McBey. CGI Train, Joseph Chittenden



Tom Graves
Bendigo, Australia
January 2021

A big thank you!

To our co-creators and valued patrons

This book would not have existed without a large amount of people who over the years have contributed great amounts of time and money to bring *Change-mapping* to a wider audience.
The author would like to thank:
Michael Smith (Mexico)
Helena Read (Australia)

Patrons
The author would also like to thank all the valued Patrons at *www.patreon.com/tetradian* who helped fund the production of this book.
As well they have 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.patreon.com/tetradian
If you would like to be involved with the development of new tools, testing and more then head over to Patreon to get involved.

About the author

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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About the designer

Joseph Chittenden

Joseph has produced concepts and visuals for companies such as: *Tesco, Lotus sports cars, T-Mobile, Honda, Makita, UK Cabinet Office, Superdrug/3Phones,* and others on behalf of design agencies in England and Dubai.
www.jc3dvis.co.uk

What is *Change-mapping*?

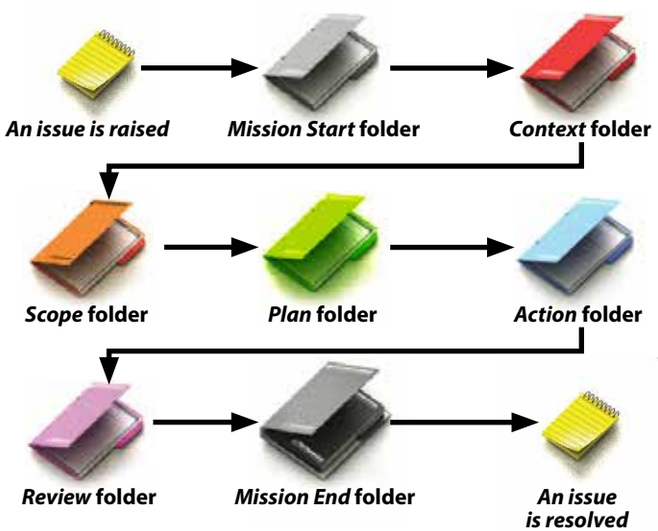
A quick overview

The first *Change-mapping* book

Inside the first book you learn how to run *Change-mapping* missions, see it in action, avoid common problems and how to run larger and more complex missions. As well there is a complete set of basic tools to help you learn how to use *Change-mapping*.
It is available at the time of writing on Amazon and other book retailers.
ISBN 978-1-906681-40-1

This book is the follow-on to the *Change-mapping* book published in 2020. You will need a copy of that book to use the contents of this book.

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.

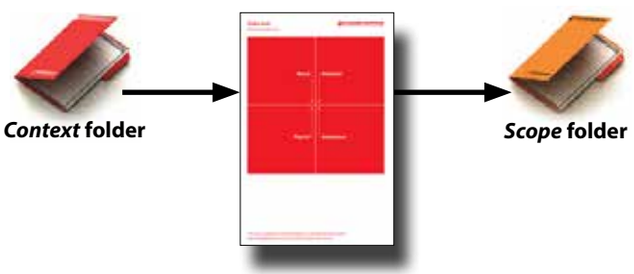


All these parts make up a ***mission*** to explore or resolve an issue. Every ***mission*** is run by a small team who are assisted by a ***Pathfinder*** who keeps the mission on track and an ***Observer*** who records all that is found.
When running a ***mission*** the team use tools to gather ideas,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

What is a *Change-mapping* tool?

Gathering ideas, information and insights

Within the first *Change-mapping* book was a set of basic tools which were deliberately simplified, so that the new user would not be daunted when first learning how to use them.
Once the new user of *Change-mapping* had become familiar with how the tools worked then they would want to tackle more complex issues. Here the basic tools would show their limits and the need for more sophisticated tools would be highlighted.
This book introduces nineteen new *Change-mapping* tools which significantly expand *Change-mapping's* capabilities. The tools are split into seven ***Context folder*** tools, eight ***Scope folder*** tools and three ***Plan folder*** tools. These tools are used within their respective folders in the same ways as the basic tools are. So for example you might use the ***Value*** tool *(see page 6)* in the ***Context*** folder.



Scenarios allow you to see how the tool would typically be used. For example the ***Value*** tool is shown being used to value ancient Chinese statues.
An important note is that any tool can be used for any scenario. For example the ***Value*** tool could be used to find out what is valued when moving copper mine trucks in Namibia *(see page 82)*.
So read through the scenarios to see what the tools are used for and then use them in your 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 copper mine, their enterprise is to mine copper. Mining the copper 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/*

How to measure value

The Value Tool

CGI Model from Turbosquid

The scenario

In this imagined scenario the Palace Museum, Beijing, China has statues which are starting to degrade after hundreds of years. The museums restoration team uses a ***Value*** tool to create a balanced value appraisal of the statues, which can be used to decide what to do next to benefit all stakeholders.

About this tool

A common way to value a product or service is to ask if it is worth a certain amount of money, is it *'good value'*?
But if something is only measured in financial terms then we are missing its ***true*** value.
This version of the tool splits value into four parts, which look at the information about the object, the physical object itself and the materials it is made of. As well many objects while not described as being worth much financially are priceless due to the emotional connection we have with them. Just replacing with a physical copy loses the emotional connection.
The last part looks at the aspirational value people will associate with an object: what the object says about them.
For example the statue above might cost a few pounds to replace with a generic copy which would be cheap to produce. But the emotional, information and aspirations connection to an ancient culture would be lost
These values are often referred to in many of the other tools in this book. Knowing the true value of a product or service will logically influence our decisions about whether they need to be kept as they are or changed.

For information about how to use this tool see overleaf.

About this tool in brief
Often a product or service is valued in only financial terms. This version of the tool helps to measure the value of a product or service in four ways.

Value tool

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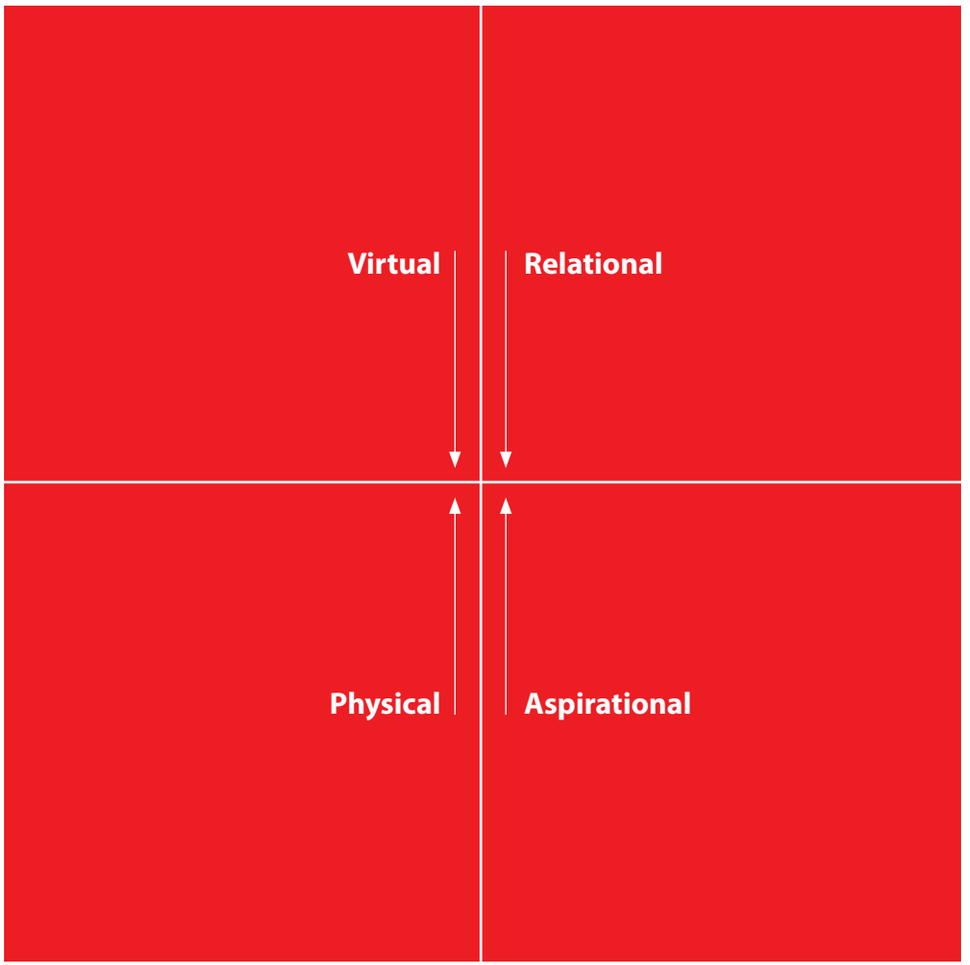
Mission identification:



Some examples of value, using a car.

Virtual: I have skills and experience in driving my car, which I can use to drive other cars. I understand about the car's financial worth compared to other cars. I understand about how powerful the engine is compared to other vehicles.
Relational: I can use it to transport friends and family, our shared memories on family trips in the car. I can help work colleagues get to work.
Physical: I value that the car can transport me from home to work. It can transport shopping from the supermarket. It can allow me to travel across the country in hours, not days.
Aspirational: The car's brand and what it says about me. It can help me achieve my dreams. It gives me something to aim for, if I want to upgrade to a faster version.

This tool is adapted from the Tetradian tool designed by Tom Graves
http://weblog.tetradian.com/2012/05/31/assets-and-services/

You need a balanced view of value to truly appreciate a product or service's worth.

How to use this tool

How can this tool help the restoration team?

This version of the tool is used to establish four types of value for each object or service, rather than just its financial value or worth.

What needs to be done before using this tool?

In this example a mission is run to: *'Appraise the value of the ancient statues'.* This would be explored in the ***Context folder***, where the ***Value*** tool would be used. It would be used with other context tools to set the context for the statues which would then lead to the ***Scope folder***. Here they would explore options about what to next with the statues, to benefit all stakeholders.

How long would it take to complete a Value tool-sheet?

In this example the museum restoration team took about an hour to map out the different types of value.

A brief guide to using the Value tool

1. The statue's ***virtual*** assets: such as information about its history. Information or data can't be touched but can be shared.
2. The statue's ***relational*** assets: such as the connections between the people who use it. It is dependent on both parties, the relationship can't be shared but can be replicated.
3. The statue's ***physical*** assets: such as what is made of. The statue is can be touched and shared.
4. The statue's ***aspirational*** assets: The connection the museum stakeholders share with the statue. The statue is part of the *'brand'* that is the museum. To replace it with a different generic statue would mean that a special connection was lost. This asset is non-exchangeable but can be shared.

What other tools work well with this tool?

This tool works well with all the other tools as if and how something needs to be resolved will be affected by how it is valued. Specific tools which work well with this tool include:

- Π The ***Sense-making*** tool is concerned with information which ties in with this part of the tool. *(See page 10).*
- Σ The ***Visioning*** tool is concerned with a vision of an organisation's future which it aspires to. *(See page 14).*
- Φ The ***Holomap*** tool is concerned with the relationships between people. *(See page 22).*

Value tool

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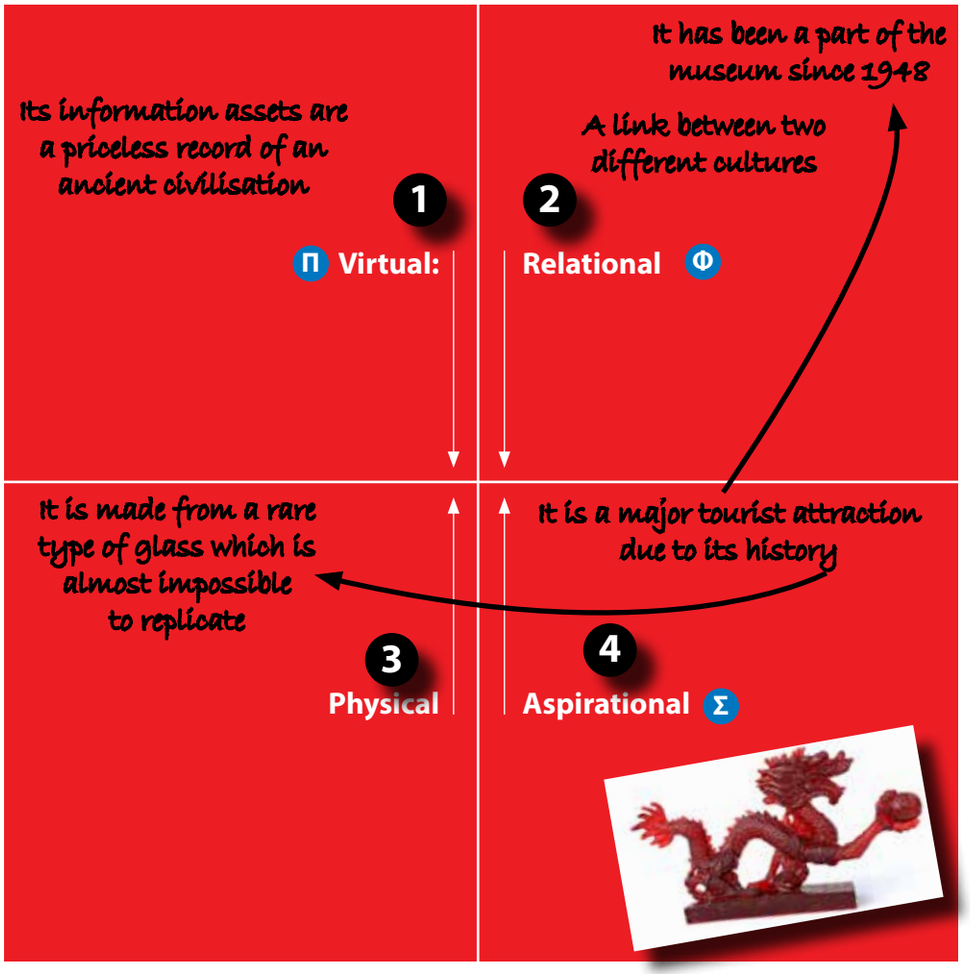
Mission identification: Appraise the value of the ancient Chinese statues



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http://weblog.tetradian.com/2012/05/31/assets-and-services/

How to build a skilled team

The Skills Learning tool

CGI e-scooter, Joseph Chittenden

About this tool in brief
This version of the tool is used to provide support and guidance for the individual and the organisation during skills learning.

The scenario

In this imagined scenario a Stockholm, Sweden based manufacturing company has lost a number of key design staff to other companies. They now face a skills shortage. They use the ***Skills Learning*** tool to explore how they currently acquire skills and ways which can improve that process.

About this tool

Learning new skills would seem to be a linear process, in that you learn the skill and progressively improve.
But in practice learning a new skill matches more of the backwards and forwards progression as shown in the diagram on the right. The learner is aiming for perfection which being pragmatic can never be achieved. As the learner progresses from beginner, often mistakes will be made with the learner feeling that they can't ever master the new skill.
Eventually through trial and error the person will become highly proficient, but even then unexpected things can happen. So this version of the ***Skills learning*** tool has been designed to accommodate this non-linear skills learning process.
It does this by helping the learner measure where they feel they are in the skills learning journey and where the organisation can help them progress further.
So at key stages the leaner will fill out a quick interview to see where the organisation can offer more value.
These values match the ***Value*** tool (*see page 6*) and represent better information, better hardware or experts to give advice.
All of this should making learning new skills less daunting and more of a team effort.

For information about how to use this tool see overleaf.

In brief
Some examples of the types of things found in the table *(below right)*.
Virtual: video tutorials.
Relational: Industry experts, colleagues who have skills which they can teach.
Physical: Computers, tools, programs, etc to make the staff members job easier.
Aspirational: Helping staff members reach their goals in life, rather than staff feeling like cogs in a machine.

Skills learning tool

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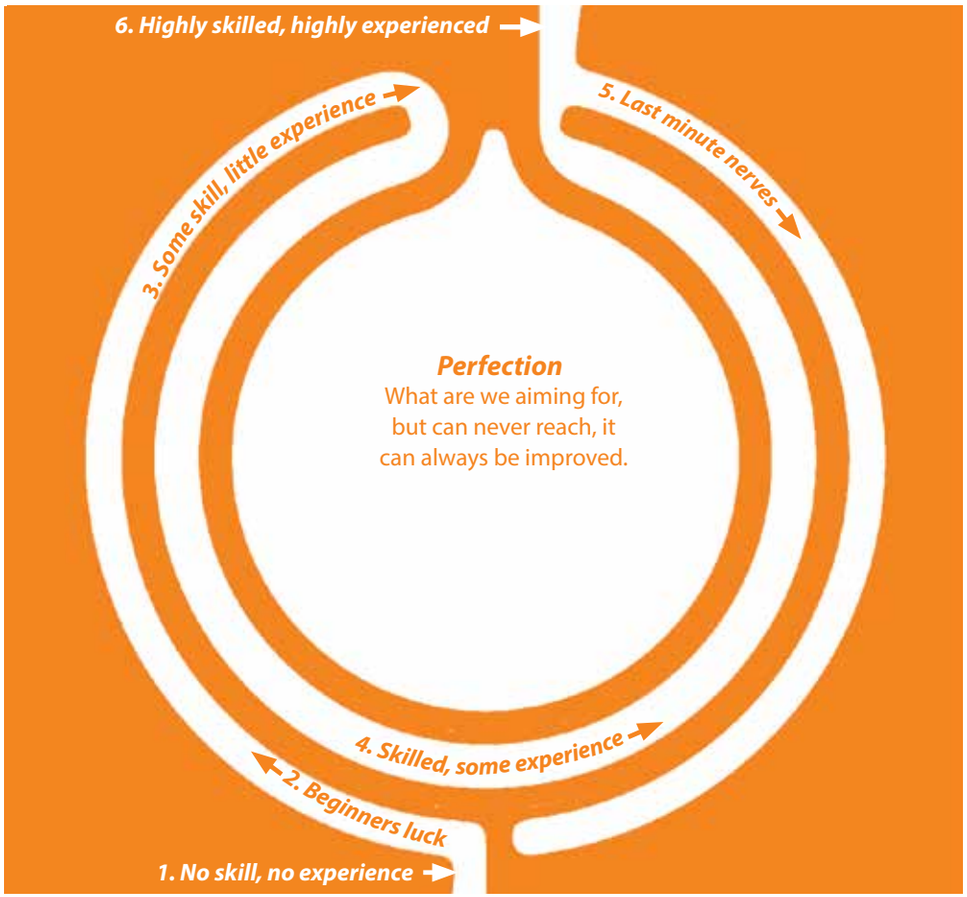
Mission identification:

What stage are you at learning your new skill?



Rate how your organisation support skills learning.

	Virtual	Relational	Physical	Aspirational
1				
2				
3				
4				
5				
6				

This tool is adapted from the Skills Labyrinth tool designed by Tom Graves.
http://weblog.tetradian.com/2015/08/19/seven-sins-7-lost-in-the-learning-labyrinth/

The path to learning skills is not always the most direct one.

How to use this tool

How can this tool help the manufacturing company?

This version of the tool is used to assess how the design staff feel their skills learning is progressing and how the manufacturing company can improve that process.

What needs to be done before using this tool?

In this example a mission is run to: *'Plan how to improve skills acquisition'.* Part of that mission would be to see if skills are being acquired. Some of that would be explored in the ***Context*** folder. This tool would be used in the ***Scope*** folder to help orient the company towards the most effective way to improve skills learning.

How long would it take to complete a Skills Learning tool-sheet?

In this example the designer would use the tool every month to review their own progress and the company's towards skills learning with each review taking a few minutes.

A brief guide to using the Skills learning tool

1. The designer who is learning new visualisation skills uses this section to mark where they feel they are in the skills learning process. This is reviewed each month, to rate progress and skill retention.
2. Here the designer rates how the company supports skills learning. The designer gives each box a mark out of five.
   1. The organisation does not support skills learning.
   2. The organisation supports skills learning with limited information, experts, equipment and staff goals.
   3. The organisation supports skills learning with some information, experts, equipment and staff goals.
   4. The organisation supports skills learning with plenty of information, experts, equipment and staff goals.
   5. The organisation supports skills learning with large amounts of information, experts, equipment and staff goals.

What other tools work well with this tool?

- Π The ***Value*** tool uses the same *'value'* categories to define what skills are valued and why. *(See page 6).*
- Σ The ***Visioning*** tool can be useful in cross-checking that the skills are acquired are useful to the organisation. *(See page 14).*
- Φ The ***Inside/Out*** tool can also be used to confirm that skills learnt align with what the organisation requires. *(See page 40).*
- Ψ The ***SEMPER*** tool can help the staff member a voice, if they feel that they are not being given enough help to obtain skills. *(See page 60).*

Skills learning tool

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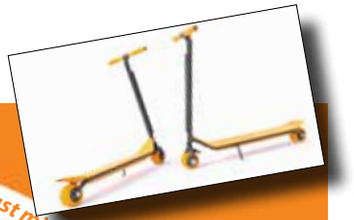
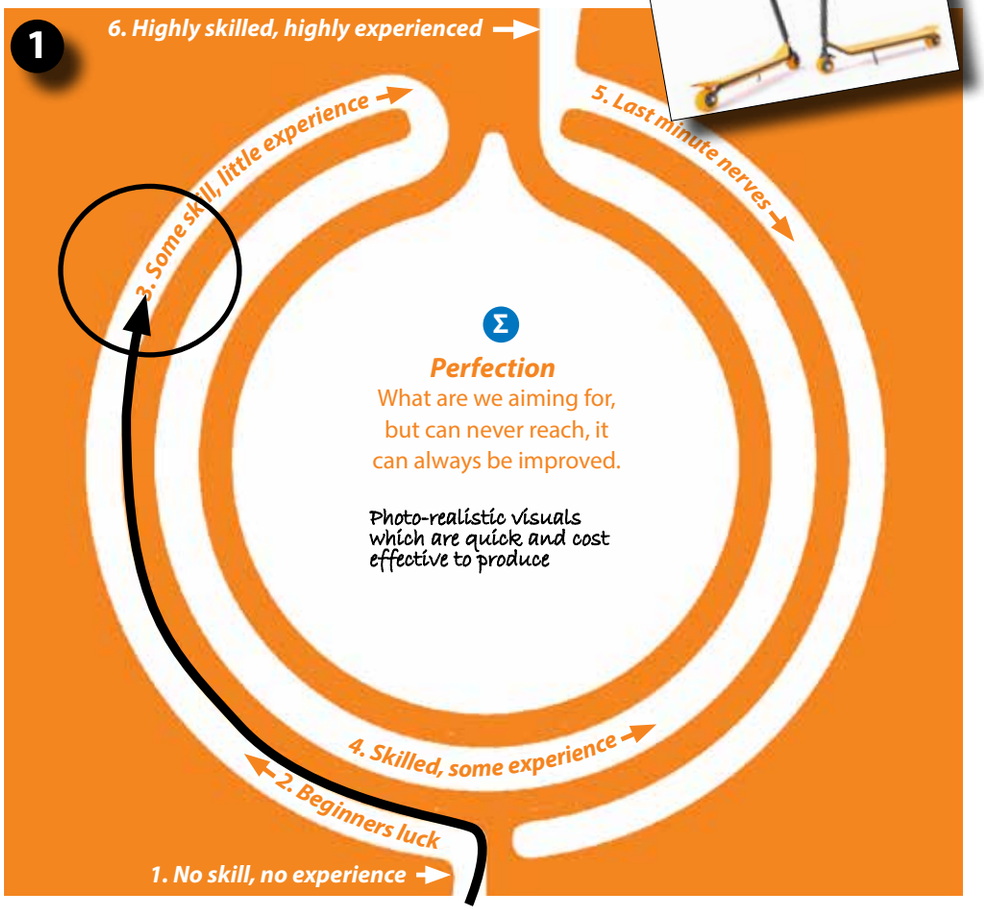
Mission identification: How do we learn new visualising skills in our manufacturing company

What stage are you at learning your new skill?





Rate how your organisation support skills learning.

2

	Virtual Π Φ	Relational Π Ψ	Physical Π	Aspirational Π Σ
1	4	4	4	4
2	3	2	1	3
3	5	3	4	4
4				
5				
6				

This tool is adapted from the Skills Labyrinth tool designed by Tom Graves.
http://weblog.tetradian.com/2015/08/19/seven-sins-7-lost-in-the-learning-labyrinth/

How to reduce uncertainty

The SCAN tool

Photograph source: Wikipedia,Asco. CGI Dump truck, Joseph Chittenden

About this tool in brief
This version of the tool is used before resolving an issue what is known and what isn't when resolving that issue.

The scenario

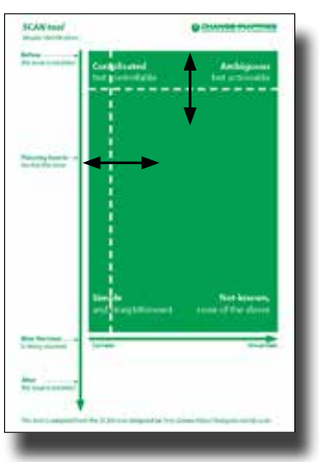
In this imagined scenario a copper mine in Namibia is relocating. Part of this complex project includes moving the massive dump trucks. The mine uses the ***SCAN*** tool to explore the uncertainties of relocating the dump trucks in terms of complexity and time. Once this was done the mine would integrate what was found with the rest of the mine relocation.

About this tool

If we use the example of moving the copper mine trucks, it would seem best to use a ***GANTT chart*** (see page 104).
A ***GANTT chart*** assumes that everything is known about how to resolve an issue, but what about the unknowns?
What happens if an unexpected event happens at the last minute? This version of the ***SCAN*** tool is used to counter these types of problems. It asks a team to put what is known about the solving of the issue into the '*simple*' section, what is complicated into the '*complicated*' section and so on.
The further to the right in the tool, the more uncertain something is. The aim is to explore the unknowns *(Using the **Sense-making** tool can help, see page 10)* and turn them into knowns, before actually trying to move the copper mine trucks.
All the above assumes the copper mine has as infinite amount of time to move the trucks, but what if they have a limited amount of time? Time is introduced on the left of the ***SCAN*** tool. Reduced time can turn a simple action into a complicated action.
So by getting a more detailed idea of how to move the trucks *before* they move the trucks they should be less likely to run into unexpected problems.

For information about how to use this tool see overleaf.

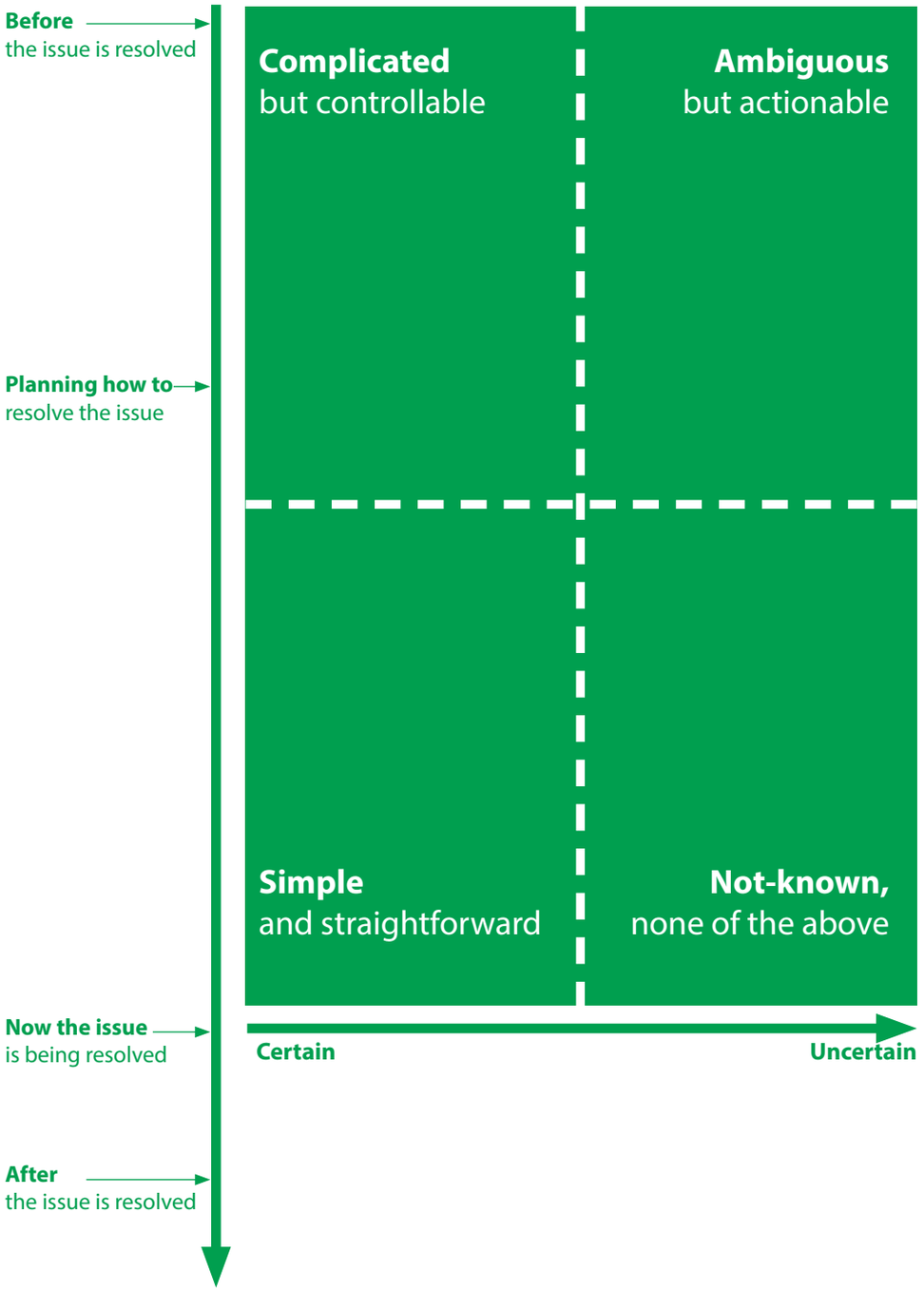
In brief
An important note about ***SCAN*** is that the dashed lines are not static *(shown with black arrows, below)*.
Often your ***SCAN*** tool will start with many unknowns before changing to look more like the ***SCAN*** tool shown on the right.



SCAN tool

CHANGE-MAPPING
CONNECTING BUSINESS TOOLS TO MANAGE CHANGE

Mission identification:



This tool is adapted from the SCAN tool designed by Tom Graves.*https://leanpub.com/tp-scan*

When trying to resolve something, what are the uncertainties and complexities?

How to use this tool

How can this tool help the copper mine?

This version of the tool is used to explore the uncertainties of moving dump trucks in terms of complexity and time. The tool acts as a cross-check so that when an issue is resolved, unexpected events don't cause problems.

What needs to be done before using this tool?

In this example the mine has confirmed they want to relocate in the ***Context*** folder of a *'Relocate the mine mission'.* Such a large project would be split into many parts each needing planning*. Here we look at just moving the dump trucks, with its own ***Plan*** folder, where the ***SCAN*** tool would be used.

**See the first Change-mapping book (Page 102) for details about running larger and more complex missions.*

How long would it take to complete a SCAN tool-sheet?

The mine will explore which parts of moving the dump trucks would be simple, complex, ambiguous or not-known. Then see which of these need to be solved before the actual move. The ***SCAN*** tool in this example would take a couple of hours to work through all the potential problems.

A brief guide to using SCAN

1. ***Simple*** tasks to move the dump trucks are placed here, such as hiring the logistics company.
2. ***Complicated*** tasks are placed here, such as confirming the roads are wide enough for the dump trucks.
3. ***Ambiguous*** parts of the project are placed here, such as how long will the relocation take, once this is known then it can be moved to the simple section.
4. ***Not-known*** factors such as dust-storms which are hard to predict in real time.
5. This section introduces *'time'.* It acts as a countdown to project start, and what needs sorting and when.
6. This arrow shows that the further to the right of the matrix the more complex the task is.
7. This line is the *'boundary of effective certainty'* which can move right to left depending on certainty.
8. This line is the *'transaction from plan to action'* which can move up and down depending on time required.

What other tools work well with this tool?

- Σ The ***Sense-making*** tool can confirm that what is said to be *'simple and straight forward'* really is. *(See page 10).*
- Φ ***SCAN*** adds uncertainty and time to the mix when drawing up plans. *(See page 82).*

SCAN tool

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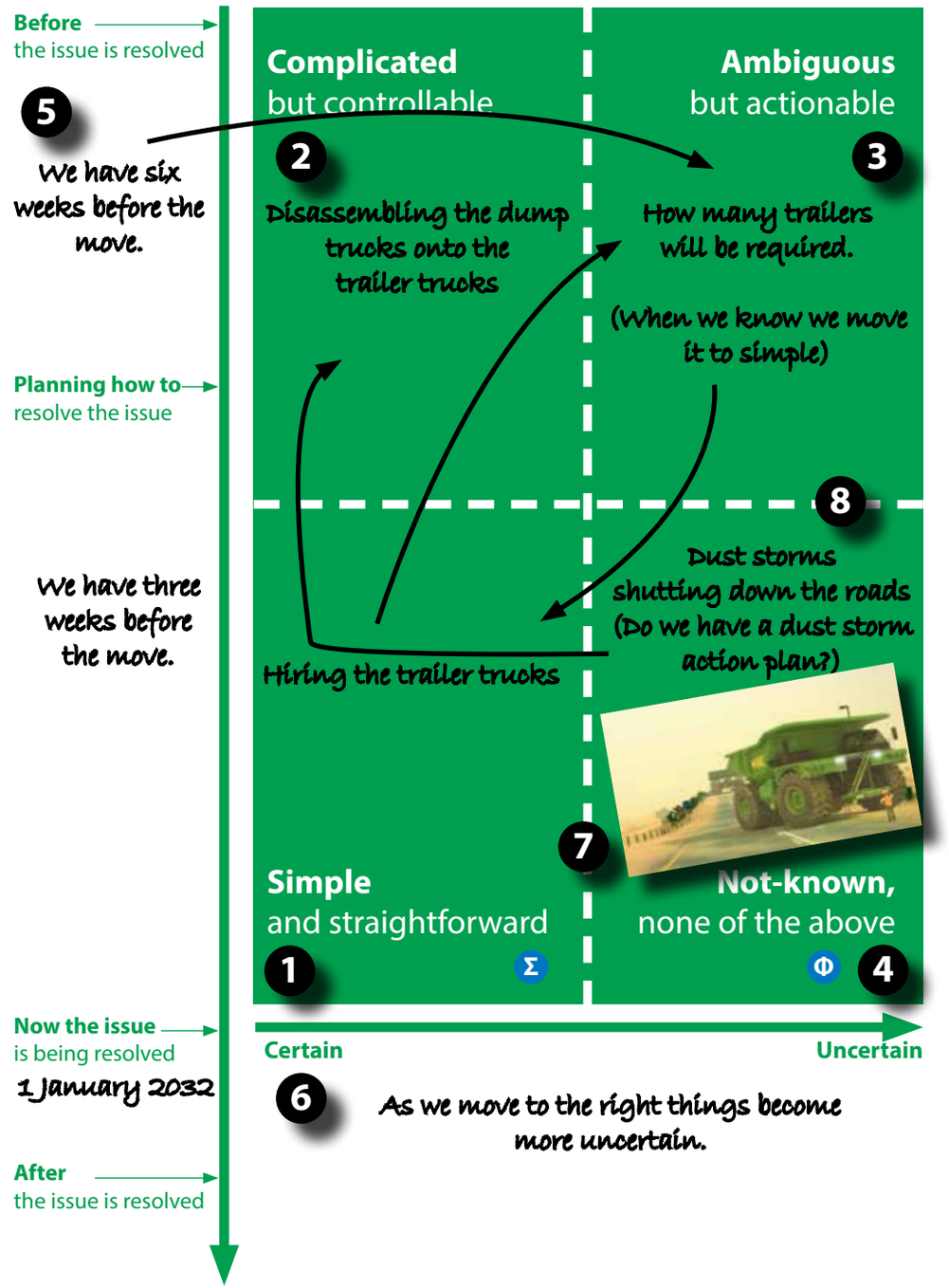
Mission identification: Relocating the Copper Mine Dump Trucks in Namibia



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