

COMPLEXITY

TOOL

HANDBOOK

**LET US TACKLE COMPLEX
CHALLENGES**



public:START



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TABLE OF

CONTENTS

INTRODUCTION	2
SETTING THE SCENE	3
WORKBOOK: MAKING HEADWAYS DEALING WITH COMPLEX CHALLENGES	5
public:START COMPLEXITY TOOL	23

INTRODUCTION

This Handbook is a compendium to the public:START website that supports public servants and related agencies to deal with complex challenges in their local regions and communities. Public:Start is an Erasmus Programme of the EU that aims to promote public entrepreneurship as a means of dealing with changing societies and the challenges that they bring.

The public:START Complexity Tool is a key element of this initiative. A short introduction on what and why of this tool is followed by a workbook to help those who wish to initiate structural changes in their teams to address complex challenges effectively as a first step. The handbook then offers you an overview of the Complexity Tool and provides a short introduction to the various aspects. Still in development is a brief guide to trainers and vocational educational institutes who wish to include the learning elements for public entrepreneurship in their programmes, which will later be added to the Handbook.

We hope that the public:START Complexity Tool will inspire you and public service organizations to embark on a journey to become fit for purpose in today's dynamic and complex world.

The public:START project partners are



SETTING THE

SCENE

Governments are expected to be reliable and predictable agents serving all citizens equally. To this end, administrative systems encompassing departments, services, procedures and guidelines are set up with clear hierarchical structures. The rigid systems are meant to offer uniformity and transparency. These administrative systems function well for many commonplace services but fall short of solving complex societal issues that are increasingly dominant in our societies. Departments, hierarchical positions, roles and protocols are focused on specific problems and forms of service provision. They do not meet the needs of persistent challenges such as:

Poverty, climate change, food insecurity, rights of refugees, risks of new pandemics, healthcare infrastructure, discrimination of the LGBTQ+ community, racism, gender equality, cyber security, corruption, organized and extremists' crime.

New approaches are needed. The problems mentioned above are of a different category. They are complex, intertwined with other issues and often play out at different system levels. They also include diverse parties with different interests and ideas about the problems and how best to solve them.

Understanding complexity, developing tools for systems innovation and training in new competences for public servants are critical. The public:START website presents two complementary approaches for those confronted with complex issues: 'lessons' on the various aspects of dealing with complex challenges and practical examples from various municipalities on how they approached the issue at hand.

These two approaches allow individual professionals to gain insights, practical tools and examples for different phases when needed, as an on-the-job tool, or to systematically work through all aspects related to navigating landscapes of complex challenges

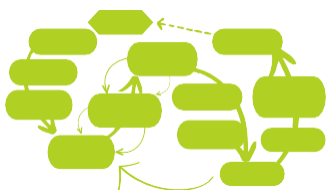
Furthermore, we provide an additional resource in this handbook, a workbook, for those in public service who want to initiate deeper systemic changes in their department or team, to be able to deal with complex challenges. This involves examining current practice, creating an awareness of the need to change, examining and re-creating conducive preconditions to allow new ways of working, etc.

In this Handbook, you will find the following:



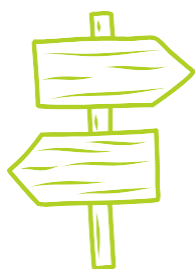
Workbook: Making headways in dealing with complex challenges

A hands-on workbook to systematically work with others/your team using a specific pilot/issue to create common understanding and initiative change



The Complexity Tool

Introduction to the Complexity Tool that helps you in understanding step by step the dynamics of complex issues and will improve your competencies in dealing with such issues.



A guide for vocational education and executive trainers (still in development)

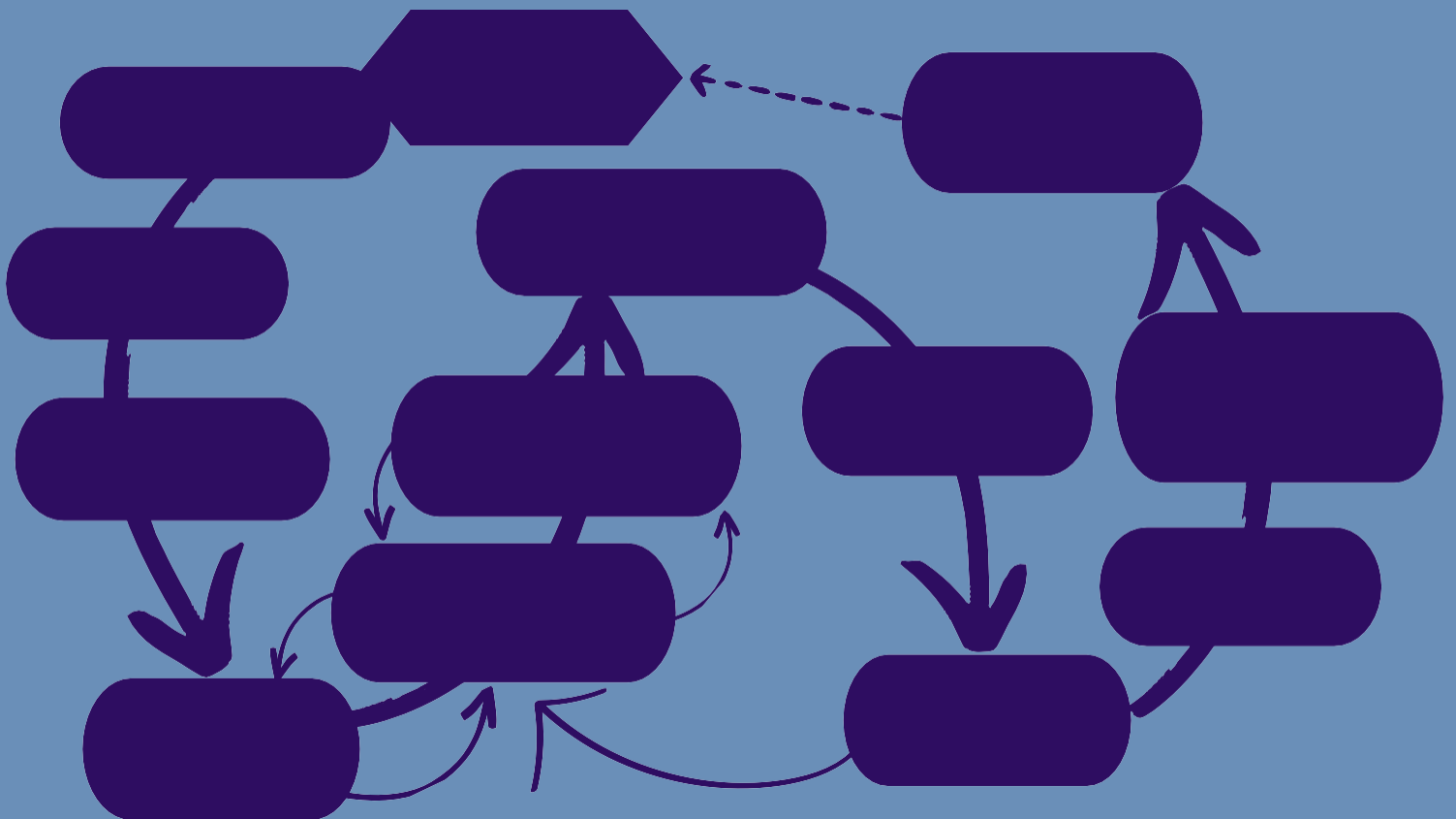
Suggestions for how the learning components of the Complexity Tool can be incorporated into upskilling and education programmes.

WORKBOOK:

MAKING HEADWAYS

DEALING WITH

COMPLEX CHALLENGES



PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

This workbook aims to support municipalities and other local agencies in designing new ways of working that are needed to effectively address complex challenges that require collaboration with other stakeholders. This involves a major shift in how we think about working: about competing, collaborating, roles of government, business, citizens and civil society as a whole and therefore, about how we make decisions, organize ourselves, and the competences and resources needed for these changes. Major shifts do not happen overnight, they are processes that need to be addressed: discussions and pilots initiated to collectively discover how to move forward. This workbook is a tool to facilitate the shift.

The workbook uses the Innovation Workplace (IWP) concept (originating from the Northern Netherlands) to create a (figurative or physical) space to bring local stakeholders together to learn and innovate collectively. This workbook can help you create an innovation space that fits your context.

The workbook offers an opportunity to systematically work out a new approach with questions to identify the core issues, who needs to be engaged and on which aspects, what are the roles of these participating stakeholders, what competences are needed, how to finance joint projects, and so on.

To begin, **choose a specific project or topic** to work through the workbook to be specific about what needs to change and how.

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 1 - External

Complex issues play out in society. What is important and who do you need in the field? look at necessary conditions beyond the organisation...

For your specific project or topic, _____,

answer the following questions, ideally with relevant colleagues and decision-makers/managers.

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

Which external partners do we need and why should they participate?

Party 1:
Interests:

Municipality
Interests:

Party 2:
Interests:

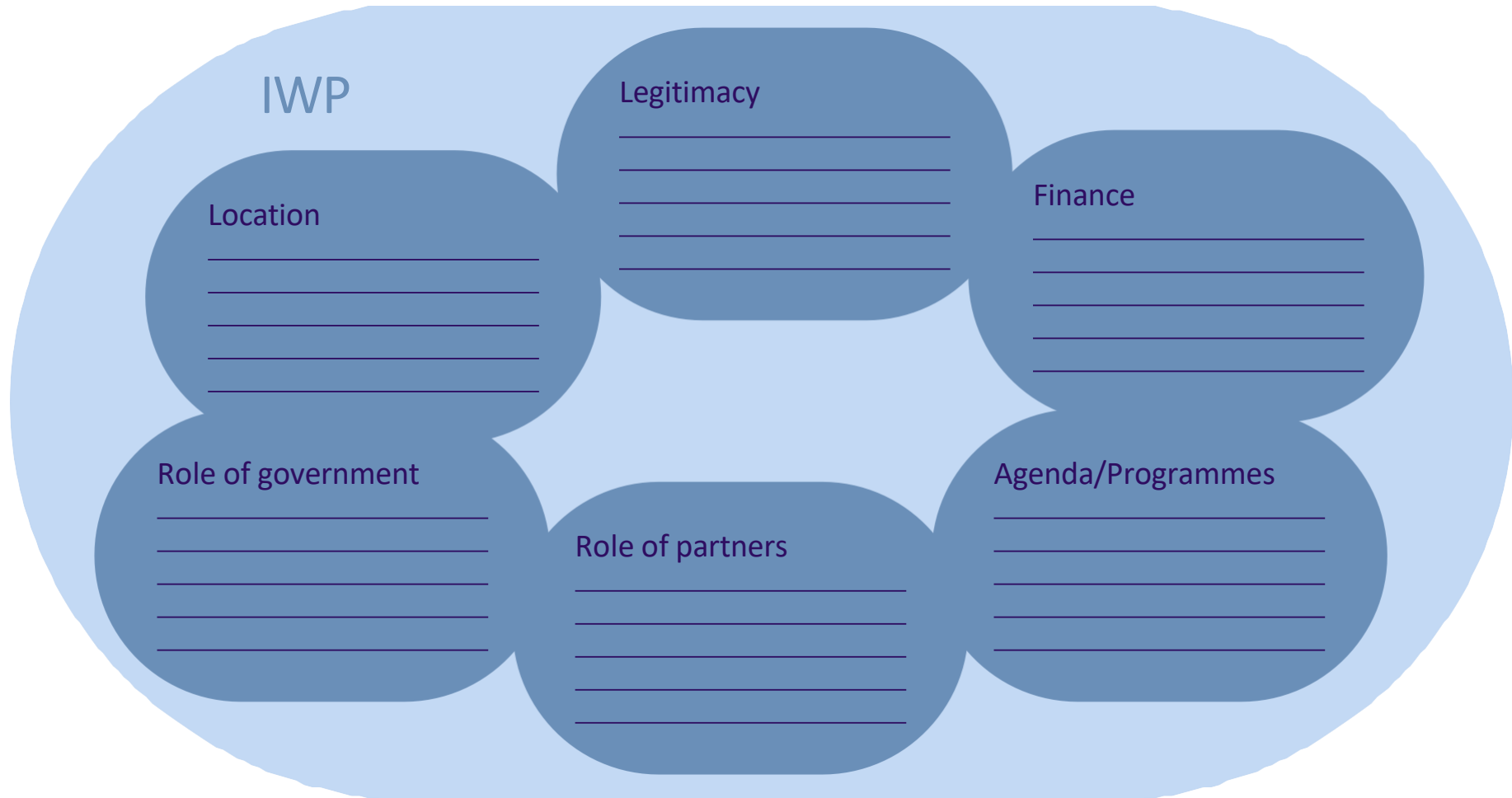
Party 3:
Interests:

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 1 - EXTERNAL

Innovation Workplace (IWP) supporting collaborations:



PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 1 - EXTERNAL

Which competencies are needed to achieve collective results in an IWP? What is missing?

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 1 - EXTERNAL

Handling risks & how to prevent things from going wrong?



PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

Governance creating shared ambition, ownership, accountability & results



PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 2 - Internal

Dealing with complex issues demands changes within the municipality and other local government agencies.

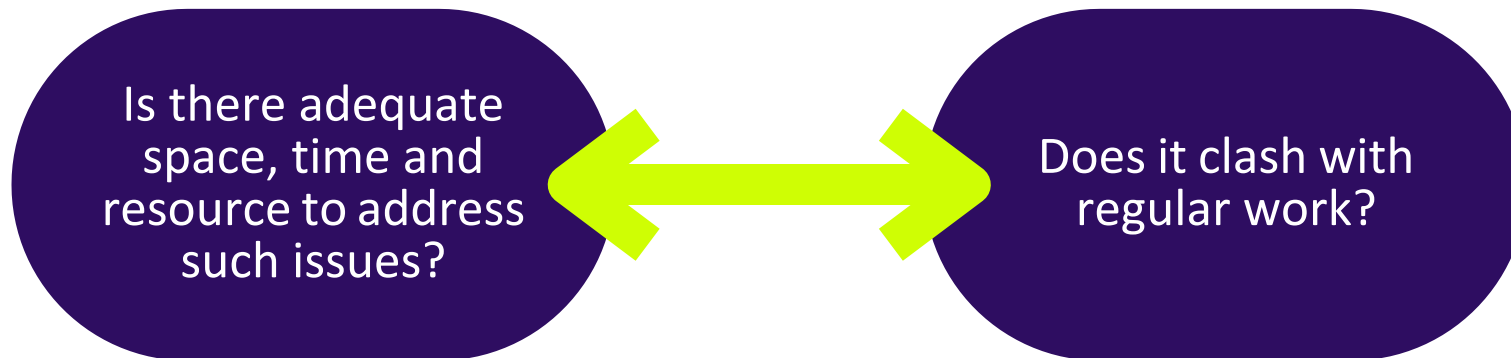
What is important and what needs to be done within your organization?

Review your own public sector organization in answering the following section...

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

How do you think the municipality/your organization is doing when it comes to effectively addressing major societal challenges?

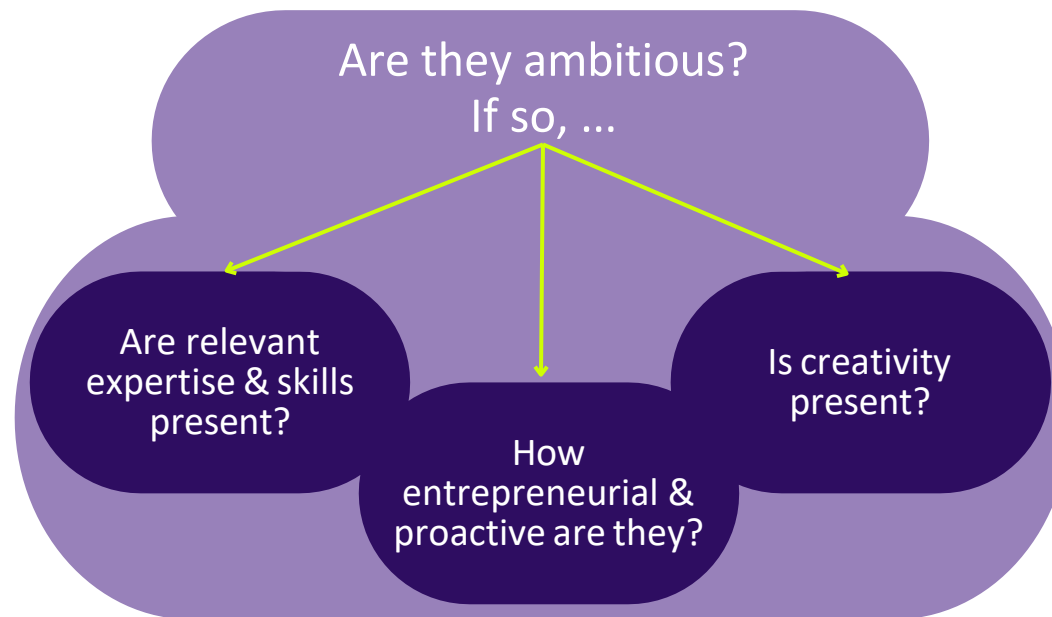


Remarks:

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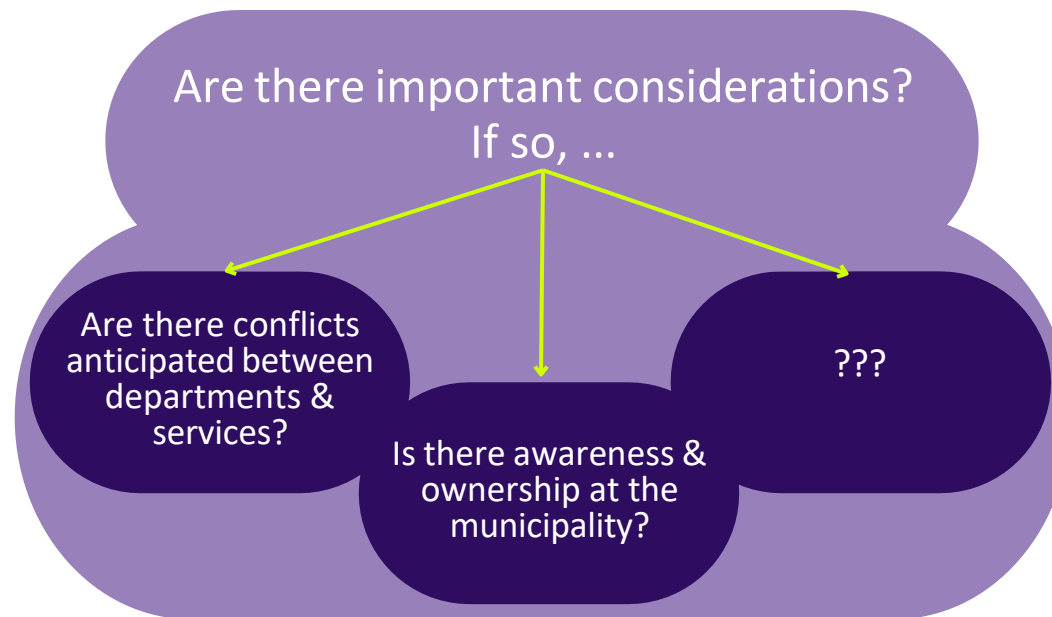


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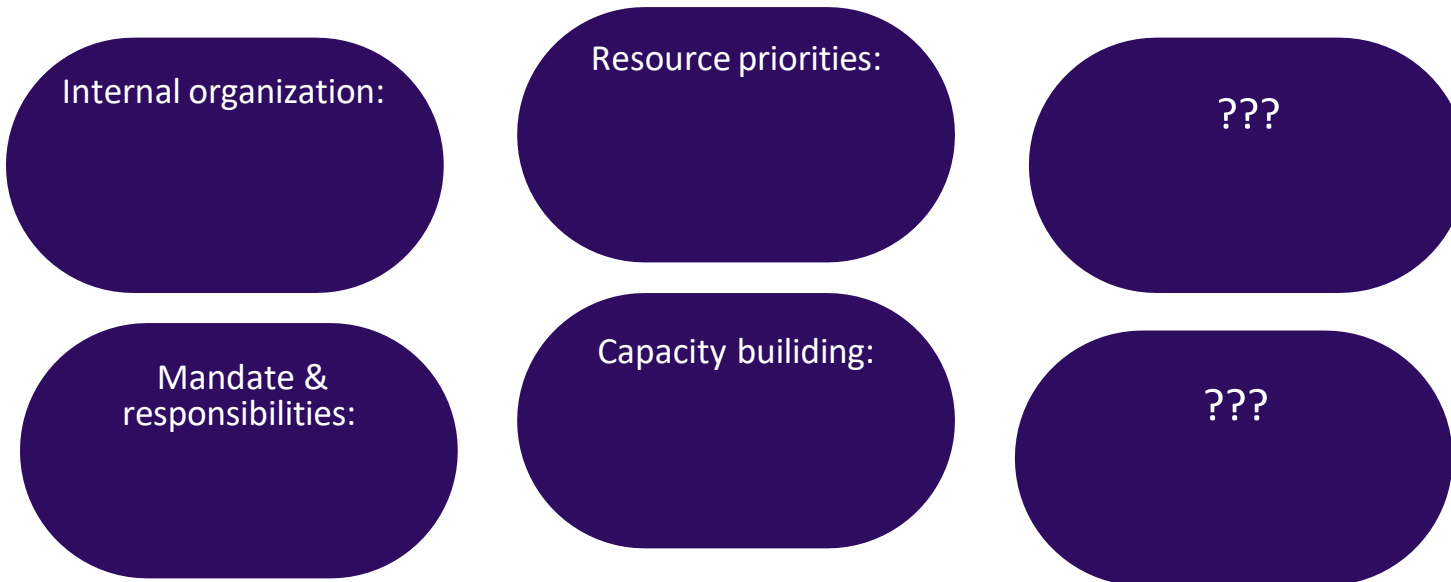
PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 2 - INTERNAL

How do you think the municipality/your organization is doing when it comes to effectively addressing major societal challenges?

Initial ideas on what could change in terms of ...



Remarks:

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 3 - Self

Personal considerations and pre-conditions enabling professionals within municipality/government agencies.

What needs to change for you to participate in addressing societal challenges collectively with others...

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 3 - SELF

What is needed to effectively tackle major societal challenges in your role?

How can things be done differently?

**Do you have space, time
and budget to really
tackle such issues?
Does it clash with your
regular work?**

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

PART 3 - SELF

What is needed to effectively tackle major societal challenges in your role?

What knowledge/skills do you have?

**Do you have ambition?
Yes --> Do you have the
necessary knowledge &
skills?**

Which do you lack?

Creativity?

**Proactive
attitude?**

**Entrepreneurial
mindset?**

...?

PRE-CONDITIONS

The municipality and societal challenges: how are we going to deal with them?

What is needed to effectively tackle major societal challenges in your role?

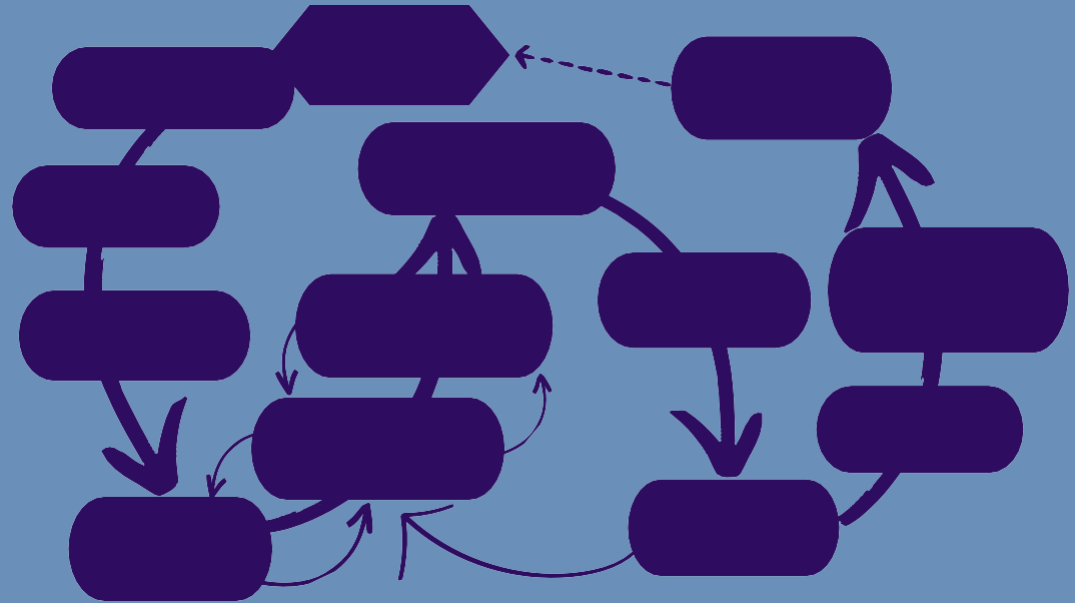
**Do you feel empowered
and have the authority
to act?**

What actions are needed?

**Do you foresee tensions
with others in the
organization?**

What concerns do you have?

WORKBOOK:
MAKING HEADWAYS
DEALING WITH
COMPLEX CHALLENGES

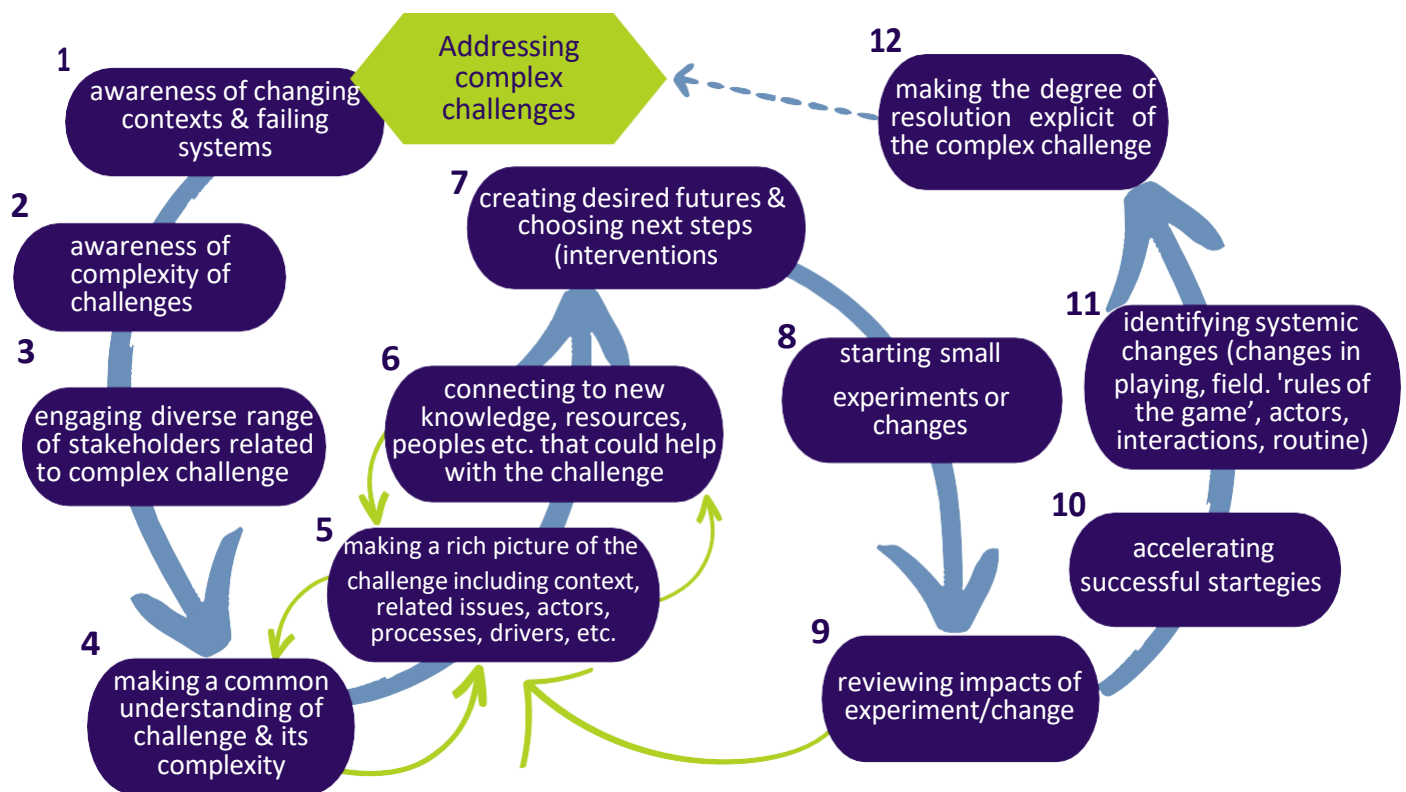


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public:START

COMPLEXITY TOOL

The public:Start tool helps you in understanding step by step the dynamics of complex issues and processes that could facilitate addressing them.



(Van Berkel & Manickam, 2023)

This public:Start tool identifies 12 focal points for interventions/strategies to effectively address complex challenges. These focal points are interconnected and actions in one focal point may prompt a need to revisit an earlier focal point in the scheme above. Also, one can start at any point in the scheme, depending on developments in that challenge. However, starting at 1 would make sense for most issues to have a deeper understanding of the changing contexts of any challenge.

Below is a brief explanation of each of the 12 focal points and the links to the respective webpages.

1 awareness of changing context & failing systems

Understanding the context of a problem is more critical than often assumed. One of the factors that we need to be aware of is the way we look at problems. Often, our perceptions are defined by dominant paradigms. This could be collective, communal or individual. Similarly, our ways of working and dealing with problems are formed by structures and processes, i.e., systems that are shaped by such paradigms. New developments may make current systems inadequate. Understanding the new context is critical.

2 awareness of complexity of challenges

It is also important to be aware that breaking down complex issues into smaller, more manageable parts to find simple solutions does not work for complex challenges. The main reason for this is that such challenges are always related to other complex issues and how they are perceived. Therefore, complex issues should not be simplified but embraced.

3 engaging diverse range of stakeholders related to complex challenge

Complex issues cannot be solved through setting protocols or by specialists in a specific discipline or by a department of a government without the help of others. Consider, for example, climate change, drug trafficking, a widening gap between rich and poor residents. For such issues, it is important to investigate interdisciplinary and across departments and organizations which parties may be able to contribute to the development of the best strategies and achieve the effective results. The different perspectives of parties to be involved increases the likelihood of a successful approach.

4

making a common understanding of challenge & its complexity

Different stakeholders in solving a complex challenge also bring different ideas about what the problem is and how it should be solved. This can lead to a great deal of confusion if sufficient attention is not paid to formulating the problem in such a way that everyone can agree. This "collective sense-making approach" often requires a lot of time and extensive procedures so that everyone's interest and expertise can be heard and addressed.

5

making a rich picture of the challenge including context, related issues, actors, processes, drivers, etc.

Complexity is harder to describe than to capture in drawings. In 'rich pictures' you create a richer reality of the diversity of stakeholders, their interests, perspectives, concerns and therefore doing justice to them. In addition, 'rich pictures' can capture new developments, changing contexts, fragmented and inadequate approaches, etc. It also offers insights into current and potential patterns of interaction.

6

connecting to new knowledge, resources, people etc. that could help with the challenge

Stakeholders think and act from their own reality, their own "bubble. By engaging in dialogue and cooperation with other stakeholders who live in other 'bubbles', they encounter new knowledge, resources, experiences, networks and solutions. It becomes a collective journey of discovery in which not only the individual stakeholders begin to see things differently, but also jointly develop new perspectives and patterns of interaction.

7

creating desired futures & choosing next steps (interventions)

Different stakeholders have different assumptions about how the future could be. Capturing different future scenarios offer opportunities to have dialogues about

desired and undesired futures. It is also important to sketch catastrophic scenarios that reveal how current problems could escalate. This in turn, can reveal which behaviours could cause doomed futures. Understanding possible pathways to different scenarios can help us determine which behaviours and next steps might lead to more hopeful futures.

8 starting small experiments or changes

Small, localized experiments are easy to enact and offer greater opportunities for success. Each new success helps feed motivation and participation of others. Framing system changes is difficult and big shifts or programmes that are centrally managed usually never succeed. They are expensive, they generate resistance, have little consideration for the reality of unpredictable events and the diversity of those involved. Small experiments are easy to execute and adapt. It is important to have multiple experiments in different areas and places.

9 reviewing impact of experiment/change

Understanding systems change requires different performance indicators. These include indicators that reveal which interventions make a problem better or worse and if there are structural improvements and therefore also more resilience. This involves mapping changes in values, perceptions and behaviours of those involved.

10 accelerating successful strategies

Building on successful interventions that make systems more purposeful means working with the willing and focussing on broader communal welfare. This means holding firmly on desired futures and goals and communicating these. Also, ensure that participation of diverse stakeholders is a continual process. Giving credits to and facilitating bottom-up initiatives are also essential.

11

identifying systemic changes (changes in playing field, 'rules of the game', actors, interactions, routines)

Reviewing and making visible what is changing and has changed is important. This includes changes in systems norms, structures, interactions, dominant views and players, etc. Making clear changes in the playing field and rules of the game. This means understanding which behaviours and changes that helped successfully address complex challenges.

12

making the degree of resolution explicit of the complex challenge

Dissemination and communication of successful change strategies are the beginning of broader systemic change. What made this change possible? Which new stakeholders are included? What new rules of interaction have been adopted? What were important mind and behavioural shifts? How do stakeholders perceive their roles and outcomes of the changes?



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