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Keywords:	Innovation management, innovation process, IMO, dynamic toolbox, mix & match toolbox, supporting toolbox.
Abstract	The aim of this deliverable is to develop an interactive framework of innovation tools, which can provide support and guidance to the DISIRE partners on how to foster innovation within the DISIRE project. This document is a live document that will be updated in the future on a needed basis.

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Ver.	Date	Changes	Author
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1 Introduction

1.1. Summary (abstract)

The main objective of the Task 9.4 (Innovation and Knowledge Management) includes both internal and external dimension:

- The Intellectual Property Office (IPO) deals with the internal dimension and addresses all activities aiming at protection of project innovative outcomes and continuous update of the consortium Agreement (CA), such as access to the background knowledge, joint use and transfer of the foreground knowledge, access rights and rules related dissemination activities.
- The external dimension is addressed by the Innovation Management Office (IMO) aiming at facilitation of the innovative approach for exploitation and commercialization activities for the DISIRE technological platform and its components. An **Interactive Innovation Toolkit** was developed by the IMO to support partners within their innovation activities and provide them with easily accessible, helpful and interactive framework of innovation tools and methods, which can be applied at each stage of the innovation process within the DISIRE project.

The Interactive Innovation Toolkit (IIT) is structured around the core innovation process and consists of three toolboxes:

- **Dynamic Toolbox** – a selection of tools based on Design Thinking and Innovation Flowchart, which provide practical advices for each phase of the innovation process.
- **Mix & Match Toolbox** – contains several tools, which offer support for designing the whole innovation process from generating new ideas to commercialization of research activities.
- **Supporting Toolbox** – comprises a set of tools for transferring knowledge to project partners, identification of key stakeholder outside of the consortium, risk management and assessing the project results.

1.2. Purpose of document

The purpose of this document is to elaborate on the three main building blocks of the IIT and provide an overview of the methodologies integrated within them. The successful realization of an idea into a product or business model requires a structured innovation process. This process must be well structured, initiated, moderated, controlled and monitored within a research project or a company. Thus, the operative innovation management includes the allocation and distribution of tasks and resources, controlling the individual process steps and eliminating failures. Furthermore, the innovation process not only requires organization concerning technical aspects but must be treated as an interdisciplinary process, especially when dealing with technical innovation.

Therefore, the added value of the methods and tools compiled within the IIT can be summarized as follows:

- They provide a structured approach towards innovation management to support spin off innovation activities, generate new business cases in the cross-sectorial context and commercialize project results, thus bridging the gap between research and market.
- They help engineers to think outside the standardized procedure of product development in order to develop a more open innovation process and mindset.

Full description of the IIT including the user manual can be located in Annex A.

All of the tools integrated within the Interactive Innovation Toolkit have been identified and preselected among hundreds of tools based on their relevance and applicability to the scientific focus and work plan within the DISIRE project. Most of these tools are well documented, diffused, publicly available and widely applied in many different sectors and projects. The source of each tool can be traced using the reference link located within the description / manual of each tool in Annex A.

1.3. Partners involved

The DISIRE Interactive Innovation Toolkit has been developed by the Fraunhofer MOEZ experts and the DISIRE management team was involved into the feedback loops related to this deliverable. The IIT is planned to be presented to the DISIRE partners during the second Consortium Meeting in Tarragona, Spain on the 8th - 9th of September 2015. Within an interactive workshop, partners will be introduced into the structure of the IIT including its three main parts: Dynamic Toolbox, Mix & Match Toolbox and Supporting Toolbox. In the second part of the workshop, some selected tools will be directly applied to generate the ideas and inputs for the DISIRE technology exploitation strategy (D9.5). The IIT can be regarded as a live toolkit, which will be constantly updated and optimized based on the active feedback of partners starting from the consortium meeting in September and throughout the whole project lifetime.

2 Achievements

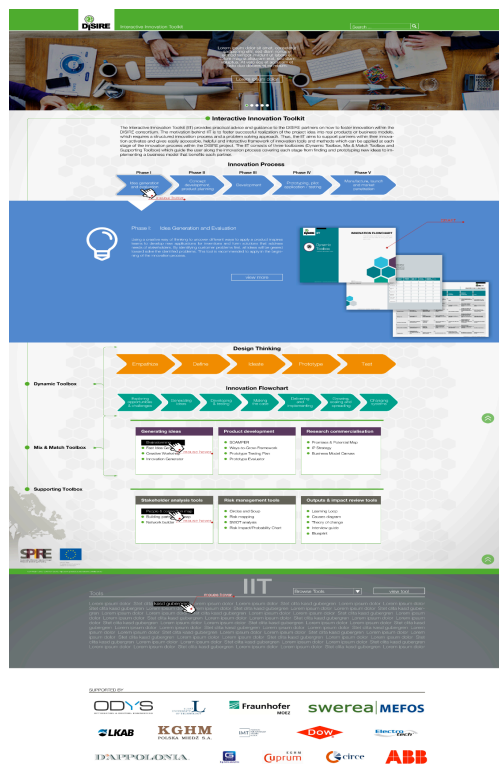
2.1. Visual design of the Interactive Innovation Toolkit (IIT)

The visual layout of the DISIRE Interactive Innovation Toolkit has been designed according to the project's visual identity. The DISIRE Interactive Innovation Toolkit front page contains the following elements and information:

- *Key visual, search function, footer with partner logos, web site keywords glossary and selection function*
- *DISIRE logo and full project denomination*
- *SPIRE logo and SPIRE tree element*
- *EU emblem and the acknowledgement of the EU funding*
- *Interactive Innovation Toolkit visual outline with a clickable elements*

All toolkit elements are arranged on a single page and can be operated by a scrolling function.

Regarding the content, the visual representation of the Interactive Innovation Toolkit (IIT) is inspired by the logic of the innovation process and its progress, which is described by the selected scientific-based phase model¹ (Figure 1).



Below the short description of the toolkit, dynamic block arrows illustrate the innovation process. Clicking on the block arrows opens a new field describing the individual phases of the innovation process. In addition, information concerning the use of tools from the Mix & Match Toolbox and the Supporting Toolbox is provided with corresponding icons for each individual phase.

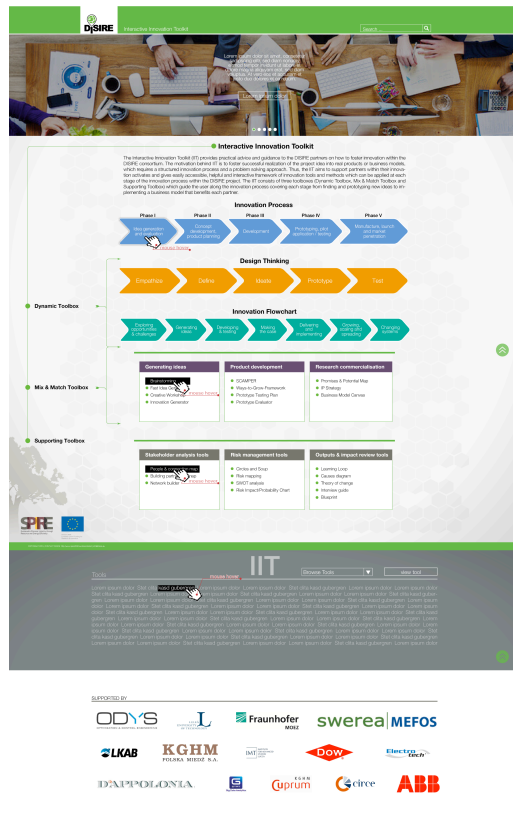
The block arrows representing one of the dynamic tools 'Design Thinking' are also clickable and provide an overview on the various stages of the 'Design Thinking' process with further instructions for its practical application. Furthermore, in the field 'Innovation Flow Chart' it is recommended to directly download the Innovation Flow Charts dynamic tool as a PDF file and to use this document as a template for the workshop.

Figure 1 Innovation process

¹ Herstatt, Cornelius; Verworn, Birgit: Modelle des Innovationsprozesses. Arbeitspapier Nr. 6, September 2000 [last downloaded 2015-08-10]

By clicking on the Mix & Match Toolbox and the Supporting Toolbox symbols and their individual icons, summary of information on the respective tool is revealed and a separate workbook in PDF format becomes available for download. (Figure 2).

The design of the online tools is very user-friendly and their concept is based on a simple interaction within appropriate tools and methodologies, which were specifically selected for the needs of the consortium partners and DISIRE project as a whole.



The online version of the IIT is hosted at the Fraunhofer MOEZ server and is accessible on the website of the DISIRE project: <http://www.spire2030.eu/disire/>. The full version of the IIT is furthermore available for the partners in the downloadable PDF format on the collaborative platform REDMINE and can be located at this link: http://ceg.research.ltu.se/projects/wp09-dissemination-and-innovation/dmsf?folder_id=122

Figure 2 Match & Mix and Supporting Toolbox

2.2. Dynamic Toolbox

The Dynamic Toolbox contains two selected approaches, which reflect the logic of the innovation process, dynamically guide the user through the process flow and provide a set of techniques within each of these phases.

The Dynamic Toolbox deals with the concept of Design Thinking, which is a formal method for practical, creative problem solving and generation of solutions to optimize project results. The concept of Design Thinking has evolved from the field of industrial design and has proven to be especially successful for interdisciplinary teams, which makes it very well aligned with the nature of the DISIRE project.

Within the Dynamic Toolbox, consortium partners and external stakeholders can gain access to the Innovation Flowchart, which gives a detailed prospect of the different phases of the innovation process, listing the activities, requirements and goals of each stage. These include an overview of the various human resources, skills, activities and finances that a project or an organization might need in order to succeed. This tool provides a structured summary, which helps to track the work progress along the innovation process and to organize the next steps.

The following figures illustrate the worksheets of the Innovation Flowchart:

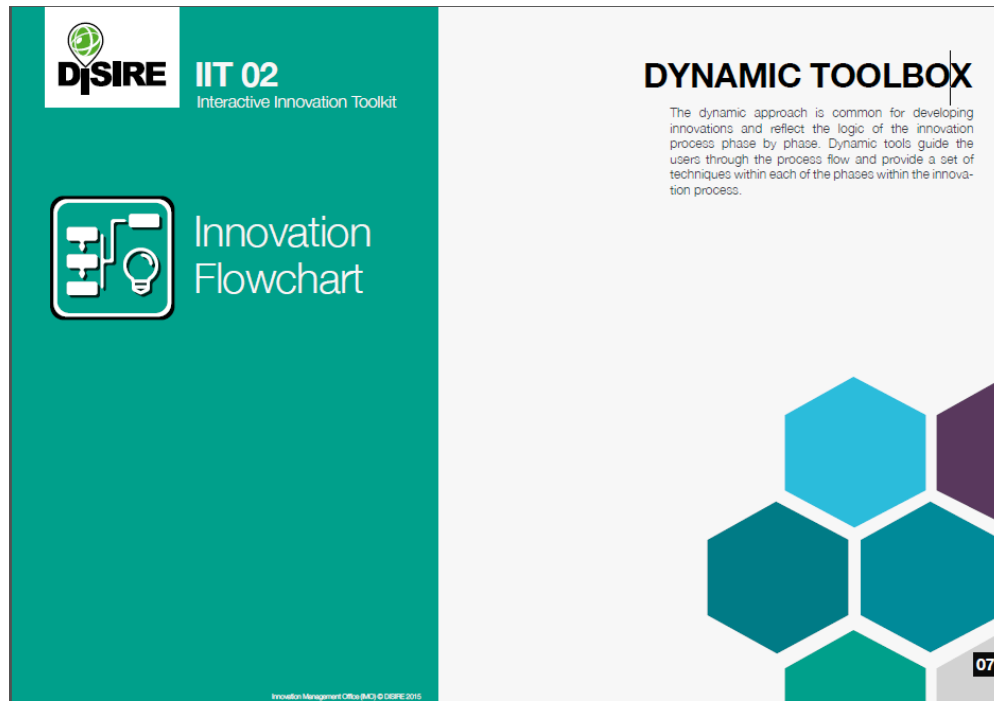


Figure 3 Innovation Flowchart Cover Page

The innovation flowchart contains a worksheet, which is used to record all the activities, requirements and goals within each stage of the innovation process (Figure 4).

IIT 02 | INNOVATION FLOWCHART

The tool in a nutshell

The Innovation Flowchart gives a detailed prospect of the various stages in the innovation process, listing the activities, requirements and goals of each stage. These include an overview of the various human resources, skills, activities and finances that a project or an organization might need in order to succeed. This tool provides a structured summary, which helps to track the work progress along the innovation process and to organize the next steps.

Why to apply

The Innovation Flowchart helps to identify opportunities for growth while supporting decisions, which resources to focus on and which aspects need to be considered.

Expected results

The outcomes of this tool can be an innovation ready for the market.

? HOW TO APPLY

The worksheet lists stages by stage the activities, requirements and goals in the innovation process. The overview comes with a handy reference to the tools and activities that can support the work in each stage.

STAGE	SPECIALIST SKILLS REQUIRED	EXAMPLE ACTIVITIES & TOOLS	RISK LEVEL AND HANDLING	FINANCE REQUIRED	KINDS OF EVIDENCE GENERATED	GOAL
1	Exploring opportunities & challenges					
2	Generating ideas					
3	Developing & testing					
4	Making the case					
5	Delivering and implementing					
6	Growing, scaling and spreading					
7	Changing systems					

Source: <http://dystoolkit.org/tools/innovation-flowchart-02/> | DIT Toolkit
08

Figure 4 Innovation flowchart worksheet

Additionally the innovation flowchart contains a list of suggested tools, which can be used in each of the innovation stages (Figure 5).

**Dynamic Toolbox
Interactive Innovation Toolkit**

**IIT 02
INNOVATION FLOWCHART**

STAGE	SPECIALIST SKILLS REQUIRED	EXAMPLE ACTIVITIES & TOOLS	RISK LEVEL AND HANDLING	FINANCE REQUIRED	KINDS OF EVIDENCE GENERATED	GOAL
1 Exploring opportunities & challenges	Research for exploratory work	SWOT Analysis Problem Definition Causes Diagram	Low risk of failure but clear decisions should be taken about how to act on insights	Grants	Insights derived from formal research and informal knowledge gathering	A well understood and clearly defined problem or opportunity
2 Generating ideas	Ideation and facilitation of creative thinking	Thinking Hats Fast Idea Generator Creative Workshop	High failure rate should be an explicit expectation, visible senior leadership essential	Usually grants; occasionally convertible	A clear account of change or likely causation, supported but not overly constrained by evidence	An idea or set of ideas to develop and test
3 Developing & testing	Mix of design and implementation skills	Experience Map Prototype Testing Plan Improvement Triggers	High failure rate should be an explicit expectation, visible senior leadership essential	Grants, convertible grants/loans	A stronger case with cost and benefit projections developed through practical trials and experiments, involving potential users	Demonstration that the idea works, or evidence to support a reworking of the idea
4 Making the case	Business development and evaluation	Blueprint Promises & Potential Map Business Model Canvas	Prepare to adapt approach, based on evaluation results and user feedback	Grant funding or funding out of investment	A stronger case with cost and benefit projections developed through practical trials and experiments, involving potential users	Clarity about what warrants implementation and funding
5 Delivering and implementing	Strong leadership, management, implementation skills	Critical Tasks List Learning Loop Target Group	Prepare for some adaptation to implementation	Programme funds, equity, loans, grants	A robust and detailed case developed through formal evaluation and evidence gathering - use of a control group to isolate impact	An implemented and sustainable innovation
6 Growing, scaling and spreading	Strong leadership, management, implementation skills	Scaling Plan Business Plan Marketing Mix	Fidelity assessments may be important, strong capacity needed to ensure transfer of practice	Equity loans, payment by results, social impact bonds	Evidence derived from evaluations in multiple sites, and independently run randomised control trials	Innovation or impact at scale
7 Changing systems	Strong leadership and management, identification and training of new leaders and teams	Building Partnerships Map Evidence Planning	Map potential unintended effects	Multiple financial systems requiring potential re-wiring possible outcome-based funding	New definitions of and measures for efficiency and impact created	A transformation in the way we do things

PRACTICAL TOOLS TO TRIGGER & SUPPORT SOCIAL INNOVATION | Source: dystoolkit.org
02

Figure 5 List of suggested tools

2.3. Mix & Match Toolbox

The Mix & Match Toolbox contains methods and tools for idea generation, product development and research commercialization, which are relevant for the planned series of workshops of the DISIRE IMO for product design, etc., and therefore for the development and commercialization of the innovation process in the DISIRE project. In addition, these tools can systematically assist the DISIRE partners in their local teams and are thereby helpful for the internal development of ideas for future innovation and the initiation of new projects.

Some of the techniques listed in the Mix & Match Toolbox include Fast Idea Generator, Innovation Generator, SCAMPER, Innovation Roadmapping, Business Model Canvas etc. Each technique contains a description and information about the context and process of application as well as supporting documents in the form of templates, worksheets etc.

An example for the structure and description of one of the techniques within the Mix & Match Toolbox is shown below:

Business Model Canvas

The Tool in a nutshell

This tool is for creating a distinctive business model around innovations. This step builds on the value proposition found in former steps of the innovation process.

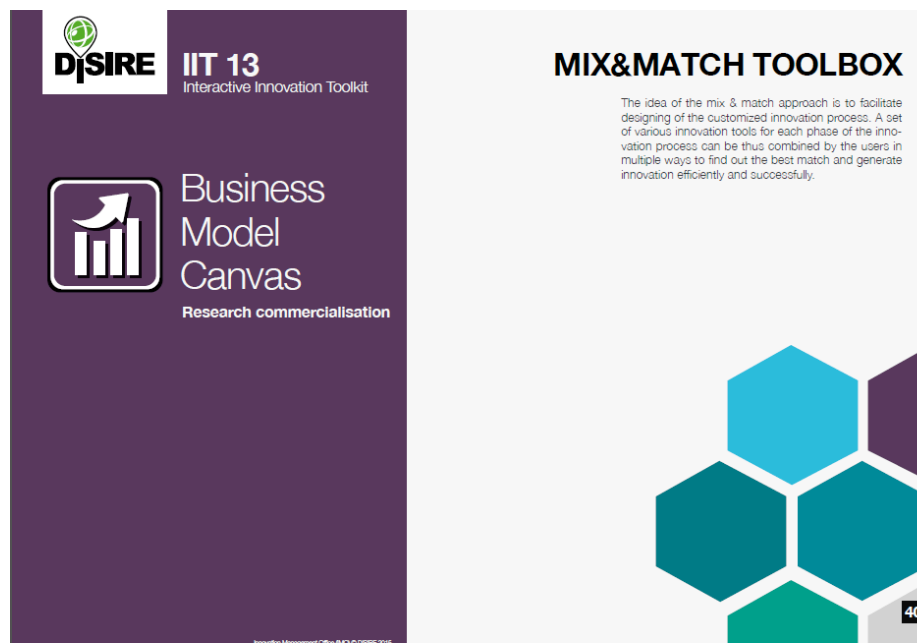


Figure 6 Business Model Canvas Cover Page

Why to apply

This method puts an emphasis on visual ways of thinking and working while at the same time inspires group dynamics and interaction during the process of development of an idea into a working business model. One of its strengths is that it provides a common language for interdisciplinary teams throughout the iterative search for solutions.


How to apply

The canvas is set up of nine building blocks, dealing with different topics important for the business model:

- Value proposition (VP) – describes the package of products / services, which create value for a particular customer segment.
- Customer segment (CS) – classifies the customer segments based on predefined characteristics. It makes sense to apply if the individual offering of the product / service differs according to the type of customer.
- Channels (CH) - the communication and distribution channels to reach clients and offer them the value proposition;
- Customer relationships (CR) - the relationships established with clients. These range from personal to automated. Influenced by customer acquisition, maintenance etc.
- Key resources (KR) – the most important goods and resources needed for the functioning of the business model.
- Key Activities (KA) - the key activities necessary to implement the business model;
- Key Partners - the network of suppliers and partners and their motivations to participate in the business model;
- Revenue stream (RS) - the revenue streams generated by the business model (constituting the revenue model);
- Cost structure (CS) – All the expenses resulting from the business model.

Expected results

Application of this tool results into an overview of the business model that everybody understands: one that facilitates description and discussion. It can be used for the development of different business models and enables the correlation of the individual segments. The focus of the Business Model Canvas is on prototypes where the level of detail is still low.



The tool in a nutshell

This tool is for creating a distinctive business model around innovations. This step builds on the value proposition found in former steps of the innovation process.

Why to apply

This method puts an emphasis on visual ways of thinking and working while at the same time inspires group dynamics and interaction during the process of development of an idea into a working business model. One of its strengths is that it provides a common language for interdisciplinary teams throughout the iterative search for solutions.

Expected results

Application of this tool results into an overview of the business model that everybody understands: one that facilitates description and discussion. It can be used for the development of many different business models and enables the correlation of the individual segments. The focus of the Business Model Canvas is on prototypes where the level of detail is still low.

? HOW TO APPLY


The canvas is set up of nine building blocks, dealing with different topics important for the business model:

1. Value proposition (VP) – describes the package of products / services, which create value for a particular customer segment.
2. Customer segment (CS) – classifies the customer segments based on predefined characteristics. It makes sense to apply if the individual offering of the product / service differs according to the type of customer.
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5. Key resources (KR) – the most important goods and resources needed for the functioning of the business model.
6. Key Activities (KA) – the key activities necessary to implement the business model.
7. Key Partners – the network of suppliers and partners and their motivations to participate in the business model.
8. Revenue stream (RG) – the revenue streams generated by the business model (constituting the revenue model).
9. Cost structure (CS) – All the expenses resulting from the business model.


01

Source: http://businessmodelgeneration.com/downloads/business_model_canvas_poster.pdf | Businessmodelgeneration, Strategizer

Figure 7 Business Model Canvas worksheet



Mix&Match Toolbox - Research commercialisation
Interactive Innovation Toolkit



BUSINESS MODEL CANVAS

The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
Key Resources		Channels		
Cost Structure		Revenue Streams		

02

Source: http://businessmodelgeneration.com/downloads/business_model_canvas_poster.pdf | Businessmodelgeneration, Strategizer

Figure 8 Business Model Canvas worksheet

2.4. Supporting Toolbox

The evaluation of the design of the internal communication processes within the DISIRE consortium with the aim of assessing the project results, transferring knowledge to project partners, managing possible solutions and identifying risks represents another major aspect of the IIT. The tools Stake-

holder Analysis and Scenario Approach (Supporting Toolbox) allow our partners to familiarize themselves with the next steps in the innovation process. This toolbox can also be used both in the partner teams for designing their internal communication and for the upcoming meeting of the DISIRE consortium.

The Supporting Toolbox consists of tools and methods focused on the following three areas: stakeholder analysis, risk management and output & impact review.

The stakeholder analysis tools include methods for identification of key stakeholders that are important for the success of the project. These methods can either be used on their own or be combined with other tools from the IIT such as Business Model Canvas. Risk management tools help to explicitly address uncertainties for a project through metrics, parameters, prioritization and tracking.

Following is an example of one of the methods listed in this section:

Risk Impact/Probability Chart

The tool in a nutshell:

The 'Risk Impact/Probability Chart' provides a useful framework to prioritize risks that a project can face. It helps to direct efforts on tasks requiring immediate attention.



Figure 9 Risk Impact / Probability Chart Cover Page

Why to apply:

- Complexity of managing risks in big projects
- Expensive to deal with all potential risks
- Difficult to co-relate the probability of risk occurrence with its impact
- Unnecessary and inefficient risk management.


How to apply:

- Enlist all likely risks of the project
- Identify two dimensions for each risk (Probability and Impact)
- Plot probability on y-axis and impact on z-axis of the chart
- Assess risk probability and assign it a rating (scale 1 to 10)
- Estimate the impact of the risk (scale 1 to 10)
- Map out the ratings on the Risk Impact/Probability Chart
- Risks are plotted as low impact/low probability, high impact/high probability, high impact/low probability and high impact/high probability
- Develop response to each risk according to its position in the chart
- Test analysis with others
- Repeat process and follow as a guide.

Expected results:

- Provides better understanding of project risks and their priorities
- Introduces Efficient risk management
- Helps to formulate different strategy for risks of different priorities.

The third section, Output and Impact review tools contains tools and methods for supporting the implementation of project deliverables and the recording and transfer of information generated during this process. Some of the tools included in this section are "Learning Loop, Causes Diagram" and "Theory of Change".



The tool in a nutshell

The 'Risk Impact/Probability Chart' provides a useful framework to prioritize risks that a project can face. It helps to direct efforts on tasks requiring immediate attention.

Why to apply


- Complexity of managing risks in big projects
- Expensive to deal with all potential risks
- Difficult to co-relate the probability of risk occurrence with its impact
- Unnecessary and inefficient risk management.

Expected results

- Provides better understanding of project risks and their priorities
- Introduces efficient risk management
- Helps to formulate different strategy for risks of different priorities.

? HOW TO APPLY

- Elicit all likely risks of the project
- Identify two dimensions for each risk (Probability and Impact)
- Plot probability on y-axis and impact on x-axis of the chart
- Assess risk probability and assign it a rating (scale 1 to 10)
- Estimate the impact of the risk (scale 1 to 10)
- Map out the ratings on the Risk Impact/Probability Chart
- Risks are plotted as low impact/low probability, high impact/high probability, high impact/low probability and low impact/high probability
- Develop response to each risk according to its position in the chart
- Test analysis with others
- Repeat process and follow as a guide.



Source: http://www.mindtools.com/pages/article/newPPM_78.htm | Mindtools

01

Figure 10 Risk Impact / Probability Chart worksheet

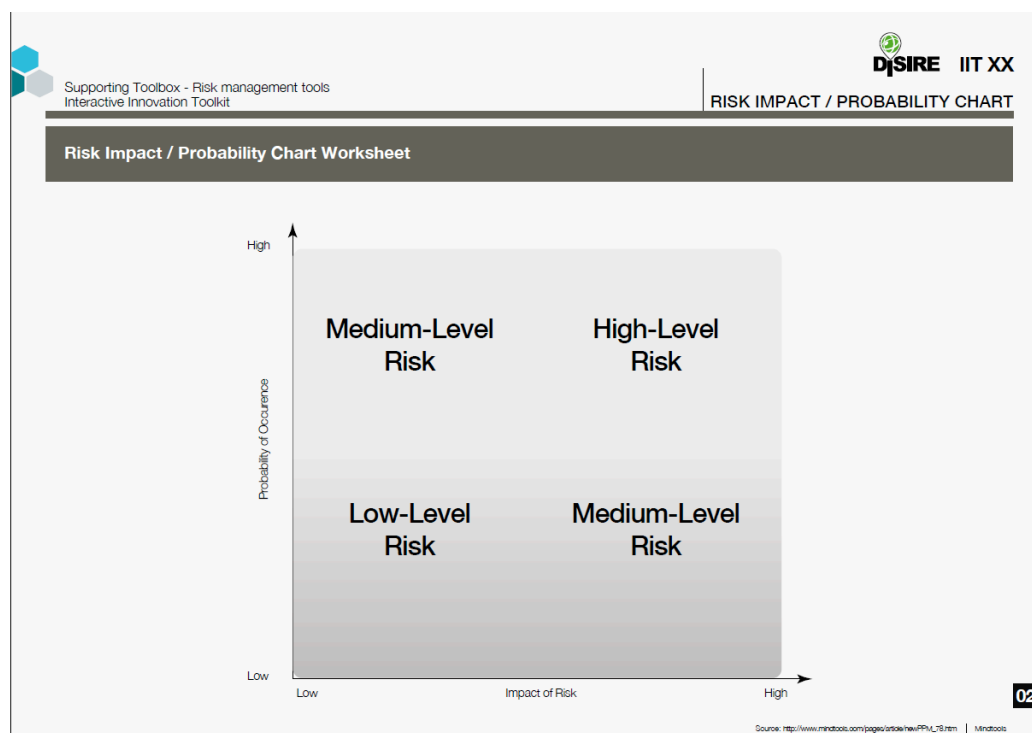


Figure 11 Risk Impact / Probability Chart worksheet

3 Conclusion and recommendations

The Interactive Innovation Toolkit contains a comprehensive set of tools and methods that provide a framework for generation, optimization and documentation of the innovation progress of the DISIRE project. The tools and techniques have been carefully pre-selected and matched to each phase of the innovation process in order to ensure that each partner of the consortium can use these tools on their own as well as during their collaborative teamwork with other partners.

Upon completion the IIT will be available online which will ensure that all the partners of the DISIRE consortium have access to the tools and methods. The tool will be introduced and during the DISIRE physical Consortium Meeting on 8th - 9th of September in Tarragona, Spain. Additionally some of the concepts and methodologies will be presented and used during workshops in order to generate the ideas and inputs for the upcoming deliverables within WP9.

The IIT is a living concept within IMO that might be updated and replenished with additional tools according to possible new requirements and feedback of the project partners within the lifetime of the DISIRE project.

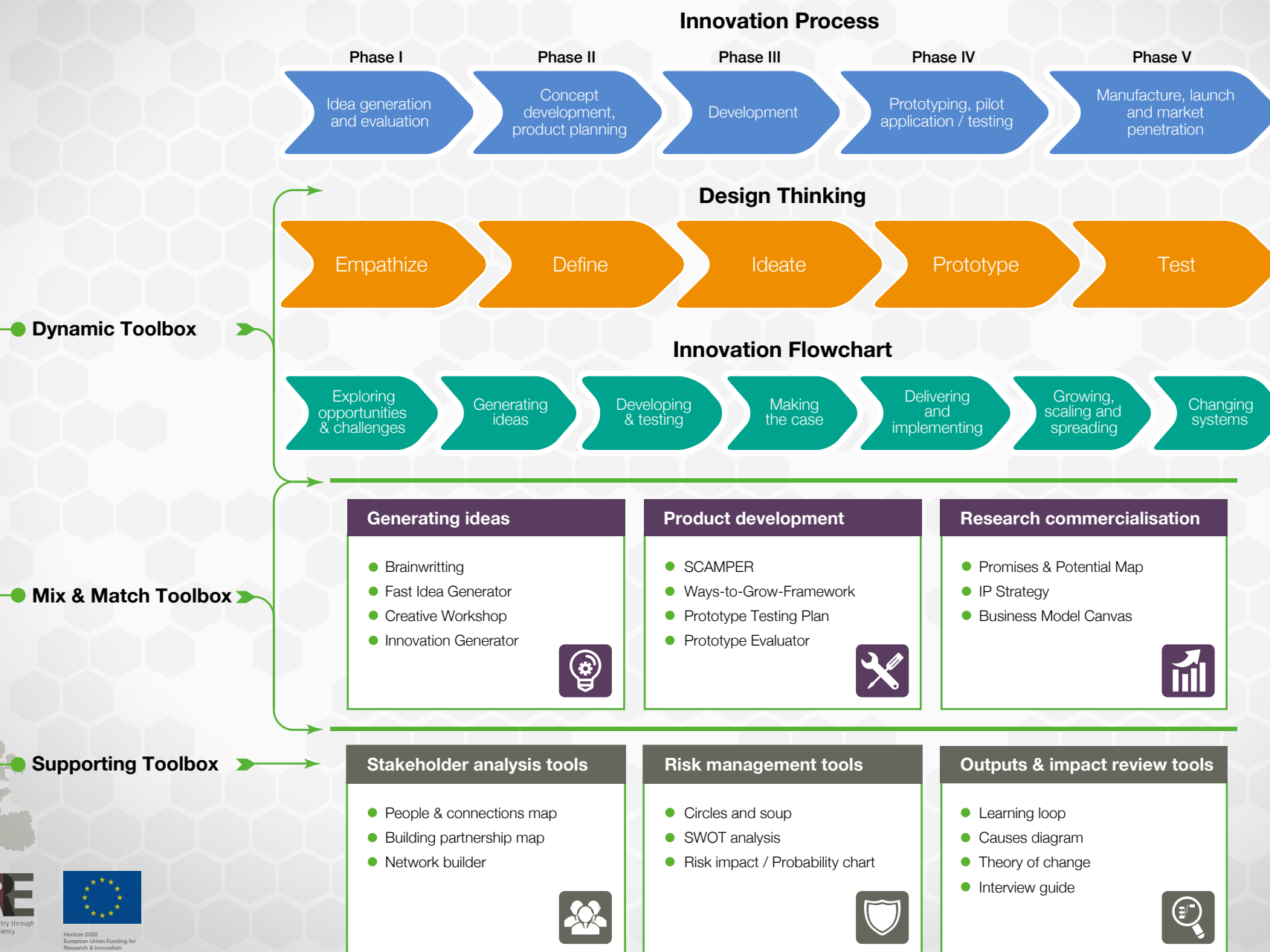
4 Annex A

The Interactive Innovation Toolkit Manual

- Innovation Process**
- Design Thinking**
- Innovation Flowchart**
- Generating ideas**
- Product development**
- Research commercialisation**
- Stakeholder analysis tools**
- Risk management tools**
- Outputs & impact review tools**

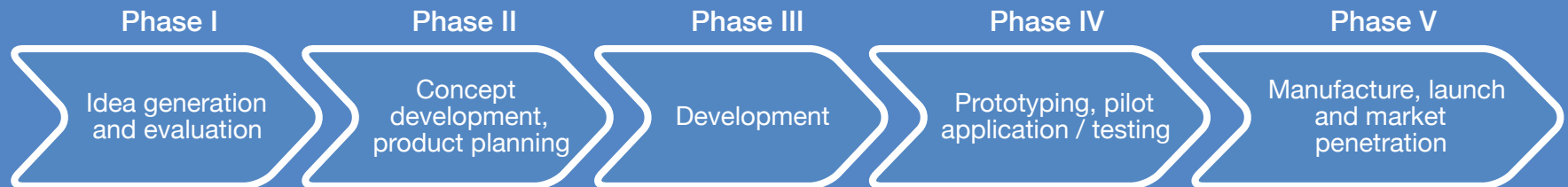
Interactive Innovation Toolkit

The Interactive Innovation Toolkit (IIT) provides guidance and support to the DISIRE consortium partners while aiming to unlock the innovation potential of the DISIRE technological platform and reinforce its impact. The motivation behind the IIT is to foster partners collaboration and successful transformation of the project ideas and concepts into the real products, business models and cases in the cross-sectorial context. This requires a well-structured innovation process and an integral problem solving approach. IIT was developed to support partners within their innovation and exploitation activities by providing an easily accessible, efficient and interactive framework of innovation tools and methods which can be applied throughout the innovation process flow within the DISIRE project. The IIT consists of three toolboxes (Dynamic Toolbox, Mix & Match Toolbox and Supporting Toolbox) which guide the users along the innovation process covering each stage from generating and prototyping new ideas to commercializing project results and implementing business models that benefit all stakeholder groups within DISIRE.



INNOVATION PROCESS

The successful realization of an idea into a product or business model requires a structured innovation process. Within a company or consortium, the process must be initiated, controlled and monitored. The operative innovation management includes the allocation and distribution of tasks and resources, controlling the individual process steps and eliminating failures. Furthermore, the innovation process not only requires organization concerning technical aspects but must be treated as an interdisciplinary process, especially when dealing with technical innovation.



- idea generation
 - customer driven
 - technology driven
 - cost driven
- idea evaluation
 - attractiveness
 - risk
- comparison with existing projects
- realignment of product portfolio

- market research
- development of a product concept
- product planning
 - quantity
 - product costs
 - timing
 - investments
 - project costs
- product specifications
- product architecture

- implementation of development according to requirements of phase II
- interdisciplinary project teams
- design reviews
- industrial design

- prototyping and testing
- market survey
- final design
- preparation of serial production

- production start-up
- launch
- market penetration
- product maintenance

Idea generation
and evaluation

Phase I

In the beginning of every innovation are ideas. These ideas have to tackle challenges and are mainly customer, technology or cost driven. Generated ideas have to be evaluated by attractiveness for possible customers, market risks and feasibility. Within this phase an overall comparison to the existing products has to be done and the adaption into the product portfolio should be given.


Concept
development,
product planning

Phase II

Based on Phase I a universal market research should be done, to lower the risks of fail. A product concept can be developed out of the ideas of Phase I. With the concept of the upcoming product the production has to be planned regarding to quantity, costs, timing and investments. Concrete product specifications and the product architecture are also developed in Phase II.



Development

Phase III

Development of the product goes on in Phase III according to the requirements of Phase II. Therefore interdisciplinary project teams have to be formed for a comprehensive coverage of all topics. Out of the concept several design reviews can be developed. For later planning the industrial design should be started.


Prototyping, pilot
application and testing

Phase IV

Before launching the production prototypes of the innovation should be developed and tested. For the right positioning market analysis with statistical methods are important. Based on the market survey the final design can be developed and in addition to this the serial production can be prepared.


Manufacture, launch
and market
penetration

Phase V

The last phase of the innovation process deals with the start-up of production and market launch. After penetrating the market with the product or solution, the innovation has to be under permanent maintenance for sustainable success.





Design thinking

DYNAMIC TOOLBOX

The dynamic approach is common for developing innovations and reflect the logic of the innovation process phase by phase. Dynamic tools guide the users through the process flow and provide a set of techniques within each of the phases within the innovation process.





The tool in a nutshell

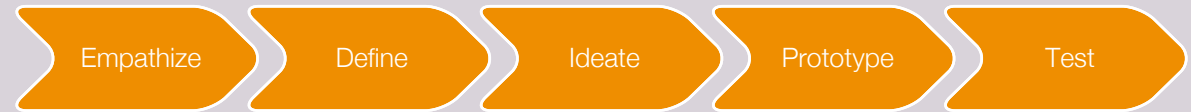
Design thinking is a formal method for practical, creative resolution of problems and creation of solutions, with the intent of an improved future result. In this regard it is a form of solution-based, or solution-focused thinking – starting with a goal (a better future situation) instead of solving a specific problem. By considering both present and future conditions and parameters of the problem, alternative solutions may be explored simultaneously.

Why to apply

As Design Thinking is a whole concept of developing innovations, products and services this approach can deliver complete new solutions to problems companies and their stakeholders are dealing with.

? HOW TO APPLY

The Design Thinking process is divided in five phases:



Empathy

As the problems you are dealing with are not your own, you have to be able to think as a member of your target group. Observation is the first key feature of this step to a new innovation. While observing the target group it is possible to see what reactions and comments in certain situations are made. The second key feature is engagement. Engaging with people directly reveals a lot about their thinking and values. The combination of observation and engagement is watching and listening.

Define

The insights gained are now merged into a common position. In addition, the team members exchange their thoughts. Through so-called storytelling, team members share their knowledge and experience. Through questions and dialogue, the insights into a common overall image are linked. Using visualizations and abstraction information is then summarized and patterns identified. Through sketches existing knowledge is explicitly visualized and made communicable. It may appear contradictory observations of the team members. The goal is the existence of a common understanding.

Ideate

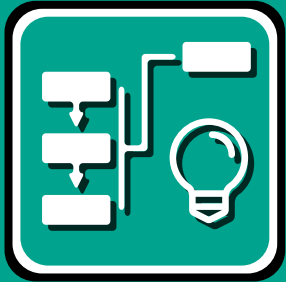
Now the generation of ideas takes place. For this purpose any creative technique can be used, for example brainstorming. The objective is producing as many ideas as possible. Then the idea suggestions are structured and summarized as similar as possible. From this set of ideas the most promising with regard to appeal, practicability and cost-effectiveness are chosen. Due to the orientation towards people appeal is somewhat more weight than feasibility and cost-effectiveness.

Prototype

Now it is important to form prototypes on basis of the selected ideas. Prototypes can take many different forms: from a paper model to RPG and storytelling. The aim is to understand and further develop the idea. This can be done through several iterations (i.e. repetition). The prototypes serve as further sources of ideas.

Test

Once the prototypes take concrete forms, an open dialogue with the audience takes place. The resulting feedback gives further starting points for improvements and alternatives. Under certain circumstances it may happen that a prototype and thus an idea is ultimately discarded.



Innovation Flowchart

DYNAMIC TOOLBOX

The dynamic approach is common for developing innovations and reflect the logic of the innovation process phase by phase. Dynamic tools guide the users through the process flow and provide a set of techniques within each of the phases within the innovation process.



The tool in a nutshell

The Innovation Flowchart gives a detailed prospect of the various stages in the innovation process, listing the activities, requirements and goals of each stage. These include an overview of the various human resources, skills, activities and finances that a project or an organization might need in order to succeed. This tool provides a structured summary, which helps to track the work progress along the innovation process and to organize the next steps.

Why to apply

The Innovation Flowchart helps to identify opportunities for growth while supporting decisions, which resources to focus on and which aspects need to be considered.

Expected results

The outcomes of this tool can be an innovation ready for the market.

? HOW TO APPLY

The worksheet lists stage by stage the activities, requirements and goals in the innovation process. The overview comes with a handy reference to the tools and activities that can support the work in each stage.

STAGE	SPECIALIST SKILLS REQUIRED	EXAMPLE ACTIVITIES & TOOLS	RISK LEVEL AND HANDLING	FINANCE REQUIRED	KINDS OF EVIDENCE GENERATED	GOAL
1 Exploring opportunities & challenges	→	→	→	→	→	→
2 Generating ideas	→	→	→	→	→	→
3 Developing & testing	→	→	→	→	→	→
4 Making the case	→	→	→	→	→	→
5 Delivering and implementing	→	→	→	→	→	→
6 Growing, scaling and spreading	→	→	→	→	→	→
7 Changing systems	→	→	→	→	→	→



INNOVATION FLOWCHART

STAGE	SPECIALIST SKILLS REQUIRED	EXAMPLE ACTIVITIES & TOOLS	RISK LEVEL AND HANDLING	FINANCE REQUIRED	KINDS OF EVIDENCE GENERATED	GOAL
1 Exploring opportunities & challenges	Research for exploratory work	SWOT Analysis Problem Definition Causes Diagram	Low risk of failure but clear decisions should be taken about how to act on insights	Grants	Insights derived from formal research and informal knowledge gathering	A well understood and clearly defined problem or opportunity
2 Generating ideas	Ideation and facilitation of creative thinking	Thinking Hats Fast Idea Generator Creative Workshop	High failure rate should be an explicit expectation, visible senior leadership essential	Usually grants, occasionally convertible	A clear account of change or likely causation, supported-but not overly constrained by evidence	An idea or set of ideas to develop and test
3 Developing & testing	Mix of design and implementation skills	Experience Map Prototype Testing Plan Improvement Triggers	High failure rate should be an explicit expectation, visible senior leadership essential	Grants, convertible grants/loans	A stronger case with cost and benefit projections developed through practical trials and experiments, involving potential users	Demonstration that the idea works, or evidence to support a reworking of the idea
4 Making the case	Business development and evaluation	Blueprint Promises & Potential Map Business Model Canvas	Prepare to adapt approach, based on evaluation results and user feedback	Grant funding or funding out of investment	A stronger case with cost and benefit projections developed through practical trials and experiments, involving potential users	Clarity about what warrants implementation and funding
5 Delivering and implementing	Strong leadership, management, implementation skills	Critical Tasks List Learning Loop Target Group	Prepare for some adaptation to implementation	Programme funds, equity, loans, grants	A robust and detailed case developed through formal evaluation and evidence gathering - use of a control group to isolate impact	An implemented and sustainable innovation
6 Growing, scaling and spreading	Strong leadership, management, implementation skills	Scaling Plan Business Plan Marketing Mix	Fidelity assessments may be important, strong capacity needed to ensure transfer of practice	Equity loans, payment by results, social impact bonds	Evidence derived from evaluations in multiple sites, and independently run randomised control trials	Innovation or impact at scale
7 Changing systems	Strong leadership and management, Identification and training of new leaders and teams	Building Partnerships Map Evidence Planning	Map potential unintended effects	Multiple financial systems requiring potential re-wiring possible outcome-based funding	New definitions of and measures for efficiency and impact created	A transformation in the way we do things

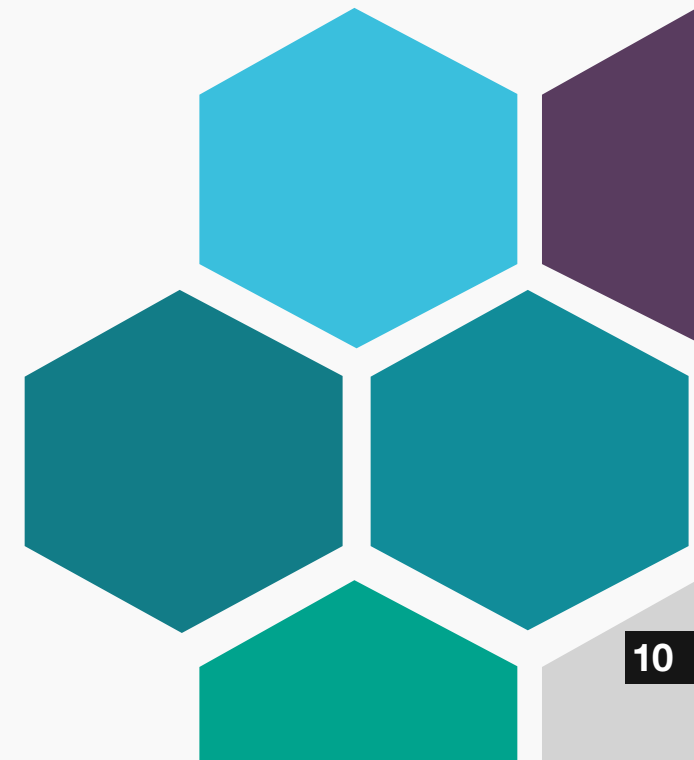


Brainwriting

Generating ideas tools

MIX&MATCH TOOLBOX

The idea of the mix & match approach is to facilitate designing of the customized innovation process. A set of various innovation tools for each phase of the innovation process can be thus combined by the users in multiple ways to find out the best match and generate innovation efficiently and successfully.





The tool in a nutshell

Brainwriting is a written and more formal version of brainstorming. It provides greater anonymity while at the same time inspires creativity by association. It differentiates itself from the regular brainstorming in a way that the generated ideas are already somehow formalized through writing.

Why to apply

This tool is a simple method for idea generation which could be applied successfully in case the group of participants is too large for an effective brainstorming. Additionally brainwriting is an effective tool if there are quiet people in the group who are intimidated by traditional brainstorming.

Expected results

The potential of this method in a group of six people is 104 ideas. In practice people often come up with more than three ideas in five minutes so it is possible to create a 6-6-5 form.

? HOW TO APPLY

In brainwriting 6-3-5, six people are given a form and asked to provide three ideas for solving a problem in five minutes. Participants are invited to consider out-of-the-box ideas and to combine ideas with others. The ideas are written in silence to prevent participants from influencing each other. After the first five minutes, each participant passes a form like the one below to the adjacent participant, who then reviews the ideas and adds new ones. The process is repeated six times.

Participants/ Ideas	Idea 1	Idea 2	Idea 3
Participant 1	Filters to reduce the size	Search	Elliptical browsers
Participant 2	Tagging	Concordance feature	Automatic clustering of related data
Participant 3	Break the list up into categories	Provide a birds - eye view and zoom	Most recently used feature
Participant 4			
Participant 5			
Participant 6			



Brainwriting 6-3-5 Worksheet

Job To Be Done:

Date:

Team:

Member:

1

2

3



Fast Idea Generator

Generating ideas Tools

MIX&MATCH TOOLBOX

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The tool in a nutshell

By using a wide range of different perspectives this tool may help to generate and develop new or existing concepts or ideas.

Why to apply

Generating new ideas is very important in the beginning of the innovation process. However, this tool not only helps to test new potential ideas but also to strengthen a current proposition, as it reviews the proposition from different approaches.

Expected results

After the discussion of ideas or views, the most suitable ones can be chosen for further application in the innovation process.

? HOW TO APPLY

Stimulate a discussion by using nine different approaches and selecting those, which seem most applicable and take the innovation further.

- Inversion - Turn common practice upside down
- Integration - Integrate the offer with other offers
- Extension - Extend the offer
- Differentiation - Segment the offer
- Addition - Add a new element
- Subtraction - Take something away
- Translation - Translate a practice associated with another field
- Grafting - Graft on an element of practice from another field
- Exaggeration - Push something to its most extreme expression

The approach			The normal rule	Bending, breaking and stretching the rule
^	Inversion	Turn common practice upside down	Doctors treat patients	What if patients became doctors?
∫	Integration	Integrate the offer with other offers	People access a range of services in different locations	What if different local services had one point of access?
X	Extension	Extend the offer	Schools provide learning opportunities to children and young people during the day	What if schools also offered sport and recreation and community learning provision out of hours?
∂	Differentiation	Segment the offer	There is a 'one size fits all' approach	What if a service was personalised and differently segmented?
+	Addition	Add a new element	Supermarkets deliver groceries	What if supermarkets delivered groceries and also provided hot meals to older people in their homes?
-	Subtraction	Take something away	Prisons are critical to an effective criminal justice system	What if you had to close three prisons?
t	Translation	Translate a practice associated with another field	Hospitals and airports are different kinds of operations	What if airport management practices were applied to hospitals?
g	Grafting	Graft on an element of practice from another field	Teaching and coaching are separate practices.	What if coaching were introduced as part of secondary school education?
∞	Exaggeration	Push something to its most extreme expression	Schools support children and young people to learn, but only within designated times and in a designated space	What if students could access learning, anytime and anywhere they chose?



FAST IDEA GENERATOR

The approach			The normal rule	Bending, breaking and stretching the rule
^	Inversion	Turn common practice upside down	Doctors treat patients	What if patients became doctors?
∫	Integration	Integrate the offer with other offers	People access a range of services in different locations	What if different local services had one point of access?
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Creative Workshop

Generating ideas tools

MIX&MATCH TOOLBOX

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The tool in a nutshell

By involving different types of people together in one straight workflow for idea generation, new propositions and approaches can be developed. In order to reach even better results, stakeholders can join the workshop. Following objectives can be tackled:

- Generating and exploring a range of ideas
- Selecting and building on the best ideas
- Creating a clear vision for how the ideas can be made real at a later stage

Why to apply

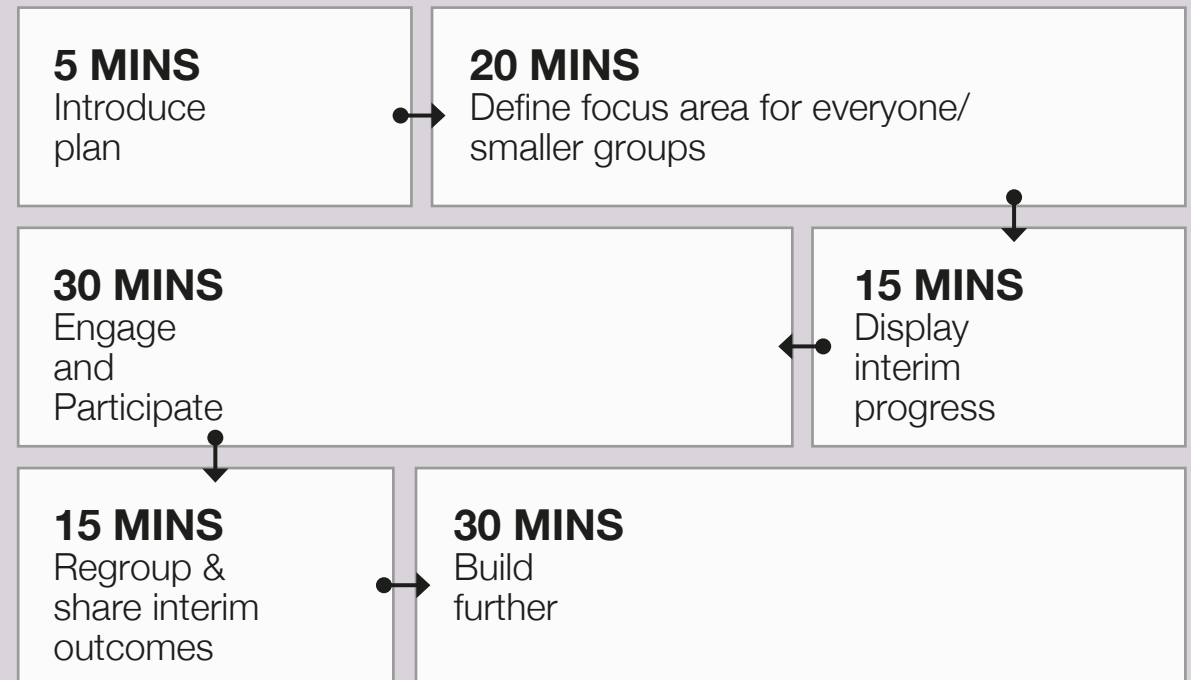
Creative workshops can provide invaluable insights into different people's perspectives on particular issues. Furthermore, they offer a setting where this knowledge is shared as soon as it is gathered. Understanding people helps to develop ideas within the first steps of the innovation process.

Expected results

This workshop is a good way to collect and share different experiences within one topic, with the possibility of finding solutions of problems.

? HOW TO APPLY

By using different points of view (POV) various perspectives on particular issues can be identified. Dealing with this kind of tool needs proper preparation and structuring to get satisfying results.





CREATIVE WORKSHOP

5 MINS

Introduce the workshop plan

20 MINS

Define who the session is focused on
(E.G. Work in small groups on creating personas)



30 MINS

Define how the target user will make use your offering
(E.G. Create a journey map for each persona)

15 MINS

Put these up on a wall where everyone can see them



15 MINS

Share the outcomes of the journey map with the rest of the teams.
Share opportunities where the group thinks it can create or add value



30 MINS

Further build on the opportunities identified by tools you used
(E.G. Promises & Potential Map, Business Model Canvas, Theory Of Change)



Innovation Generator

Generating ideas Tools

MIX&MATCH TOOLBOX

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The tool in a nutshell

The Innovation Generator is a game like approach, which helps teams to identify and address customer needs.

Why to apply

Using a creative way of thinking to uncover different ways to apply a product inspires teams to develop new applications for inventions and form solutions that address needs of stakeholders. By identifying customer problems first, all ideas will be geared towards solving the identified problems. This tool is recommended to apply in the beginning of the innovation process.

Expected results

Innovations can be identified by combining inventions and values.

? HOW TO APPLY

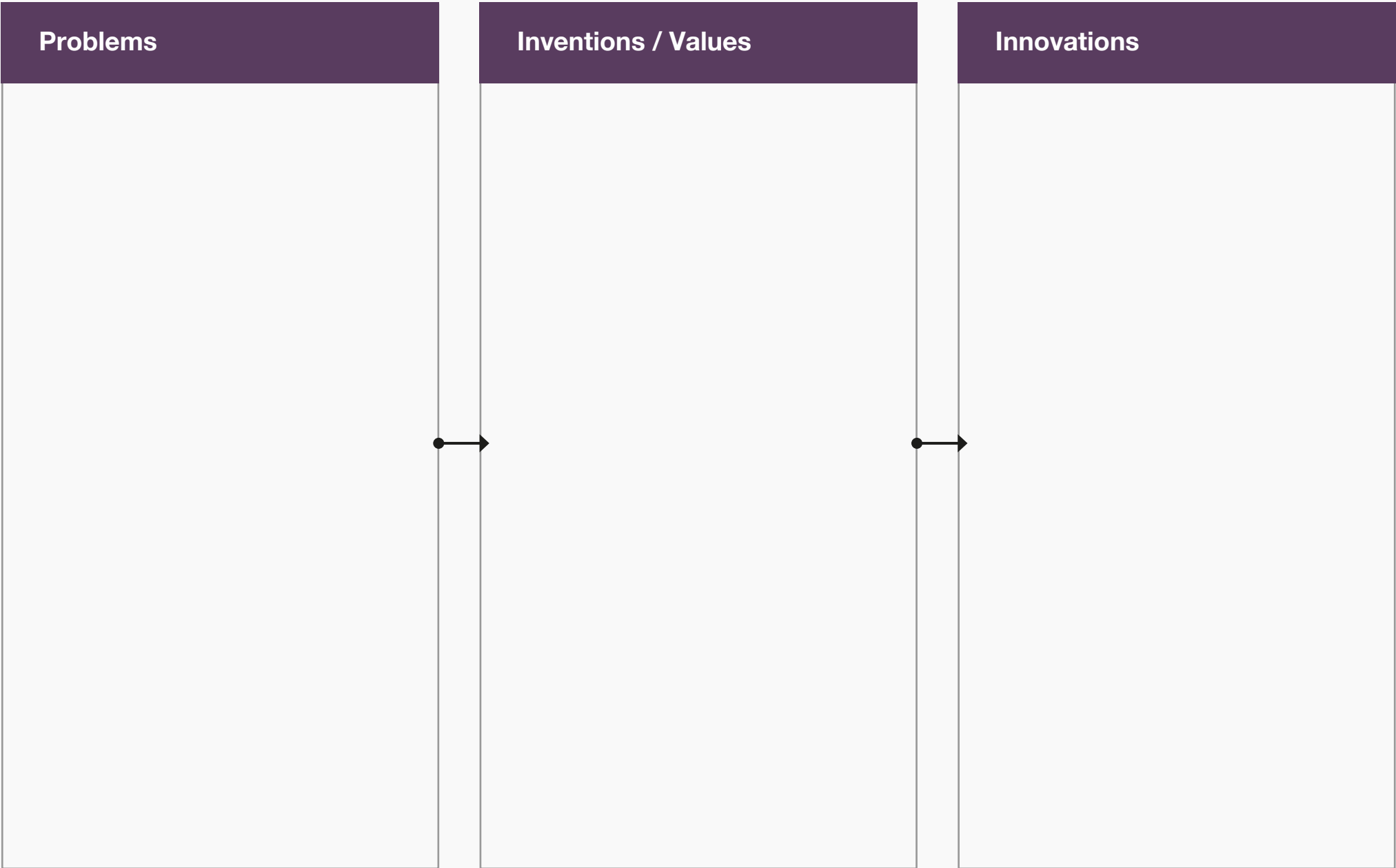
A white board, post-it and markers are required for preparation. Three columns with the following titles should be drawn on the whiteboard:

- Customers'/Prospective Customers' Problems: Thinking about the problems that customers within the market could have, writing them down and discussing the meaning for the company within the group follows
- Invention/Value: Matching about five inventions or solutions the company offers for the problems identified in the beginning
- Innovation: Identifying new purposes and values then the original ones of the invention and solutions matching the problems identified in step 1 may help to resolve the problems.





INNOVATION GENERATOR





SCAMPER

Product development tools

MIX&MATCH TOOLBOX

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The tool in a nutshell

SCAMPER is a question driven approach for solving problems. The base for new ideas are existing products and solutions.

Why to apply

As this tool helps finding new solutions und products it is recommended to apply in the phase of product development.

Expected results

The tool SCAMPER is designed to provoke new ways of thinking via different questions, and is structured in a way that let approaches or a potential new solution in development be seen from a number of perspectives.

? HOW TO APPLY

An existing product is checked with the SCAMPER check list:

- S - Substitute
- C - Combine
- A - Adapt
- M - Modify
- P - Put
- E - Eliminate
- R - Reverse

After filling out the check list the best ideas can be taken into further development.

SCAMPER Worksheet

Substitute	<p>Think about substituting part of your product/service or process for something else. By looking for something to substitute, you can often come up with new ideas.</p> <p>Typical questions: What can I substitute to make an improvement? What if I swap this for that and see what happens? How can I substitute the place, time, materials or people?</p>	Answer:
Combine	<p>Think about combining two or more parts of your problem to create a different product/process or to enhance synergy.</p> <p>Typical questions: What materials, features, processes, people, products or components can I combine? Where can I build synergy?</p>	Answer:
Adapt	<p>Think about which parts of the product/service or process could be adapted to remove the problem, or think how you could change the nature of the product/process.</p> <p>Typical questions: What part of the product could I change? And in exchange for what? What if I were to change the characteristics of a component?</p>	Answer:
Modify	<p>Think about changing part or all of the current solution to distort it in an unusual way. By forcing yourself to come up with new ways of working, you are often prompted into an alternative product, service or process.</p> <p>Typical questions: What happens if I warp or exaggerate a feature or component? What will happen if I modify the process in some way?</p>	Answer:
Put to other purposes	<p>Think of how you might be able to put your current solution to other purposes, or think of what you could reuse from somewhere to solve your innovation problem. You might think of another way of to meet your Job To Be Done or find another market for your product.</p> <p>Typical questions: What other market could I use this product in? Who or what else might be able to use it?</p>	Answer:
Eliminate	<p>Think of what might happen if you eliminated various parts of the product/process/problem, and consider what you might do in that situation. This often leads you to consider different ways of tackling the problem.</p> <p>Typical questions: What would happen if I removed a component or part of it? How else would I achieve the solution without the normal way of doing it?</p>	Answer:
Reverse	<p>Think of what you would do if part of your problem/product/process worked in reverse or done in a different order. What would you do if you had to do it in reverse?</p> <p>Typical questions: What if I did it the other way round? What if I reverse the order it is done or the way it is used? How would I achieve the opposite effect?</p>	Answer:



SCAMPER Worksheet

Substitute	<p>Think about substituting part of your product/service or process for something else. By looking for something to substitute, you can often come up with new ideas.</p> <hr/> <p>Typical questions: What can I substitute to make an improvement? What if I swap this for that and see what happens? How can I substitute the place, time, materials or people?</p>	Answer:
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Ways-to-Grow-Framework

Product development tools

MIX&MATCH TOOLBOX

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The tool in a nutshell

GROW stands for:

- Goal
- Current Reality
- Options (or Obstacles)
- Will (or Way Forward)

Originally developed in the 1980s the model first establishes the goal (what you want to achieve) and your present situation (your current reality). You then explore various scenarios (the options) on how to achieve your goal. The final step is to establish the will (required resources) in order to ensure that achieving your goal is feasible considering the obstacles that could be encountered on the way.

Why to apply

The GROW model enables people to draw conclusions and select the best options that are available in order to achieve a predefined goal based on an assesment of the current situation.

Expected results

Application of this tool results into a clear definition of goals and current situation. When used in the team this tool will help you to colaboratively explore different scenarios for achieving the predefined goals and select the scenarios which are most feasible and would lead to the best results.

? HOW TO APPLY

The following steps need to be taken to structure a coaching or mentoring sessions using the GROW model:

1. Establish the Goal.

First the team needs to look at and formulate the goals that need to be achieved. It should be made sure that these goals are SMART: Specific, Measurable, Attainable, Realistic, and Time-bound.

When doing this it makes sense to ask questions like:

- How do you know when the team has achieved the goal? How will you know that the problem or issue is solved?
- Does the goal fit to the team's main objectives?

2. Examine the Current Reality

This step is important as too often people try to solve a problem or reach a goal without fully considering their starting point. By carefull assessing the current reality some information might surface that will result in the emerging of a solution.

Useful coaching questions in this step include:

- What is happening now (what, who, when and how often)? What is the effect or the result of this?
- What steps have already been taken towards your goals?
- Do these goals conflict with any other goals or objectives?

3. Explore the Options

Once the team have explored the current reality, its time to determine what is possible- meaning all of the possible options for reaching the objectives. Help the team to brainstorm as many good options as possible then discuss these options and select the best.

Typical questions in the explore options step are:

- What else could you do?
- What if this or that constraint were removed? Would that change things?
- What are the advantages and disadvantages of each option?
- What factors and considerations will you use to weigh the options?
- What obstacles stand in your way?

4. Establish the Will

After examination of the current situation and exploring the options the team should now have a good idea of how the goals can be achieved. This is good but not enough. The final step is to get the team to commit to specific actions in order to move forward towards the goals and help him establish his will to boost his motivation.

Usefull questions to ask here include:

- So, what will you do now, and when? What else will you do?
- What could stop you moving forward?
- How will you overcome this?How can you keep yourself motivated?
- When do you need to review progress? Daily, weekly, monthly?

Finally decide on a date when the progress will be reviewed. This will provide some accountability and allow changing the approach if the original plan is not working.



WAYS-TO-GROW-FRAMEWORK





Prototype Testing Plan

Product development tools

MIX&MATCH TOOLBOX

The idea of the “Mix&Match”- approach is to give several tools to the innovators for designing their own innovation process. The tools shown here are fit to different phases of the innovation process and can be combined in different ways. It s also possible to try out more than one tool in each phase and compare the results to find the best way to new and successful innovations.





The tool in a nutshell

Prototyping is an approach to develop and test ideas at an early stage before large-scale resources are committed, to see what works and what doesn't work. Although commonly used by engineers, designers and web developers, the approach is increasingly being applied to help develop new and innovative services. Prototyping also encourages low-cost and low-risk experimentation.

Why to apply

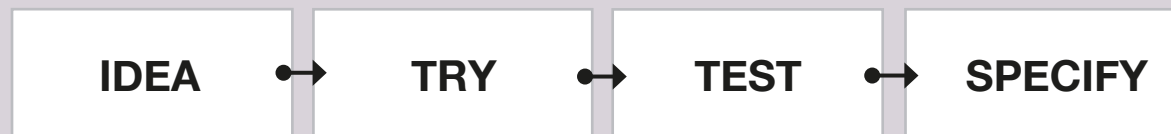
Prototyping should be applied in the last steps of the innovation process, when an idea has to become a product ready for the market.

Expected results

With successful prototyping, it is possible to develop a product or service ready for the market.

? HOW TO APPLY

- Making the case for prototyping: needs strong leadership to make the case for prototyping
- Skills for prototyping: ensuring there are the correct skills and roles on the project team
- Cultural permission to prototyping: ensuring the organizational culture embraces prototyping (and that the team feel empowered to 'just try it out')





PROTOTYPE TESTING PLAN

HYPOTHESIS

Specify the main idea / hypothesis that you want to test.

QUICKLY TRY OUT YOUR IDEA TO JUDGE WHETHER IT CAN WORK IN REAL LIFE

Build a small model of your idea using cardboard/ paper, children's blocks or any material you see lying around. This is so you can see your idea in three dimensions and check whether it would work smoothly or has gaps.

Act out parts of your idea when you meet with your target audience. Pretend that your idea is launched. How will they know of it and use it? Try acting out different possibilities to learn about alternative ways of doing things.

Draw the experience of finding out and using your work in the form of a story to see if you've not missed any step.

TEST YOUR IDEA AGAIN AFTER HAVING DEVELOPED IT FURTHER, TO EXAMINE DETAILS BEFORE LAUNCHING IT

Build a new model of your idea. Since you have developed your idea further, you should now have more details and elements in it to test and check whether they all work in synchronisation.

Act out your idea again. Can use the Blueprint as a guide to check whether the different elements are matching up properly.

Again draw the experience of using your work in more detail than before. Test out if all the steps in your story are working well together.

MAKE A LIST OF ALL THE THINGS THAT YOU NEED TO MAKE YOUR IDEA REAL

List things like activities, resources, people and materials that you need to make your idea realistic enough to implement.



Prototype Evaluator

Product development tools

MIX&MATCH TOOLBOX

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The tool in a nutshell

Moving beyond prototypes is the next phase of innovation development and is likely to involve significant investment of time and money so agreement here is important.

Why to apply

Stopping an innovation at this point can be very valuable as it frees up resources to focus on a better alternative. This tool can also form a useful springboard to go back to the former phases of the innovation process and try a different approach.

Expected results

It is a good idea to use this card as the basis for a discussion with other team members and leaders so you can reach a consensual decision.

? HOW TO APPLY

The evaluation is realized through a short questionnaire:

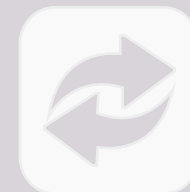
1. What idea was prototyped?
2. What was going to be changed?
3. What remains the same?
4. Mark the Stop/Go/Reinvent box



PROTOTYPE- Evaluator

1. What did we prototype?

2. What are we going to change?



3. What remains the same?

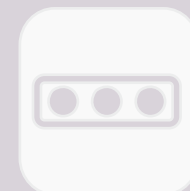


4. Mark the Stop/Go/Reinvent box

S

G

R





Promises & Potential Map

Research commercialisation

MIX&MATCH TOOLBOX

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The tool in a nutshell

The Promises & Potential Map is a way to define the added value by mapping the relationship between what is done and who it is done for.

Why to apply

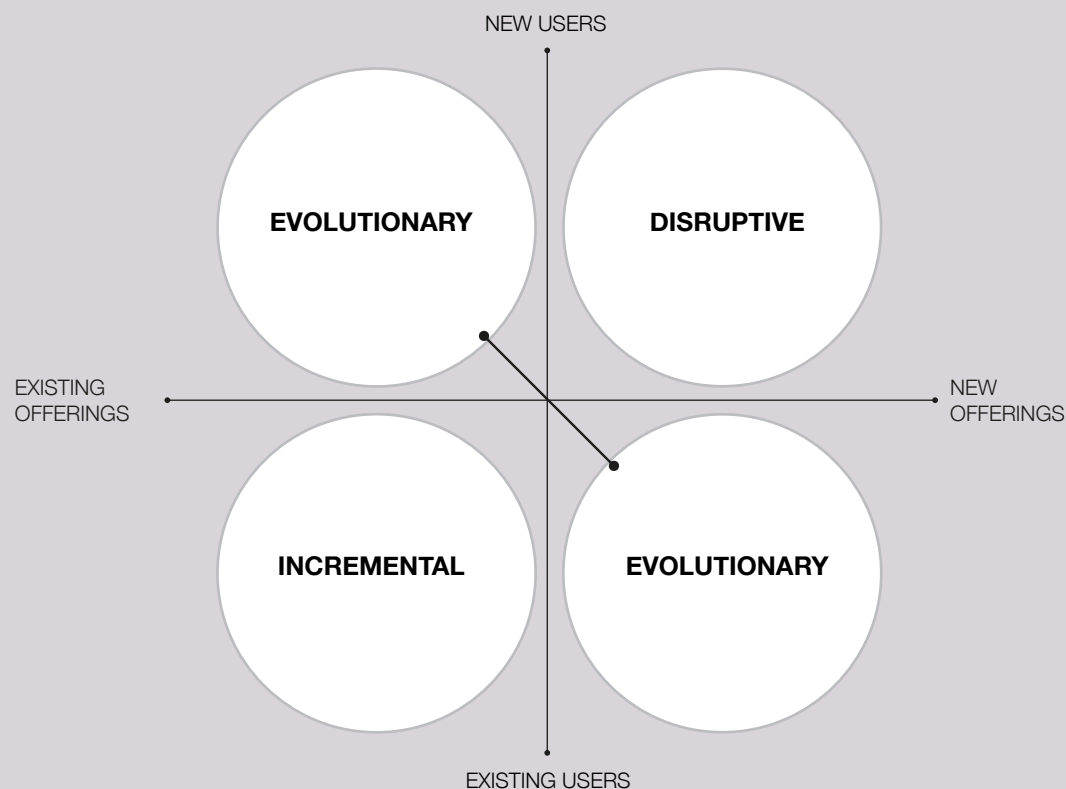
Sometimes mapping things out in this way is useful for understanding how much work and how much benefit a potential solution might bring. This tool is a kind of market potential analysis and should be applied in the phase commercialization of the innovation.

Expected results

In this way any potential new solutions are mapped alongside the promises made.

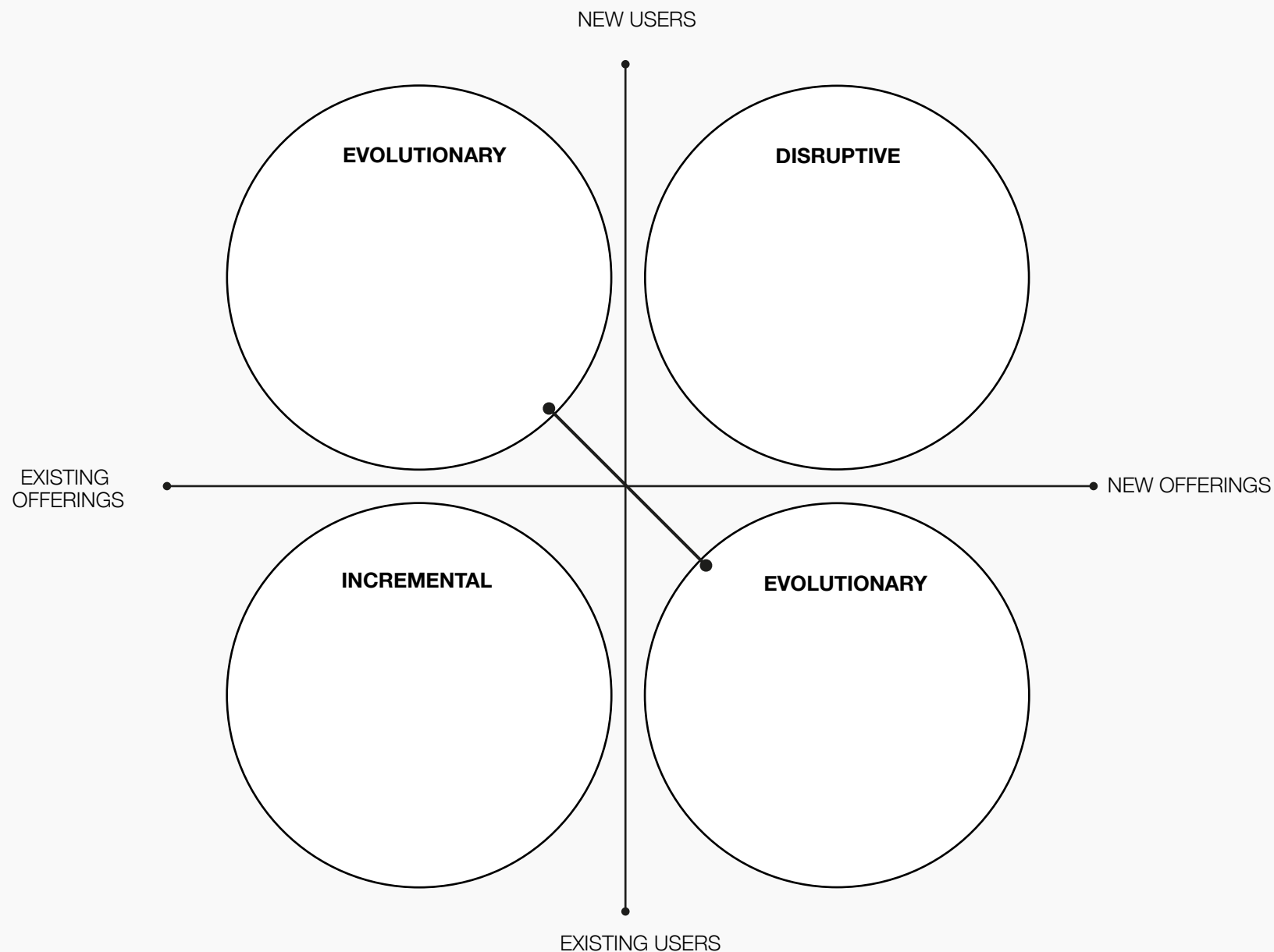
? HOW TO APPLY

The tool provides a diagram on which each idea or solution in development can be plotted. Each idea is also classified as being completely new, or something that builds upon what is already done.





PROMISES & POTENTIAL MAP





IP-Strategy

Research commercialisation

MIX&MATCH TOOLBOX

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The tool in a nutshell

This tool helps to discuss and agree the appropriate approach to intellectual property, often a key barrier to productive partnerships between companies or organizations.

Why to apply

Given that IP law is complex and specialized, this tool can be used in order to think about intellectual property and to support initial discussions with innovation partners. The tool might also be applied to brief an IP specialist, help develop the details and check the innovation.

Expected results

The result of this tool is a strategy for the whole IP developed within the innovation process.

? HOW TO APPLY

This approach uses a questionnaire with following questions:

1. What advantages are there to an open innovation approach?
2. What sort of innovation is involved?
3. What type of open innovation is involved?
4. What is the IP maturity or sophistication of each entity involved?
5. Who is taking the lead on IP matters?
6. What are the IP rules?
7. What are the IP strategy and action plans?
8. How will we measure and monitor?



1. What advantages are there to an open innovation approach?

2. What sort of innovation is involved?

Form:

Phase:

3. What type of open innovation is involved?

4. What is the IP maturity or sophistication of each entity involved?

5. Who is taking the lead on IP matters?

6. What are the IP rules?

7. What are the IP strategy and action plans?

8. How will we measure and monitor?

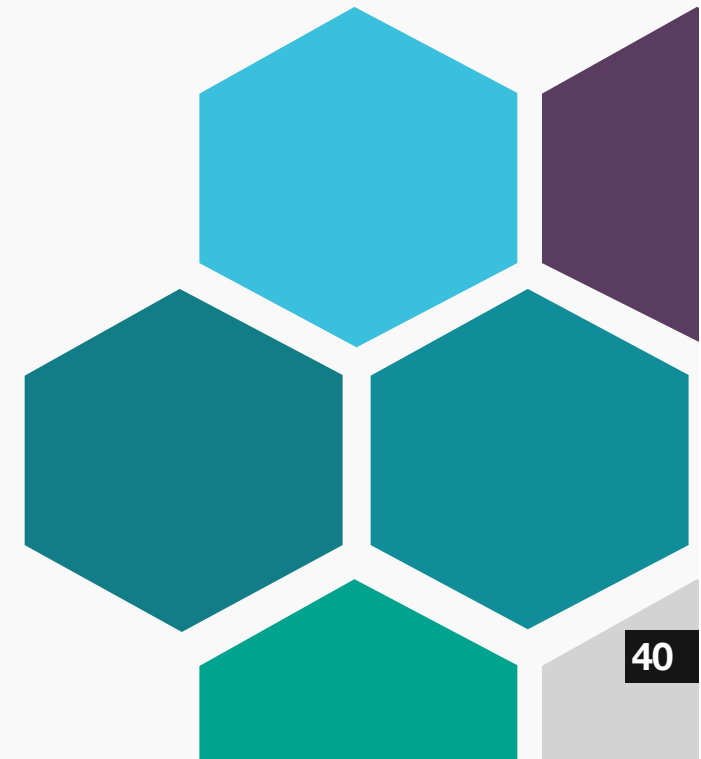


Business Model Canvas

Research commercialisation

MIX&MATCH TOOLBOX

The idea of the mix & match approach is to facilitate designing of the customized innovation process. A set of various innovation tools for each phase of the innovation process can be thus combined by the users in multiple ways to find out the best match and generate innovation efficiently and successfully.





The tool in a nutshell

This tool is for creating a distinctive business model around innovations. This step builds on the value proposition found in former steps of the innovation process.

Why to apply

This method puts an emphasis on visual ways of thinking and working while at the same time inspires group dynamics and interaction during the process of development of an idea into a working business model. One of its strengths is that it provides a common language for interdisciplinary teams throughout the iterative search for solutions.

Expected results

Application of this tool results into an overview of the business model that everybody understands: one that facilitates description and discussion. It can be used for the development of many different business models and enables the correlation of the individual segments. The focus of the Business Model Canvas is on prototypes where the level of detail is still low.

? HOW TO APPLY

The canvas is set up of nine building blocks, dealing with different topics important for the business model:

1. Value proposition (VP) – describes the package of products / services, which create value for a particular customer segment.
2. Customer segment (CS) – classifies the customer segments based on predefined characteristics. It makes sense to apply if the individual offering of the product / service differs according to the type of customer.
3. Channels (CH) - the communication and distribution channels to reach clients and offer them the value proposition;
4. Customer relationships (CR) - the relationships established with clients. These range from personal to automated. Influenced by customer acquisition, maintenance etc.
5. Key resources (KR) – the most important goods and resources needed for the functioning of the business model.
6. Key Activities (KA) - the key activities necessary to implement the business model;
7. Key Partners - the network of suppliers and partners and their motivations to participate in the business model;
8. Revenue stream (RS) - the revenue streams generated by the business model (constituting the revenue model);
9. Cost structure (CS) – All the expenses resulting from the business model.



BUSINESS MODEL CANVAS

The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

Key Partners



Key Activities



Value Propositions



Customer Relationships



Customer Segments



Key Resources



Channels

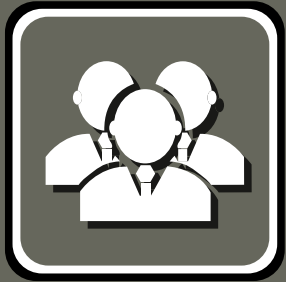


Cost Structure



Revenue Streams





People & connections map

Stakeholder analysis tools

Supporting Toolbox

The role of the supporting toolbox is to enhance the innovation process by providing a set of tools which support the identification of key stakeholders, enable knowledge transfer and facilitate risk management. The tools and methods within this toolbox can be used throughout the innovation process as they focus on recording and assessing the knowledge generated in each phase. This toolbox can also be used in the partner teams for designing their internal communication.





The tool in a nutshell

The 'People & connections map' co-relates the different stakeholders involved in the project. They can be categorized as international, national, local community and others.

Why to apply

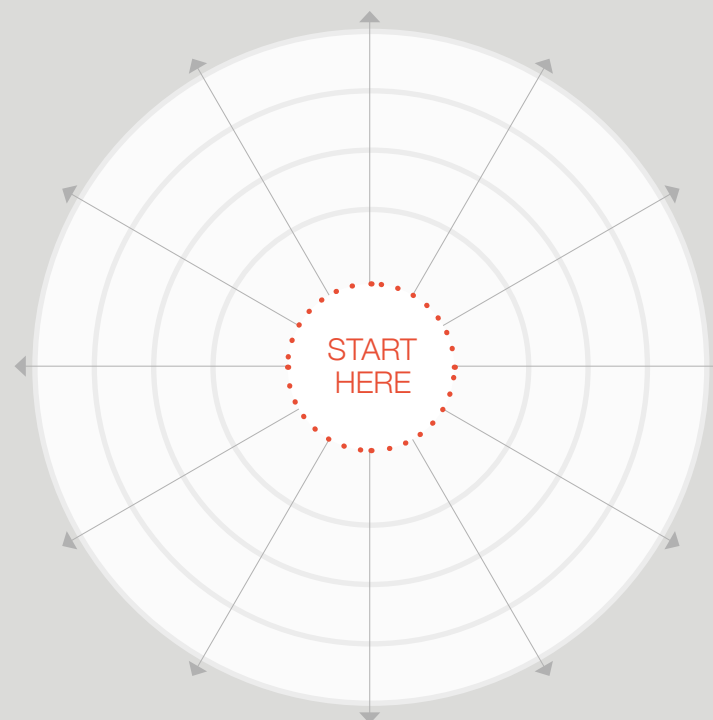
- The number of stakeholders involved in a project is usually overwhelming
- Difficult to know whom to reach and how
- Obscure relationship amongst the stakeholders
- Cumbersome relay of the progress of work to the stakeholder community
- Difficult to identify main focus of work if spanning across multiple activities.

Expected results

- Clarifies their influence of the concentric arrangement of participants
- helps to cluster them in sections according to specific networks, sectors, interests
- allows to reposition participants in the latter stages of project development
- helps to identify main focus area of development.

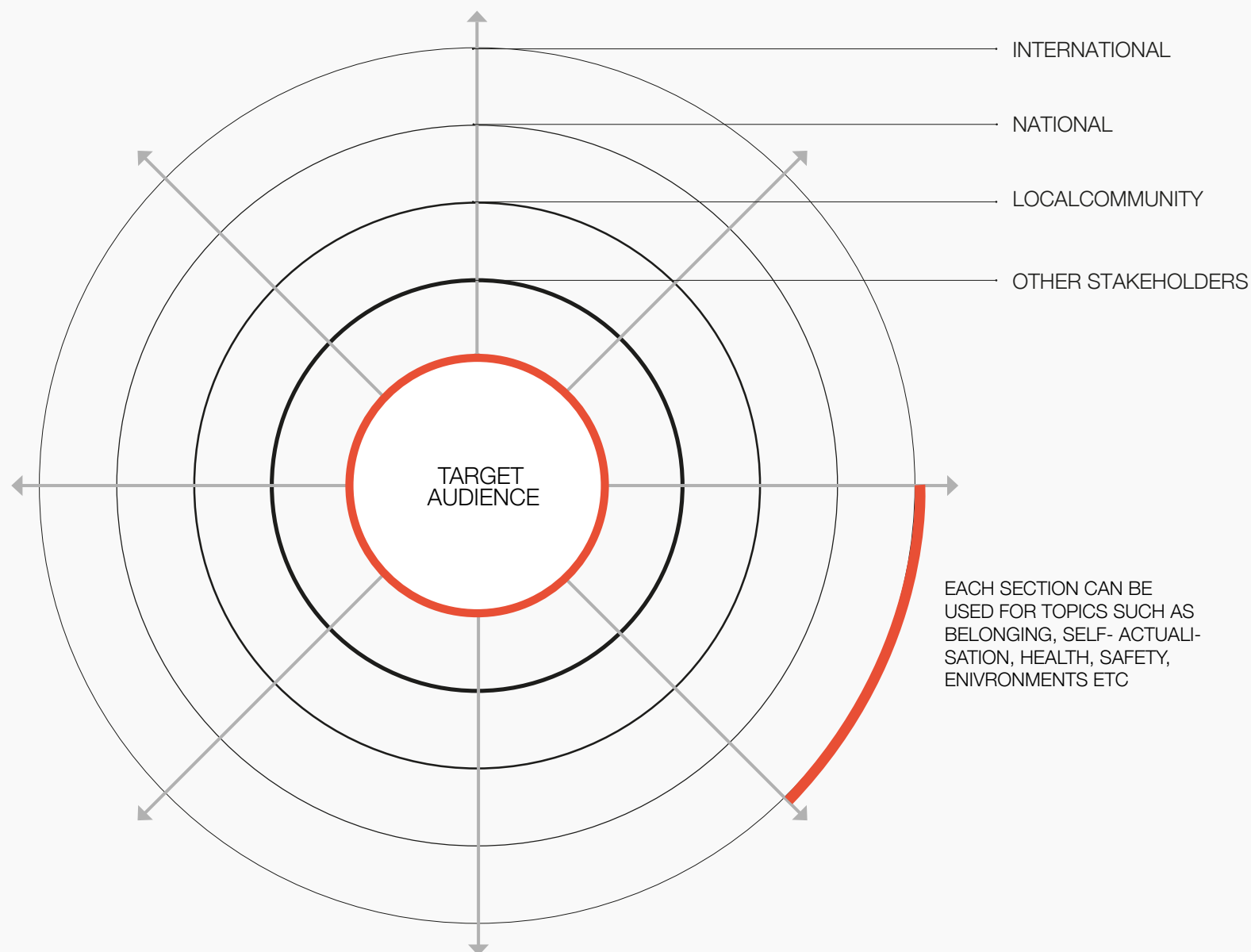
? HOW TO APPLY

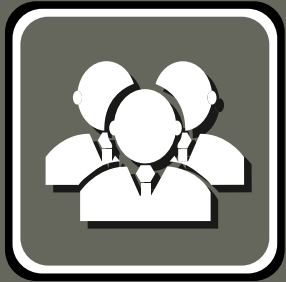
- Write down the target audience, beneficiaries, users and customers at the center of the worksheet
- Move outwards from the center mapping other participants (individuals, organizations)
- Organize participants in concentric circles with target audience at the center.





PEOPLE & CONNECTIONS MAP





Building Partnership map

Stakeholder analysis tools

Supporting Toolbox

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The tool in a nutshell

The 'Building partnership map' helps to co-ordinate the work plan between groups that share a common vision. It involves the different stages of scoping, identifying, building, planning, managing, resourcing, terminating, institutionalizing, revising, reviewing, measuring and implementing.

Why to apply

- Complex projects involve a lot of redundant activities
- Lack of partnerships puts a strain upon the organizations working for related causes
- Lack of common understanding and wider perspective to solve problems
- Building partnership is cumbersome and lengthy process

Expected results

- Elevates the strain upon organizations with limited resources through partnership formulation
- Indicates the current stage and next desirable stage
- Formulates the pathway and outlines in-between activities
- Builds a strong partnership amongst participants.

? HOW TO APPLY

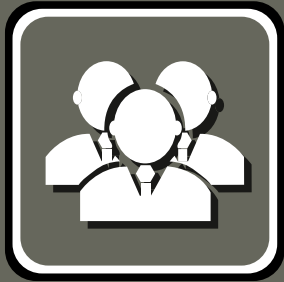
- Describe the series of phases seeking partnership
- Offer guidelines for increasing partnership efficiency at each phase
- Ensure partnership to be mutually beneficial
- Stick to the map and refer to it at each stage of the innovation process.





BUILDING PARTNERSHIP MAP





Network builder

Stakeholder analysis tools

Supporting Toolbox

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The tool in a nutshell

The 'Network builder' helps to build a mesh of supporters for open innovation, thereby inspiring others. It supports the open innovation network to build, recruit and improve.

Why to apply

- Building a strong support network is difficult and takes time
- Lack of proper communication of challenge objectives
- Limited transparency of processes (winner selection, recruitment, challenge process)
- Lack of information on incentives for challenge participation.

Expected results

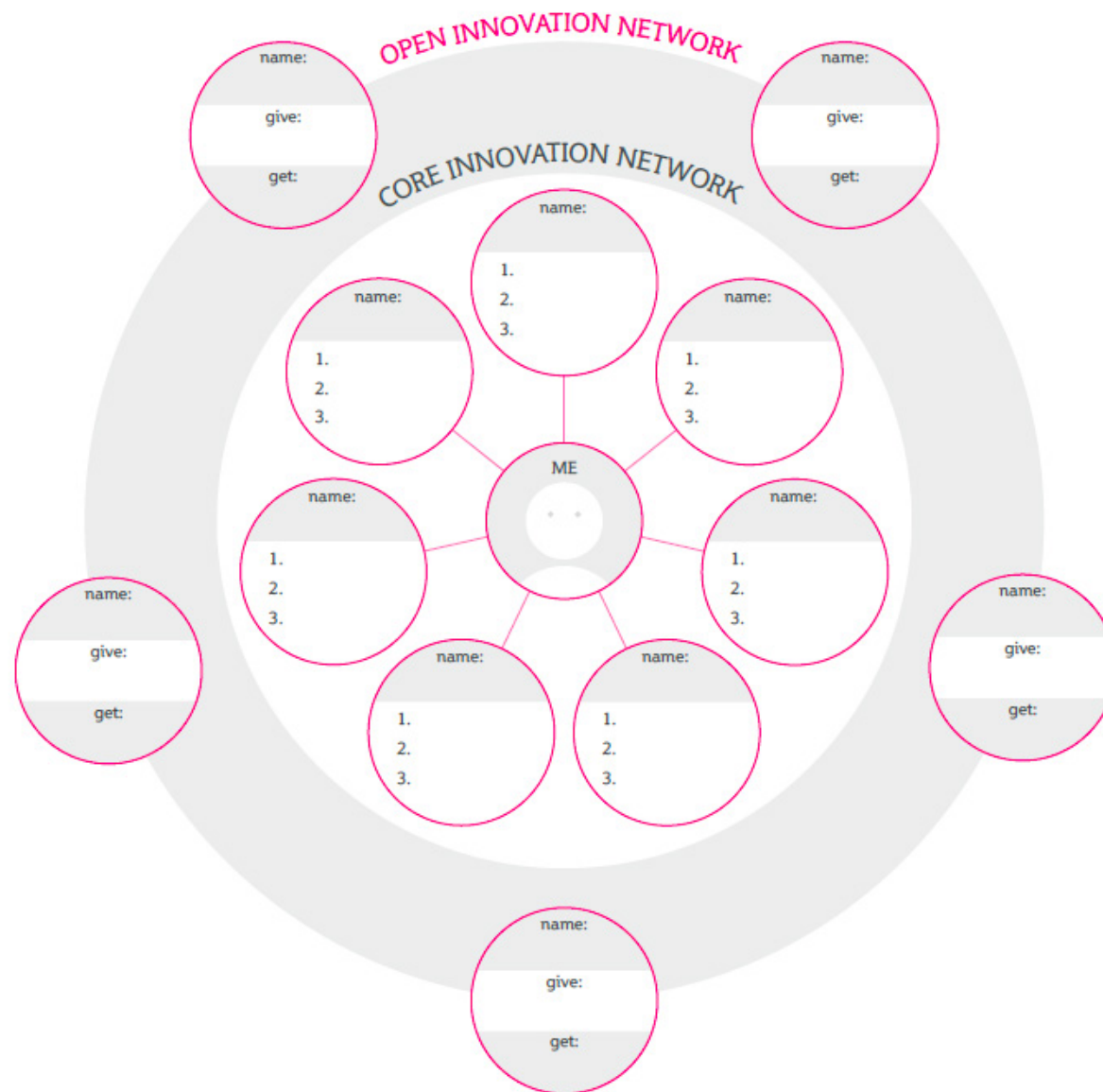
The tool "Network builder":

- Simplifies the network building process
- Gives clear identity and characteristic to the network
- Makes addition of new network participants easy
- Helps clearly distinguish relevant from irrelevant sectors.

? HOW TO APPLY

- Use the tool as the central process and document for the whole team
- Name the network appropriately
- Visualize the network and define each participant
- Arrange participants according to influence and expertise
- Define relevant sectors, industries and geographies and corresponding keywords.





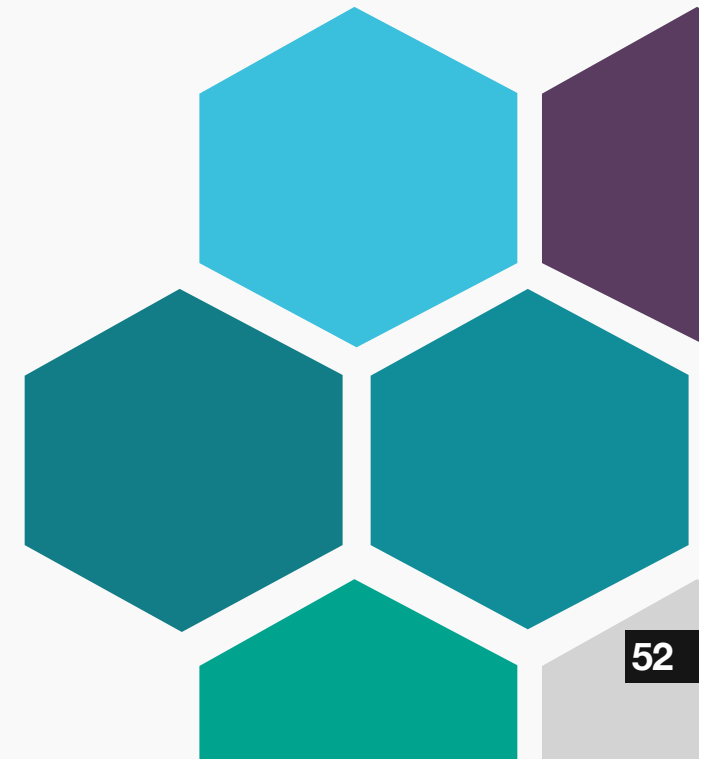


Circles and Soup

Risk management tools

Supporting Toolbox

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The tool in a nutshell

The 'Circles and soup' is a game-like approach for retrospective analysis so that teams may overcome the barriers of unproductive blame-game. It helps to identify the factors within the team's control and those beyond it, so that the various obstacles may be overcome.

Why to apply

- Unproductivity of team due to blame-game
- Negative effect of self-evaluation
- Lack of plan to overcome deadlock.

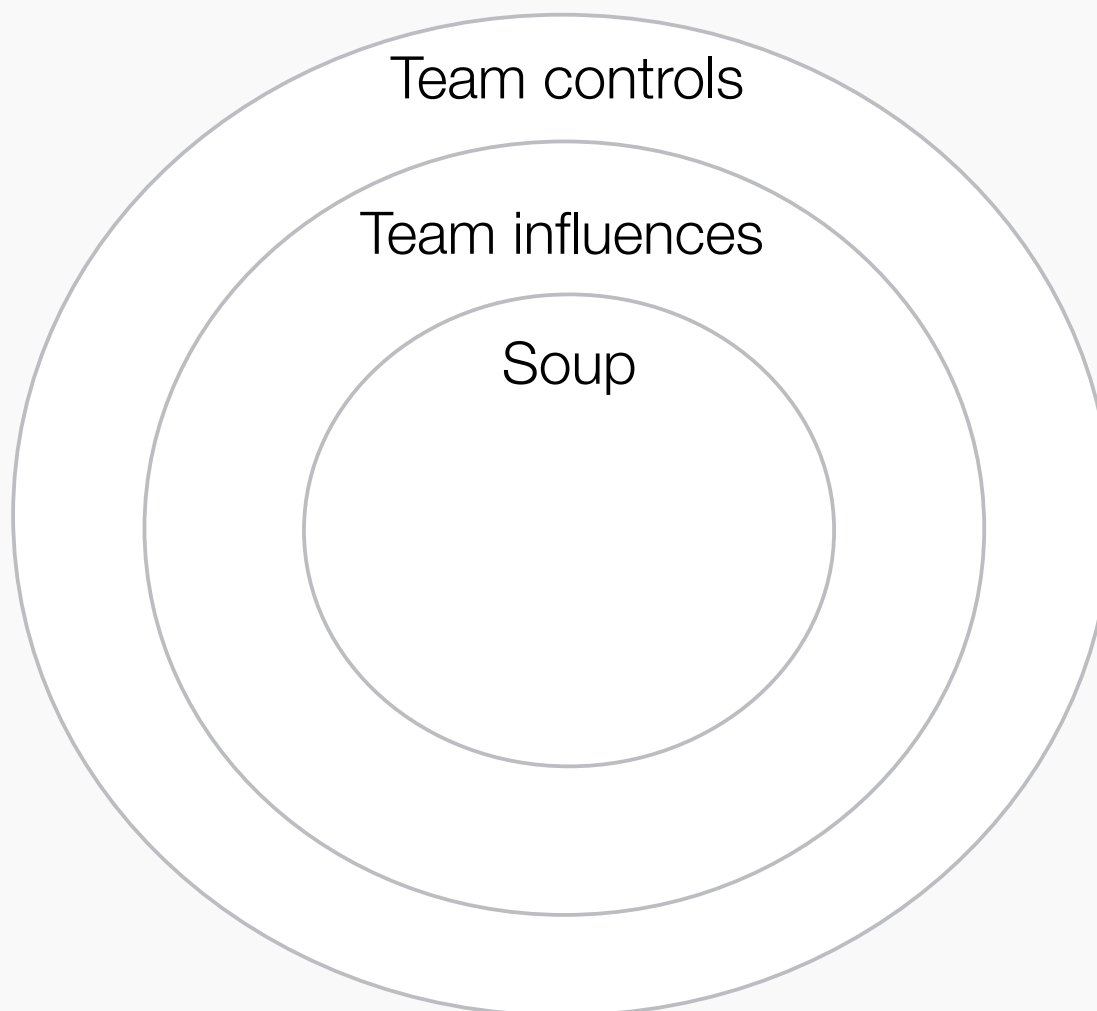
Expected results

- Cuts out on the blaming process
- Concentrates more upon formulating solutions to dead-locks
- Inculcates a feeling of fun and encourages idea-sharing
- Overcomes barriers effectively
- Improves implementation plans for the future.

? HOW TO APPLY

- Draw concentric circles to outline what the team can control, influence and cannot control (soup)
- Hand out sticky notes to the team-members and define the circles to them
- Allot them time to fill the note with ideas and place it on a specific circle
- Collectively work upon the ideas for project improvement.







SWOT analysis

Risk management tools

Supporting Toolbox

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The tool in a nutshell

The 'SWOT Analysis' helps to build a clear implementation plan by analyzing the strength, weaknesses, opportunities and threats for a project.

Why to apply

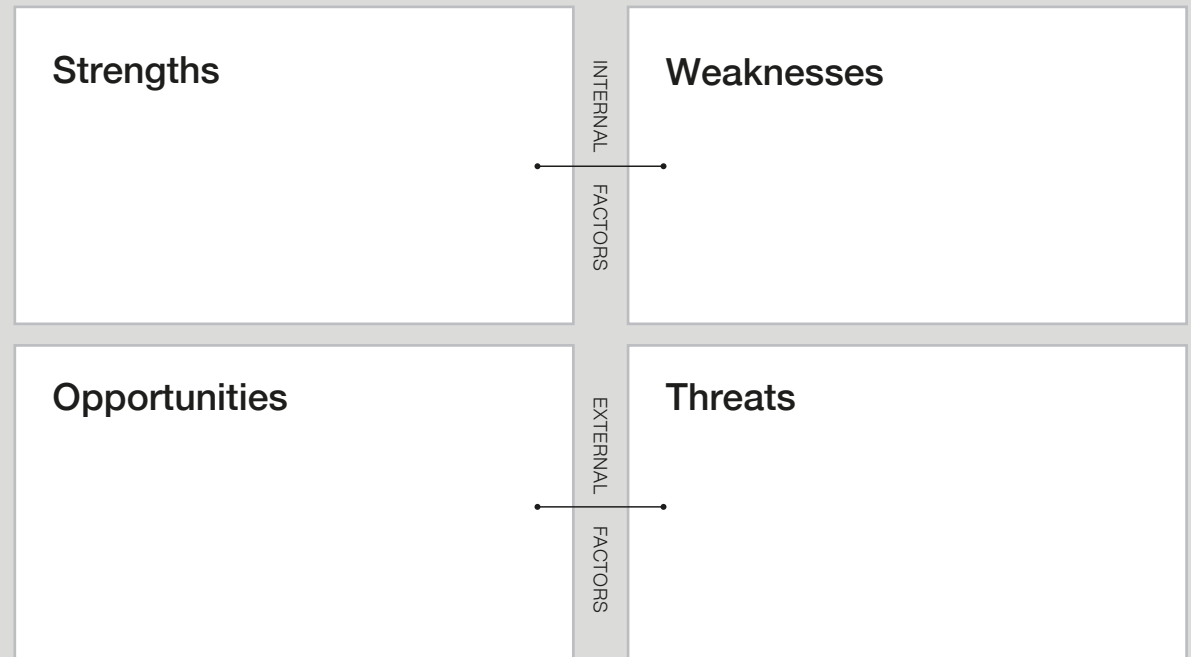
- Unclear mapping of factors that help or oppose the project development
- Vague understanding of strengths and weaknesses of the project
- Lack of information upon assistance to solve problems
- Absence of a standard framework to review the ongoing progress.

Expected results

- Supports better understanding of the strengths and limitations of a given project
- Help to overcome project weaknesses through external assistance
- Encourages better testing of solutions and ideas
- Inculcates reflective thinking to formulate a development guide.

? HOW TO APPLY

- Create a work-sheet with four quadrants (Strengths, Weaknesses, Opportunities, Threats)
- Fill each quadrant after thorough analysis
- Prepare well with facts, figures, comprehensive details
- Allow honest self-criticism
- Test analysis with others
- Repeat process and follow as a guide.





Strengths

What do you do better than anyone else?
What makes you unique?
What unique or lowest-cost resources can you draw upon that others can't?
What do people in your market see as your strengths?

Weaknesses

What could you improve?
What should you avoid?
What are things that users might see as weaknesses?

INTERNAL
FACTORS

Opportunities

Do people have a need?
Do people prefer something else?
Are there any changes in technology?
Are there changes in government policy?

Threats

What challenges do you face?
What are your competitors doing?
Is changing technology making things difficult?
Is there an issue with finances?

EXTERNAL
FACTORS



Risk impact / probability chart

Risk management tools

Supporting Toolbox

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The tool in a nutshell

The 'Risk Impact/Probability Chart' provides a useful framework to prioritize risks that a project can face. It helps to direct efforts on tasks requiring immediate attention.

Why to apply

- Complexity of managing risks in big projects
- Expensive to deal with all potential risks
- Difficult to correlate the probability of risk occurrence with its impact
- Unnecessary and inefficient risk management.

Expected results

- Provides better understanding of project risks and their priorities
- Introduces efficient risk management
- Helps to formulate different strategy for risks of different priorities.

? HOW TO APPLY

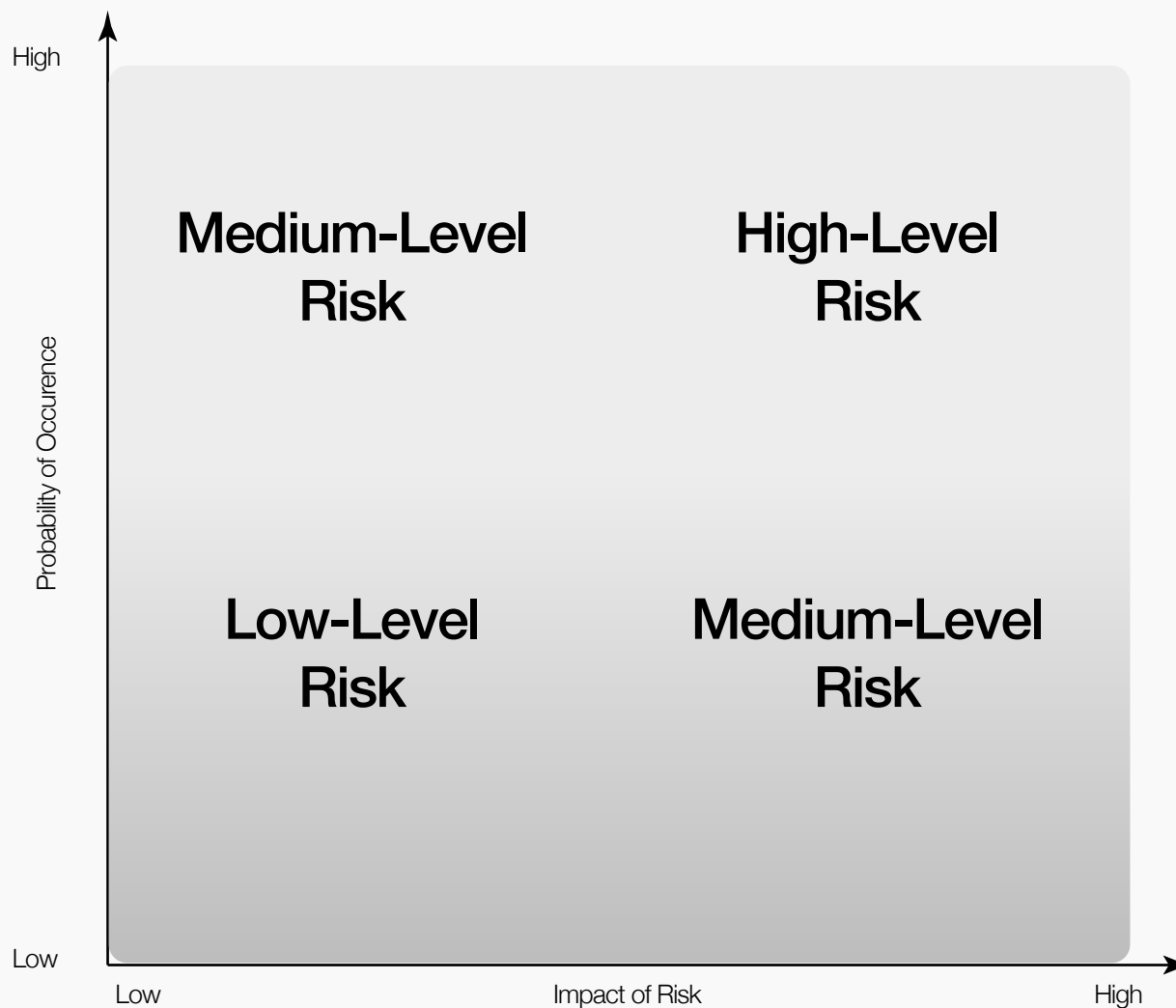
- Enlist all likely risks of the project
- Identify two dimensions for each risk (Probability and Impact)
- Plot probability on y-axis and impact on x-axis of the chart
- Assess risk probability and assign it a rating (scale 1 to 10)
- Estimate the impact of the risk (scale 1 to 10)
- Map out the ratings on the Risk Impact/Probability Chart
- Risks are plotted as low impact/low probability, high impact/high probability, high impact/low probability and high impact/high probability
- Develop response to each risk according to its position in the chart
- Test analysis with others
- Repeat process and follow as a guide.





RISK IMPACT / PROBABILITY CHART

Risk Impact / Probability Chart Worksheet





Learning loop

Output & impact
review tools

Supporting Toolbox

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The tool in a nutshell

The 'Learning loop' helps to build a clear implementation plan by improving upon previous work through reviews, insights, feedbacks and progress trackers. It helps to better structure the future work by analyzing the present work.

Why to apply

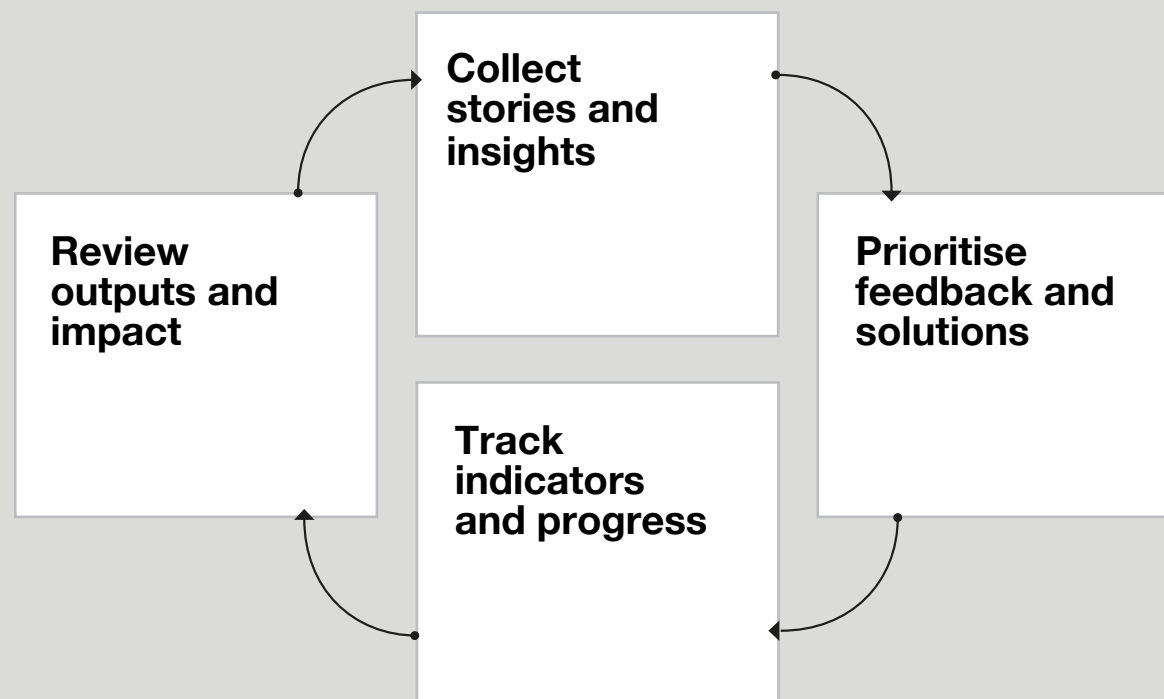
- Complex implementation of social change
- Difficult to understand different stages involved in the implementation of ideas
- Low emphasis upon learning process
- No standard way available to detect if organization is improving.

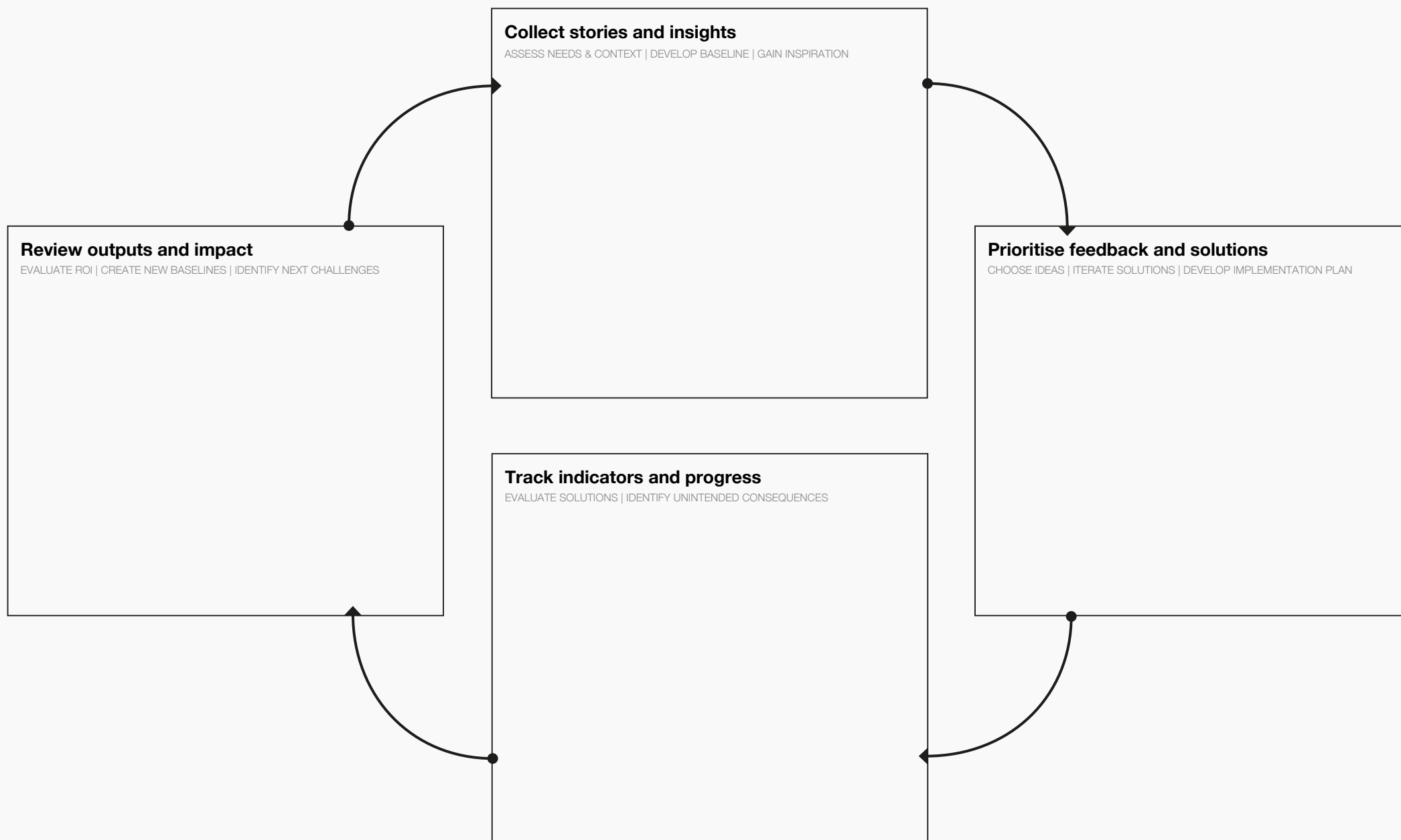
Expected results

- Provides a structured framework to plan and implement work
- Breaks a complex process into iterative cycles of learning
- Uses every current step to improve upon the next one
- Checks if organization learns and improves through different work stages.

? HOW TO APPLY

- Create a Learning loop worksheet with four quadrants (Review outputs and impact, Collect stories and insights, Prioritize feedback and solutions, Track indicators and progress)
- Make notes in each quadrant
- Use for current or future project
- Use learnings to improve upon future steps.







Causes Diagram

Output & impact
review tools

Supporting Toolbox

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The tool in a nutshell

The 'Causes Diagram' helps to clarify the priorities by understanding a complex issue. It helps to map the causes and symptoms associated with a problem.

Why to apply

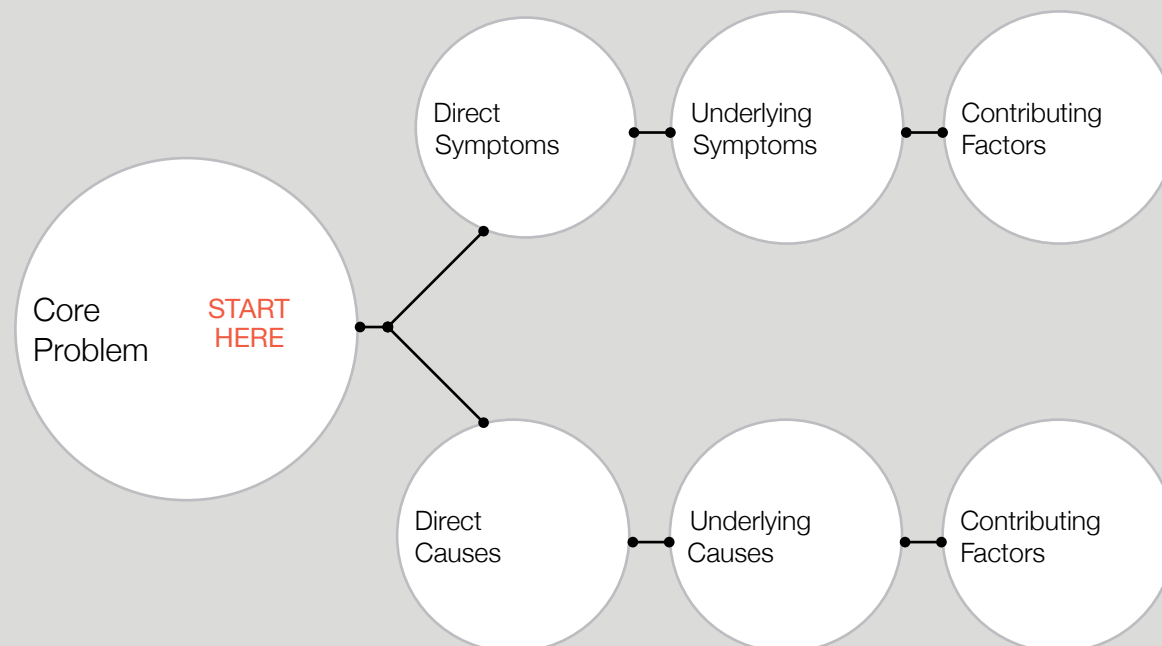
- Difficult to understand root cause of a problem
- Unstructured problem analysis
- Inefficient in time and efforts to understand the problem
- Unclear demarcation between causes and symptoms of a problem
- No efficient approach to arrive at a permanent solution.

Expected results

- Gives clearer demarcation between cause and symptoms of the problem
- Ensures efficiency of the problem analysis
- Allows for faster problem resolution
- Provides better understanding of aims
- Offers wider sharing of ideas for improvement.

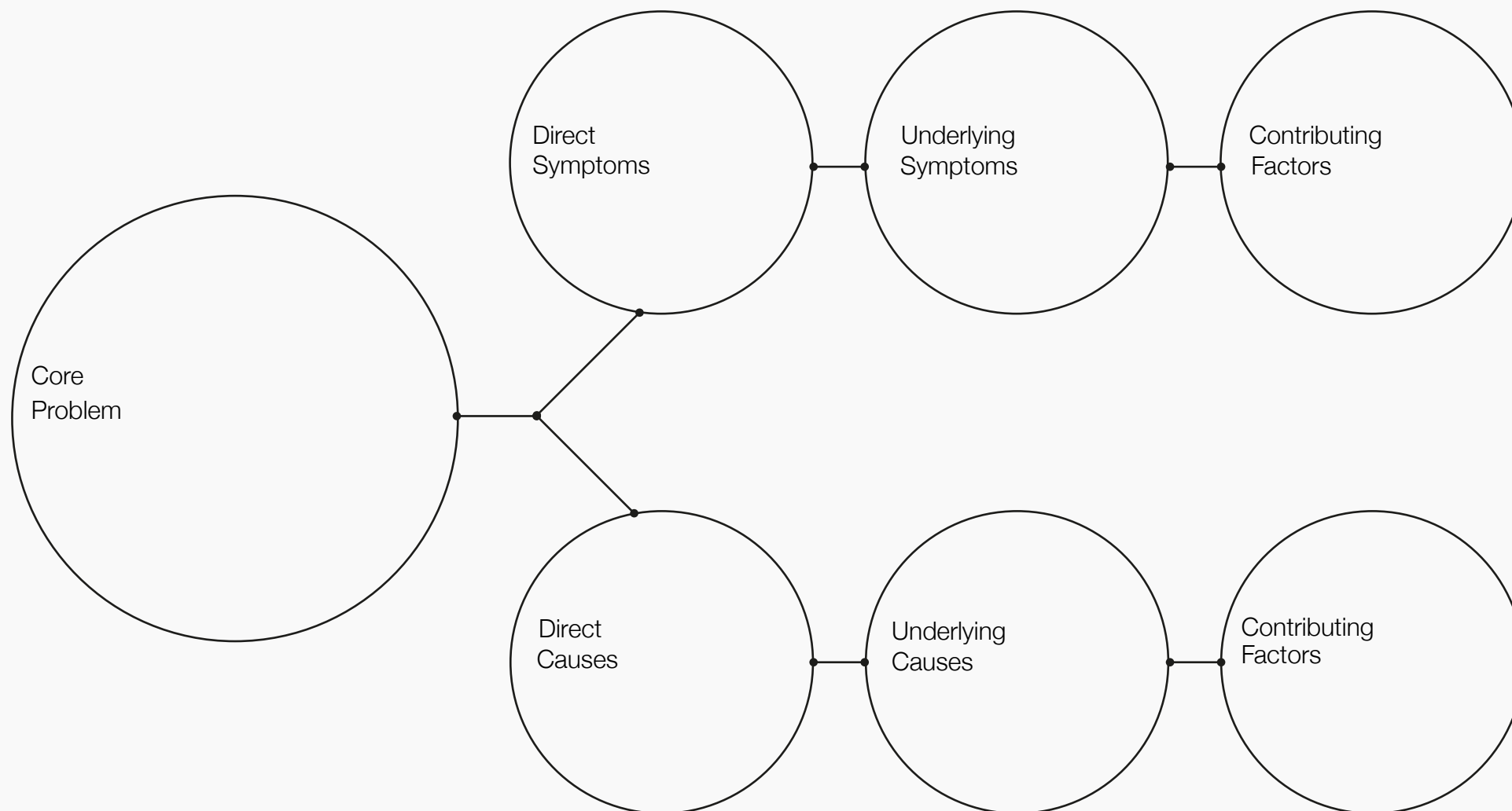
? HOW TO APPLY

- Note down the core problem to be solved in the worksheet
- Starting here, note down the direct, underlying and contributing symptoms
- Draw out maximum contributing factors (like people, systems, equipment, material)
- For each symptom fill out their respective causes
- Discuss the findings with the team
- Clarify aims using this information.





CAUSES DIAGRAM





Theory of change

**Output & impact
review tools**

Supporting Toolbox

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The tool in a nutshell

The 'Theory of change' helps to clarify priorities by clearly defining the goals and the roadmap to reach them. It identifies the problem, key audience, path to reach audience, steps for implementing change, quantify the effects of work, larger impact and the long-term goal of the change process.

Why to apply

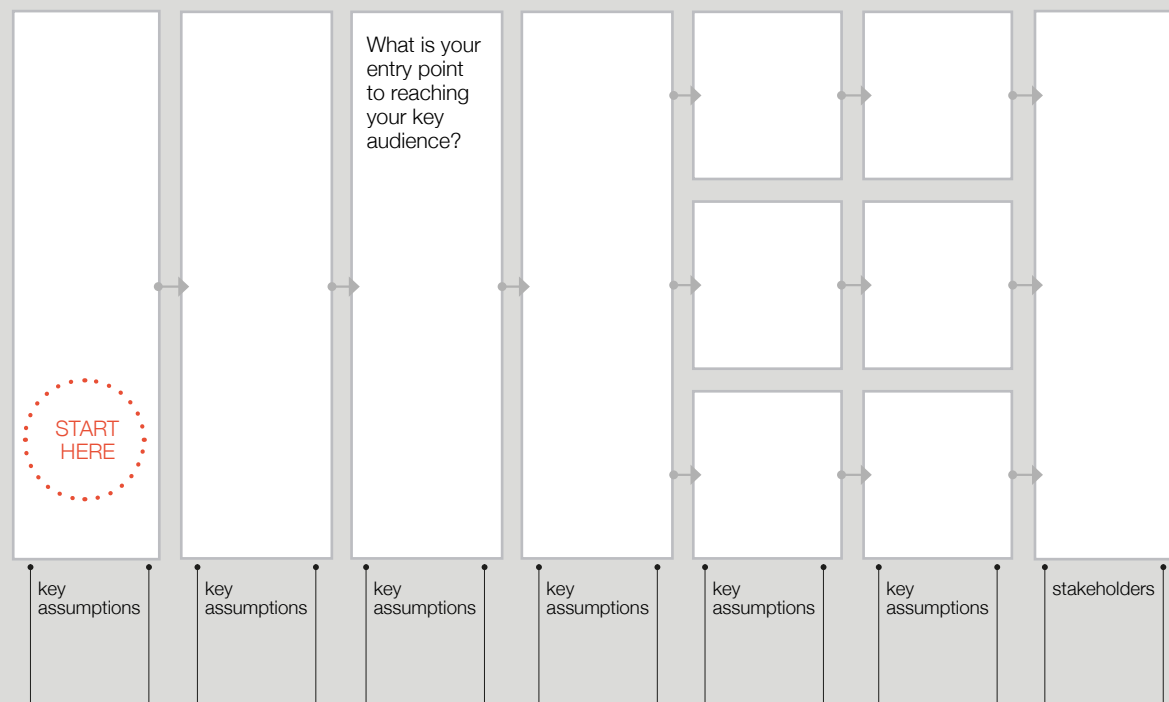
- Unclear roadmap to reach the goals
- Vague correlation between the current work with future goals
- Lack of information upon underlying risks in current work plan
- No means to relate different projects in large organizations
- Unclear understanding of roles of team members for goal achievement.

Expected results

- Offers vivid connection between present work and long-term goals
- Provides clear understanding of risks
- Uncovers relations between different projects
- Ensures better understanding of effects of problems
- Supports efficient formulation of practical steps to solve problems.

? HOW TO APPLY

- Create a worksheet and note down the main problem to solve
- Fill in notes about the key-audience, entry point to reach them, steps of change, measure of effects and benefits of work, and the long-term vision of change
- Note down affected people and organization
- Use work-sheet to plan the practical steps of change
- List the key outcomes
- Reflect upon assumptions to uncover potential risks.





THEORY OF CHANGE

What is the problem you are trying to solve?	Who is your key audience?	What is your entry point to reaching your audience?	What steps are needed to bring about change?	What is the measurable effect of your work?	What are the wider benefits of your work?	What is the longterm change you see as your goal?
				measurable effect?	wider benefits?	
				measurable effect?	wider benefits?	
KEY ASSUMPTIONS	KEY ASSUMPTIONS	KEY ASSUMPTIONS	KEY ASSUMPTIONS	KEY ASSUMPTIONS	KEY ASSUMPTIONS	STAKEHOLDERS



Interview guide

**Output & impact
review tools**

Supporting Toolbox

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The tool in a nutshell

The 'Interview guide' helps to collect inputs and perspectives from others through conversation. It emphasizes the approach to show, draw, think aloud and be specific.

Why to apply

- Vague problem description
- People may belong to different social and cultural environment
- No clear evidence of work impact.

Expected results

- Provides better connection with people through interviews
- Offers clearer understanding of people's problems
- Supports better testing of work impact.

? HOW TO APPLY

- Create an interview guide worksheet with four quadrants (Show me, Draw it, Think aloud, Be specific)
- Fill each quadrant with information gained through interview questions ('What', 'How', 'Why')
- Follow steps to make the participant open-up, go broad and look deep
- Extract specific information (through drawing, showing)
- To frame better questions, get input from team
- Plan to use the interview information.

Show me

Draw it

Think aloud

Be specific





Show me

If you are in the interviewee's environment, ask him or her to show you the things they interact with (objects, spaces, tools, etc). Capture pictures and notes to jog your memory later. Or, have them walk you through the process.

Draw it

Ask participants to map out their activities and experiences through sketches and diagrams. This is a good way to debunk assumptions and reveal how people perceive and order their activities.

Think aloud

As they perform a process or task, ask participants to describe aloud what they are thinking. This helps uncover their motivations, concerns, perceptions and reasoning.

Be specific

People often generalise about what's typical and leave out rich important details. Instead, ask people to talk about a specific period of time. Instead of what's your typical day like, ask them what happened yesterday.

Interactive Innovation Toolkit

All of the tools used within the Interactive Innovation Toolkit have been identified and preselected amongst hundreds of tools based on their relevance and applicability to the working packages and topics within project DISIRE. Most of these tools are well documented and already widely used in many different sectors and projects. The origin of each tool can be traced using the reference link in its description.

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