

# ANTICIPATECH

## SCENARIO GAME

using Technological Trends and Megatrends

User Guide

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# Objectives and Goals of the Scenario Game

Foresight work is often challenged by not engaging enough members of an organisation or decision-makers. While analytical work on trends is the fundamental basis for developing foresight, it is paramount to think about alternative pictures of the future and think about different scenarios and this is best done in group discussions and interactive settings.

Not only do group discussions allow for the inclusion of multiple perspectives, but such settings foster active engagement with trends, scenarios, and multiple futures. Following the paradigm of “understating vs. consuming”, we have created an engaging workshop format, addressing leaders, foresight experts, and any other potential stakeholder or expert interested in future implications of disruptive technologies and all-encompassing megatrends.

This workshop concept is named the “*Scenario Game*”. The overarching goal of the *Scenario Game* is to jointly develop images of the future, based on the information on technology- and megatrends compiled in the accompanying “AnticipaTech Trend report”. Further, the Scenario Game aims to enable participants to engage with multiple futures and challenge their assumptions about the future.

The *Scenario Game* aims to provide a less time-consuming approach that can be practised more frequently. The tight format enables faster and more focused work in producing scenarios. The interactive aspect further enhances participant engagement and thus their performance and learning experience. The collaborative aspect improves “buy-in” of the resulting scenarios from participating members of an organisation, as well as team building.

Of course, this cannot replace the analytical rigour of a full scenario planning process or the effects of several organisational interventions, but we believe that we have created a format that serves either as a starting point to engage with foresight or allows discussions on the future one step further.

In the following, we provide basic ideas for the design of the *Scenario Game*.



Figure 1: Impressions from conducted workshops

## Preparation and resources

To facilitate the *Scenario Game*, we provide the following resources:

- AnticipaTech Trend report
- Technological Trend cards and Megatrend cards
- Two scenario canvases
- Video tutorial
- Presentation for the *Scenario Game* facilitation

The *Scenario Game* can either be played online or offline. If you want to use the *Scenario Game* online, please just contact us.

For using the *Scenario Game* offline, all material is ready to print. The trend cards can be printed either in DIN A4 or DIN A5. You might want to consider printing the trend cards on thicker paper or cardboard.

We recommend printing the canvases in a DIN A1 format to have enough space for working with Post-its.

### **Checklist for needed materials:**

- Trend cards DIN A5 or DIN A4
- Scenario Game Canvas 1 DIN A1
- Scenario Game Canvas 2 DIN A1
- Post-its (at least one stack per team)
- Sharpies or markers to write on the Post-its (one per team member)
- Tape or pin needles for each team (when working on pin walls)
- Countdown or watch visible for all participants

The workshop environment should facilitate working on the canvases and discussions between members of the teams, as well as provide possibilities to report back to the whole group of participants. Pin walls have proven to be a good tool for this, but blackboards or any other tools to hang up the canvases and easily put on Post-its should suffice. A few pictures facilitated workshops and their environments can be seen for inspiration in Fig. 2. The material used was a prototype.

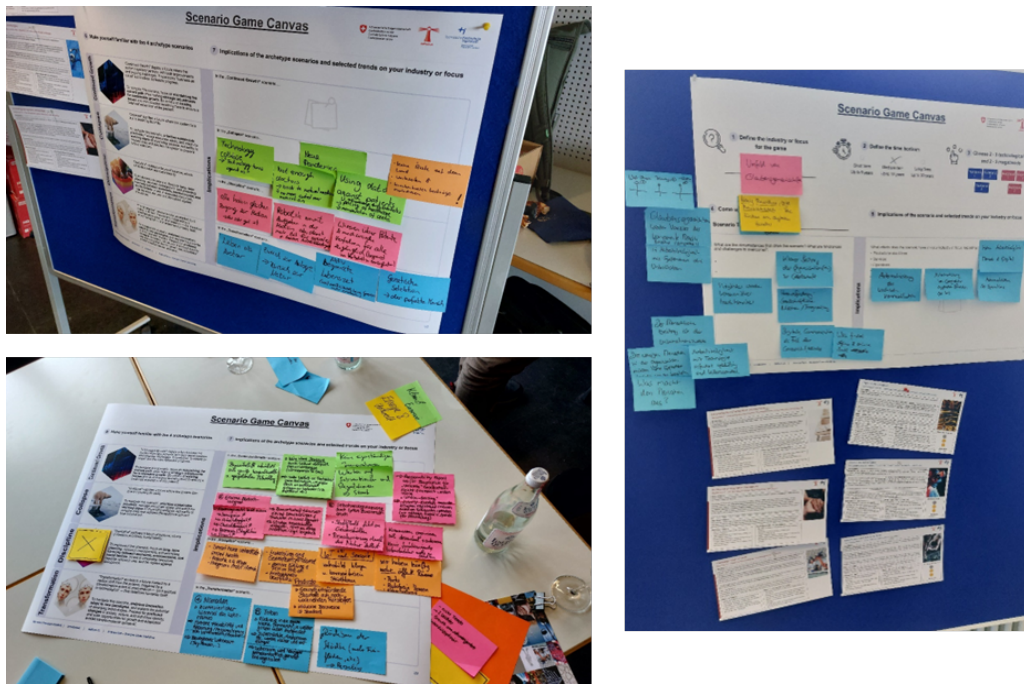


Figure 2: Examples of facilitated workshops

## Creation of teams

It is recommended that the allocation of team members is done beforehand. Team sizes from 3-6 members would be ideal, comprising experts of the industry/focus of question or experts of the trends that should be worked on. Of course, non-experts can also play the *Scenario Game*.

The teams will discuss their scenarios and present their results after each of the two major steps of the *Scenario Game*.

If you need more information on how to best facilitate workshops we would suggest you to read through these online resources.

- Facilitation 101: <https://www.workshopper.com/post/the-ultimate-guide-to-facilitation>
- How to Run an Effective Workshop: <https://www.workshopper.com/post/how-to-run-a-workshop>

## Basic principles

The *Scenario Game* rests on two principles.

1. The future cannot be predicted but based on current trends, possible scenarios can be described. This is illustrated in the *Future Cone* (Fig. 3).

2. Scenario exercises tend to describe *Four Archetypes* of possible scenarios; this is fundamental for the *Scenario Game*.

The *Future Cone* is a representation of the various types of scenarios one can encounter in dealing with the future. These types are:

**Projected scenario:** Default extrapolation from today, and the "most probable" scenario to happen.

**Probable scenario:** Current trends show that such a scenario is "likely to happen" in the future.

**Plausible scenario:** Current knowledge indicates that such a scenario "could happen".

**Possible scenario:** Knowledge about the future indicates that such a scenario "might happen".

**Preferable scenario:** This represents a desired future that is "wanted to happen".

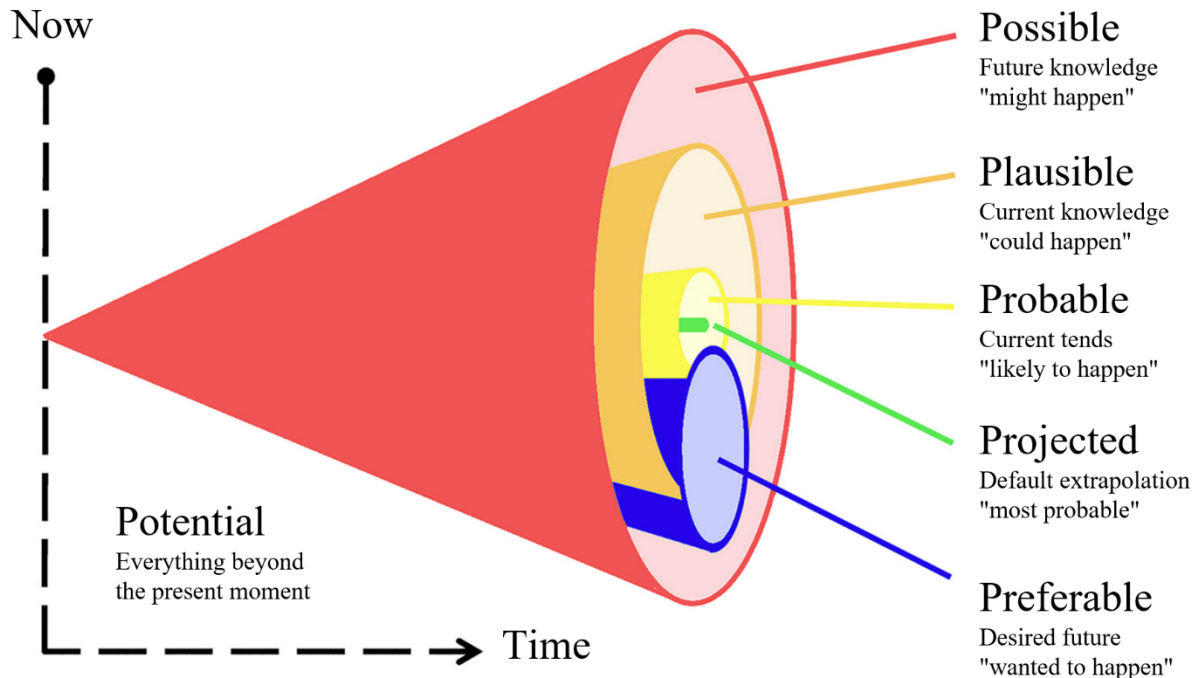


Figure 3: The Future Cone [van Dorsser et al., 2018]

Research has suggested that scenario exercises typically produce scenario sets which revolve around the same tonality, labelled as the *Four Archetypes* [Dator, 2009] (Fig. 3). The *Four Archetypes* is a classification of future scenarios that presents four different types of scenarios

that are typically very useful in thinking about the future. The *Four Archetype* scenarios are defined as follows [Dator, 2009]:

- **Continued growth** is a future of continuation and enhancement of the current trajectory, but also current problems. An expansion of the present. This future is remarkably similar to business as usual, but not exactly the same. Business as usual is the continuation of the present, not a continuation of its trajectory.
- **Collapse** is a future where the system reaches its limit and collapses.
- **Discipline** is a future of equilibrium. A steady state civilisation focused on sustainability.
- **Transformation** is a future of radical departure from the present due to a transformative event or phenomenon, either spiritual or technological, where the very concept of being human is redefined.



Figure 4: The "Four Archetype Scenarios"

These concepts are underlying of the *Scenario Game*. It is advised to mention theoretical principles such as the *Future Cone* in the introduction of the workshop to strengthen the understanding of different possible various futures and therefore variations of scenarios.



# Scenario Game How To

The *Scenario Game* comprises two steps:

- Canvas 1, a first more explorative step, and
- Canvas 2, a second more structured step.

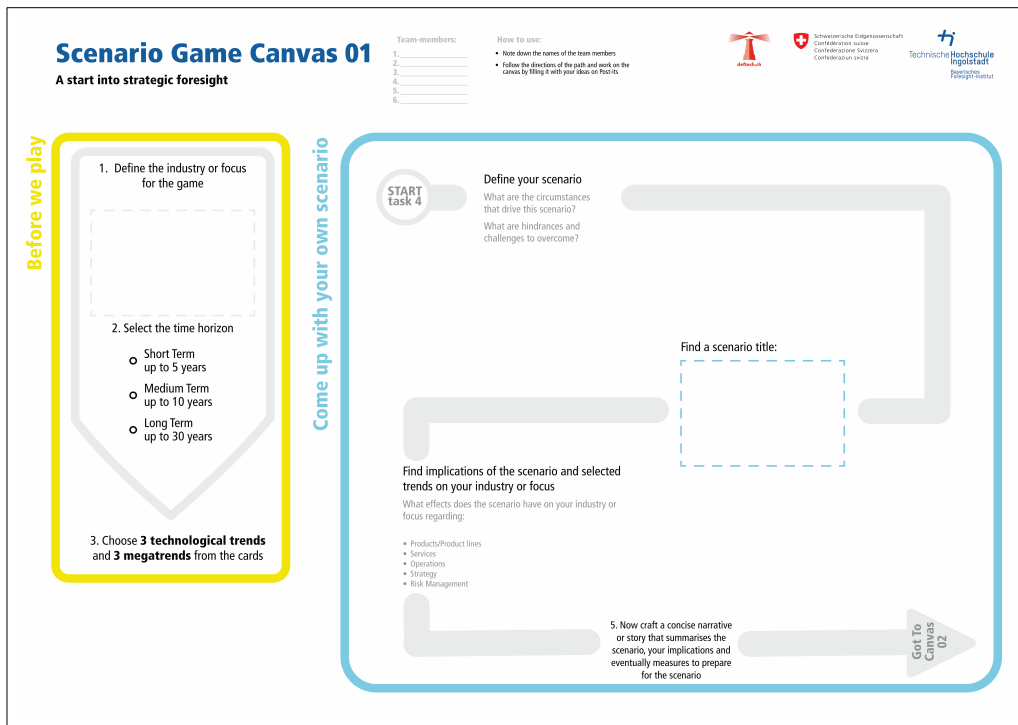


Figure 5: Canvas 1 for the first, explorative step of the Scenario Game

In the **first, explorative step**, the participants are assigned to teams and are provided with the first canvas (Fig. 4) and the trend cards.

Tasks 1 to 3 of the first canvas will have to be decided on by the facilitator beforehand in variations 1 and 2 (see Page 10). The most amount of time should be planned for tasks 4 and 5 in the first canvas.

The teams have the following tasks, also listed on the canvas:

## TASK 1: DEFINE THE FOCUS

Define the industry or particular area participants would like to focus on. This can either be all teams working on one topic or each team working on individual topics.

## TASK 2: DEFINE THE TIME HORIZON

Define the time horizon participants would like to focus on, ranging from up to five, up to ten, and up to 30 years, or even beyond depending on the industry or area of interest. Make sure that it is understood that the longer the time horizon the more uncertain and complex the foresight activity will get.

### **TASK 3: CHOOSE TREND CARDS**

Choose 2-3 technology- and megatrends that are most relevant to the chosen focus and time horizon. Depending on the time available, more trends can be considered. In order to develop a comprehensive understanding of the future, it is important to include trends from both areas. Non-selected trends are not discarded during the game, if they play a role include them in the scenario.

### **TASK 4: DEVELOPMENT OF OWN SCENARIO**

Develop a scenario, combining the selected trends to provide a consistent picture of the future. Find a compelling title that describes this future world (scenario) and describe it in a few bullet points.

In building a scenario, participants should consider the following: building a scenario involves creating a detailed and structured narrative or sequence of events that outlines a possible future, situation, or series of actions. Participants should discuss how the chosen trends can be combined to a consistent picture of the future.

As an option, the cross-impact analysis, explained in the report, can be used to detail the scenarios but also to assess the connections between the trends.

### **TASK 5: IMPLICATIONS OF THE DEVELOPED SCENARIO**

Consider the implications, e.g., on products, services, operations, strategy or risk management, of the selected industry or focus.

After the **conclusion of these tasks**, all teams shortly present their findings and may come up with first recommendations or ideas on how this scenario impacts decision-making and planning for the daily business and the strategy in the set time frame.

For the **second, structured step**, participants are introduced to two key principles of the *Scenario Game*: The *Future Cone* and the *Four Archetypes*. Fundamental is to emphasise that the future cannot be predicted but that one can develop alternative pictures of the future/ scenario based on current trends.

Participants have the following task using the second canvas (Fig. 6):

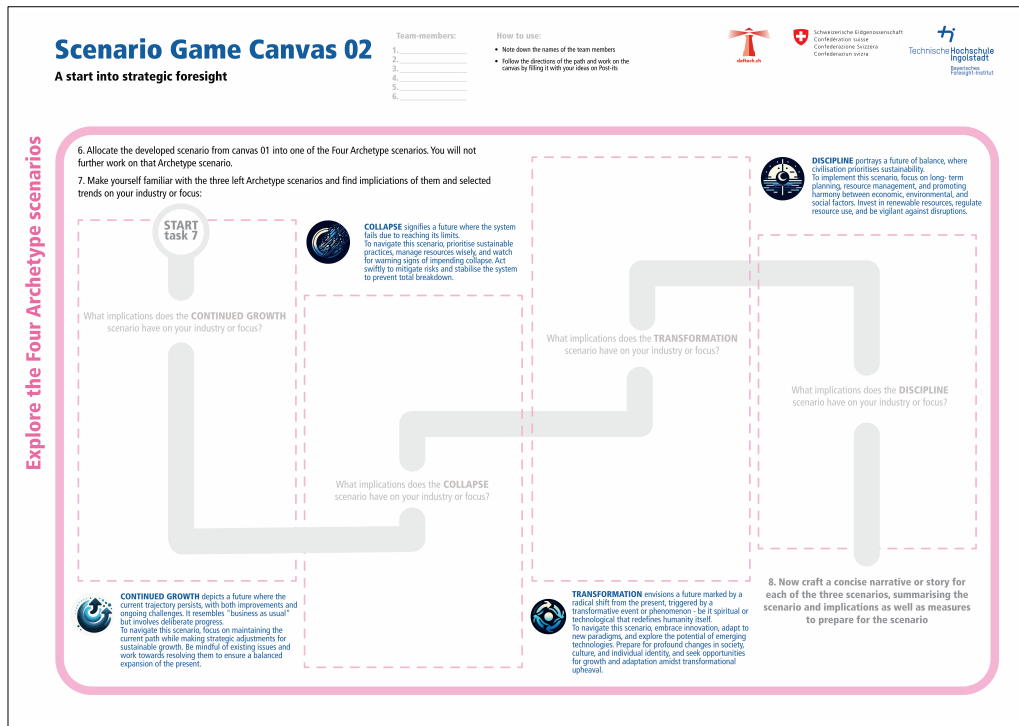


Figure 6: Canvas 2 for the second, structured step of the Scenario Game.

## TASK 6: ALLOCATE THE DEVELOPED SCENARIO INTO ONE OF THE FOUR ARCHETYPE SCENARIOS

Read through the *Four Archetype scenarios* on Canvas 2. Allocate the previously developed scenario from Canvas 1 to one of the *Four Archetype scenarios*. Which type does it reflect best?

The *Archetype scenario* it got allocated to, will not be worked on in this part anymore, as the results would likely be the same. For Canvas 2 the teams will only work on the three left *Archetype scenarios*.

## TASK 7: DEVELOP THE SCENARIOS OF THE LEFT ARCHETYPE SCENARIOS

Assess how the previously developed scenario would play out in the left three *Archetypes*. Imagine what the initially developed scenario would look like, given a different context, here are a few suggestions for what participants could think about:

- a. For the **continued growth scenario**, participants can focus on maintaining the current path while making strategic adjustments for sustainable growth. They can also be instructed to be mindful of existing issues and work towards resolving them to ensure a balanced expansion of the present.

- b. For the **collapse scenario**, participants can prioritise sustainable practices, manage resources wisely, and watch for warning signs of impending collapse. They can act swiftly to mitigate risks and stabilise the system to prevent total breakdown.
- c. For the **discipline scenario**, participants can focus on long-term planning, resource management, and promoting harmony between economic, environmental, and social factors. They can consider renewable resources, regulate resource use, and be vigilant against disruptions.
- d. For the **transformation scenario**, participants can embrace innovation, adapt to new paradigms, and explore the potential of emerging technologies. They should aim for profound changes in society, culture, and individual identity, and seek opportunities for growth and adaptation.

### **TASK 8: DERIVE IMPLICATIONS FOR THE THREE DIFFERENT ARCHETYPE SCENARIOS**

As done on Canvas 1 for their own developed scenario, participants will work on implications for the three *Archetype scenarios* on Canvas 2.

After **concluding these Tasks**, the teams report back what their scenarios look like and how they impact decision-making and planning for the daily business and the strategy in the set time frame.

The outcome should be ideas on how the business can be affected by different scenarios in the future and what measures can be taken to sustain critical blows resulting from these scenarios.

# Variations of the Scenario Game

While we provide suggestions on how the *Scenario Game* concept can be used, we also want to emphasise that the approach can be implemented in many ways, for different purposes and in diverse settings.

Our suggestions here are based on several *Scenario Game* workshops we have run, reflecting different contexts, and participant constellations but also different timeframes.

Why have we called this approach the *Scenario Game*? It is not about winning; one cannot win the future. Instead, it is more about collaboration and playfully exploring different futures by using different trends in a structured way.

In the following, we will share a few suggestions on how to run the *Scenario Game*. Below is an overview:

Table 1: Scenario Game Variations

	Variation 1 Sprint (30-45 minutes)	Variation 2 Quick & Full (90 minutes)	Variation 3 Full Monty (1/2 day - 1 day)
<b>1. Step – Open</b>	<p><u>Focus</u>: one industry for all teams or individual teams</p> <p><u>Trends</u>: preselection of trends for all or per teams</p> <p><u>Duration</u>: 30 to 45 minutes</p> <p><u>Benefits</u>: engagement with trends and thinking in multiple futures</p>	<p><u>Focus</u>: one industry for all teams or individual teams</p> <p><u>Trends</u>: preselection of trends for all or per teams</p> <p><u>Duration</u>: 30 to 45 minutes</p> <p><u>Benefits</u>: engagement with trends and thinking in multiple futures</p>	<p><u>Focus</u>: participants select focus per team</p> <p><u>Trends</u>: participants select trends per team</p> <p><u>Duration</u>: ½ of scheduled workshop</p> <p><u>Benefits</u>: deepened engagement with trends and thinking in multiple futures</p>
<b>2. Step - Structured</b>		<p><u>Focus</u>: engagement with the four Archetype concepts</p> <p><u>Duration</u>: 30 to 45 minutes</p> <p><u>Benefits</u>: engaging in thinking in multiple futures challenging own assumptions.</p>	<p><u>Focus</u>: engagement with the four archetype concepts</p> <p><u>Duration</u>: ½ of scheduled workshop</p> <p><u>Benefits</u>: deepened engagement into thinking in multiple futures, challenging own assumptions.</p>

Basic rule of thumb: the more time I can invest in running a *Scenario Game* workshop, the more I can expect in terms of learning detailed insights.

Our *Sprint* variation is ideal for introducing foresight and working with trends and scenarios. This is in particular suited for groups which are new to the topic, and which want to get a first idea of what it means to discuss trends and scenarios or to think about the future in a comparably structured way.

Our variation *Quick & Full* adds the component of working with scenario archetypes to the variation *Sprint*. This takes the discussion one step further, not only discussing trends and one possible scenario but introducing the idea of an open future and multiple scenarios. It also provides an opportunity to challenge our own assumptions concerning the future.

Our variation *Full Monty* facilitates deep engagement with trends and scenarios. This also allows to move beyond the effects of dealing with the future, to have for instance more focused discussions on the industry.

However, as these are merely suggestions based on our *Scenario Games*, feel free to experiment with the setup and content. We would be happy for any feedback on how you have applied the concept and the experiences you had, conducting a *Scenario Game*.

## Workshop schedule

Find below a **suggested workshop schedule** for the *Quick and Full* Variation (90 min). For the *Full Monty* variation adjust the schedule times to half a day/a day of workshop or as you like.

Table 2: Suggested workshop schedule.

Part of workshop	What to do	Time	Variation
Introduction	Introduction to the scope of the workshop and foresighting	10 min	1   2   3
Task 1: Define the focus	Teams define the focus/industry/business department	5 min	3
Task 2: Define the time horizon	Teams define the time horizon	5 min	3
Task 3: Choose trend cards	Teams choose the trend cards to use in the Scenario Game	10 min	3
Task 4: Develop own scenario on Canvas 1	Teams create their own scenario on Canvas 1	10 min	1   2   3
Task 5: Implications of the developed scenario	Teams draw implications for their focus from the created scenario on Canvas 1 and report back	25 min	1   2   3
<b>Break</b>			
Task 6: Allocate the developed scenario	Teams allocate the developed scenario to one of the <i>Archetype scenarios</i> on Canvas 2	5 min	2   3
Task 7: Develop the left Archetype Scenarios on Canvas 2	Teams develop the scenarios of the left <i>Archetype scenarios</i> on Canvas 2	15 min	2   3
Task 8: Derive implications for the three different Archetype scenarios	Teams derive the implications for the Archetype scenarios on Canvas 2	15 min	2   3
Retrospective	The moderator wraps up the workshop with a short retrospective and feedback from participants	10 min	1   2   3

## Leveraging Foresight Insights

The *Scenario Game* workshop provides a platform to explore potential future landscapes. The insights gained are invaluable for strategic decision-making and organisational adaptation. So, for the steps after the workshop, keep the following things in mind:

**Communicate Insights:** Share the workshop outcomes with relevant stakeholders to foster a shared understanding of future possibilities. Effective communication is essential for organisational alignment.

**Track Key Indicators:** Monitor the indicators identified during the workshop to gauge the progression of trends and scenario development. This information will help refine strategies and responses.

**Form a Foresight Team:** Assemble a cross-functional team dedicated to foresight activities. This team can drive foresight initiatives, share knowledge, and ensure integration across the organisation.

**Establish a Foresight Cadence:** Consider creating a regular foresight practice to continuously scan the environment and update scenarios. This could involve quarterly or annual foresight sessions with the *Scenario Game*.

**Integrate Foresight into Strategy:** Utilise the developed scenarios to identify opportunities and threats. Incorporate foresight into strategic planning processes to ensure the organisation is positioned for future turbulences.

**Building a Foresight Culture:** Remember, foresight is not a one-time event but an ongoing process. By embedding foresight into the organisational culture, you can enhance agility, innovation, and resilience. This handbook offers a first glance into building foresight capabilities. Continuous learning and adaptation are key to maximising the value of foresight.

We wish you fun engaging with the future and hope you enjoy our foresight endeavour.



## About

This User Manual is part of the *Scenario Game* developed by the Bavarian Foresight-Institute in Ingolstadt and the technology foresight research program of armasuisse Science & Technology, also known as Deftech - <https://deftech.ch>.

This game is freely available. Any use of this game, including but not limited to modification, distribution, or public performance needs proper attribution, including the name of the creators, logos and a link to the source. The same applies if its components are used or shared.

A special thanks goes to the students of the Design Leadership Master programme at University of Applied Sciences in Ingolstadt. They provided us with great redesigns for our *Scenario Game* Canvases and trend cards. Part of the team of the redesigned resources were Ameesha Bhorkade, Simon Mayer, Utsav Patel, and Jehan Somji.

## REFERENCES AND FURTHER READING

- Van Dorsser, C et al. 2018. "Improving the Link between the Futures Field and Policymaking", *Futures* 104: 75–84, 2018, <https://www.sciencedirect.com/science/article/abs/pii/S0016328717302513>
- Dator, J., "Alternative Futures at the Manoa School", *Journal of Futures Studies*, Vol. 14, No. 2, 2009, <https://jfsdigital.org/articles-and-essays/2009-2/vol-14-no-2-november/articles/futuristsalternative-futures-at-the-manoa-school/>
- Fergnani, A., "4 Archetypes", *Shell, 2x2: Top Three Scenario Planning Methods Explained and Compared*, Article, Medium, 2020, <https://medium.com/predict/4-archetypes-shell-2x2-three-scenario-planning-methods-explained-and-compared-d2e41c474a37>
- Schwarz, J. O. (2023) *Strategic Foresight: An Introductory Guide to Practice*. London: Taylor & Francis.