Creating a Sustainable Innovation Event System for SGRE

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Abstract:

Climate change is a great risk for the planet and initiatives are happening to mitigate this. SGRE is working towards minimising its climate impacts through a digital innovation event with its employees. The purpose of this report is to make an event system for SGRE to enable ideas to minimise or mitigate their environmental impacts. The system is based on interviews with employees from SGRE and literature on innovation, digitalisation and event management. The system is called "*Sustainable Innovation Event structure*" and it consists of two aspects: The overall event, which defines the scope and the performed workshops which generate ideas to handle the environmental issues. There are four classifications for environmental issues structures: 1) *strict structure*, for the local and specific issues, 2) *moderate structure*, for the local issues with aspects of uncertainties, 3) *mild structure*, for the global issues with local context and lastly 4) *Lenient structure* for the global wicked problems. Each structure has a predetermined workshop structure, which enables innovative idea creation to mitigate environmental issues. Based on uncertainties regarding implementation, lack of a test run and others, it can be argued that restructuring of the system can occur. It can be concluded that the system can aid SGRE in achieving their goals, after implementation and potential modifications.

Summary

In this chapter will a summary of the context of the report, such as the problem, research question, utilised theory, analysis, discussions and conclusions be described.

The researchers of this report are in cooperation with Siemens Gamesa Renewable Energy (SGRE) a wind turbine manufacturer, to aid them in achieving their goal of innovating their internal systems, by utilising their employees' knowledge to pinpoint potential environmental improvements in their organisation. They do this to combat the climate crisis and to comply with policies such as the Paris agreement, the SDG and Agenda 21.
To achieve these environmental changes has SGRE decided to conduct an *innovation event* for their employees, to determine both concrete to wicked problems. The requirements for SGRE's innovation event is the following: 1) All the employees of SGRE needs to be able to participate. 2) The event should occur digitally, to comply with the restrictions of COVID-19. 3) Create a company-wide consensus about sustainability and innovation, to ensure the participants can contribute to the event. In order to create an event with these requirements has the researchers of this report created a research question to encapsulate the problem: *How can an innovative environmental system be facilitated digitally, which can be implemented in SGRE and its preexisting culture?*. In relation to this was three sub-questions been formulated.
Information was gathered regarding innovation, digitalisation, event types and tools, to be able to create an innovative environmental system for SGRE.

Firstly, the innovation approach was established to ensure a holistic implementation throughout the system. Innovation approaches varied from organisational innovation [Baregheh et al., 2009], social innovation [Mulgan et al., 2007], technological innovation [Schramm, 2017] and sustainable innovation [Altenburger et al., 2018]. Moreover, it was considered if the system should have a closed or open framework for information sharing [Huff et al., 2013; Kratzer et al., 2017a]. SGRE does not have an uniform innovation culture and it varies from department to department. So despite technological innovation being the prominent innovation structure of all in SGRE, was sustainable innovation chosen for the event. This is to ensure that the primary focus throughout the event is on the environmental aspects of the issues and how to negate these. Moreover, the event is intended to share knowledge and ideas throughout the company, thereby sharing elements with open innovation [Huff et al., 2013].
Then event types and tools were defined to be able to define the context of the system. There was a primary focus on establishing three aspects of event types: 1) *One-way communication* to enable information sharing 2) *promoting dialogue* to enable discourse and 3) *enabling concept creation* to enable the production of innovative and environmentally focused ideas. By utilising different combinations of these can the participants get informed, discuss and create ideas. Throughout these event types can event tools be used to highlight different techniques which can be used during the creative process. These tools vary from defining the issue, invent and further develop the ideas, to deliberating and finalisation of them. This means that there are a structure for the participants throughout the creation process of the ideas.
This process is aided with digitisation and the strengths and weakness of performing an event digitally. Digital technology can aid these process and can enable dialogue and information sharing over great distances. This can aid in complying with the open innovation, by connecting employees throughout the company. Moreover, Kanstrup argues that an event can be successful digitally if the context of the event is structured accordingly [Kanstrup, 2021]. Though drop outs of digitalisation can occur and understanding of the

digital culture and usage of it varies throughout SGRE [Dalsgaard, 2021]. Therefore, it is relevant that the participants are taught how to use digitalisation to avoid this.
With these elements was a system formed.

The structure is called "*the Sustainable Innovation Event structure*" which defines which actions are needed to ensure a continuous innovative process within SGRE. It is the overall event, which defines the scope, with addition a *workshop structure* which is the performed workshops that generate ideas to handle the environmental issues. In the beginning of the event is an overall environmental theme defined, which the workshops occurs within and the event is planned to happen yearly or every second year. Moderators are trained to be able to conduct the workshops where each workshop consist of 20-25 participants from the same local department.
The environmental issues handled during an event depends on the type of issue. Therefore consists the Sustainable Innovation Event system of four classifications for issue structures: 1) *strict structure*, for the local and specific issues, 2) *moderate structure*, for the local issues with aspects of uncertainties, 3) *mild structure*, for the global issues with local context and lastly 4) *Lenient structure* for the global wicked problems. Depending on the specific issue is there a predetermined structure for how the workshops should be performed. Through these should the participants be enabled to create innovative ideas for SGRE environmental issues.

The Sustainable Innovation Event system has uncertainties and considerations, which have been discussed. Such as SGRE requirements for the event. It can be discussed that it is not beneficial for every employee of SGRE to participate in the events, due to potential costs and time. Moreover, the benefits of performing the events and workshops partly digital can be discussed; due to the different understanding and usage of digital technology throughout SGRE can it be argued that in some cases would it be beneficial to perform the event physically. Lastly, it can be discussed how the nonholistic view on innovation and sustainability can affect the Sustainable Innovation Event system, whereas it can be argued that a holistic agreement on these would benefit SGRE.

In can then be concluded that the presented Sustainable Innovation Event system can be used in SGRE with the possibility of using educated moderators to implement workshops across the organisation to promote environmental awareness, innovation and digitalisation culture. Strategies to reduce digital dropouts and use digital tools to promote engagement has been included in the system. Nevertheless, there are still uncertainties in relation to the success of the event as there is no empirical data in the form of a test run to back up the theoretical information. However, feedback has been primarily positive and due to the flexible design of the workshops structures, are there ample possibility for SGRE to implement it into their existing culture, to achieve their goal of an innovation event.

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Introduction 1

The recent climate crises have proven that global warming is one of the main threats to society, as it has resulted in a global health crisis due to heatwaves, property damage from extreme weather and loss of habitats and biodiversity [McKinsey Global Institute, 2020]. To combat these, both countries and companies have chosen to commit to e.g. the Paris agreement, Agenda 21 and the 17 Sustainable Development Goals (SDG). The definition of sustainability can aid in defining what course of action can mitigate the climate crises as; *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs"* [Brundtland Commission, 1987]. To reach sustainability has the report divided the development into three categories: "environment, social and economic", where all three parts have to be in balance to reach sustainable development [Brundtland Commission, 1987].

Innovation theory has been sought in an integrated part of globalised organisations, that commit to sustainability, to solve problems internally and convert political discourse to company strategies [Altenburger et al., 2018]. Within sustainability, difficult issues can occurs, which can be described as *wicked problems* which are unpredictable, intractable and complex issues, which makes it difficult to define advantageous solutions to them [Head and Alford, 2015]. Thus, this creates the need for a new perspective on these problems, whereas the need for a coherent action towards managing them and less for a final solution [Head and Alford, 2015]. Organisations have looked to innovation as a way of dealing with complex issues. Some of the most complex problems concerning sustainability has been the problem of reducing the environmental impact of operations while protecting profits in the global market. Innovation could be a useful way of finding the most advantageous sustainable solutions in industries across country borders to mitigate or prevent climate change [Ooms and Piepenbrink, 2021].

Though, it can be questioned if innovation can manage these wicked problems and can lead to beneficial solutions for the influenced parties? Studies show that innovation can be utilised to generate and adopt for complex problems, through collaboration [Ooms and Piepenbrink, 2021; Head and Alford, 2015]. Though to conceptualise innovation itself and managing this has also shown to be increasingly complex, due to the need for e.g. new components, processes or others, to develop products [Ooms and Piepenbrink, 2021].
Additionally, the term innovation and how to work informatively is also complex and has a plethora of methods to achieve this [Baregheh et al., 2009]. Therefore, there is a need for a shared terminology for innovation and how to work with it, to enable a shared viewpoint on how to manage these complex environmental issues. Moreover, how can innovation be incorporated into an organisation and lead to beneficial changes, without potentially damaging the sustainability aspects?
Therefore, based on the complex issues will the following chapter shed light on them.

Problem Analysis 2

In this chapter will innovation, digitalisation and the case company be defined and described. Then the case company's event will be defined along with the challenges related to it.

As mentioned earlier, wicked problems are difficult to manage, combined with the uncertainly of sustainability and how to achieve this. Studies show that innovation can be a way to manage these uncertainties and give way to alternative methods of improving sustainability. Though is it truly so easy to achieve in reality? Describing idealistic approaches to difficult problems are a way to highlight solutions, though to actually work with them could prove difficult. Working with sustainability have changed over the years and "low hanging fruits" are no longer enough to mitigate the issues [Jensen, 2021]. A deeper understanding of which sustainable issues are being handled and how to handle them is needed. This requires awareness of innovation and its shortcomings, as well as insight into an organisations baseline and its current sustainable starting point. To do this is there often a need for a plethora of actors that can participate and aid in providing knowledge and improve sustainable challenges. Only from there can innovation be utilised to its fullest and archive sustainable improvements.
Therefore will this chapter describe what innovation is and what is required to work with it. Moreover, will this chapter describe the case company and how they work with innovation and sustainability.

2.1 Innovation

Innovation is a term widely used by different organisations, companies and states. Though what the word entails and means, depends on who is asked. Innovation can be defined as " *any one of the following phenomena: (1) introduction of a new good, (2) introduction of a new method of production, (3) opening of a new market, (4) conquest of a new source of supply or raw materials or half-manufactured goods, and (5) implementation of a new form of organisation*" [Altenburger et al., 2018].
Alternatively, the Organisation for Economic Co-operation and Development (OECD) defines innovation as "*implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations*" [Altenburger et al., 2018].
Despite the different terminologies and overlap between them, it results in an unclear definition of innovation [Baregheh et al., 2009].

This is likely due to the fact that innovation is being utilised in many different contexts to achieve or maintain competitiveness for other companies. For example, technological competition can lead companies to innovate, thereby achieving sustainable competition between them [Graafland and Noorderhaven, 2020]. Thereby, it is shown that management pays attention to business strategies that encourage innovation within companies [Graafland and Noorderhaven, 2020]. This leads to benefits for the companies, because of the advantageous development towards environmental goals within the companies themselves [Gupta et al., 2016]. Furthermore, studies show the importance of competitiveness's relationship between companies and the resulting informativeness occurring from it [Gupta et al., 2016].

Though, to achieve an innovative mindset within a company, is "innovation culture" or "innovation openness" needed within the company itself [Kratzer et al., 2017b]. To accomplish this are human resources for innovative activities needed, as well as an understanding of the company's internal innovation culture and openness [Kratzer et al., 2017b]. A challenge for the innovation culture is building or changing a company's mindset, assembling the company within teams to create new products or services and bringing the company together to support the new ideas [Kratzer et al., 2017b]. Furthermore, an underlying challenge is ensuring that the company incorporate a shared view on innovation, not only by the company's leaders but also amongst the employees [Kratzer et al., 2017b]. However, ensuring this perspective amongst the employees of the company risks that innovation, as a means to better environmental performance, will be misunderstood: The employees might be exuberant from generating ideas or engaging in innovation, so they might lose sight of the environmental goals to reach carbon neutrality of comply with Agenda 21. Therefore, it is important to ensure the employee's inclusion throughout the entire innovation process, thereby emphasising the use and application of the employee's original ideas, no matter the idea's original source [Kratzer et al., 2017b].
Overall innovation can be beneficial for a company's competitiveness in the global market, depending on the company's internal innovation culture.

To sum up, the different challenges of achieving innovation for companies can be because of their terminology of sustainability and the actual goals of the innovation process. Additionally, a challenge is having a change of mindset in actors regarding innovation and how to interact with it, both physically and digitally. This challenge builds on how to engage the employees throughout the entire innovation process to ensure the most beneficial conditions to improve the environmental performance.
Therefore, handling wicked problems in relation to sustainability is difficult, despite the inclusion of innovative mindsets.
Thus, to view how innovation occurs within a company, it's beneficial to examine a company's experiences with innovation and to determine how they will work with innovation and sustainability. A method of working with innovation is through the use of digital media, to connect the employees of the company through software. However, there are also significant challenges associated with the digitalisation of such processes.

2.2 Digitalisation

Companies utilise different methods to achieve innovation internally in their organisation, where digitalisation has been used as a tool to take advantage of the technological developments and the benefits which can be gained from it [Agostini et al., 2020; Kanstrup, 2021].

Though the definition of digitalisation is complex and conceptualising digitalisation remains ambiguous [Annarelli et al., 2021]. Terminologically speaking is digitalisation defined loosely as *utilising digital technology to innovate business models and contribute with new value-producing chances and revenue streams* [Annarelli et al., 2021]. Through its important to note, that this terminology is missing a consensus in definition and unclear research boundaries, due to its continuous development [Del Río Castro et al., 2021]. This evaluation compels companies to adopt and use digital technologies because the technologies entail changes in business processes and affect the nature of innovation and competitiveness [Annarelli et al., 2021].

Over the last decades have digital technologies dramatically transformed companies and how they do business [Agostini et al., 2020]. Companies transform themselves digitally,

both in terms of re-thinking their internal structure and how to communicate with their customers and external stakeholders [Agostini et al., 2020]. This can also lead to growth for the company and give it a competitive advantage within the market [Agostini et al., 2020]. This is because digital technologies make the companies better equipped to manage and gain benefits from the digital transformation [Annarelli et al., 2021]. Some of these benefits include e.g. voicing problems and connecting people throughout the world [Aksin-Sivrikaya and Bhattacharya, 2017]. It also improves products and contributes with more sustainable products and production methods [Matser, 2017].
Additionally, the exponential growth of digital technologies had a considerable impact in regards to innovation and the opportunities related to that [Agostini et al., 2020; Lohrmann, 2017]. Though this development has also resulted in challenges for others and increasing the risk for e.g. disrupting existing businesses, causing social and environmental issues and challenges in regards to designing business models, all as a result of digitalisation [Lohrmann, 2017; Aksin-Sivrikaya and Bhattacharya, 2017]. Also, the impact on sustainability relates to e.g. increases in electronic waste, adverse health effects, pollution, job insecurity and negative impact on human rights [Aksin-Sivrikaya and Bhattacharya, 2017].

There are also pragmatic issues related when working with digitalisation [Heath et al., 2000]. This is among others because the benefits from the new technologies have been exaggerated and these tools fail to achieve the goal which they were designed for [Heath et al., 2000]. Furthermore, another of the issues is that people resist digital development itself [Matser, 2017]. There is an unfounded understanding that people will naturally and unproblematically adapt to new technologies and take advantage of the benefits of the digital system [Heath et al., 2000]. Studies show this occurs when insufficient consideration is made concerning people and their use of tools and technologies [Heath et al., 2000]. This happens when considerations on how digitalisation affect peoples activities, social actions and more fails [Heath et al., 2000].

Therefore, digitalisation provides many opportunities and benefits for companies and can connect people throughout the world, even, if digitalisation leads to negative impacts on the world, both environmentally and socially. Hence, investigating potential benefits and risks before implementing digital technologies is highly relevant to ensure a successful innovation process [Agostini et al., 2020]. It is therefore necessary to go through the different challenges that occur when a company wishes to use digitalisation in a innovation process.

2.3 Case company

The focus going forward will be on a case to look at how innovation can be used in a company setting. In this case study will Siemens Gamesa Renewable Energy (SGRE), a wind turbine manufacturer based in Denmark, be used as the main subject of this report. The company is a large multinational company with over 26.000 employees worldwide, which are divided into three sectors; Onshore, Offshore and Service, thus setting a complex framework for the company to operate in. Sustainability and innovation are primarily handled on a corporate level. Analysing SGRE can provide an insight into how an international company, that works with and aims for sustainability, promotes innovation through digital technology to reach an environmentally sound performance for their operations.

SGRE have on their website defined themselves as ambitious in their environmental goals and policies and aim to become carbon neutral before 2050 [SGRE, 2020b]. In their

environmental policies and reports, has SGRE frequently referred to the SDGs and the Paris agreement in relation to their internal goals and have ongoing targets set to improve the environmental performance of the company. Even though they are familiar with the SDGs and are working with social development, the focus is primarily on economic development, in the form of cost reductions and increasing their sales values. Regarding sustainability, SGRE mostly refers to the environmental aspect of the concept [Jensen, 2021]. In this relation, SGRE strives to be energy and resource-efficient and seek to have continuous environmental improvements in the company [SGRE, 2020a]. This is shown by their financial expenses for their research and development (R&D) activities, which amounted to € 231 million in 2020 [SGRE, 2020a]. The R&D activities are primarily focused on sustainable innovative solutions for the wind turbine components, testing validating software systems, energy storage, hybrid power systems, machine learning and AI build "smart" wind turbines in the future [SGRE, 2020a; Heilmann, 2021].

SGRE has previously had events to expand the employees' awareness of environmental concerns, by arranging days with e.g. waste walks: The employees take a walk around specific areas of the production facilities to discuss and get ideas to improve the current practise. Moreover, there are postboxes located at plants, where employees report their ideas and every month is the best idea congratulated [Jensen, 2021]. The usual approach to environmental innovation can thus be described as a mailbox, where the employees go to submit their ideas. The entire interaction can be seen as a one-sided communication strategy, where employees can voice their ideas, but without necessarily getting a response from management.
An alternative structure has been e.g. the production facility in Aalborg has gathered all the waste from a wind turbine blade and displayed it for the employees, to make them aware of the amount of waste that is generated in the production-line. This is done to promote waste awareness among the employees, to see where the best opportunities for minimising waste is located. These initiatives are all ways, that local initiators have worked to implement environmental measures and awareness. For SGRE has many of their sustainable developments been environmentally oriented. On top of that, in terms of environmental implementations have these often been focused on waste or energy consumption [Participatory observer, 2021]. These types of events were isolated and their success depends mainly on the ability to gather participants in the location and how the organiser can facilitate the discussions to generate ideas among the employees.
The new proposed event structure varies significantly from this as it will have to occur on a digital platform and with diverse participants, which all need the opportunity to participate on an equal footing. SGRE has no experience with running a project of this scale and has therefore reached out to find experts who can help organise this sort of event [Participatory observer, 2021].

The previously conducted events at SGRE have been isolated occurrences that were confined to specific locations or departments. In addition to this has SGRE an online platform, called "HYPE", where employees can report their ideas in a template, in terms of improving safety, streamline production or reducing waste across the company. However, this platform has gained some critique among employees as it has proven to be a black box which users have grown to dislike [Participatory observer, 2021].
It has been requested among employees that they have a better means of sharing their ideas to optimise their work and the company on a broader scale. There is therefore a need for a better way to work with especially a broader definition of environmental concerns and utilise the knowledge of the employees to improve operations and reduce environmental impacts across the entire production and service line.

2.4 Difficulties related to a sustainable innovation event

An Environmental specialist, Jonas Pagh Jensen, from SGRE has suggested a way to do this by creating an "event", where all employees of the company can attend [Jensen, 2021]. This event would ideally begin in late 2021 and occur yearly or every other year, where new ideas can flourish and come to fruition. Jensen highlighted that there are many factors to consider, when developing this type of event, and the uncertainties as to how it will run and its success will be determined in the future [Jensen, 2021].
Firstly, the scale of the event will be quite ambitious due to the size of the company and its 26.000 employees. This means that the event would have to run on an international level, where all participants will have to have the same understanding of sustainability and have the same options to participate actively.
Secondly, the event will most likely occur at least partially on a digital platform since it is possible that there still is going to be repercussions of the lockdown present in society. Society on a global scale has changed dramatically due to the COVID-19 pandemic, that have resulted in several restrictions such as: Keeping a distance of up to 2 meters, restrict the number of people in gatherings to under a certain number of people and using face masks and wash hands continuously [Sundhedsstyrelsen, 2021]. These restrictions have been largely accepted in some forms across the entire globe, which has meant that many workers have had to work from home.
Thirdly, SGRE want to focuses on being innovative, so employees can submit suggestions for environmental improvements. Hereafter will the best solutions be tested, scaled up and implemented into SGRE to hopefully achieve an improvement in environmental sustainability through innovation. However, there is no global consensus in SGRE on what sustainability or innovation is, so creating an event where all participants have the same ability to engage in the event will become a significant challenge.

To do this are there a certain element that needs to be considered. The general consensus in the literature is that, there is a need to create experimental spaces to have a successful change of mindsets and being able to come up with new innovative ideas [Huulgaard et al., 2020; Cartel et al., 2019]. These spaces help separate the participants from their existing models to think outside of their own field [Cartel et al., 2019]. Clear boundaries would have to be set up to help participants stay in a space where innovation can occur freely among them [Cartel et al., 2019]. Sometimes spaces can be created temporarily when openings occur by themselves [Huulgaard et al., 2020]. Although, most experimental spaces will occur due to effective use of boundary work, which improves the flow of innovation in the space [Cartel et al., 2019]. Then will the results in the form of innovations, carefully be implemented into SGRE.

One of the major challenges, in this case, is to align over 26.000 employees to have roughly the same understanding of sustainability, and thus to be able to participate and actively engage in this event. This will occur on a digital platform to comply with restrictions on gatherings and social distancing. Digitalisation will improve the success of the event as there will be a need for structuring and organisation of the presentation and collection of idea on a global scale. Even if many of the employees are going to have very varying understandings of sustainability and how to improve it in the setting of SGRE there is sill possibility to work with sustainability and have a positive influence on the environment. Other than the challenges presented concerning the event at SGRE are there other challenges related to the system which have been presented in this chapter. There needs to be a clear definition of sustainability among the participants and an understanding of how innovation can be used among the organisers of the event. There also need to be taken some measures to use digitalisation in this event to ensure that participation won't

be restricted but rather be enabled. Based on these challenges and the goal to hopefully generate an abundance of new ideas from a multitude of participants that can be achieved on a digital platform.

2.5 The event at Siemens Gamesa Renewable Energy

Based on information from Jensen have the following elements been highlighted as important to include in the innovation event, and thus what needs to be researched further in the report to apply the most beneficial methods and tools to implement an innovative environmental system for the entire company [Jensen, 2021; Participatory observer, 2021]. A visualisation of the steps can be seen in figure 2.1, which illustrates the system as a timeline, that describes the beginning and end of the creative idea process.

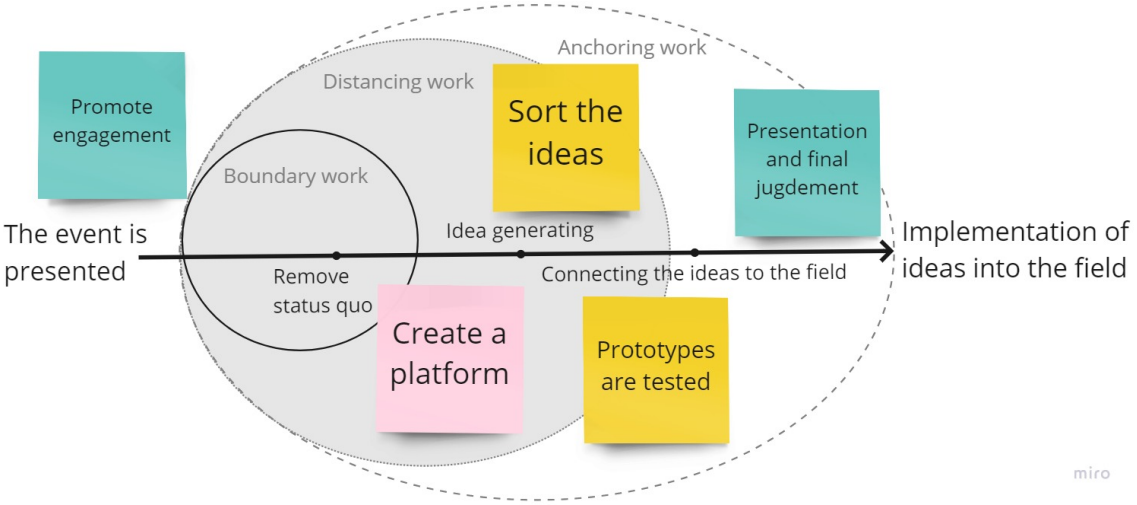

Figure 2.1. A description of the innovative environmental event which SGRE wants to implement, to mitigate environmental issues.

The description in figure 2.1 of the event sets the framework for what criteria the innovative environmental system will have to follow and thus the analytical boundaries going forward in working with innovation, engagement, idea-generation and digitalisation. This scope sets the frame for a multitude of events, different tools and how they will be most useful. Though there are requirements from SGRE, which the event must comply with.
Firstly, to ensure that as many as possible of the employees will interact throughout the entire event and participate actively to gain the most out of the experience and the resources needed to run the event [Participatory observer, 2021].
Secondly, will the use of boundaries to create experimental spaces become very useful to generate ideas. Jensen explains that they expect that all employees are supposed to participate in the idea creation with a focus on potential environmental improvements within SGRE [Jensen, 2021]. Thereby not only look at "low hanging fruits" but neither on large systematic changes within the production [Jensen, 2021]. Therefore, it is important that the management informs the scope of the employees and ensuring that the idea generation stays within this area of focus. Moreover, SGRE needs to define and create a platform for the collection of ideas. This can be through a web-page, such as HYPE, or another alike. Alternately other collection methods can be utilised, though all these must be online solutions, as it must take into account the limitations of COVID-19.
Thirdly, after the ideas have been collected will they have to be sorted into different subcategories to combine similar ideas and set up groups where prototypes can be created

and tested [Jensen, 2021].
Fourthly, the prototypes and suggestions are assessed internally and optimised. During this step, prototypes can also be culled depending on their performance or potential yield [Jensen, 2021].
Fifthly, the projects with prototypes are evaluated and presented to the board of the innovation management, whereas Jensen is amongst them [Jensen, 2021]. Jensen has explained, that they imagine the suggestions could go through a *Dragons den* to determine the ideas with the highest potential environmental benefit for SGRE [Jensen, 2021].
The final aspect of the innovative environmental event takes place after the experimental space is closed. Here the "winning" proposal(s) become implemented into SGRE and after time and depending on the success-rate, will it potentially be implemented into various departments in the company if it seems economical and environmentally sound.
After all of this has occurred will another event take place [Jensen, 2021]. Going forward will this report not go into further detail regarding methods related to implementations and the analysis will focus on the beginning of the event and stop with the selection of ideas and closing of the space.

Having this innovative environmental system will be a step on the way to a structured improvement process, where opportunities for idea generating can be facilitated in spaces to cultivate the best solutions for environmental issues, which SGRE might face in the coming years. The fact that this event will have to be digital means that unique challenges and advantages can occur, which means that specific measure will have to be considered when taking traditional methods of running events and transporting it to a digital platform. This is why the general recommendation for SGRE is to see the event as a process to reach a higher level of environmental concerns and train the employees to integrate innovation, digitalisation and environmental concerns into the everyday lives of the employees. This will have to be considers going forward and is the foundation for the research question which will lead the analysis for the rest of the report.

Research Question 3

There is a need for a structured internal system for Siemens Gamesa Renewable Energy to utilise the knowledge which their employees possesses to continue the environmental performance of the company. There is a constant need for optimisations in the production-line of the wind turbines if SGRE want to follow the development in the market of renewable energies [Heilmann, 2021]. These are needed to comply with new knowledge and issues that are brought to light in international climate actions, which SGRE have committed to. The main focus point in this report is, therefore, about how a structured innovation focused event can produce creative ideas or prototypes to manage both precise and wicked environmental problems in a company setting. This system can potentially be used by any type of company, though the system will be modified to suit SGRE's needs.

The importance of incorporating innovation into the business practice is relevant, to achieve a sustainable practice and to mitigate climate change, have been stated in the previous chapter. Moreover, the event will be influenced by the constraints of COVID-19 and the international scale, which also limits how and what could take place during the event.

Based on all of these issues and challenges is there a need for change in how SGRE handles environmentally friendly ideas to accommodate the future plans and restrictions present in society. These changes are influencing the future strategies and goals for both governments and companies, which highlights the need for SGRE to innovate and keep up with the societal changes, to reach the goals they have set themselves of minimising or reducing their environmental impact. Despite the challenges this goal entails, it also allows for opportunities to create ideas to tackle challenges from new angles and utilise internal knowledge of key processes to improve the environmental performance of the company.

Based on this will this report create an environmentally focused system, which will allow for the creation of innovation ideas, which SGRE can then implement within their company. This system will be referred to as "*Sustainable Innovation Event System*" and to minimise text will this be referent to as just "*the system*". Therefore, based on all this, has a main research question been defined as:

How can an Sustainable Innovation Event System be facilitated digitally, which can be implemented in SGRE and its preexisting culture?

To thoroughly answer the research question and to cover the different aspect of the issue.

Sub-questions:

1. What type of event structure will aid SGRE in improving innovation and the environmental system in the company?
2. How can digitalisation be utilised by the employees of SGRE, to enable them to create innovative ideas?
3. How can the event system be a part of improving the innovative process when working with environmental issues in SGRE?

These questions have been formulated based of the following arguments.

Sub-question 1: This question is relevant because an event can be shaped in many different ways, which all have their benefits and disadvantages connected to them. Therefore it is relevant for SGRE to know which events can aid them in achieving the environmental goals for the events over time. The different types of events are described in section 6.3. Moreover, an understanding of innovation and how to work innovatively is also needed, to ensure a structured and informed process for SGRE, which is described in section 6.1. An final event system is described in section 7.4 on page 55.

Sub-question 2: Question 2 focus on how digitalisation can be used to connect individuals. Therefore, it is relevant to define how people interact with other individuals by using digital tools and how people interact with digital technology to improve idea generating. Moreover, an understanding of how digital technology can aid in the formation and different activities during an innovation event to avoid potential disadvantages must be examined. Digitalisation will be further described in section 6.5 and the connection with the event will be analysed and discussed in chapter 7 and 8.

Sub-question 3: The last question focuses on how changing the mindset of the employees of SGRE can increase innovation in processing the environmental issues at SGRE. This is important if SGRE want to be ahead of their goals and to stay competitive. The improvement of the innovative process is relevant, to enhance the innovative culture when handling increasingly complex environmental issues. This process does not occur naturally and needs an understanding of how internal communication and the culture is at SGRE. These elements are described in section 6.1 and 6.2.1, and will be analysed and discussed in chapters 7 on page 47 and chapter 8 on page 69.

By answering the three sub-questions is the required knowledge and considerations gathered, to be able to tackle the main research question in an informed and considered way.

Disclaimer:
The focus of this report is to establish a continuous innovation system, which establishes a process for SGRE, where they can work with their environmental issues creatively and innovatively. The focus of this report is to establish how SGRE can work with the system to increase the momentum for innovation and idea generating to solve environmental issues throughout the company of SGRE. However, due to time and resource constraints was it not possible to test the system in the field.
Therefore, the focus is on establishing a system and describing an event that supports this process. The reason for why there needs to be a continuous process is because the approach to innovation and idea generation relates to the fact that there rarely is a finished perfect idea which is ready to be implemented immediately [Kanstrup, 2021]. The ideas will have to be refined and perfected and discussed before they are implementable into SGRE. More in this can be read in section 6.1 on page 22. Furthermore, this report will not work with how to implement, assess or handling any of the ideas or prototypes which are produced during an innovation event. It is expected that SGRE will define which implementation is best suited depending on the specific idea or prototype and can evaluate and suggest potential improvements.

Research Design 4

In this chapter has the research design for the report been described and the use of it in relation to the research question.

The problems presented in this report are described as wicked problems, which require a systematic approach to how they can be managed. The research design that is needed must therefore present a structured procedure which can handle the challenge of working with wicked problems. Although it is important to note that research designs are not static in the process of a project, rather it changes continually while information is gathered and new knowledge is gained by the researchers [Yin, 2009].
The goal of this report is to use SGRE as an example of managing environmental issues through innovation events and how to handle the problems related to this. This, along with the exploratory nature of the research question meant, that it proved ideal to make use of the case study research method. The benefit of using the case study approach is that it can *"Explain the presumed causal links in real-life interventions that are too complex for the survey or experimental strategies"* [Yin, 2009]. Case studies work well when the researcher needs to understand complex social phenomenons and usually work well with exploratory research questions which begin with a "how" or "why" [Yin, 2009].

4.1 Types of case study design

The case study type used is the single case holistic case study. This has been defined by the research question and the unit of analysis.
The case in this report can be described as being a "critical case" since the theory already has set propositions that are believed to be true and can thus either be confirmed, challenged or extended [Yin, 2009]. The unique combination of making an event with a sustainable innovation perspective is recent in itself, however, when the aspect that all has to be digitised is included, then it becomes a completely new situation. At the same time can it be said that based on the literature used in this report are there many other cases that have delved into the same type of problem like what has been presented in the previous chapters. However, there has been little research published about the challenges of having a large group of individuals solving wicked problems on a digital platform. Thus, can this type of case contribute with new knowledge and help build on the existing theory.

After having defined the type of case, the researchers started focussing on the preparation for collecting data for the case study. To do this the importance lies in accurately defining the unit of the analysis and what elements are important to keep in mind when data is being collected [Yin, 2009]. Some of these elements are:

- Asking good questions
- Be a good listener
- Be adaptive and flexible
- Have a firm grasp of the issues being studied
- Be unbiased by preconceived notions

If one of these is absent the data collected can still be redeemable, because skills can be improved and worked on [Yin, 2009]. Though, the researchers must be honest in assessing

their capabilities [Yin, 2009]. These aspects are explained further in section 5.2 on page 16 regarding the interview and how the data was collected using this method.

SGRE proved to be very forthcoming with information and it was often possible to get in contact with a variety of employees at the company. SGRE has a plethora of information available online regarding their environmental targets and pledges to various organisations. However, it was through dialog with key individuals at the company which lead to the formulation of the research question and most of the content in chapter 2 was researched on the basis of this. The cooperation between company and researchers made it possible to clearly establish the barriers that may arise on the way to better environmental management within the company.

4.2 The structure of the case study

In the process of designing the methodology and research for this report was it necessary to follow five components based on Yin [2009]:

1. the study question
2. propositions, if any
3. unit(s) of analysis
4. linking data to propositions
5. criteria for interpreting findings

First, the literature study is used as a means to understand the field of study and to get a sense of what questions have been asked concerning the case that is being researched. The literature along with interviews is used to narrow down the key topics to discover new research questions and use the literature as support for the case study. More information about the literature study and the related considerations and steps, which the researchers have made, can be seen in section 5.1 on page 15.
The literature has to lead to the creation of the final research question for the report and thus completes the first component of the case study [Yin, 2009]. The arguments for the creation of the research question and the sub-questions was presented in chapter 3 on page 9.

Secondly, finding relevant assumptions and theories for the research is based on the research question [Yin, 2009]. For instance, for this report, one such proposition is that the digitalisation of the innovation event will limit participation or the process of idea generation. There can be many different types of propositions. They can either be related to implementation, an individual, a group, an organisation or a societal theory [Yin, 2009]. For this report are innovation theory, event management, event types and their limitations along with the use of digitalisation as a tool needed, to ensure an understanding of the differences and arguments for and against working with these elements. The arguments for these choices are described at the beginning of chapter 6 on page 22 and more details about these aspects are described later in that chapter.

Thirdly, the units of analysis can either be a person, an event or an organisational change [Yin, 2009]. For this, it was chosen to focus on an event, which can be harder to define in terms of when they begin and subsequently end. These can be characterised as being “soft” borders, which then have to be specifically defined to effectively analyse the case since the unit is what makes the study relatable to any broader body of knowledge [Yin, 2009]. For example with this case, the case is an event system to promote the innovative environmental system at SGRE, which have a defined beginning and end. Though, is the event restricted to the participation in the event or the entire event itself. Here it becomes important to

clarify whether the case is about the event or participation during a pandemic. These arguments for clarity of the focus on the case and which considerations the researchers have had has been described in chapter 2 in the form of the event description. This event will further be specified in the analysis when the event types along with their strengths and weaknesses are set into perspective of the case. These can be read in chapter 7 on page 47.

The fourth component speaks to the logic linking data that has been collected to previously defined propositions. Here the focus is going to be on: *"explanation building for an explanatory case study"*, which gives a comprehensible analysis of the collected data. Essentially this is what will be the main analysis of data from interviews, participant-observations and documentation of events previously held at the case company.
After the data collection has occurred, is a fitting data-analysis is needed [Yin, 2009]. One aspect of analysing the data and the innovation event is *relying on theoretical propositions* [Yin, 2009]. This strategy follows the theoretical propositions defined by the case study itself. Here, the propositions shape the theoretical orientation and help to define which data is needed to answer the defined "how" and "why" questions [Yin, 2009]. This often results in highlighting certain aspects, while simultaneously excluding others, to achieve a clear and sharp case study [Yin, 2009]. This occurs when defining the research questions and the chosen theories, which defines the frame of the report. Lastly, after linking the propositioned data will the last step *"criteria for interpreting findings"* be defined, where this report follows the analytic technique *Explanation building* [Yin, 2009]. This technique has often been compared with hypothesis-generating processes, though the goal of the technique is not to conclude on a study, rather develop ideas for further study [Yin, 2009]. This is done through analysing the "how" and "why" in the case and drawing recommendations or propositions from it [Yin, 2009]. This will occur through examining the evidence from the case and the theoretical aspects to create new iterative perspectives through a defined set of steps [Yin, 2009]. Here it becomes important to address rival explanations to the findings in the previous component and find ways to generalise the conclusion. Thus, applying the findings in this case to a broader concept and knowledge of how innovative environmental systems can work during a time with a strict limit of assembly [Yin, 2009]. This can be compared to refining a set of ideas to show that the events of the case study can be supported [Yin, 2009].
The steps are defined in the literature as [Yin, 2009]:

1. Initial theoretical statement or proposition
2. Comparing initial case to the statement
3. Revision of statement
4. Comparing other details of the case study against the revision
5. Compare the revision to more cases
6. Repeat

These steps are primarily designed for a explanatory case study, which means that the last two steps will be altered slightly in the analysis of this report to fit the research question. The first step relates to the initial problems that are stated in the introduction, which then leads to the presentation of SGRE, who are working with these issues. This lead to the revision of how the case can go forward with a way to implement an innovation event. In this report will the research question and the sub-questions defined in chapter 3 on page 9 be examined and matched to see if they can be supported as part of step 4, which can be described as being the other details of the case study. Much of the data that has been collected regarding the comparisons mentions other cases where their approach was used e.g. in the reports by Huulgaard et al. [2020] and Cartel et al. [2019]. These sources provide examples that can be related to the event at SGRE and used to compare

the revised statement to the case. The structure for an explanation building analysis, however, without the repeated step as this is more suitable for multiple cases.

Thereby, by following the five components based on Yin [2009], have this report defined the problem, narrowed the scope, collected and analysed data, compared theories and methods and lastly suggested recommendations for the case company. The steps which were described here also align with the research design for this report. The design can be seen in figure 4.1.

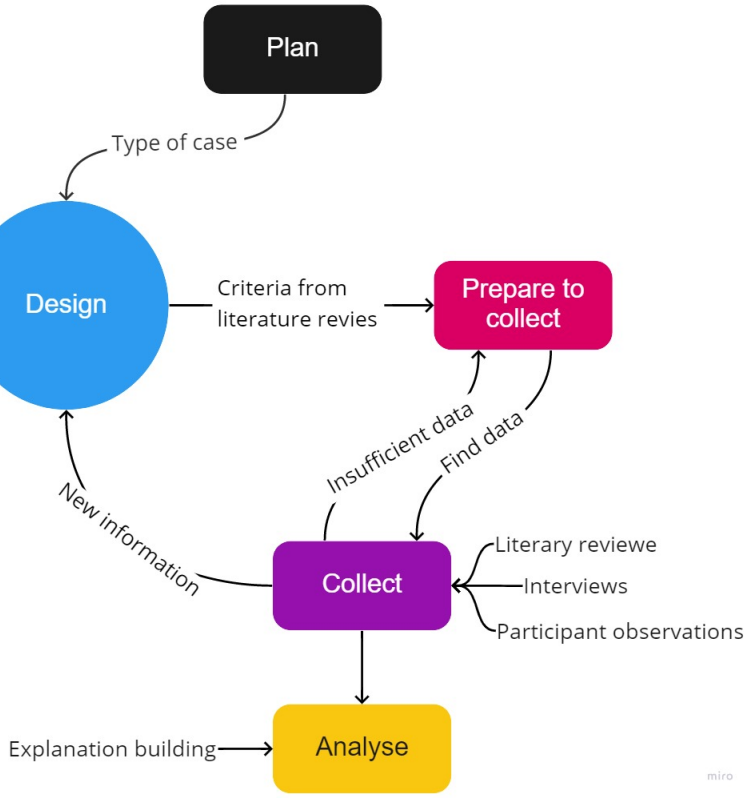

Figure 4.1. The research design used for this report, which is inspired by Yin [2009].

"Plan" stands for the preliminary planning and research of the report, which leads to the identification of the unit of analysis and issues that needed to be taken into account going forward. This meant that the "Design" or research design could be organised to help answer the questions which were presented after the plan. Then the data was "prepared to be collected". The details of this step has been described in this chapter and will be a part of the description of how data was collected in the different methods in chapter 5. This part of the process happened somewhat repeatedly as often the collection of data lead to the realisation that not enough data was on the subject and there was a need to expand the scope of literary review or new interviews had to be conducted or observations gave a new perspective on certain issues such as what event types would most likely work well in SGRE. The "collect" element here refers to the collection of the data itself which will be described in detail in the next chapter. Finally the data will be "analysed" using the method of explanation building.

The figure 4.1 thus showcases the step by step progress of reaching the conclusion in this report. Throughout the steps in the report are there methods that the researchers have followed while striving to stay clear of methodical pitfalls described in the case study theory. These methods will be described further in the following chapter.

Methods 5

In this chapter will literature review, interview guides and participant observation be described.

In the research design was the relevance underlined regarding describing the methodology and how it has been utilised. In the following chapter will each of the methods will be defined and thereafter described with considerations the researchers have had when performing them.

5.1 Literature review

The literature review made it possible to design a preliminary area for research, regarding e.g. innovation and case studies, and then the research question itself [Yin, 2009]. The method of finding information is following a systematic literature review, which is a method that can be used for systematic data collection and contains the following steps from Jesson et al. [2011]:

1. Define the research question
2. Design the plan
3. Search for literature
4. Apply exclusion and inclusion criteria
5. Apply quality assessment
6. Synthesis

The literature review required, firstly, the preparation of a preliminary research question followed by the research question presented in chapter 3 and, secondly, plan for the collection of empirical data, early on in the report [Jesson et al., 2011]. This lead to the forming of the question about e.g. innovation and digitalisation, and how these can be utilised in the report. It was clear from the beginning that these definitions would form how the analysis would weigh different aspects when choosing between various event types for SGRE. Moreover, it is also necessary to determine how SGRE wishes to inform and work with their employees to achieve an innovation culture and how they want to establish a continuous improvement of their experimental performance. This influences what kind of event SGRE should have, which highlights the importance to find different types of events, which have different focuses and goals, so SGRE can be informed for their future decisions making process. Therefore, the plan for collecting data is highly relevant to ensure a holistic understanding of the theoretical fields.

Thirdly, it was important to set up certain search words and include certain criteria when choosing the literature in this report [Jesson et al., 2011]. These search words were e.g. “Innovation” and “event” or “bootcamp”, which lead to other search words such as; “sustainability” and “innovation processes”. This is relevant to collect different data regarding these definitions to determine how academics and others define and work with the definitions and more. This has proven especially relevant when working with e.g. events. This is because there are many different versions of events, but there are important differences or focuses which differentiates between them. Therefore, it is relevant to have these search words to understand which elements they share and which they do not, to determine a clear definition.

For the fourth step, is the exclusion criteria. What was interesting in this step was the search for "bootcamp" before transiting to "event", however, it became clear that by using this term in Primo (the online university library), that this term has mainly been used in the medical field. It proved to be a significant issue to find accurate information about the structuring of workshops, definitions of bootcamps and even innovation events. There proved to be surprisingly few sources in this field. Thus there was a need to increasingly use other databases and find literature through the supervisor to find accurate data. The university library of Aalborg contains databases and research portals which allows for a broad spectrum of available reports and scientific papers. Also, the selected sources for the report are peer-reviewed to ensure credible research. This was done to secure quality articles as is described as step five [Jesson et al., 2011].

Finally, the sixth step is when all information from the selected literature used in the report is synthesised, meaning it has been gathered and compared to each other to form new conclusions [Jesson et al., 2011]. This is relevant for multiple aspects of the theory, regarding event types, event tools, digitalisation and more. This is because there are different aspects that scholars highlight as relevant depending on the specific scenario. Therefore, it is pertinent to compare these recommendations, to create an innovation event best suited for SGRE and their specific issues or goals, based on the collected data. Thus can new combinations of events, tools, usage of digitalisation or others be created and thereby forming new conclusions.

Therefore, based on all the above-written elements, is the goal of this report to establish an understanding of innovation, events, spaces and more, to be able to make recommendations for SGRE. This is so they can achieve their innovation event, despite the issues which they face, to improve their overall environmental performance. To determine the most beneficial elements for SGRE, was interviews needed to determine the specific requirements.

5.2 Interviews

The interview method was chosen to enable the collection of empirical data regarding e.g. the innovation process at SGRE. Through this, it was possible to create a collection of data regarding the respondent's opinions, experiences and goals for the innovative environmental system, which helped the researchers to understand the topic and its many aspects [Brinkmann and Tanggaard, 2015].

The conducted interviews were semi-structured and occurred digitally through the communication software Microsoft Teams. Both the semi-structured interview and digital interview will be explained further. Both interview methods below are cited from Wilson [2014].

5.2.1 Semi-structured interview

A semi-structured interview method merges prepared question with open-ended questions created during the interview itself. Semi-structured interviews typically follow an interview guide made in advance, which was used for the interviews described in section 5.2.3 on page 18.
The use of semi-structured interviews allows for the collection of systematic information regarding chosen topics, such as sustainability, digitalisation and events, while also allowing for the exploration of new issues or topics to be brought up during the interview. Therefore is the semi-structured interview yielding when exploring a somewhat explored topic, while details are missing.

Generally, is it recommended that the duration of the interview is between half an hour to two hours, to ensure the most efficient use of the respondents time, while simultaneously allowing for in-depth questioning of the topics.
Semi-structured interviews have both their strengths and weaknesses due to the structure of the interview itself. Some of the strengths of the interview are, that it gives the researcher an option to steer the conversation if it strays too far from the main topic. Additionally, semi-structured interviews give the respondents the space to raise additional issues or concerns related to the topic. What became especially beneficial for the interviews conducted in this report was the ability to move the questions so that there was a better flow of conversation in the interview. This ensured that the interview felt more like a conversation and that the interviewee felt more at ease.
On the other hand, semi-structured interviews also have their shortcomings, which needs to be considered when preparing, performing and analysing the results from afterwards. A weakness of the method is there is an "interviewer effect" where the researchers' sex, age, background or other might influence the respondent's willingness to share information. Additionally could the researcher potentially put words into the mouth of the respondents or the researcher could give cues to specific answers which could influence the answer.

The interviews does not only follow the guidelines of a semi-structured interview because the interviews was not performed physically between the respondent and the researchers, due to COVID-19. Therefore, the interviews were carried out through digital means. Therefore, to ensure that the interviews were performed most optimally, was guidelines for phone interviews also researched and utilised.

5.2.2 Phone interview

Usually are phone interviews semi-structured or structured interview to conducted through a phone or internet audio service such as Skype or Microsoft software. The phone interview can be a cheaper and simple way to conduct an interview and collect data, though it can be lacking depending on e.g. if there is video support for the call or not. Moreover, is a benefit to conducting a phone interview when the participants are not able to meet physically.
This is one of the phone interview strengths, that it allows for sharing and gathering of data even if the participants are distributed in different geographical areas. Moreover, a phone interview is generally viewed as a cheaper and faster way of collecting data than other types of interview methods.
Another important note is the fact that during the time where the information was collected were restrictions still set in place and it was therefore seen as being safer and in accordance with the government, recommendations to have interviews on the phone or online.
The potential downsides of phone interviews are that complex issues are more difficult to explain through digital means, than face-to-face. The questions can be misunderstood if the respondent missed a word or potentially misunderstands questions and could be too embarrassed to ask for a reread of the question. Additionally should the question or categories not be too complex or long, to avoid confusing the respondent.
Suggestions for when conducting a phone interview is by structuring the questions in an engaging and easy to understand way. This reduces resistance to the researchers and allows for a conversational flow to occur and improves the overall quality of the collected data. Rules for ordering the questions are to make the first question especially relevant for the researchers to ensure attention and to lay the questions out in a logical order. This order should go from easy to hard, which will make the respondent more open to the more difficult questions.

Interview guides has been created with both the semi-structured and phone interview methodology, which formed the basis for the interviews and can be seen in the appendixes.

5.2.3 Interview guides

Different interviewees have partaken in interviews during the formation of this Master thesis, to aid in answering questions or highlight elements of different issues. Before an interview, an interview guide was conducted to establish which questions and more the interview should revolve around. The interview guide is planned to be thirty minutes to an hour-long, to enable time for in-depth questions. The questions of the interview guide are structured and connected, by having simpler questions whereas the later questions are harder to answer.
To illuminate the different aspects of scope for each interview, multiple interview guides have been constructed. Each of the interview guides are different, both in intended interview length, questions asked and the like, to tailor it to the specific interview. Each conducted interview can be seen in table 5.1.

Name of interviewee	Interviewee occupation	Date	Language	Interviewee relevance to the event
Jonas Pagh Jensen	Health, safety and environment specialist at SGRE	22/2 23/4	English	Has insights regarding the internal wish and goals for the innovation event internally SGRE. Presented the needs for the event for the researchers.
Anne Marie Kanstrup	Professor in the I.A. department of Planning at AAU	9/4	Danish	Has insights regarding digitalisation and knows how people interact with digital technologies.
Emil Skov Dalsgaard	Waste Coordinator at SGRE	6/5	Danish	Has inside knowledge of how to run an environmental awareness event at SGRE on a digital platform.
Kathrin Heilmann	Head of open innovation at SGRE	6/5	English	Has insights regarding innovation management in SGRE and how to moderate an innovation event

Table 5.1. Conducted interviews.

Table 5.1 shows, different interviewees which have been contacted, based on their specific knowledge.

Interview guide: Jonas Pagh Jensen
Jonas Pagh Jensen is the facilitator for the innovative environmental event within SGRE. Therefore, he is the main decision-marker for how and what the event will become and what its focus is. Jensen wants the event to improve SGREs environmental system and subsequent performance, to hopefully remain as a leading company for environmental implementations and reduction of carbon emissions [Jensen, 2021]. When the report refers to Jensen's statements in the report it is referred to as *Jensen [2021]*.

The goal of the interview guide is to establish wishes and expectations for the event and which elements SGRE wishes to innovate. SGRE have many different goals, therefore can their focus be either narrow or broad, depending on what direction the event will take and how many resources will be allocated to the event.
The questions made for the interview guide is structured in three main topics:
An introduction, the event itself and lastly the frame of the event. The introduction establishes how e.g. SGRE defines innovation and sustainability and how they have worked with innovation before.
The second topic establishes the event. Questions range from what they expect for the event, which possibilities and limitations they expect and when they will begin.
The last topic, the frame of the event, has questions that focus on e.g. how it is being

influenced by COVID-19, the potential organisational challenges and whether they expect the event to become a reoccurring element within SGRE. The questions themselves can be seen in appendix A on page 89.

A second interview was scheduled and consisted of the researchers presenting the Sustainable Innovation Event System to Jensen. The goal was then to gather his feedback on the system and the tools, which were used to further modify the system. No interview guide was made for this meeting, as it mainly consisted of the researchers presentations of the system, with few clarifying questions for Jensen.

Interview guide: Anne Marie Kanstrup
Anne Marie Kanstrup was interviewed, due to her knowledge regarding digital media and human interaction with digital technology. Moreover, Kanstrup has knowledge regarding innovation, design and the usage and implementation of technology. She is a professor at Aalborg University, within the departments of *Planning*, *The Technical Faculty of IT* and *Design and Techno-Anthropology and Participation*. Getting insight from an expert who has worked directly with this type of event and reaches positive results provided the report with invaluable information which proved detrimental in answering the second sub-question and formed the analysis and recommendations for SGRE.
Whenever the report refers to Kanstrups statements, they will be referred to as *Kanstrup [2021]*.

This interview guide focuses primarily on understanding which challenges and opportunities there are when communicating with and using digital technology while establishing how innovative environmental events can influence and be influenced by digitalisation. This is evident in the questions asked in the interview guide, which can be seen in appendix B on page 91.
In the guide, there are four different topics, which aids in defining and informing about potential digital uncertainties. These are: Innovation, digitalisation in general, gamification and event. For this interview it was important to get an understanding of how social and digital culture influences engagement and if gamification is a useful tool in promoting engagement.

Feedback of the event system

After having produced a prototype of the event system was it presented to various people of interest in SGRE. First was the report presented to Jensen, as he was the one who recommended the project and then he referred to the head of open innovation. Then the project was presented to a colleague of one of the researchers who was working on an awareness event for a department in SGRE at that time. Their feedback was included into the analysis and review of the event system and thus became an integral part of the final adaptation of the system. Their inputs were key to co-designing the final product and to get information about the possible ways it could be implemented and used in SGRE in the future.

Interview guide: Emil Skov Dalsgaard
Emil Dalsgaard was identified as a person of interest as he is currently working on a small scale waste awareness event in SGRE at the plant in Aalborg. Dalsgaard is therefore a likely candidate for the position of being the moderator in the event. This means that the tasks of talking to the participants, devising them into teams and relaying information will all be part of his responsibilities. He already has some training in being a moderator and has had events where he has had to moderated 150 people about environmental challenges at SGRE.

The questions in the interview guide are phrased to get an understanding of how a moderator of the event might choose how to handle the information and managing the participants to promote engagement and work with experimental spaces. The guide is divided into separate stages which follow the four weeks of the event to understand which choices the moderator makes along the way and how to counter insecurities. The interview provided the researchers with information about the proposed structures applicability into SGRE and its existing structures. Information about what elements of the system could work and what couldn't was thus implemented into chapter 7. The interview guide can be seen in appendix C on page 92. Whenever the report refers to Dalsgaards statements in the report, they will be referred to as *Dalsgaard [2021]*.

Interview guide: Kathrin Heilmann
Kathrin Heilmann is the Head of innovation at SGRE, based in Hamborg. She is affiliated to the strategy department of SGRE and has ample experience with event management. Heilmanns department works both with technical innovation and how to promote innovation internally and with open innovation in reaching out to other engineers and researchers at universities and companies across the world.
Other than this, she already has experience with running innovation events at SGRE and how to manage the information and later be a contribute to the implementation of the ideas generated at the events.

The interview guide was split into four sections, where first the innovation culture of SGRE was established and then the use of digitalisation over the last year during lockdown. The third section related to the presentation of the theoretical framework and the structure of the event itself. After this was presented by the researchers, were questions related to the implementability and use of the event in existing structures of SGRE. The interview guide can be found in appendix D on page 93. Whenever the report refers to Heilmanns statements in the report, they will be referred to as *Heilmann [2021]*.

Interviewing other employees from SGRE
During the formation of this report, was a consideration to interview or survey numerous employees from SGRE. By doing this, it would provide further data regarding the employees level of engagement or understanding of e.g. innovation or sustainability. This would also allow the researchers of this report to further establish which kind of event would be most suitable for the employees of SGRE to work with their environmental issues.
Though a challenge arose, because of the consideration of who to interview or survey. There are over 26.000 employees from different countries in SGRE, which all have their own values, opinions and biases, which influences how they will interact with an event. Therefore, it was difficult to select specific employees from SGRE which could accurately give representative data for all the employees.
Another issue is presenting the finalised event for the employees. The context of the event in this report is based on the findings and assessment of the researchers, which does not necessarily reflect the actual future innovative environmental system of SGRE. This is because the employees might react positively or negatively to different elements, which might or might not be related to the actual event.
Based on all this did the researchers of this report decide not to interview or survey employees of SGRE, to avoid potential misunderstandings or non-representative responses. This leads to uncertainties regarding the finial implementation within SGRE, which highlights the need for further modifications to ensure that the Sustainable Innovation Event System fits the goals and needs of SGRE.

5.3 Participant-observation

Data for the case study was also gathered through participant-observations [Yin, 2009], by one of the researchers of this report, since she is currently employed at SGRE. The use of participant-observations is commonly used among anthropologists and is often considered to be the best way to "accurately" portray the case study [Yin, 2009].
The observations have mainly taken place during meetings and conversations with the employees of SGRE. Much of the information about the need for an innovation event and the ideas for doing this was attained through SGREs internal documents, through field trips to one of SGREs facilities and by generating ideas with other SGRE employees regarding the environmental system and culture in the company. This information would have been unattainable without having an insider in the case company. However, some significant biases have to be addressed when using this type of source collection [Yin, 2009]. Most notably is the potential bias of the employed researcher. After the researcher was employed, could this potentially affect her objectivity of SGRE and their processes. Another bias is the fact that SGRE is an international company with more than 26,000 employees. This means that the researcher only has inside information from employees in a very definite part of the organisation. This means that the researcher has opinions from a selected group of employees, which could have views which are not necessarily representative in the rest of the company.
Therefore, it is advantageous to have two researchers where one acts as a participant and the other acts as a direct observer. To collect data in this way, the researchers can compare and contribute their results and reduce disadvantages from either type of source.
To ensure that the collected data is valid and handled in the same critical manner as the literature review, as described previously in section 5.1 on page 15, measures were utilised. Firstly, during the internal meetings at SGRE did the researcher take notes in a document, which describes the date, data and the initials of the observed people. Thereby, the researchers do not have to rely on the memory of the researcher who attended the meeting, which could result in misunderstandings or miscommunications. Moreover, this ensures that the quality assessment of the literature review will be maintained. Therefore, notes and observations taken by the researcher are referred to as *Participatory observer [2021]*.

Theory 6

In this chapter will innovation, events and digitalisation be described concerning SGRE and the specific focus point they have set for their innovation event.

SGRE wishes to create an innovation event, which can occur digitally and enables all their employees to submit and create sustainable improvements. Though, sustainable improvements can be different things and it can be difficult to define a specific focus for the employees of SGRE unless there are structural definitions and guidelines set in place. This is because innovation is a process, where continuous improvements and ideas will result in the environmental improvements which SGRE seeks.
Therefore, to achieve this, an understanding of innovation, events, spaces, idea generation and digitalisation is needed, to mitigate disadvantages and achieve a successful innovation event. This will aid in creating an innovative culture, where the employees of SGRE have an clear understanding of the innovation culture and the goals for SGRE.
Therefore, based on the research question in chapter 3 on page 9, will this chapter describe innovation theory and the different types of innovation. Moreover, the term *event* will be defined and different considerations regarding events, such as spaces, engagement and different types of events and idea generation tools will be described. Lastly, digitalisation and considerations related to that will be outlined.
These will serve as the foundation for the following analysis to structure the innovation event for SGRE, to become more environmentally sustainable.

6.1 Innovation

As described in section 2.1 on page 2, innovation is a broad term, which can be used in many different contexts, depending on the desired results. Here, innovation culture is important to incorporate into the mindset of the employees to successfully implement innovation into the company culture. The following will describe different kinds of innovation and aspects to be mind-full of.
The context in which innovation develops is important to understand because companies innovate for different reasons [Marzocchi and Ramlogan, 2019]. Innovation is seen as a process where the balance of knowledge, environment and organisation results in e.g. new products. This process can be influenced by different things and happens over longer period of time. Though achieving a balance between the different aspects can be difficult and can lead to misunderstandings [Marzocchi and Ramlogan, 2019]. Therefore, the companies need internal abilities to recognise, reconfigure and assimilate knowledge and investments to be able to perform the needed research and development [Marzocchi and Ramlogan, 2019].

Another aspect of innovation is the unfortunate downside of the innovation process failing, despite the resources and man-hours poured into the innovations projects [Marzocchi and Ramlogan, 2019]. The failure rates of an innovation project for companies are difficult to determine, though there are estimates that the rates vary from 25% to 80% [Marzocchi and Ramlogan, 2019]. Therefore is failure an unavoidable part of an innovation process, which the companies have to come to terms with and extract the contribution factors and experiences from the failure process [Marzocchi and Ramlogan, 2019].

Therefore, failure is needed to be implemented into the company's strategic thinking, to ensure future projects can be significantly unaffected by failure in the future [Marzocchi and Ramlogan, 2019]. Studies show that companies which involve external and internal research and development sourcing do not tend to deviate from their innovation strategy and could potentially intensify their strategies when a failure occurs [Marzocchi and Ramlogan, 2019]. There are different learning opportunities to gleam from internal and external innovation failure [Marzocchi and Ramlogan, 2019]. This can be seen as a misallocation of resources or as inefficient management practices.
Alternatively, innovation processes can also be abandon by the company [Marzocchi and Ramlogan, 2019]. There are many aspects to why an innovation process will be dropped, and one aspect can be failure to collaborate between companies [Marzocchi and Ramlogan, 2019]. This can be because of disagreements or if the research and development show the innovation is economically or technically unfeasible [Marzocchi and Ramlogan, 2019]. Alternatively, companies can begin an innovation project with the intentions of abandoning them, purely to learn about the competitors' technologies [Marzocchi and Ramlogan, 2019]. Nevertheless, failure or abandonment of an innovation process can be seen as a learning opportunity for the company, to minimise potential future issues related to this [Marzocchi and Ramlogan, 2019]. This is because "smaller" and frequent failures during the exploration of the innovation process gives relevant information, which is needed for learning [Marzocchi and Ramlogan, 2019]. Moreover, early failure during the research and design phase provides learning opportunities that can spur innovative behaviour within the company themselves and give chance to revising routines in new ways [Marzocchi and Ramlogan, 2019].
Therefore, the innovation process depends a lot on how the company views the internal process and how they manage and communicate regarding innovation. This internal communication is important to maintain a certain innovation culture, where failure is allowed.

The innovation culture and how innovation have been worked with have shifted over the years. In the 1990s, innovation was viewed as a company's way to achieve product superiority over their competitors through research and development [Flores et al., 2018]. Innovation occurred through having top-level support and internal specialist, which worked on the innovation activities behind closed doors, till a product could be launched into the open market [Flores et al., 2018]. This process is called "closed innovation", which focuses on a company's internal capabilities and have limited cooperation with other companies [Kratzer et al., 2017a]. Then, it was believed that this was the only way to maintain relevance and importance amongst competitors [Flores et al., 2018]. Since then there has been a shift, where innovation is viewed from many different angles and structures [Flores et al., 2018]. Some of these angels will be described further along.

Open innovation

Open innovation is the creation and implementation of ideas from both within and outside the company, which can be implemented in other companies as well [Flores et al., 2018]. Open innovation highlights the importance of external inputs to influence internal structures within a company, to ensure the collection and implementation of relevant creativity and knowledge [Flores et al., 2018; Huff et al., 2013]. Therefore, collaboration with partners, suppliers and customers is needed to allow for an open platform for innovation to occur [Flores et al., 2018; Huff et al., 2013]. This collaboration is a paradigm shift for companies, because it's the opposite of the closed innovation mindset [Flores et al., 2018; Huff et al., 2013].

Sustainable innovation

Sustainable innovation has an emphasises focus on the implementation of environmental requirements into the different stages of innovation management and product development processes, thereby highlighting the products environmental impact throughout the products life cycle stages [Altenburger et al., 2018]. Additionally, sustainable innovation has also emphasises the importance of sharing, creating and using new knowledge with other stakeholders [Altenburger et al., 2018]. Moreover, partnership and collaboration is an integrated part of sustainable innovation [Altenburger et al., 2018]. Hence, the collaboration and partnership of the organisation is an important part of its public image [Altenburger et al., 2018]. However, these partnerships could have either a positive or a negative influence on the organisations brand and reputation if these are not considered properly. Therefore, its needed to manage, control and develop the sustainability of the partners, as well as the organisation itself [Altenburger et al., 2018].

Technological innovation

This focuses on constructing a fit between technology characteristics and commercialisation approaches that can enable success on a market [Altenburger et al., 2018]. Additionally, the term is defined as a conversion of ideas and knowledge which leads to new and commercially successful services, processes and/or products [Schramm, 2017].
Though when working with technological innovation the different aspect of innovation does not occur at the same rate [Schramm, 2017]. The discovery rate often exceeds the invention rate which itself exceeds the technological innovation rate [Schramm, 2017]. This means, that there is a great potential to increase theoretical technological innovations, through the aspect of testing, experimentation and piloting the prototypes are often a slow process [Schramm, 2017]. Moreover, results or knowledge from research and designs are often withheld internally within organisations, to prevent competitors from adopting or copying the results [Schramm, 2017]. This results in a further postponement of technological innovation across all spectre.

Organisational innovation

This focuses on the implementation of alternative paradigms which can shape the culture, routines and structures of an organisation and thereby change the method of how things are done and change this into a more sustainable development [Altenburger et al., 2018]. This means that the focus of organisational innovation can also be on the products, services or operations themselves, within the company [Baregheh et al., 2009].
It is argued that organisational innovation is often politicised because when they are implemented they provoke conflicts of interest amongst the afflicted parties [Sheaff et al., 2009]. Therefore, the intended outcome of the innovation is viable to become misleading, cryptic or not happen at all, which makes organisational innovation unattainable [Sheaff et al., 2009].

Social innovation

Social innovation creates and develops a market for innovation with a social purpose [Altenburger et al., 2018]. It is referred to as leading to new ideas that meet unmet needs [Mulgan et al., 2007]. The goals for social innovation often focus on behavioural problems of addictions, diseases, welfare and inequality. These aspects are worked at through the use of e.g. open-source methods, collaborations and networks [Mulgan et al., 2007]. Despite the vast amount of innovation research there is little known about social innovation and thus a lack of systematic overviews, long-term analysis or major datasets and little interest from big foundations and academia [Mulgan et al., 2007]. This lack of knowledge has meant that few are interested in researching the area and often rely on other types of innovation or simple hunches [Mulgan et al., 2007].

Innovation used in practice

Though these innovation aspects are numerous and cover different aspects, they can bleed into each other. Moreover, often can different innovation methods also be used in synchronisation.

Based on these six types of innovation perspectives is it clear that there are diverse and multiple versions to view and work with innovation. Therefore, figure 6.1 shows how the described innovation types share some elements and how they can be viewed in relation to each other. There could be other innovation types or methods which could fit within figure 6.1, depending on which approach is taken.

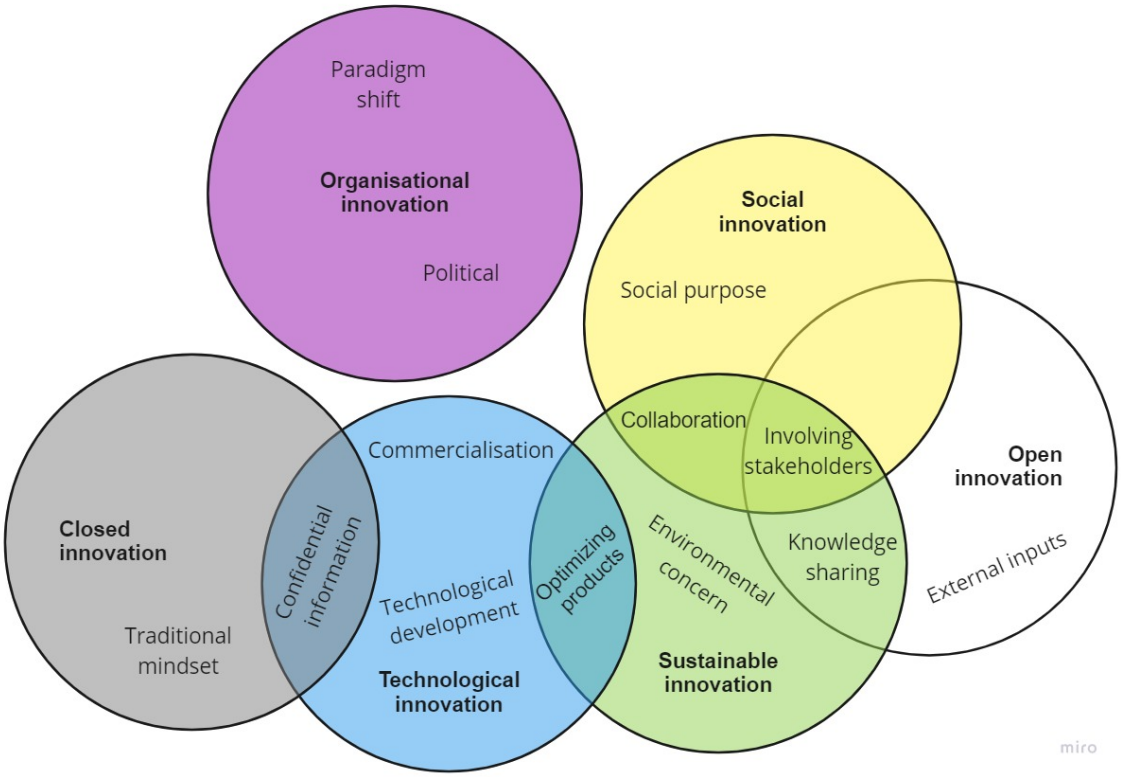

Figure 6.1. The relation between the different innovation types.

Figure 6.1 shows that e.g. sustainable innovation and technological innovation share many aspects with other types of innovation. These shared elements can make it relatable for employees, which potentially only have worked with one type of innovation previously. Though it can also lead to confusion and uncertainty when working with innovation and how they differ when performed.

Based on the previously stated arguments can it be concluded that the term innovation is broad and there are different ways of viewing and communicating regarding innovation. Failure or abandonment of innovation processes could occur and should be viewed as a learning opportunity. Therefore, the internal communication culture must allow for this change to happen. Moreover, there are many types of innovation and some can bleed into each other, as can be seen in figure 6.1. Therefore, it can be relevant to examine the context of the innovation process to determine which kind of innovation method is currently used and which is most suitable for the needs of the company. Moreover, to determine if there are similar innovation methods that could be relevant to incorporate.

Concerning SGRE and their wishes for an innovation event would the recommended innovation type be sustainable innovation. This is because of the primary focus on the environmental requirements regarding innovation management and product development, which Jensen has described as their prime focus for the innovation event [Jensen, 2021]. Based on this innovation type, a primary focus on the environmental impacts and the potential advancement would aid SGRE in achieving their goals for the innovation event. Though, a consideration regarding sustainable innovation is its focus on stakeholders and the collaboration which could occur, regarding the environmental innovations. Here could this collaboration originate amongst the different departments within SGRE, based on their varying knowledge and experiences. Furthermore, this collaboration can also occur amongst SGREs suppliers, which would aid in modifying the materials to be more suitable for the environmental changes or modifications, based on the results of the innovation event. Aspects of this are already in use in SGRE [Heilmann, 2021]. Therefore, the focus for SGREs Sustainable Innovation Event System, will focus on sustainable innovation and the elements described above.
With the innovation defined, it's possible to define which kind of event could occur and which elements are important to consider when performing this kind of event. These elements and more will be described in the following section.

6.2 Event management

SGRE has described a wish to perform an innovation event to improve the environmental sustainability within the company [Jensen, 2021]. Though the definition of an event is broad and can include many different things [Bhe et al., 2004]. An event can be defined as an activity that is planned for a specific purpose, that can include many people, often through a meeting, conference, party or other [Cambridge Dictionary, 2021]. Thus, there is not a set limit to which kind of event it could become, though the event needs to be able to include all the employees of SGRE [Jensen, 2021]. The important element of the event is to ensure that it creates an environment for innovative thinking and idea generation for environmental sustainability. Moreover, the event would have to allow for communication between different employees and sharing of knowledge and experience amongst them, to enable thoroughly innovative thinking.
Therefore, there is a need to describe what an event could be and how to utilise it to achieve the desired results. In the following sections will the term "event" be described along with a description of how to create an environment for a fluid creative innovation process, through engagement and more. Thereafter will different types of events be presented which SGRE could potentially utilise.

As described before, events can be shaped in many different ways, hence the need for management of it, to ensure a concrete result and fruitful future repeat of the events [Bhe et al., 2004]. This can include the organisation's aspiration for the event, the different responsibilities and roles, the success factors, standards, ownership of the processes and tools and the procedures for the event itself [Bhe et al., 2004]. Therefore, is the focus on event management, the flow of information between different departments within the organisation [Bhe et al., 2004]. Thus, SGRE needs to define themselves, depending e.g. on the monetary amount they will devote to the events, the amount of employees to run the events and so on.
Additionally it also results in the evaluation of the events themselves, to ensure continues improvement and changes, to achieve the goal for the system [Brown et al., 2015; Ambrecht et al., 2017]. This includes gathering information and the employees feedback regarding the process, to determine potential improvements, effectiveness, which would help SGRE in learning how to conduct and adapt future events [Brown et al., 2015]. This is done

through observing, monitoring and measuring the implementation of an event, based on the response from the employees and the yielded results of the innovation process [Ambrecht et al., 2017; Brown et al., 2015].
These elements are important, to define what the event is, how it should be run and how to improve it for the future course of the innovation events within SGRE.

Though even with the system and scope of the events settled, there is still a need for establishing an environment for the employees to work within, which enables an innovative culture, as described as an important element in section 6.1 on page 22. Therefore, in the following sections, will there be described how to create this culture and make the employees of SGRE engage and support the system.

6.2.1 Spaces and boundaries

To first establish a system is there a need to create a space where new ideas can flourish freely. To create these spaces is there a need for clear boundaries to separate the participants from their daily work, procedures and expectations [Cartel et al., 2019]. With this setup, participants can be encouraged to bring new ideas to the table in a new setting, with confines that are less strict and outside of their normal scope in terms of their everyday lives.
This scope can be framed as a "space" which "*provide the framework for staging new activities and forming opinions may be planned or unplanned*" [Huulgaard et al., 2020]. This means, that the spaces where innovation and new ideas are formed can occur by themselves by having actors go together in new groups or meet other employees which spark conversation. The goal is to structure these meetings and create new ideas not just as accidents but to solve specific problems.

Experimental spaces can be used as a definition for working with an event to facilitate innovation in an organisational setting. Experimental spaces fit within this framework as it [Cartel et al., 2019]: "*refer to temporary situations of interaction in which a restricted community of actors experiments with new solutions*" to "*experiment with prototypes, fail, learn from their failures and iteratively develop effective solutions*" [Cartel et al., 2019]. These spaces are taking place in the fields. In this report are fields defined as *a specific area of institutional life*, which here refers to SGRE. The experimental spaces do not have to occur in a physical space, but can also occur on online platforms [Cartel et al., 2019].

When designing experimental spaces is the role of "boundary work" important to successfully initiate innovation [Cartel et al., 2019]. "Boundary work" is the activity of defining a space away from the field by choosing participants, deciding when the participants meet, where they meet and what they are going to do in the space. This boundary work can be both physical, but also mentally and created by social interactions [Cartel et al., 2019]. The boundaries are needed to protect the participants from external pressures and to step out of their social roles [Cartel et al., 2019].
After the boundaries have been established, the participants are encouraged to leave their preconceived conceptions outside of the space. This is done with "distancing work", which is the designing of rules that are set in place to specifically remove participants attachments to the status-quo [Cartel et al., 2019]. After the previous types of work will the participants hopefully come up with new ideas and solutions that can be implemented in the field. To do this will there be a need for "anchoring work". This work refers to the construction of rules to connect solutions from the experimental space to the field. These three elements are the key to designing the experimental space [Cartel et al., 2019] and can be seen in figure 6.2 on the following page, where the arrow symbolises time and the circles are the experimental space.

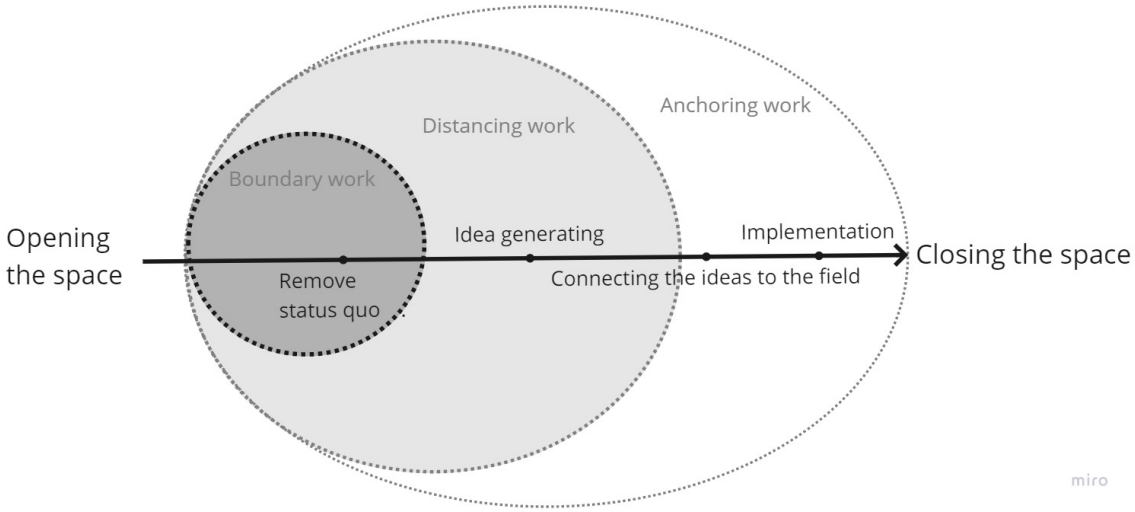

Figure 6.2. A process model of the creation of an experimental space based on Cartel et al. [2019].

An interesting aspect to the three types of work to design a space is also present in other terminologies with small variation. This can be seen in Sanders and Westerlund [2011] where design space is divided into three interpretations: "*The experienced physical space, the current work and the future situation of use*" [Sanders and Westerlund, 2011]. In their definitions can they easily be compared to boundary work, distancing work and anchoring work. The boundary work relates to the "experienced physical space," where the frames of space are created. The distancing work can more loosely be related to "the current work" which focuses more on designing the process and proposals in the space rather than designing rules that separate participants from the status-quo. The last design is the "future situation of use" which relates nicely to the anchoring work. They both concern the solutions that have been generated in the space, where Sanders and Westerlund [2011] relates to the design of the result that can be implemented while Cartel et al. [2019] relates to how the results can be implemented.
It is important to note that the desired outcome of the innovation event closely resembles that of the experimental space rather than the design space. Therefore, the definitions of the experimental space will be used in this report.

It can be seen across literature that boundary work, distancing work and anchoring work has been used in some form in several case studies of workshops and events. One such example is the case for implementing circular economy in the business model of a large multinational company in Denmark [Huulgaard et al., 2020]. Here the researchers mention the occurrence of three temporary spaces, however, the steps they take in implementing the business model fits into the narrative of the design of an experimental space.
The first space occurs when they take part in a scheduled meeting in which their presence result in extra discussions being taken to further the implementation of the new business model. The meeting transformed into a space by already having established boarders and then adding a "disturbing factor" to disrupt the status-quo and have the participants consider a field in which the proposals from the space can be implemented "outside". Even if the space was more of a discursive interaction as apart of an experimental space, they are still connected as:"*discursive interactions revolve around the sharing of practical experiences and the potential refining of a prototype, which represent the core activities in experimental spaces*" [Cartel et al., 2019]. Therefore, spaces can be utilised during an event to ensure idea creation occurs.

6.2.2 Removing of participates barriers

There are difficulties and barriers that need to be addressed when working with engaging participants to create a productive experimental space. Barriers vary according to the setting and the participants that are involved [Thastum et al., NA], so those presented are the ones that are expected to be the most applicable to the events at SGRE.
The main barrier which is expected to occur is the individual psychological barrier in terms of intellectual barriers, when the task is too demanding for the participant and they struggle to understand the reason for the event. Moreover, the emotional barriers can take place in the form of a feeling of impotence and distrust of the process [Thastum et al., NA]. Other than this, are there some practical barriers that can occur due to time constraints and a shortage of resources [Thastum et al., NA]. Concerning the process can there be a barrier in the form of the presenters of the event system [Thastum et al., NA]. This can occur when the presenters involuntarily obstruct their message and end up leading to uncooperative participants. A way to combat these barriers is to acknowledge them and work towards overcoming or at least reduce the consequences [Thastum et al., NA]. This can be done by catering the event to the participants and perhaps relate it to previous events from SGRE and experiences, so they know how to act and participate in the event.

Disagreements and conflicts can be resolved in many contexts by considering them beforehand. These are perceived as being between incompatible perspectives and interests that cannot be solved unless leaders make a final decision or through a democratic process. Unfortunately, this can lead to nontransparent debates where the lowest common denominator is chosen rather than the most beneficial decision [Agger and Hoffmann, 2008].
Thereby, it should be acknowledged how people interact with each other and how this interaction is predetermined by their previous interactions, even before the event occurs. Therefore, there might be preexisting biases, which can affect the event. This is why it is relevant to acknowledge these and work towards breaking these barriers and creating a respectful and understanding environment between the participants.

6.2.3 Creating engagement and utilising gamification

One way to strengthen the effort for the sustainable innovation event is to be more clear on the underlying notions for sustainability and how it will benefit from this event. The ultimate goal in creating the event is to make sure that the participants engage in the discussions and find a space where they can speak their mind and contribute with their ideas, being good or bad ones. They should all have a place to bring them to light and either be discussed and left for another day or used to implement new sustainability initiatives in SGRE.

To engage the participants in the Sustainable Innovation Event System, they have to feel a sense of empowerment and not as if they are wasting their time [Agger and Hoffmann, 2008]. Those who deviate from the standard model of thinking and operating must be praised as they are contributing to alternative thinking which could contribute to the best ideas [Cartel et al., 2019]. It is therefore desired to have as many participants as possible to engage and participate actively in the event. The researchers, therefore, wish to create an event that can cater to as many actors as possible to reach SGRE's goal. However, people are very individual and with a pool of participants as large as the one in the case of SGRE, there is not going to be one method that fits all [Thastum et al., NA].
However, there have been examples of methods to promote participants engagements. Gamification elements have been used for years and are by no means a new idea [Gamify, 2021]. The implementation of game elements and fun mechanics to entertain and promote

engagement has been used for a long time in various sectors [Gamify, 2021]. In short gamification can be defined as: "*the addition of game elements to non-game activities*" [Gamify, 2021]. This makes gamification extremely versatile and useful in not only various events, but also in various phases of an event. There are many varying ways of using different gamification-elements, such as points, leader boards, badges, levels and visual designs or challenges. By making the event fun and perhaps with some elements of competitiveness and collaboration can the participants look forward to taking part and work actively towards "winning the game", by gaining the most points or badges after having completed certain steps in the event [Goethe, 2019]. The goal is not to turn work into a game, but to play on the psychology that drives the participants' engagement to outdo, improve and compete to get rewarded [Goethe, 2019].

In events where participants have to join and leave the workshop, then the challenge of having all participants join with the minimum of interruptions increases. It can therefore be a good idea for longer meetings to include some sort of reward system for being punctual in the schedule and avoid late arrivals.

It is important to note, that cultural difference influences how individuals interact with gamification [Guhl, 2017; Khaled, 2011; Jong-Woo and Kim, 2018]. The geographic culture can define how participants react to different kind of gamification, which can result in both increased and decreased engagement [Guhl, 2017]. For example, to encourage participants through gamification in America, should the individuals' mastery and achievements of a subject be highlighted in a hierarchic leaderboard [Khaled, 2011]. Intellectual autonomy decreases engagement for Americans, whereas it increases engagement for Danes [Khaled, 2011]. Austrians do also focus on individual development [Jong-Woo and Kim, 2018]. Danes focus heavier on egalitarianism and highlighting a teams skill instead of an individual [Khaled, 2011]. Likewise, Koreans seem to react positively to egalitarian gamification and increasing the social norm through cooperation [Jong-Woo and Kim, 2018].

It is therefore relevant to consider how gamification is used in an international setting and how best to encourage the participants through gamification [Guhl, 2017]. A way to work around this is to allow some sort of customisation depending on the cultural mentality of the locations e.g. vary between giving rewards to individuals or to teams or giving out public praise or have private conversations with participants where their "reward" is revealed either in the form of a physical bonus or a virtual symbol of gratitude. For this report have different gamification elements been proposed during chapter 7 on page 47 in relation to each event type in the structure of the event. However, the elements of gamification are flexible and can to some extent be used to any type of event and is therefore not exclusive to any one situation.

There are therefore different ways to engage the participants in an event. A barrier could be the preserved "goal" of the event, which for the researchers, can be different from the participants, who might see the level of success in terms of how many ideas are implemented, while the management, want to see how much money they can save or how much CO_2 can be mitigated. The level of success thus depends on the mindset of the individual and what the purpose of the process exactly is [Agger and Hoffmann, 2008]. Therefore, there is a need for a clear transparent goal of what the event must accomplish and how it will occur. Thus is there a need for an event that utilises methods that encourage engagement and create an experimental space whereas many participants as possible can share their ideas.

6.3 Type of events

As described in section 6.2 on page 26 can an event be many different things and therefore have varying structures or end-goals. Thus, it is relevant to describe different types of events, with their strengths, weaknesses and how SGRE can utilise them, to present different options for them. Moreover, it will aid them in their decision-making process, by knowing the potential shortcoming or benefits of the different event types. Moreover, it is important to note, that there are other event types not described here, which could be relevant for SGRE to consider for their innovation event. Though these events, which are described below, were chosen based on a few criteria: Firstly, the events have to be able to be performed digitally, to comply with the restrictions from the pandemic. Additionally, the events have to lead to active participation from the participants and allow for all the employees of SGRE to participate, either individually or in groups of varying size. Lastly, it has to comply with the goals of SGRE and their environmental improvement goals.
Moreover, the scope of the report enables the creation of a process, which means the focus is on the innovative creation process of new ideas, and not on the implementation of prototypes or evaluation of the system itself.

Therefore, in this section will eight different event types be described. They are categorised into three different groups, *"One-way communication", "Promoting dialogue"* and *"Enabling concept creation"*, to highlight their differences and usage for SGRE. A description, strengths, weaknesses and usage for SGRE, will be described for each of the events. They are not presented in a prioritised list, thus is the first presented event not necessarily more beneficial for SGRE to use than the other events.

6.3.1 One-way communication

This type of event focuses on collecting data, to define e.g. opinions, suggestions, polls and more. This is done by a one-way communication to the participants from the management of the company to gather a large amount of information which has to be reviewed. One event type that accomplices this is surveys.

I: Surveys
Surveys are a method to collect systematic data regarding the opinions of a group of people [Hampton, 1999; Rowe and Frewer, 2000]. This method allows for larger sample sizes, upwards to +1000 responses, to form a representative view of the respondents [Rowe and Frewer, 2000]. It is a single event, where the survey can be answered in a few minutes, depending on the amount of questions [Rowe and Frewer, 2000]. Surveys are useful in a projects initial stage to define issues or to redefine pre-emptive definitions regarding these issues [Hampton, 1999]. Often are surveys carried out with written questionnaires or telephone surveys, where each participant is asked the same questions [Abelson et al., 2001; Rowe and Frewer, 2000].

Strengths
The benefit of surveys is that it can reach a large number of people and can be suited to monitor changes over time [Abelson et al., 2001]. Additionally, a survey can clarify what the survey group agrees or disagrees on, while simultaneously identifying underlying opinions of value [Rowe and Frewer, 2000].

Weakness
Despite the potential clarification, which can occur through a survey, could the results from the survey be misrepresented and the results could be incomparable with other studies or groups of people [Abelson et al., 2001]. Moreover, the responses will reflect the biases

or misunderstandings of the participants and it does not allow for dialogue between the participants and the coordinator [Rowe and Frewer, 2000]. Additionally, the value of the survey is depending on the number of respondents the survey receives [Abelson et al., 2001]. Moreover, the questions of the survey need to be straightforward and potentially simplified, to ensure they are comprehensible, though this can lead to superficial or simplified results [Abelson et al., 2001]. Also, changes can not occur after the survey has begun [Abelson et al., 2001], even if the focus or scope changes. Lastly, the survey is a time consuming method [Abelson et al., 2001].

Usage for SGRE
A survey can be utilised by SGRE to establish the employees understanding of sustainability, innovation or how they would potentially engage in an event. Moreover, it could also be used to establish how well versed they are in regards to digital technology and whether they need training before participating in digital events.
It does not allow for dialogue creation or elaborating on the ideas before they're submitted. Therefore, potential barriers could be found, but not worked with. Moreover, it would not create any spaces for communication to occur, if it is a written questionnaire.
Therefore, the possibility to create an innovation culture internally SGRE is not being supported by a survey.

One-way communication can be utilised in different ways, but primarily to establish a knowledge foundation for e.g. future events or to establish the opinions or potential improvements of already occurred events. This can be used to highlight potential barriers, lack of knowledge or others, to improve the experiences for future events. Other ways one-way communication occurs is during presentations where a presenter shares their opinion or agenda. The purpose of this is to give the participants information to act on in the future. Though the one-way communication does not allow for the creation of spaces for innovative thinking, whereas *promoting dialogue* does.

6.3.2 Promoting dialogue

The primary focus in this grouping of event types is to enable the participants to actively partake in dialogue amongst the other participants and achieve an innovative mindset when working with the company's environmental issues. Here the primary goal is to allow for open dialogue of the different aspect of the issues to ensure it is thoroughly worked through and usable for potential implementations in the future.

II: Focus Groups
The focus group is often comprised of 6-12 participants, who discuss different issues, set forth by the organisers. This allows for the creation of spaces, where innovative thinking can occur. The participants are chosen on specific criteria to be able to represent different knowledge and skills [Abelson et al., 2001; Rowe and Frewer, 2000]. Additional participants can also be chosen, thereby creating subgroups within the same group [Rowe and Frewer, 2000]. The focal point of focus groups is through a one-time meeting, which usually last up to two hours, to be informed about an issue and encouraged to engage in discussion amongst the participants [Abelson et al., 2001; Rowe and Frewer, 2000].
Focus group is a flexible method because it can be modified to incorporate language or viewpoint differences, to determine the viewpoints of the participants [Hampton, 1999].
It is important to note, that this method is often used by the local or national government to create citizens jury's to handle an issue [Abelson et al., 2001]. Though in this report is the method framed in an organisational framework to SGRE.

Strengths
A successful focus group can lead to a consensus and feeling of mutual enrichment amongst the participants [Abelson et al., 2001], because of the shared viewpoints and open discussions. This can lead to increased engagement from the participants, because of the enrichment of others and themselves. Moreover, it focuses on clarifying agreements and disagreements and defining the values, instead of settling on a certain direction [Rowe and Frewer, 2000], which can lead to the removal of barriers. Thereby, it is an exploratory method to explore the different elements of an issue [Rowe and Frewer, 2000]. Moreover, it is informal in its structure, thereby allowing participants to discuss in a relaxed atmosphere [Abelson et al., 2001].

Weakness
Though despite the strengths and the possibilities it presents, there are some weaknesses which are important to highlight. The size of the groups defines the accessible knowledge, thus it might lead to superficial discussions due to lack of information [Abelson et al., 2001]. Additionally, dominant individuals could overrule other participants and potential social separations could be reinforced, depending on the combination of participants [Abelson et al., 2001]. Therefore, despite the potential to remove barriers, potential barriers might instead be created or reinforced. Moreover, the method itself has no structured procedure to enable the participants to make good decisions, which only highlight potential biases or misunderstandings [Rowe and Frewer, 2000]. Also, focus groups are not transparent with their process, because it occurs behind closed doors, though this can be avoided by having meetings or presentations, with added question-and-answer sessions [Rowe and Frewer, 2000]. Lastly, the method is resource-intensive, depending on the amount of participants [Abelson et al., 2001].

Usage for SGRE
This method could be useful for SGRE because it encourages deliberation and discussions amongst the participants and allows for openness and active participation.
Though it is important to note the disadvantages which follow the method e.g. the lack of transparency and potential misunderstandings that needs to be handled, to ensure useful innovation suggestions and improve their environmental performance. Therefore, this event can result in the creation of spaces where innovation and discourse occurs, though it can also result in the creation of barriers and barren results. Therefore is it important to consider who the participants are and how they are managed to avoid the weaknesses of the event.

III: Visioning
Like the name suggest, visioning is creating a broad vision for a service, product or organisation [Pratchett, 1999], which is open for interested participants [Abelson et al., 2001]. The method's priority is to create a statement of how somethings should develop long-term, but not to define or plan specific solutions or how to achieve them for the future [Pratchett, 1999; Abelson et al., 2001]. It is a deliberative process in which ideas can be continuously refined, through reoccurring discussions by the participants [Abelson et al., 2001]. Additionally, these discussions are encouraged to occur without concern for the existing constraints [Pratchett, 1999], which can aid in removing existing barriers. This can lead to the creation of ideas that aren't necessarily relevant in the current context, though it can lead to an understanding of how it could or should be [Pratchett, 1999].
Therefore, the outcome of visioning is an overview of the potential possibilities, based on their preferences, instead of a structured plan [Abelson et al., 2001; Pratchett, 1999].
It is important to note, that this method is often used by the local or national government to create citizens jury's to handle an issue [Abelson et al., 2001]. Though in this report is the method framed in an organisational framework to SGRE.

Strengths
The method encourages consensus building, through cooperation and teamwork, in which an understanding of an issue and a shared vision for how to handle it can be reached [Abelson et al., 2001]. Here, spaces are an important element where shedding preexisting notions or restrictions to achieve a progressive or creative vision for the future. Therefore, a strength is the enlightenment of the participants of the potential possibilities and fostering of connections of different organisations [Abelson et al., 2001]. This can increase engagement and lead to ambitious innovative ideas.

Weakness
A weakness is that the visioning might raise expectations for the organisations, which they might be unable to fulfil [Abelson et al., 2001]. This can result in the reduction of engagement and potentially lead to a decreased willingness to participate in future events, because of the reduced outcome of the Visioning. Moreover, it can influence how the system is viewed, if the ideas won't amount to anything.

Usage for SGRE
Visioning can help SGRE establish what kind of innovative sustainable vision their employees want for the future and help to visualise what the focus should be. This can also aid in defining what kind of sustainability the employees focus on and can aid in defining which additional knowledge the employees needed. However, this method does not supply concrete innovative ideas, which can lead to prototypes, which SGRE wish for.

IV: Safari walk
This method is walking through the physical environment of the organisation, to describe and discuss the impression the participants have during the walk [Agger and Hoffmann, 2008]. The method is walking, biking or digitally walking through e.g. the production, offices or other parts of the organisation, which can take from 10 minutes to multiple hours [Agger and Hoffmann, 2008]. The focus is to find the potential improvements within the physical environment and enable dialogue between the participants [Agger and Hoffmann, 2008]. Thereby, it allows for the creation of new perspectives and relations, to see new or alternatives handling of preestablished structures [Agger and Hoffmann, 2008]. This is to kickstart innovative thinking from a preexisting environment, by pointing out elements that are usually ignored or overlooked in everyday practice. Alternatively, photos of the physical workspace can also be utilized instead of a walk [Agger and Hoffmann, 2008].

Strengths
The Safari walk strength is allowing dialogue between the participants, without needing the participants to preemptively involve themselves [Agger and Hoffmann, 2008]. By walking through areas, which the participants are familiar with, they can explain how or why certain elements are structured as they are [Agger and Hoffmann, 2008]. This allows for dialogue and inspiring the participants to view and wonder about the options regarding the current setup [Agger and Hoffmann, 2008]. This can also aid in highlighting existing barriers formed by traditions, technology or others and potentially removing elements, changing or improving the existing physical workspace.

Weakness
To ensure a beneficial outcome of a safari walk, it needs to be established what the specific focus is [Agger and Hoffmann, 2008]. If the walk occurs without some pre-established goal, the walk can become unstructured and redundant for the participants [Agger and Hoffmann, 2008]. Therefore, a clear focal point is needed, before the walk is initiated [Agger and Hoffmann, 2008]. Moreover, barriers can be created when questioning the existing practice and can result in the participants closing off or fighting against changes.

Usage for SGRE
This method is similar to the waste-walk, which SGRE has used within the facility in Aalborg. This is therefore a potential add on by performing this online instead, which can still lead to dialogue between the participants. Therefore, there is presuming a preexisting space of innovative communication regarding the waste walk, which can aid in relating known events with future upcoming innovation events.

These event types described in *promoting dialogue* focus on the creation of spaces where communication can occur and allow for creative innovative thoughts and potential changes for a more environmentally beneficial practice. It can aid the participants in active participation and allowing them to view the issues from different angles. Though the events do not focus on creating prototypes that SGRE wants, though they can help in establishing viewpoints, knowledge and open dialogue amongst the participants. Creating structured ideas are other events more focused on, which is described below.

6.3.3 Enabling concept creation

This last grouping of event types focuses primarily on both dialogue and the creation of idea or suggestions. Here the participants are collaborating by viewing the issues from different angles to afterwards define how the issue potentially can be solved or mitigated. Therefore, the primary goal for these event types is not only to discuss the different elements of the issue but also to go deeper into what can be done about it.

V: Planning Cells
This method focuses on a team of people, usually around 25 participants, to discuss an informed issue and reach a decision on the given issue [Abelson et al., 2001], which goes in line with the creation of spaces. The method seeks to create a consensual decision amongst the participants [Fishkin et al., 2000]. It is done through collected data and evidence from observers and knowledge of specialists [Abelson et al., 2001]. These considerations, discussions and conclusions are written in a report and handed to directors or others, who have an interest in the subject [Abelson et al., 2001]. This method is often used by the local or national government to create a citizens jury's to handle an issue [Abelson et al., 2001]. Though in this report is the method framed in an organisational framework to SGRE.

Strengths
Planning cells have different strengths, such as the non-intimidating nature, because of the teams' size [Abelson et al., 2001], which potentially could increase the engagement of the participants and lead to active discussions. This means that the participants can be more active and suggest ideas, which could have been harder to achieve if the team was larger [Abelson et al., 2001]. Additionally, a strength is the accountability of the suggested ideas for the issue, because the ideas have been worked through and discussed by the participants [Abelson et al., 2001]. Moreover, because of this are the suggested ideas often implemented, because the ideas are thoroughly worked through and fitted the issue [Abelson et al., 2001]. This can also increase the engagement of the participants because they can see how their work influences the decision-making processes.

Weakness
A downside of the Planning cells is how the decisions might not always be feasible in the long term [Abelson et al., 2001]. Furthermore, personal bias can be difficult to abstain from and might lead to a disseminated process [Abelson et al., 2001]. Moreover, it might lead to strengthening existing barriers, depending on the participants' point of view or level of knowledge. Moreover, the Planning cells is not suited for issues with "yes" or "no"

answers [Abelson et al., 2001], because it decreases engagement and does not allow for nuanced discussions.

Usage for SGRE
SGRE could utilise this method for the creation of innovative ideas within the different teams of employees. By this, there is a potential for employees to voice their ideas or suggestions when working with environmental innovation suggestions. The focus is to thoroughly working through the issue and its different elements. Though it is important for SGRE to consider the weaknesses of the method and how they plan to work around them. Moreover, the creation of a report could also be suited to convey the Planning Cells discoveries and can easily be shared throughout the entire company via a digital platform.

VI: Future Workshop

A future workshop focuses on defining an issue and develops visions for the future and discusses how this future can be accomplished [Apel, 2004]. This occurs through the exchange of suggestions and shared problem-solving by the participants in different teams [Schrot et al., 2020], which can lead to the creation of alternative solutions [Vidal, 2005]. A future workshop can be broken up into many different steps, through a traditional future workshop is broken up into these five different elements [Vidal, 2005]:

- **Preparation phase**: Themes, method, rules, time tables and more are presented for the participants.
- **Critique phase**: The issue is thoroughly discussed and examined, where-after ideas are generated and structured into sub-themes.
- **Fantasy phase**: The participants imagine a utopia to create an exaggerated version of the future.
- **Implementation phase**: The created ideas are analysed and evaluated regarding their practicability, where after an action plan is laid out.
- **Follow-up phase**: The action plan is monitored, whereas potential changes are carried out.

Thereby the participants can define a specific aspect of the issue to handle and thereafter create a structured plan for how to fulfil the created idea. The five steps described above aids the creation of innovative spaces with the removal of barriers and closing of the discussion to create concrete ideas.

Strengths
A future workshop allows for the sharing of experiences and knowledge which the participants bring, which can lead to the creation of creative and innovative ideas [Apel, 2004]. This nonrestrictive and structured scope gives way for creative development for the participants [Apel, 2004] and can increase the engagement of the participants.

Weakness
An important weakness of future workshops is the critique phase itself [Apel, 2004; Vidal, 2005]. It can be argued that starting an event with being negative could have a demotivating effect on the participants and potentially make them demoralised when faced with the environmental issues [Apel, 2004]. This can decrease motivation and engagement, which can have a negative influence on the system.
Additionally, the reflection the participants makes needs to be efficient enough, to lead to applicable suggestions for the issue, instead of staying within the fantasy phase [Vidal, 2005]. Therefore, following the spaces is important to reach the finalisation of the ideas, for concrete manageable ideas.

Usage for SGRE
The future workshop can be used by SGRE to define a future version of their company and the environmental issues which they face. The future workshop differs from Visioning is that an action plan is created and monitored, which ensures continuous work and improvement on the suggested ideas. This stays in line with SGREs wishes for prototype creation and monitoring how it performs. This can potentially also increase motivation because of the clear results from the event itself.

VII: Hackathon
Hackathons focuses on accelerating the innovative process of the participants [Flores et al., 2018]. During this event the participants are separated into different teams, in which they have to tackle a challenge over a short period - usually between one to three days [Chia, 2017; Komssi et al., 2015]. Here the focus is to identify, discuss, design and test new ideas by cross-cultural and cross-functional collaboration, to create new opportunities for the organisation [Flores et al., 2018]. This occurs through an intense and uninterrupted process, where the goal is to engage and motivate the participants throughout the entire process [Komssi et al., 2015]. After the groups have produced a prototype, they enter a "competition-phase" with the other participants, where the different teams present their innovative ideas and give critique and suggest improvements on the other groups' ideas [Flores et al., 2018].

Strengths
One strength is the potential quick production of innovative ideas or prototypes for the organisation [Chia, 2017]. Additionally, Hackathon has shown to increase the motivation for the participants due to the potential of winning with their creation [Komssi et al., 2015]. Alternatively, the event gives opportunities to meet and work with new people, which encourages learning and experimenting, which also adds to the motivational factor [Komssi et al., 2015]. It also follows spaces structure, by opening a space, discussing and closing the idea.

Weakness
Despite the benefits of a Hackathon, there are negative elements of the event as well. Firstly, this event is resource intensive and require much preparation before, during and after the event [Flores et al., 2018]. Additionally, there is no guarantee for successful results or ideas for the Hackathon, depending on how much preparation and energy is put into the event itself [Chia, 2017]. Moreover, due to the time limit, some issues might be harder to handle, depending on the level of knowledge of the participants beforehand [Flores et al., 2018]. Therefore, if e.g. barriers are not predefined, encountering unforeseen barriers amongst the participants can lead to a reduction in the outcome of the Hackathon.

Usage for SGRE
This event focuses heavily on the accelerated innovative process, which can lead to a fast output of ideas or suggestions, which SGRE request for. A Hackathon is designed to last for days, but according to Heilmann [2021] it is optimal if the participants are not online for more than 2.5 hours at a time. Thereby, depending on the number of groups that enter the Hackathon, an equal about of potential outcome might spring from it. Therefore, if SGRE is willing to invest in the preparation and time, they could potentially achieve their goals for their innovation event.

VIII: Dragon's Den
The Dragon's Den is originally a BCC television show, in which entrepreneurs pitch their business ideas to five multi-millionaires, called dragons, in hopes that they will invest in their idea, which has been implemented into academic research as an event for evaluating

developing process[Mazhindu and Gregory, 2015; Feng et al., 2020; García-Gómez, 2018]. A Dragon's Den is structured in three different phases [García-Gómez, 2018]: Firstly, the entrepreneurs present their ideas in three minutes and describe the needed funding for the idea to succeed [García-Gómez, 2018]. Secondly, after the entrepreneurs' pitch do the dragons have time to ask questions for additional details regarding the innovation idea. Moreover, the entrepreneurs have access to an advocate who can support with additional information or facts regarding the idea or explanation regarding potential challenges [García-Gómez, 2018]. Lastly, after the questions can the dragons decide whether they're interested in investing in the idea [García-Gómez, 2018]. The dragons can come with requirements or add changes if the original idea does not fit the dragons views [García-Gómez, 2018]. This event focuses more on the presentation and modification of the presented idea, instead of the creation of an original idea.

Strengths
This structure has been copied and used in many different contexts, besides the show itself [Mazhindu and Gregory, 2015]. Several universities and healthcare organisations from the UK have used this structure to distribute research funding for innovative ideas [Mazhindu and Gregory, 2015]. These examples have shown that the Dragon's Den structure provides an excellent platform for both students, staff and more to show their innovative ideas and research, to ensure equatable and justifiable funding [Mazhindu and Gregory, 2015]. Moreover, it allows for defining how the ideas can be improved or changed, so it can be implemented. It can increase engagement for the participants by presenting their idea and get complimented for their good work.

Weakness
Studies show that the Dragon's Den is not efficient in training the participants in analysing, critically thinking or problem-solving, due to the structure of the event [Feng et al., 2020]. Moreover, the event can potentially provoke and result in a negative attitude from the participants, depending on the interaction with the Dragons [García-Gómez, 2018]. This can occur by e.g. the Dragons suggestions for major changes, which the participant is not willing to comply with. Alternatively, comments from the Dragons can result in participants denouncing their ideas, based on e.g. the participants' potential lack of knowledge: "*You don't know what you're talking about*" [García-Gómez, 2018]. These elements can result in potentially damaging the participant's self-image, which can result in the denouncement of the idea [García-Gómez, 2018]. This can result in the creation of barriers from the participants, both the presentation of their idea or by the other participants witnessing the presentation.

Usage for SGRE
The Dragon's Den was initially proposed by Jensen [2021] as a way to sort through ideas which have already been generated in the process of an event. However, this is not the only purpose it can serve.
SGRE can replicate this structure and utilise it for their internal decision process, to define whether they should dedicate their time and resources to a specific innovation idea. The entrepreneurs would be the employees of SGRE, who have partaken in the innovation event and the dragons would be individuals from the management, who have an understanding of the company's prospect and resources. Therefore, it allows for a more open discussion, than what the original show allows because the participants and the dragons all strive for the same end goal and want to aid each other.

These event types, which focus on enabling concept creation, can create idea creation or finalisation, which can provide the last needed steps before a concrete prototype is ready for its test run. By following the idea from the initial brainstorm to the actual creation of

something concrete can motivate the employees because they can see how their ideas bear fruit. Moreover, the creation can also aid in giving structure to the ideas, which potentially can be hard to grasp when the participants are only communicating about the idea.

Overview of event types
As described there are many different types of events, which have varying kinds of focus, structure or end-goal in mind. An overview of the events can be seen on table 6.1.

Table 6.1. Overview of the event types presented in section 6.3.

Name	Description	Strengths	Weakness	Usage for SGRE
One-way communication				
Survey	- Collecting data regarding the opinions of the employees - Large respondent group	- Reach a large number of people - Defining agreements or disagreements	- Potential clarification issues - Biases - Simplified questions - Time consuming	Allows SGRE to understand their employees opinion regarding e.g. sustainability and innovation.
Promoting dialogue				
Focus Group	Around 6-12 participants discuss in a one-time meeting about a issue	- Exploratory way of working with a issue - Informal in structure, which leads to a relaxed atmosphere	- Potential super-ficial discussions - Lack of transparency - Resource intensive	- Encourages deliberation and discussions amongst the participants - Creates an open and active space
Visioning	- Structures a vision for the future - Does not create a system of how to achieve the vision	- Enlightening the participants of the future possibilities	Potentially rises the expectations for the future, which could be beyond reach	Can establish what kind of sustainable future SGRE wants
Safari walk	Walking through the physical work space to discussions the current practise	Allows for viewing the space in a new perspective	Requires a clear and predefined focal point	Similar to SGRE previous waste walks, though this method can also be used online.
Enabling concept creation				
Planning cells	Around 25 partitions gather to discuss a issue and how it should be handled through a report	- Increased idea generation and activity, due to the group size. - Ideas are often implemented.	- Long term planning can be difficult - Biases can influence the process	- Useful for idea generations - Allows for the participants to participate actively
Future workshop	Creating a vision for the future and how to reach this future by an action plan	A space for sharing experiences and knowledge	Critiquing could have a negative impact on the participants	Allows SGRE to create a vision for the future and how to achieve it.
Hackathon	Workshops where the participant identify, discuss, design and test new ideas	- Quick creation of ideas - Allows for teamwork	Resource and time intensive event	Accelerated innovation process, which potentially could produce ideas or prototypes
Dragon's Den	Evaluation event which focus on improving and realising innovative ideas	- Defines how to distribute funding - Can engage participants	The event does not train the participants in analysing or problem solving.	The event can aid SGRE in defining how many resources are needed to achieve an idea.

It is relevant for SGRE to consider what they specifically want from their events and whether the event type changes over time when e.g. their employees have become more

familiar with the innovative mindset and the system. Therefore, it could be relevant to consider which kind of event SGRE want to utilise, e.g. an event which first uses *promoting dialogue* and then later utilise an event which is *enabling concept creation*. The different events can be utilised to achieve SGREs innovation goal.

An important note is that the events described above are primarily described to occur physically, though they have potential to occur digitally as well, as digitalisation is merely a method to work with events [Kanstrup, 2021]. Kanstrup argues that the design and structure of an event is what determines of it is successful or not, and not weather if the event occurs digitally or physically [Kanstrup, 2021]. Therefore, for a event to run smoothly is it necessary to ensure that the participants understand how to use the chosen software for the events to be able to take notes, talk, present etc [Kanstrup, 2021]. Some of the participants might require training before they can use the software to the fullest, which is necessary to consider when planning the event. By occurring digitally does it allow for the inclusion of different employees from around the world, thereby utilising the large knowledge and experience-pool which is highly sought for in an innovative process [Hopkins, 2010].
No matter what kind of event SGRE chooses to work with, they have to define a structure for their participants, to ensure transparency and comprehension for the steps and end goal for the actors involved [Michanek and Breiler, 2005].
Moreover, the different event types have defined that the participants should be creative and create innovative ideas, though it can be difficult to think creatively.
Event tools are seen as methods which can be included into the different event types. Their purpose is to promote distancing work and promote the participants to think outside of their normal routines. Event types can be describes as setting up the boundaries for the participants and act as a step by step, whereas event tools can be utilised along the process of the idea generation and management during the event to change the environmental performance. Therefore, multiple event tools can be used in an event.

6.4 Tools for events

To ensure the creation of a concrete innovative idea, as SGRE requests, are different steps needed, from the creation to the finalisation of the idea itself. Five steps are presented, which can aid in the entire idea creation process [Michanek and Breiler, 2005]:

- **Defining the need**: Defining the specific scope and goal for the event, where an issue is presented.
- **Idea generation**: Creating a plethora of ideas with as many different angles as possible, through both group work and individual emergence.
- **Idea development and assortment**: After ideas are suggested, are they sorted and reduced to a selected few, to ensure the quality of the ideas.
- **Defining and deliberation**: These few ideas are developed further on, by defining uncertainties, create visualisations and more.
- **Finalisation**: Lastly, the ideas should define if they should be prioritised and invested in, or if the ideas should be abolished.

By considering these five points throughout the entire event process can there be produced concrete innovative suggestions for increasing SGREs environmental performance. Though the aspect of being creative and imagine innovative solutions to issues can be difficult without tools to set the scope of idea creation and idea handling.
Therefore, in the following sections will different tools concerning idea handling be presented, related to the five points described above.

6.4.1 Defining the need

SGRE has specified that they wish for the innovation event to focus on their environmental issues. SGRE must describe to their employees which issue they want them to work with and what kind of criteria needs to be fulfilled before implementation is possible [Michanek and Breiler, 2005]. It can be seen as describing the issues and their many different aspects, before looking into how the issue can be solved or handled [Michanek and Breiler, 2005]. Here it could be relevant for SGRE to perform multiple events with their focus and specific issue in mind, to ensure their different environmental issues are worked on.
A tool for defining the different aspect of an issue can be found in this tool:

Written hand overs
This tool focuses on the participants drafting their ideas unto paper, to describe their views on a specific issue [Agger and Hoffmann, 2008]. After the participants have written their views down, their draft is sent to a new person [Agger and Hoffmann, 2008]. This individual gets three minutes to read the input and add their views to the issue. This happens between a pair or in small groups [Agger and Hoffmann, 2008].
This tool defines the different aspects of the issue while allowing the participants to be inspired by the other participants' views and perspectives [Agger and Hoffmann, 2008].

6.4.2 Idea generation

This phase is about generating ideas, to ensure different avenues of the issue is explored [Michanek and Breiler, 2005]. To ensure a successful idea generation for the participants is it important to give enough time for the participants to comprehend the issue and understand which possible innovative solutions there could be though of [Michanek and Breiler, 2005].
There are different ways to enable idea generation for the participants, where a few of these methods are:

Brainstorm
Brainstorm is an idea generation tool, which can help create an overview of the potential sustainable ideas of an issue through creativity [Hallenga-Brink and Brezet, 2005]. This is done by the participants writing their immediate ideas down on e.g. post-it notes or in a chatroom, then the participants present their ideas for the rest [Agger and Hoffmann, 2008]. Thereafter, the ideas are sorted into fitting categories [Agger and Hoffmann, 2008]. The focus is to create as many ideas so possible and building on top of other ideas are encouraged [Agger and Hoffmann, 2008].

The lotus flower
This tool focuses on promoting associations and idea creation based on an issue, through visualisation of a flower [Agger and Hoffmann, 2008]. This is done, by writing an issue in the middle of a document and thereafter writing eight ideas or associations around it, like the petals of a flower [Agger and Hoffmann, 2008]. Hereafter, participants pick an idea or association and create eight new ideas or associations to delve deeper into an aspect of the issue [Agger and Hoffmann, 2008].
An example could be "how to increase engagement for the employees of SGRE?". Here the ideas or associations could be: Communicating with the employees at their workstations, create competitions, give benefits and so forth.

6.4.3 Idea development and assortment

After different ideas have been generated and discussed, an overview of the ideas is needed to understand the different aspects [Michanek and Breiler, 2005]. Thereafter the number of

ideas should be reduced, thereby increasing the quality of the remanding ideas [Michanek and Breiler, 2005]. There are different ways to categorise ideas, where one tool is the "de Bono's six thinking hats".

De Bono's Six Thinking Hats
This tool focuses on thinking systematic to evaluate an idea based on different perspectives, by equipping different hats [Agger and Hoffmann, 2008]. The tools is referred to as *thinking hats*. These hats focus on different angels of the issue and the related idea [Agger and Hoffmann, 2008]:

- **The White hat** focuses on facts, which describes the details known of the issue or idea.
- **The Red hat** focuses on emotions and intuition and described the feeling which emerges related to the idea. These emotions do not need to be justified.
- **The Yellow hat** focuses on the positive and successful regarding the idea, and describe how or why it a good idea.
- **The Black hat** focuses on the limitations and problems regarding the idea, by highlighting potential future challenges.
- **The Green hat** focuses on creating new innovative ideas or suggestions based on the inputs from the other hats.
- **The Blue hat** focuses on how to continue development, by combining the inputs of other hats to form a conclusion.

There are many different ways to order the hats, which will result in different outcomes [Paterson, 2006]. Some combinations have shown to produce a beneficial outcome, such as having the Yellow hat to *begin the innovative thinking* to set the stage for the participants [Paterson, 2006]. Depending on the participants' knowledge level regarding the issue, it can be relevant to have the White hat in the beginning as well [Paterson, 2006; Agger and Hoffmann, 2008]. Though if the participants are familiar with the issue, having the White hat first is unnecessary [Paterson, 2006]. Having the Green hat after the Black hat can result in overcoming weaknesses by creating new ideas or suggestions [Paterson, 2006]. Moreover, presenting the Green hat, to introduce new ideas, followed by the Yellow and Black hat to describe positive and negative aspects of the new ideas are also recommend [Paterson, 2006].

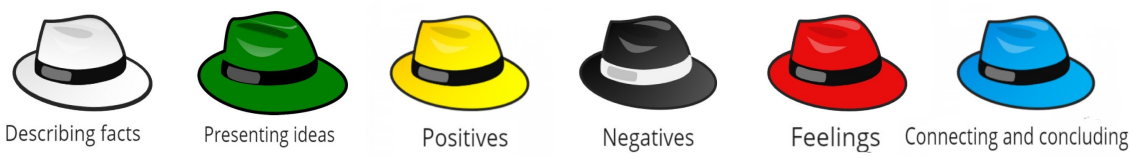

Figure 6.3. The figure shows a order of hats SGRE could follow.

The order of the hats is not fixed and jumping back and forth between could be beneficial when different elements are presented. By using this tool, the ideas can be worked through and decided if they are relevant to keep working on.

6.4.4 Defining and deliberating

Once the ideas have been reduced, it's time to develop on them to have a concrete concept to focus on [Michanek and Breiler, 2005]. This is important, because the participants could use too much time on discussing the idea, without considering whether the idea is realistic or not [Agger and Hoffmann, 2008]. This point helps avoid this [Agger and Hoffmann,

2008]. This means having a definitive description of the idea, defining uncertainties, create illustrations and more [Michanek and Breiler, 2005].
These elements can be done in different ways, but a way to perform this is by "backcasting".

Backcasting
This tool focuses on defining which steps are necessary to be able to perform or achieve the idea [Agger and Hoffmann, 2008]. It is usually performed in groups of three participants or more [Agger and Hoffmann, 2008]. Backcasting can take up to 30 minutes to multiple days to perform and is done by an interviewer asking a participant or an entire team several clarifying questions [Agger and Hoffmann, 2008]. The answers are written down, often as a timeline, where the different necessary steps for achieving the idea is noted in a timely order [Agger and Hoffmann, 2008].
The clarifying question could be e.g. "What were the important steps that made this succeed?" [Agger and Hoffmann, 2008]. There could also be asked which uncertainties the participants expect to meet during the process, where they have to define what they will have to do to avoid the uncertainties [Agger and Hoffmann, 2008]. By doing this, the participants can make a timeline of necessary steps, before the idea can come to fruition [Agger and Hoffmann, 2008]. Thereby it describes what is necessary to do first, second and so forth [Agger and Hoffmann, 2008].
By doing this, a potentially complex idea becomes more manageable for the participants and make clear and distinct steps and initiatives [Agger and Hoffmann, 2008]. Though to ensure the steps are handled it is necessary to define e.g. who should do what and when [Agger and Hoffmann, 2008].

It can then be clear for SGRE what is needed to achieve the ideas. This relates to the last step, *finalisation*, which is described below.

6.4.5 Finalisation

Lastly, after the ideas have been sorted, defined and structured how to achieve them, is it necessary to examine whether SGRE should prioritise resources, time, staff and more into realising them [Michanek and Breiler, 2005]. All the ideas are not necessarily valid at the current point in time and could be more relevant to initiate later, or when technology has developed further [Michanek and Breiler, 2005]. It will be relevant for the event facilitators of the event to consider the spaces, described in section 6.2.1 on page 27 when working with ideas.
When the participants move from the boundary work to the distancing work, the participants are going to consider how the idea will affect the field [Cartel et al., 2019], and how the idea relates to the company and their environmental work. This mindset helps in finalising the idea and how it might be implemented or resulting in prototypes for SGRE. Moreover, the tools *Backcasting* and *Thinking Hats* can also be beneficial in finalising the ideas. The blue hat specialised in combining and concluding on the idea(s), which is beneficial to ensure the ideas are structured and manageable. Furthermore, Backcasting is beneficial in defining potential needed steps to avoid potential pitfalls and defining the needed steps to achieve the idea.
Therefore, there are different ways to ensure the idea is finalised to create the prototypes or other needed steps.

By following the five steps for structuring the event, it can aid the idea generation, sorting, deliberation and finalisation of the innovation process and contribute to a beneficial system. There are other types of tools, besides these which have been described previously, which could also be beneficial for SGRE during their innovation event, though it also highly depends on which type of event structure they settle on.

An overview of the described event tools can be seen in table 6.2.

Table 6.2. Overview of the event tools.

Event tool	Usage	Icon
Defining the need		
Written handover	Defines the different aspects of the issue while allowing the participants to be inspired by the other participants' views and perspectives	
Idea generation		
Brainstorming	Create as many ideas as possible and build on top of other ideas	
The lotus flower	Pick an idea or association and create eight new ideas or association to delve deeper into an aspect of the issue	
Idea development and assortment		
Thinking hats	Thinking systematically to evaluate an idea based on different perspectives, by equipping different hats	
Defining and deliberating		
Backcasting	Defines which steps are necessary to be able to perform or achieve the idea	
Finalisation		

Based on the different event types and the event tools which can be utilised during an event, it shows there are many different options for SGRE for their events.
Though, it is important to note that the event needs to occur digitally, which is still possible with the events, through some customisation could be needed to ensure a smooth experience. Therefore, in the following section, are different considerations and relevant points regarding digitalisation noted.

6.5 Digitalisation

Events and event management can be designed in many different ways and utilise different tools to achieve their goals. Concerning SGRE and their goal for an innovation event, the usage of digital technology is needed to be able to perform this, due to the restrictions of COVID-19.
Based on the above-mentioned information in section 6.2 on page 26 is it known that events can be shaped in different ways and can be constructed to be performed digitally. Though there are elements that are important to highlight when conduction events online.

Drop outs of digitalisation
Employees can have different understandings and knowledge regarding digital technologies, which will influence how their "digital relationship" with technology and how they interact with it [Matser, 2017]. This might result in distancing the employees from the technology because they can't connect or understand it, which results in *drop outs* [Matser, 2017].

Teaching usage of digitalisation
To avoid drop outs is it pertinent to teach the employees how to use digital technology. Moreover, by knowing how to utilise the technology can the employees communicate ideas, creativity and innovate suggestions to the company [Agostini et al., 2020].
Though to achieve this, it requires continuous suitable training of the employees and ensuring that the given tasks can be performed using the digital technology [Agostini et al., 2020]. This is needed to ensure an early transition towards using digitalisation for innovative purposes [Agostini et al., 2020].

Creating a digital culture
Implementing the ever changing digital technology is difficult in any setting, which underlines the importance of creating a digital culture internally in the company [Matser, 2017]. The digital culture will be based on the preexisting culture, which is based on historic traditions, behaviour and rules [Matser, 2017]. The employees will presumably perceive this preexisting culture as certain and safe and will most likely resist cultural changes [Matser, 2017]. Though this is important to acknowledge and needs to be worked on, to ensure a thorough transition into a more digitalised culture.

Enabling change
Change is often presented as a preconditioned problem, because of the notion that people don't want to change [Matser, 2017]. This occurs when change is forced upon the employees due to e.g. importance or emergency. These changes will be perceived as negative and will not necessarily enable a positive process for future innovative activities [Matser, 2017].
Therefore, communication is important to highlight the need for change and to understand the potential concerns or thoughts the employees might have.

Physical activities occurring digitally
Because of the pandemic are individuals not able to meet physically in large groups, which is often recommended when conducting an event. Therefore, it is relevant to examine which elements from events can become digitalised and still result in beneficial outcomes. Kanstrup argued that to achieve active participation and beneficial results from a digital event, it would require the same structure and approach as a physical event [Kanstrup, 2021]. She argues that it is only the framework that has changed, so instead of having a physical blackboard, for note-taking, it could be a digital one [Kanstrup, 2021].
Therefore, the considerations and recommendations for how an event should be carried out still holds true, despite it occurring digitally.

When SGRE wishes to initiate the innovation event, there are different considerations they have to make, to ensure an advantageous process. SGRE have to understand what kind of digital culture they have internally and which potential changes are needed to achieve a sound starting point for the system. Furthermore, they will need to ensure that the employees are willing to change their mindset and embrace the new technological changes or events. Moreover, SGRE needs to teach their employees how to use digital technology and understand who and why some might experience drop outs and work towards avoiding this.

Final comments regarding the theories used in the report

Throughout this chapter have different elements been described, which is relevant for SGRE and the creation of a system to handle their environmental issues. This is both for creating the needed space for the innovation culture to occur, with events and tools to ensure the participants can work creatively and suggest environmental beneficial ideas for SGRE.

Innovation itself can be many different things and can be incorporated into a company in many different ways. This is often done based on the internal communication culture within the company, which dictates how innovation is seen and worked with. The researchers recommends that SGRE follow sustainable innovation, based on the requirements Jensen has described [Jensen, 2021]. This influences' the content of the system itself, which can also occur in many different ways.

To ensure an internal innovation culture is there are need to define the spaces and boundaries which are present within SGRE. Spaces is a way to view internal communication and the creation of ideas and new perspectives. This is relevant to consider, because a space can be created during an event, but also during a normal workday. Therefore, it is needed to ensure there is room for a continuous process, where the innovation culture is nurtured during these spaces. Adding to this is the aspect of barriers and the need to acknowledge and work with them, to ensure a respectful and understanding space for the employees of SGRE. Moreover, there is a need to create engagement for the employees of SGRE both before, during and after the event, to ensure they will partake in the different elements of the future system, instead of opposing it.

An event can be shaped in different ways and there are strengths and weaknesses related to all of them. Depending on the actual goal for SGRE can some event types be more beneficial for SGRE to utilise than others. Additionally, different tools can be used during an event, to ensure the creation of ideas, holistic examination of the idea and finalisation of the idea itself.

Lastly, the system has to occur digitally, which highlights the need for digital culture and ensuring that the employees of SGRE have an understanding of digital technology and how to utilise it to its fullest. All these aspects will help define what system for SGRE could become and which considerations are needed to avoid potential pitfalls, to achieve their goal and gain environmentally beneficial idea for their company.
In the following chapter will a structured system for SGRE be presented, with event types and tools which could be beneficial for them to use, within a specific system and planned timeframe.

Creation of the Sustainable Innovation Event System

7

In this chapter will the gathered information be analysed and discussed in relation to the research question and presented a chronological description of the required preparations to be able to perform the Sustainable Innovation Event System.

This chapter will focus on establishing the Sustainable Innovation Event System. This is based on the questions presented in chapter 3 on page 9, where the reports focus on creating a system for making a structured innovative focused event, to produce creative ideas or prototypes to manage both precise and wicked environmental problems.
This system is created to be used by different international organisations, whereas SGRE is one of the target group organisations. Due to the general nature of the system, it is relevant and needed for SGRE to modify the system to ensure its compatible with their current work structure, cultures and current environmental issues.
SGRE face varying types of environmental issues, whereas the issues change depending on which geographic location is in focus. Therefore, it is needed for SGRE to determine which environmental focus is most relevant for the participants for the event to focus on.

Thus, this chapter presents a systematic depiction of the Sustainable Innovation Event System that can occur digitally and for a large number of participants. This system is defined in relation to SGRE and is based on the knowledge gathered from the theories and used in the context of the requirements of SGRE to enable them to have a process where they work with their environmental issues.

This is conceptualised through two different aspects of the event. The overall structure, which was defined in chapter 3 on page 9 as the "*the Sustainable Innovation Event System*", shortly defined as "*the system*", that defines the scope of the events and preparations before the event occurs. The system is a structure that defines actions, themes and division of work, that are needed to ensure a continuous innovative process within SGRE. The themes should be general enough to have a broad scope, to include different issues, such as energy consumption, waste generation, water usage, transport optimising and more.
Inside the system is there "*The workshop structure*" which is the beginning, middle and end of an idea generation process. This means the decided theme and issue are presented for the participants, where after they work to generate ideas to handle the issue and submit the idea for assessment. During a workshop are multiple event types and tools utilised, to aid the idea generation. This means, that there are multiple workshops occurring simultaneously, with a certain amount of participants in each of them. Further description of the workshop structure can be seen in section 7.4 on page 55.
The workshops end after ideas are generated and gathered, and feedback has been collected. Implementation of the ideas takes place after this and feedback is used for the next iteration of the Sustainable Innovation Event System, which will take place one or two years later. Further description of the event can be seen in section 7.1 on the following page.
This means that during a year is a single event occurring with a specific theme, whereas multiple workshops work simultaneously across the entire company with specific issues concerning the overall theme. The following years are future events occurring with other themes.
In figure 7.1 on the next page can an overview of the workshop in the system be seen.

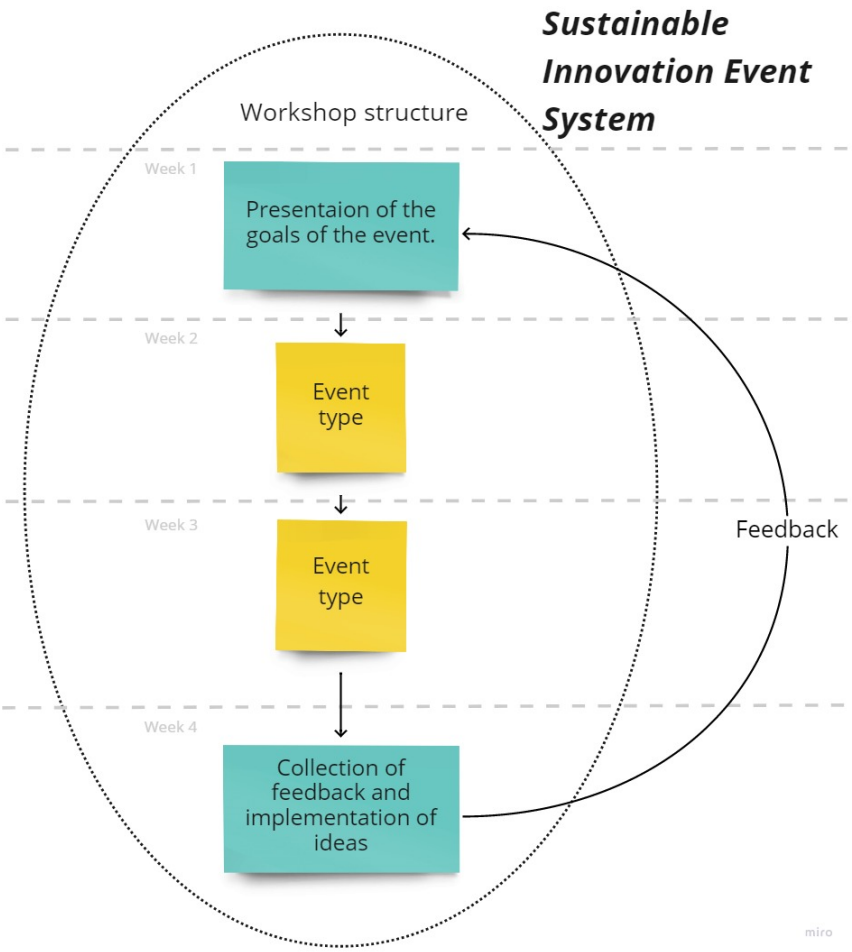

Figure 7.1. This illustration shows the event system and the workshop structure.

Therefore, in this chapter is the structure, performance and finalisation of the system presented. This entails defining the scope, goal, themes and field, after the workshop structure which specific combinations of event types and tools are defined to be able to work with specific environmental issues. Lastly, relevant points and future work is described.

7.1 Defining the field and goal

During the system are different tasks needed to be handled to ensure a successful workshops, when a plethora of employees from different geographical locations participates. It is therefore required different preparations to ensure that the workshops runs as intended, which can lead to the creation of innovative ideas for environmental issues. Therefore, the usage and understanding of innovation- and digitalisation culture needs to be established, to either establish them or to ensure the system can fit within the preexisting cultures.

7.1.1 Establishing an innovation culture

It is relevant to define what it entails when conducting an "innovation event" and what the specific end goal is. So far, SGRE has not presented a concrete plan for what the specific goal of the innovation event is, besides to improve the company's environmental impacts. To date, has the focus for SGRE primarily been on reaching carbon neutrality and in some

specific locations has there been a focus on waste and how to reduce it. However, these issues are but a few of the company's potential impacts and thereby does it not aid in defining which issues should be worked on in the innovation event.
Therefore, a recommendation would be to view SGRE global goals and relate these to local issues. This is to ensure a clear and transparent definition of relevance of why the issues should be worked on. An example of this would be SGRE's goal to become carbon neutral, which can be difficult for a general employee to relate to, however, if the issue was presented as "how to modify a production line to reduce fuel consumption?" Then the goal of becoming carbon neutral as well as highlighting the local connection to the participants, can make the issue more palpable.

Therefore in the system is it relevant for SGRE to be familiar with innovation and which kind of innovation type fits SGRE overall goals. As Jensen described SGRE wants to work innovatively with a focus on the environment and circular economy [Jensen, 2021], though Heilmann argues that SGRE has a current primary focus on technological innovation [Heilmann, 2021]. Heilmann argued this due to the heavy focus of their primary production, wind turbines, and the improvement of the production [Heilmann, 2021]. She adds, that the focus of innovation also depends on the specific work, which differs internally SGRE [Heilmann, 2021]. Therefore, Heilmann argues, that the innovation focus throughout the company should be different, to cater for the actual work and needed focus [Heilmann, 2021]. This also relates to SGREs usage of open innovation, where Heilmann highlights that it is used in collaboration with external stakeholders, which usually consists universities [Heilmann, 2021].
Based on this, the researchers of this report have chosen to focus on sustainable innovation, due to the focus on the different potential impacts of a products life stages [Altenburger et al., 2018]. Thereby, concerning SGRE, could it be the design, creation, maintaining and disposal of e.g. the wind turbine wings. Moreover, sustainable innovation has a focus on sharing knowledge between individuals, which would be useful for a large company, like SGRE, with many different types of knowledge [Altenburger et al., 2018].
It could be argued that other innovation types could be relevant to consider. This is because, depending on the approach of creating ideas and prototypes could technological innovation be more suitable, to be able to match the demands with the market. Through, to ensure the focus stays on the environment and the related issues in SGRE can it be argued that innovation with this focus is relevant. Moreover, it can be questioned whether a single innovation type is occurring within SGRE. This is because of the size of SGRE and their employees, which is spread across the world. It can be argued that a company this big could have differences, which could affect their approach to innovation and how to work with it.

With an innovation focus decided can SGRE focus on how to establish or reaffirm an innovation culture. This is to ensure the employees know how to work with innovation and the creative process. Both Jensen and Heilmann acknowledge the existence of an innovation culture, though they argue that they do not have a comprehensible understanding of the innovation culture internally in SGRE [Jensen, 2021; Heilmann, 2021]. They argue other employees within SGRE works on maintaining an innovation culture [Jensen, 2021; Heilmann, 2021], though they do not know to what extend. It can be questioned how the innovation culture can be affected if there is no agreement or uniform structure of how and what an innovation culture is?
Moreover, no matter which innovation culture there is within SGRE, can it still be questioned how the innovation process and view of failures are handled. Tangible ideas are time- and resource-consuming process and might not yield result the first time [Kanstrup, 2021; Marzocchi and Ramlogan, 2019]. Moreover, as described in 6.1 on page 22 is failure

an interacted part of innovation and needs to be accepted. Thus, failure should be seen as a learning opportunity and not as wasted time.

Concerning the innovation event does SGRE need to know how to highlight these aspects to the employees throughout the workshop process. This means, highlighting to the employees the focus of the innovative process, as well as how to best enable creative idea-generating. Moreover, during the workshops should the employees be reassured that they are not forced to produce a final idea, rather that they are encouraged to delve into the environmental issue and how best to generate solutions for it. Lastly, after the workshops should SGRE reassure the employees that the innovative process yielded results, no matter if there was created finalised ideas or if the ideas were not implemented, since these will strengthen and aid future workshops [Kratzer et al., 2017b].
If SGRE follows this can an innovation culture be established and ensures that the employees have a continues creative idea process. To enable this innovative process can digitalisation be suitable to reach the employees throughout the company.

7.1.2 Utilisation of digitalisation

A goal for the SGRE innovation event is to engage participants and to have as many of their 26.000 employees contribute with ideas as possible. The more participants which can actively participate in the system, the more is the likelihood that innovative ideas will submerge [Hopkins, 2010].
It was argued in 2.2 on page 3 that digitalisation can aid an innovative process and can create new opportunities, such as enabling communication across great distances. Though, it was also highlighted that there are potential challenges related to digitalisation, as described in 6.5 on page 44, which SGRE needs to know how to handle when following the system and workshops. Therefore, SGRE needs to understand digitalisation and the level of knowledge of the employees, as well as how to enable the employees to reap the benefits from digitalisation and not the disadvantages. This entails teaching the participants how to use digital technology and creating or maintaining a digital culture. This is to ensure that the participants know how to use the technology available for them, to such an extent that it can aid them in the innovation process and not hinder them. This is because it can not be expected that all the employees of SGRE has an understanding of how to use digital technology [Dalsgaard, 2021]. Moreover, having a digital culture allows for maintaining an understanding of digital technology. This allows for the integration of new digital tools, to aid the system and creative process'. This is useful for SGRE to know, to be able to tailor the system so it fits the participants digital understanding. At the same time, SGRE needs to understand the usage of digital platforms and how to use the available technologies to aid them in the execution of the system. Lastly, this focus can aid the participants to avoid dropouts of digitalisation, which would be an obstacle for having successful digital workshops.
If this occurs there could be a potential to use the digital tools in the system in a physical setting to improve engagement and limit the disadvantages of conducting it purely digitally, as the participants could find it easier to communicate face to face. This depends on what the future restrictions of COVID-19 or other social restrictions will be.

SGRE should be able to utilise digital technologies to improve the communication process. Having a conversation digitally can result in more inputs, but it all relates to the process of how it is conducted [Kanstrup, 2021; Heilmann, 2021]. If participants are thrown into a system without information and preparation, then it will potentially have a negative effect on the success. In the end, it is not digitalisation and its tools which determines the success of the system, rather than how it is implemented [Kanstrup, 2021].

7.1.3 Defining the frequency of the workshops

SGRE wants the workshops to occur yearly or every second year, which have arguments for and against it. If the workshops occurs yearly, it can be argued that the employees of SGRE are exposed to innovative thinking and creative mindset more often, and thereby it would aid in maintaining an innovative culture [Kratzer et al., 2017b]. Though conducting the workshops yearly can be assumed to be costly and requires hours of preparations, execution and post-processing of data and inputs. Thereby, it can be argued that to ensure sufficient time to conduct the needed actions, the workshops occurring every other year could be more beneficial for SGRE. It depends on what and how SGRE conducts and shapes the workshops. It is recommended by the researchers of this report, that the workshops occurs yearly, to ensure the creation of a innovative process, where the employees learn to continuously look for potential improvements.
Lastly, because of the uncertainties of the system when implemented into SGRE does it highlight the need for a structure set in place to promote the idea-generating. This is to ensure that the employees can be encouraged to think outside of the box and think creatively and solution-oriented, to work focused on the environmental issues within the company.
Therefore in the rest of this chapter are specific steps described of the preparation, execution and finalisation of Sustainable Innovation Event System, which SGRE could implement and modify to fit their needs. One of the major steps is defining who should be the moderator that aids the participants throughout the workshops.

7.2 Defining the moderators

The moderator role aims to enable open discussion amongst the participants, while simultaneously manages potential problems or disagreements to enable a space for creative innovative thinking for the participants. The moderator thereby needs an understanding of innovation and the overall environmental goal for SGRE, while also understanding the usage of event types, event tools, spaces, engagement and digitalisation. It is therefore relevant to question who could fulfil this task and in what department they belong within SGRE.
The researchers of this report recommend that the moderator role is delegated to the location-specific employees for a number of reasons.
Firstly, by having the moderators working within locations where they are familiar, it can be assumed that they have an understanding of the location-specific issues and what needs to be focused on. If there are uncertainties or a lack of data, it is assumed that the moderator would be able to collect the needed information from the knowledge holders, due to the moderators' connection to the location. Though, having the moderator work locally can also lead to strengthening potential biases or the "what we're doing is the best"-attitude, though it is assumed that the moderators would want to minimise environmental issues and would therefore look past their own biases.
Secondly, it is assumed that the moderator understands the preexisting dynamics and communication culture. This knowledge can aid the moderator in shaping how the workshops should occur, to ensure that the creative process happens on the participants knowledge level.
Lastly, the moderator could be the manager of a department within SGRE. It could be argued that having a manager from a team to be the moderator, would increase the incentive and reasoning for working on the company's environmental issues, instead of having an outsider arguing for the same. This would also aid in establishing order during the workshops because it can be assumed that a manager is capable of maintaining structure and focus during meetings and more. Though, having a manager as the

moderator could also lead to restraint from the participants, because they could be waiting for reassurance from the managers, for ideas, perspectives or others. This could also occur, if the manager participated in the workshop. Therefore, an general employee would avoid this and instead potentially aid in a free and open discourse about environmental issues. Therefore, the researchers of this report would argue that a location-specific general employee would be fitting for the role of moderator within SGRE. This means that the moderators would have to undergo training, to be taught how to lead the workshops successfully and understand which event types and tools are available, and the different associated advantages and disadvantages. They also have to understand the long-term goal of improving innovation internally amongst the employees and the prospect of running the workshops in the future. This is related to an important task of the moderator: To create an overview of the issues and thereafter define which environmental issues should be worked on during the workshops, with specific event types and tools. This can result in relevant and concrete issues, which the participants of the workshop can work on. Though it can also lead to uncertainties regarding prioritising the most urgent environmental issues. If this occurs the moderators should seek guidance from their management or local environmental experts, to ensure that the most urgent issues are handled first.
Moreover, the moderator needs to understand spaces, engagement, barriers, event types and tool. These aspects should be taught to the moderators by experts from SGRE or outside stakeholders if needed. Therefore, the last required skills the moderator needs will be described below.

7.2.1 Using spaces to increase engagement and remove barriers

As mentioned in section 6.2.1 on page 27 will the work created around experimental spaces be useful for SGRE. The use of boundary and distancing work is important for getting their employees to be creative and work intuitively with solving problems in the company which they potentially haven't previously considered. Thereby can the innovation culture be supported and ensured a continued process. Experimental spaces can also be seen as the way to grant the participants a space in which they can openly communicate, however, this task is also very important in the assignments, which the moderator has to manage. The moderator has a lot of influence on the anchoring work and how the ideas in the field are supposed to be incorporated into the field of the company. During the workshops will there, through anchoring work, need to be some sort of understanding that the ideas generated here are not just for the duration of the workshops, but that after the workshops will there have to be a continuation of "idea-curation" and implementations taking place. The ideal is that the employees will repeat the process and thus be trained in the mental exercised that take place and become better and more efficient in the upcoming workshops. There is no given that the workshop will be a success the first time around. Rather it seems according to the theory that the first time most likely will be a failure, as the process of improving the innovative approach is a learning process. It is therefore important to keep up the workshop and run them in regular intervals so that the participants can bring their experiences out into their everyday habits and gather new inspiration for the next workshop. In relation is it relevant for the employees to be encouraged throughout a workday to engage in innovative thinking with their colleagues to maintain the habit.

Though the potential of failure and change in habit might result in barriers for the participants, as well as other potential barriers. As mentioned in section 6.2.2 on page 29 are there both intellectual and emotional barriers, which can prevent the participant from partaking in the workshops or from having a beneficial process. This can stem from disbelief in others or their own capabilities or fear, anger or other emotions. Likewise, time constraints or shortage of resources can lead to barriers, if the employees feel they do

not have time to finish their tasks or do not have the resources to achieve their own goals. It is important that the moderator speaks with the participants and define any potential barriers and work with the participants to remove these. However, the moderator should not push unwilling participants to actively participate as this can lead to unwillingness and ultimately reduce the engagement among the participants [Participatory observer, 2021; Jensen, 2021]. Therefore, the moderator should determine how to incorporate the participants, without creating new barriers or strengthening preexisting ones.
Within SGRE is the removal of barriers especially important in relation to the employees feeling overlooked, when previously suggesting improvements for the company [Jensen, 2021]. Thus, the moderator needs to acknowledge this and work towards ensuring the participants that their work within the workshop will not be forgotten or ignored by the management. Else, this preexisting feeling will have a negative impact on the process and prevent the participants from creating and submitting the ideas. Jensen argued that it is important that the participants reserve praise or other forms of recognition from their work to avoid this [Jensen, 2021; Heilmann, 2021]. Heilmann also argues that economic gains could be a beneficial to increase engagement for the workshops [Heilmann, 2021]. It can then be argued that the management has to change this mindset and reaction to their employees, though it can be questioned when this change could occur.

To avoid barriers is it relevant to increase the engagement of the participants, to ensure the participants want to partake actively and feel emotionally invested in the process. It is relevant to make the participants feel empowered and that their time is spent on something worthwhile. This is therefore needed for the moderator to highlight the relevance and connection to the participants' everyday work and the positive influence on the environment.
This engagement can occur in the form of inclusiveness or other social parameters which can work better on some people, rather than others. This means that the moderator needs to know how to engage the specific groups of participants and how best to achieve engagement. A way to engage the participants is through gamification, as described in section 6.2.3. Gamification can be used to help engage participant on a digital platform by including elements such as polls, quizzes, team exercises, leader boards, pattern recognition or point systems where participants are rewarded for active participation or the contribution of great ideas. This can be based on different categories which involved the environment or how implementable the idea is. Additionally could digital badges be used to show other employees that they have partaken in workshops, submitted ideas or others. However, gamification can very easily be off-putting for some participants as they can potentially feel targeted or insufficient [Kanstrup, 2021]. This is especially important for cultural differences when implementing gamification into the different departments within SGRE. Both Heilmann and Dalsgaard describes that they are familiar with this and had varying levels of success with it [Heilmann, 2021; Dalsgaard, 2021]. If gamification can be done with humour then it will have a higher chance of succeeding with several participants [Kanstrup, 2021].
Though it again depends on how the participants react to a specific type of gamification, which the moderator needs to define. Other types of gamification will be described further in the specific structure of the workshops, beginning in section 7.4.6 on page 64.

7.2.2 Summery of the moderators required skills

This chapter has described different requirements for the moderator and related considerations with it. These steps are necessary to ensure a streamlined process of the system. An overview of the different steps can be seen below. The moderator needs:

- An understanding of event types and tools, as well as the benefits of different combinations of these.
- An understanding of SGRE global environmental goals and the local environmental issues, to be able to priorities and select issues for a workshop.
- To establish or support a preexisting innovation culture.
- To establish the participants' knowledge and utilisation of digital technology, so they can partake in a digital workshop without issues, to avoid dropouts.
- To increase engagement and remove barriers of the participants, through e.g. gamification and praise.

These skills could seem overwhelming, depending on the specific moderators knowledge level. Though it is important to note, that it is not expected that the moderator is an expert on these from the beginning. It is expected that the moderators have a general knowledge of these elements and then in the future become more experienced with the different skills. With the moderators selected and trained can the participants be defined.

7.3 Defining the participants

As previous defined is SGRE a company with many international employees, where one of the requirements was that all the employees must have the opportunity to attend the workshops. This means that they will have to be divided into smaller teams to be able to partake in the workshops effectively and to ensure clear communication handled by the moderator.
It can be questioned whether an event for 26.000 employees, where all of them participate, is realistic and doable. Though it can be argued that with the necessary resources and time, this goal could be reached. Moreover, there is a varied level of knowledge of environmental issues and how to manage them, internally in SGRE [Dalsgaard, 2021]. This means some employees could benefit from more knowledge regarding this, which Dalsgaard argues there are already some incentives for [Dalsgaard, 2021]. This is another argument for ensuring that the issues are relatable for the employees and that potentially could all the employee qualify for participation.
The grouping of the participants is suggested by the researchers of this report to be grouped in their preexisting departments within SGRE. This means employees from a production is put together with others from the same production. There are arguments for this grouping. Firstly, employees from the same production have a mutual understanding of local issues, based on their work experience. Moreover, with help from the moderator can the employees connect their local issues with the global issues and create relevance for the participants. Secondly, it can be argued that the employees are experts within their fields. Therefore, it can be argued that the employees have the necessary knowledge regarding the issue to analyse critically the issue and how to potentially avoid or minimise it.
Lastly, due to linguistic and cultural differences would it be recommendable to combine employees with the same cultural background. This is because there are different ways of work, communication and more, which might not be compatible with other types of work culture. This is also recommendable with the moderator because they could structure the workshop to fit within this culture.

Based on these elements is it recommended that the grouping of employees are within 20-25 participants per team. This is due to the event types, defined in section 6.3 on page 31, because these types are suitable to teams of these sizes. Additionally, it could also be considered to divide the teams into smaller sub-teams to allow for immersion of different aspects of the same issue, e.g. when performing the written handover, Dragon's Den or other event types or tools.

It would be beneficial to mix employees from different teams together after the workshops has run a few times or if a specific situation occurs repeatedly. This also opens up the opportunity to change the dynamic of the individual teams from year to year if this is needed. It could be questioned if the most beneficial results will be gained if the teams are divided into their respective departments or if they should be mixed around e.g. have teams in certain factories consist of both white and blue-collar workers. This choice is something the moderators at SGRE can decide for themselves. Thus, the employees can be a part of figuring out what is the best way to address local problems as a way to minimise global issues as well.

Overall, by following the system defined in this chapter can SGRE define who their moderators are and what they need to know to be able to perform workshops with a focus on the company's environmental issues. The structure of the workshops itself also needs to be specified, which will happen in the following section.

7.4 The process of the workshops

When the moderators are educated and the environmental issues are discussed and prioritised, are the preparations completed. Then the definitive workshop structure can be defined. The system is comprised of a beginning, execution, finalisation and collection from the workshops, where different steps will be performed. Therefore, the system consist of four different weeks with varying focus:

- Week 1 - beginning of the workshops with a presented issue
- Week 2 - continuation of the workshops with focus on defining the issue
- Week 3 - finalisation of idea creation with focus on defining a solution
- Week 4 - collecting ideas for implementation and feedback from the workshops

The four weeks are structured to be able to be performed purely digitally, to comply with the restrictions of COVID-19. Though, when performing a digital workshop it is recommendable to not extend beyond 2,5 hours, to ensure that the participants do not experience burnouts during the workshop [Heilmann, 2021].

Week 1 - beginning of the workshops

The primary focus of week 1 is to establish which specific environmental issues should be worked on throughout the workshops based on the overall theme. Then an introduction to the workshop structure for the participants of the workshop should occur. The issue is chosen by the moderators and local environmental specialist. The participants are not included in the decision-making process, of which issue there should be worked with. This is to ensure overall agreement and defined structure for what issue should be worked with first and to ensure clarity for the participants, so they know what they can expect from the workshop.
It is relevant for the moderators to bring the environmental issues on a global scale down to a more manageable local level because these elements could be difficult for the participants to relate to. Especially regarding the participants understanding of sustainability, what issues are prominent, what they hope to get out of it or even what challenges they see in the success of the workshop can be very insightful to the moderators as they can try to make some preemptive measurements to limit the barriers of engagement. The the chosen issue should be relatable for the participants and prepares them for the upcoming weeks. This can be done by starting discussions regarding the issue and what elements of the issue itself is relevant to focus on. This gives the participants something to think about as a preparation for week 2 and 3, where the actual work with the issue begins. It can be argued that the presentation has to occur in a separate week from the idea generation,

to ensure time for the participants to think about the issue and how the issue is affecting them and their work.
To handle the environmental issues and define what the participants should work with, is described further in section 7.4.2 on the next page.

Thereafter, the employees will be presented via either a video or a type of conference where the overall environmental goals of the workshop will be presented along with the hopes of improving the innovation culture in the company and focus on using digitalisation to improve these. This is also where they have presented the issue which they are to work on within the following weeks. Jensen argues that it could be relevant for the local leader of the department to present how the issue relates to the participants, to create a relation from the issue to the participants [Jensen, 2021]. If the event is presented by the CEO of SGRE, then most of the employees will see it as unimportant as it is another goal of the company of SGRE [Jensen, 2021; Participatory observer, 2021]. There could therefore either be extra videos made to present the issue specific to various locations, so the participants get to see their local manager talk about the importance of this task [Jensen, 2021]. This could raise the participants' sense of importance and may lead them to take the system more seriously and focus on bringing new and implementable ideas to the table during the event types of the workshops. The videos could be shown live during one of their global digital meetings for all SGRE employees or sent out via email, to allow participants to watch it when their schedule allows it.

Week 2 - idea generation in the workshops
During week 2 is the focus on generating ideas for environmental issues. This will be done by performing event types and tools in unison in the different teams with a moderator. The moderators will have to ensure that the participants can work with the issue without feeling pressured to construct a finalised ideas and removing barriers. This relates to digitalisation, where the lack of physical connection can have a negative effect on the process [Heilmann, 2021], however, many different tools and gamification methods are very useful to work with online [Kanstrup, 2021].

Week 3 - finalise idea generation during the workshops
The focus of week 3 is to finalise the idea generation and result in two different types of ideas: Either finished ideas which can be shaped into prototypes that can go through a test run in SGRE or idea which can be worked on further before implementation can occur. This means that the workshops can produce potentially "completed" ideas or ideas that can be worked on further in future workshops potentially. The event types and tool can differ from week 2, to ensure smooth finalisation of the ideas.

Week 4 - collecting ideas and feedback from the workshops
During week 4 should the space be closed and the moderators evaluates the system and workshops. This is because the ideas have to be anchored in the company, which this week focus on. Moreover, is the focus to collect the ideas and define what ideas can be implemented into SGRE.
Firstly, having the participants evaluate of the process of the workshops and the system. The moderators will have to take notes of the process and take them into account for the next round of workshops and see what can be done to improve the process. It can become necessary to change the workshops and how they run, as it otherwise could become too repetitive and engagement can decline. However, there shouldn't be too much of a difference either as the participants will have to learn an entirely new system in the future. This would contradict the goal of teaching the participants the system, so they can become more experienced in the process and thus become more effective.
Secondly, the generated ideas have to be assessed, approved and implemented into the

related department within SGRE. If there are non-finalised issues after the workshop, it is relevant to consider continuing the work on the issue in future workshops. It is relevant to have a clear definition of how the ideas are to be assessed, implemented and tested in SGRE, which will be described further in section 7.5 on page 65.

7.4.1 Duration of the workshop

The workshop is designed to occur during a few hours within each week, where the participants and the moderator performs the specified steps for that week. This will allow ample time to perform the step within one day and to have time, to let the experience and information sink in before beginning on the next step in the workshops, which could also strengthen the distancing work.
Having the workshops take four weeks was to allow the participants to have more time in-between the different weeks of the workshops, to have a break and get inspired in their daily lives. Having this break means that the moderators can have more time to prepare the next part of the workshop to cater it to the outcomes and discussions which took place in the previous part of the workshop. However, it is possible to have the entire event take place during a single week or even a long day, perhaps with the exception of the step including the collection of feedback. This could have its advantages and disadvantages as it can significantly shorten the time frame of the workshop structure and requires fewer resources, but it can also become overwhelming for the participants and rush the idea generation and discussions. Some elements of the workshop can be shortened. For example, can the presentation in week 1 take place during week 2. The advantage of presenting the issue and theme in week 1 means that employees will have more time to gather inspiration and think about ideas for week 2, but too much time should not pass either, as the participants will forget what the purpose of the workshop was in the first place [Dalsgaard, 2021].
Alternately could the entire structure for the workshop occur within the same week, thereby having four days within the same week to perform all the steps. Though this does not allow time for immersion, however, it does allow for a condensed and speedy completion of the workshops.

7.4.2 The categorisation of the environmental issues

Based on the presented theme(s), which is intended to establish the corporate goals, then the moderators will have to translate these into location-specific issues to see where they can aid the corporate targets. Environmental issues are diverse and should be handled differently, to ensure the innovative handling of them fits the issue. Therefore has four different structures for environmental issues been defined, with described characteristics. These structures have defined event types and tools, which can be useful in creating innovative ideas for that specific issue type. These structures can aid the moderator in determining what kind of issue and event types and tools they should utilise.

Strict structure

This structure can be defined as *specific local problem that needs specialised and local solutions*. These issues are closely connected to the employees of an e.g. production plant and the issues are very relatable for the employees to work with. It can be argued that the ideas generated during this workshop can result in local implementations, which might or might not be implementable in other parts of the company, due to its specific local focus.
Some examples of an issue for a strict structure could be: Reduce electricity consumption in a given process of production, reduce CO_2 emissions from waste

trucks or reducing the amount of waste from a specific fraction at a plant.
To select similar issues has three elements of the issue type been defined:

* Specific local problems with few additional aspects of uncertainties.
* Ideas generated here are often only implementable within working scope of the participants.
* Issues are relatable and concrete for the participants

Moderate structure
This structure can be defined as *local problems that need planned structures and solutions*. These issues are also closely connected to the employees, though with an aspect of the uncertainty of the preferred outcome of the issue. These issues are local in scope and related to a specific location, though there can be uncertainties regarding where in the e.g. plant the improvements potentially should occur.
Some examples of issues for a moderate structure could be: reducing a percentile of waste from a product, such as the wind blade, identifying sources of spillage or reducing emissions related to transportation of materials and final products.
To select similar issues has three elements of the issue type been defined:

* Specific local problems with additional aspects of uncertainties.
* Ideas generated here are often implementable within the working scope and other related areas of the participants.
* Issues are relatable and concrete for the participants

Mild structure
This structure can be defined as *global problems which need visionary solutions*. These are issues that affect the broader part of SGRE, which needs structured visions and descriptive steps for how to handle the issue. This means that the issues might not be handled quickly, but rather on creating a planned vision for the future.
Some examples of issues for a mild structure could be the problem of creating a structure to phase out landfill waste from wind turbine blades or reducing emissions by 50% for an SGRE plant. It could also be about how to manage the demolition of wind farms near the danish coast in more environmentally friendly manner.
To select similar issues has three elements of the issue type been defined:

* Global problems and goals with additional aspects of local context.
* Ideas generated here are often focused on planning for issues in the future
* Issues are relatable but abstract in their nature.

Lenient structure
This structure can be defined as *wicked problems*. These are not easily definable and are affecting SGRE in their entirety. These issues could take decades to manage and needs to be handled to follow the societal development in terms of environmental focus.
Some examples of issues for a lenient structure could be: finding ways to reach carbon neutrality before 2050 or complying with the UNs SDGs and comply with Agenda 21. To select similar issues has three elements of the issue type been defined:

* Global problems and goals which affect the entire company.
* Ideas generated here are often focused on solving a long term issue and may not be implemented the first time it is proposed
* Issues are abstract in their nature.

These structures are a guide for the moderators for how to define their environmental issues. Because of the potentially diverse nature of the issues, it could be difficult to boil an issue down into three distinct points. Therefore, an issue can fulfil only two of the structures points or share an element from another structure. This means, that the moderator needs to determine which aspect of the issue they feel is most relevant for the participants, such as the variety of local to global, or abstract or defined issue. Additionally, the specific workshops structure could also aid the moderator in choosing which issue structure to pick, if there are uncertainties.
The workshops for each of the issue structures can be seen on figure 7.2, to create a guide for how to create system to generate ideas for environmental issues.

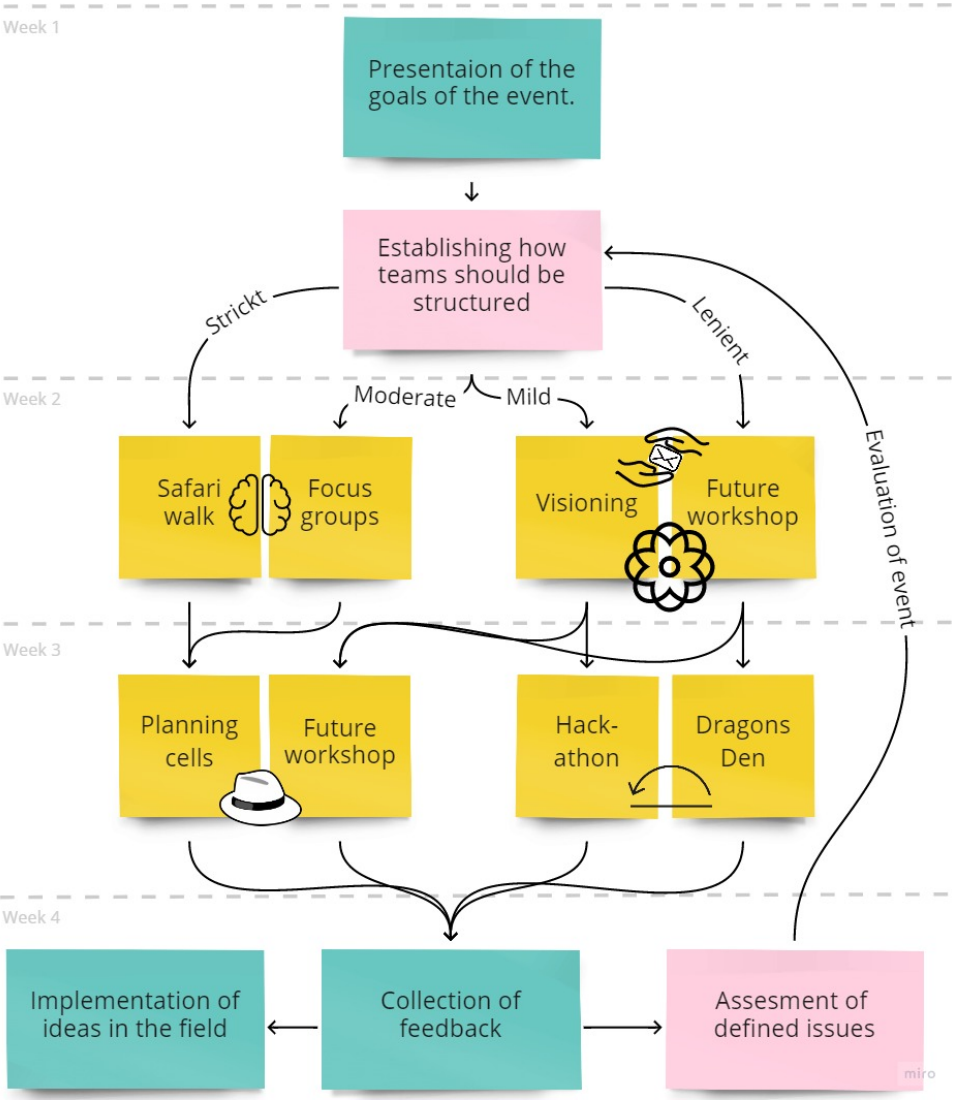

Figure 7.2. Overview of the system with the four issue structures.

When presenting the issue structure and related workshop structure, it is relevant that the moderator does not overwhelm the participants by including too many different types of event or tools as it can confuse them and make them unsure of how to proceed with the tasks at hand. Various combinations of the workshop structures can maximise the potential gain from the workshop, depending on the specific issue or team of participants.
The following workshops structure been constructed to comply with the requirements set by SGRE.

As figure 7.2 shows, each of the four weeks are highlighted, which the necessary steps or event types for each week described in the boxes. Next to each of the yellow boxes, are pictures of the utilised event tools, which was described in table 6.2 on page 44. Sub-question 1 describes which type of event could be beneficial for SGRE, whereas in the following pages are different suggestions for how SGRE can utilise event types and tools for work with their environmental issues in an innovative way.

7.4.3 Strict structure

This event structure is recommendable for the teams who work with specific problems which are already determined.

This structure is useful for participants who are used to work with very defined tasks and problems and can work towards targeted solutions. The moderator, therefore, has to be very precise in the presentation of the issue of the workshop and make sure that participants can be able to work with it in a way that allows for immersion and open communication. If the chosen issue fits into this strategy, then the moderator starts the preparations to make a safari walk.

- Specific local problems with few additional aspects of uncertainties. - Ideas generated here are often only implementable within working scope of the participants. - Issues are relatable and concrete for the participants

Table 7.1. An overview of the strict structures definable characteristics.

Week 2: Safari walk with a brainstorm.
The primary focus of the safari walk is to enable dialogue of an issue, which is relevant for the participants. This can be achieved by a safari walk because specific physical aspect of the company can be shown to the participants. This is especially related to employees who work within the production. Here, the moderator can highlight specific aspect which the participants should talk about and focus on improving. Digitalisation can be a great way to visualise these issues if they occur in hard to reach places.Here can videos and photos be used as a replacement for the physical location and be a part of gamification to engage the participants in e.g. a game of spot the difference. Digitalisation can also be a tool to aid in boundary work where employees can easily disconnect from their social roles and take a more rational stand on issues where they might usually act biased.

If the safari walk seems unsuitable, then could other dialogue events also be used, but they all focus on mental images or perceived understanding of an issue. The

strength of the safari walk is that a clear issue can be presented and worked with. This means, that the participants can focus their energy on the improvement or change, to achieve an innovative process and environmentally friendly result.

During the safari walk would it be beneficial to use the brainstorm tool. The benefit of using these tools are they view the issues both from a positive and negative angle, as well as aid in understanding the issue, while simultaneously allowing the participants to incorporate related aspects of the issue into the discussion. Other tools could also be used during the process, although it is important not to overdo it, as it can confuse the participants and unnecessarily complicate the process.
By doing this should the employees be informed and enabled to be able to discuss the issue and be ready to create innovative ideas on how to handle it.

Week 3: Planning cells with thinking hats.
During week 3 will the discourse and generated ideas continually be worked on with planning cells. They are useful for discussing the issue and creating ideas or defining needed data before an idea can be reached. This enables a certain level of concept creation for the issues, with the result of the planning cell being a report or document describing the issues and more. This could be describing the potential solutions for the issue or describing which initiatives is needed to create the needed data to be able to create ideas for the issue. The thinking hats are relevant to use with this event type, because it highlights potential pitfalls, which could be relevant to gather more information about. Gamification can play a role here in the form of actually bringing in items which can be interacted with and using visual design in the final report, which has to be presented to the management in the end of the event. If the event is taking place on a digital platform such as Microsoft teams, then the "change background" feature can act as a way to change the colours of the screen and show who is wearing which hat. By following this structure can the participants become more engaged and potentially more willing to try other event types and tools in the future.

7.4.4 Moderate structure

This event structure focuses on establishing a thorough understanding of local issues, with some uncertainties. These issues have elements which relate to both the participants direct workplace and work performance. With this structure will the moderator prepare a focus group.

- Specific local problems with additional aspects of uncertainties. - Ideas generated here are often implementable within the working scope and other related areas of the participants. - Issues are relatable and concrete for the participants

Table 7.2. An overview of the moderate structures definable characteristics.

Week 2: Focus groups with a brainstorm.
The focus group specialises in promoting dialogue for the participants and gives time to work with the issue to understand the different aspects of it. Moreover, so they can understand the need to work with environmental issues in relation to their daily tasks. Other dialogue specific event types could also be used, though they do not share the same scope as the focus group. The visioning event type, focuses on the future and how to achieve it, however, this can sometimes prove to be too abstract.

Safari walk is especially suitable for specific physical issues, though it has potential to lock the participants into at narrow mindset of potential issues to work with.
By using the focus group it allows the participants to focus on the issues aspect which interest them the most and thereby increase engagement. Engagement can also be promoted with the use of interactive visual designs in the form of online whiteboards or other digital tools. In focus groups are the participants divided into smaller sub-teams where they participate in small challenges against or with each other, to ensure that all feel a sense of accomplishment at the end of the workshop. Like the strict structure, is brainstorm suitable for the focus group and can aid the participants in viewing the issues both from a positive and negative angle. Other tools, such as hand over, could also be useful for defining specific issues with which the participants could work with.

Therefore, during week 2 is the focus to find and work with the issue which the participants find the most engaging or interesting to work with. Hereafter, the participants are able to work in greater detail with the ideas or suggestions for the issue.

Week 3: Planning cells with the thinking hats.
This week focuses on continuing on the discussed issues from week 2, through the use of the event type planning cells. This event type has been discussed in the previous structure, and will generally follow the same principles. Likewise are the thinking hats used to achieve similar results. The outcome of this structure is also likely to come in the following structure

7.4.5 Mild structure

This event structure is suitable for the participants who want to work creatively and in a less strict structure, by visioning the future.

The problems which are proposed in this structure needs more planning than the other structures. The benefit of this structure is the focus on having a vision and then bringing it down to relate to the inner workings of the factory [Dalsgaard, 2021].

- Global problems and goals with additional aspects of local context. - Ideas generated here are often focused on planning for issues in the future. - Issues are relatable but abstract in their nature.

Table 7.3. An overview of the mild structures definable characteristics.

Week 2: Visioning with written handover and lotus flower.
Visioning allows for abstract thinking and innovative perspectives on an issue. Opposite to the focus group which focus on the issue itself, does visioning allows for abstract thinking of the future. Moreover, the future workshop also focusing on creating a vision for the future, though it also focuses on creating a path to get to this vision. Visioning itself focuses more on the actual vision and how the issue can be shaped over time. The tools chosen are to enable comprehension of the different aspects of the issue. Firstly, using the written handover allows the participants to highlight diverse issues and showcasing them to the other participants. This tool can be used though HYPE or by using chat boxes internally in the digital plat-

form. Thereafter, choosing one or more specific issue can the lotus flower be used to expand on the issue and explore the different aspects of it. The lotus can be used digitally be having a excel sheet where the boxes are used as the flower petals. Thereby, a comprehended view of the issue can be established.

For visioning could the written handover and lotus flower be used to aid the participants in understanding the different aspects of the issue.
After the participants have worked with the issue and understood how a future could be shaped are there two different proposals for week 3.

Week 3: Future workshop with thinking hats or Hackathon with backcasting.
Depending on how week 2 has gone, could either a future workshop or Hackathon be beneficial to continue with.

If the participants are not finalised with working with the future vision could it be relevant to work with future workshop. This continues on the results from the vision workshop, but also continues to create a concrete idea for the issue. Thereby, this could ease the participants more smoothly into an idea creation phase. This style of event has the best potential of success when participants are able to work with each other in the same geographical locals. An alternative to this could though be the by dividing the participants into sub-teams and create digital "rooms" where participants can talk together in smaller teams. The event tool thinking hats are suitable for defining eventual disadvantages, benefits or emotional related aspects of the ideas for the environmental issue. Based on this can a concrete idea be finalised, while ensuring the different aspects of the hats are discussed thoroughly.

Alternately, a Hackathon could also be used if the participants have defined a specific issue they want to continue to work on. Hackathons are not very suitable to do online as they are often very intensive and time consuming. This event type does not fit very well into the system since it is recommended that digital meetings only last up to 2.5 hours. A way to work with this is to have the participants spend an entire day on the Hackathons with the use of games, scavenger hunts, team exercises and then log on the digital platform at scheduled moments to avoid becoming overwhelmed. Backcasting could be beneficial to utilise to aid the participants in defining the pitfalls of their ideas and define what is needed for the idea to come to fruition. Optionally the thinking hats could also be used here, though the hats focus on potential broad issues, whereas backcasting focuses on the specific parts of the idea. Dragon's den would not be suitable, because it focuses too heavily on evaluating specific ideas, which the participants are not ready for. Planning cells could be used, as described in the previous medium engagement event. Though it is relevant to highlight different events fitting for the engagement group, so the most suitable event can be chosen for the participants. Therefore, it is relevant for the moderator to discuss what the participants want and how best to engage them in the system by tailoring the event for the situation and problem.

By following these weeks can the participants focus on a specific aspect of the problem without the pressured to produce a final idea, if they determine more data or understanding is needed.
Another combination of event could also be used for the participants to increase engagement and idea generation, as it is far from certain that this particular

structure is the best fit for all types of participant groups and moderators. There is therefore made room for the possibility to change some of the aspects to accommodate the people who will have to work with the Sustainable Innovation Event System. This flexibility is therefore very prominent in the last structure.

7.4.6 Lenient structure

This issue structure is created for issues which are abstract and difficult to find solutions for.

The structure focuses on enabling the participants to create innovative ideas or suggestions for long term SGRE environmental issues. These issues can be directly derived from the overall theme of the workshop to allow for an open discussion about a wicket problem. This structure does not lead up to an easily implementable solution, and it can therefore be beneficial to work with this event structure multiple times before there is a working prototype of the idea.

- Global problems and goals which affect the entire company. - Ideas generated here are often focused on solving a long term issue and may not be implemented the first time it is proposed. - Issues are abstract in their nature.

Table 7.4. An overview of the lenient structures definable characteristics.

Week 2: The future workshop, with the written handover and lotus flower.
By utilising a future workshop it allows for concept idea creation and visions for how the future of SGRE should be shaped. If another event type fit better, then it is still useful to use other concept creation events, though these are suited for working with concrete issues and how to manage them, though without the aspect of the visions for the future. The tools; written handover and lotus flower, can be used to aid the participants in understanding the different aspects of the issue, which was also explained in section 7.4.5. Due to the nature of the problem is it recommended that the next week is also a future workshop, as it means the participants can spend less time on learning the event type and focus more on completing the tasks.

Thus, week 2 will produce a concrete understanding of the issue and of the future vision for the environmental issue. Finalising concrete ideas or prototypes are not the primary goal necessarily, because the third week is to work in-depth with the solution(s) for the issue.

Week 3: The future workshop continues, with the thinking hats.
The future workshop goes into its later stages and defines concrete ideas, aided by the thinking hats. Thereby there is more time to focus on creating ideas because an understanding of the issue and a vision for the future has been reached during week 2. This has been described in greater detail in the previous section 7.4.5.

However, after having gone though the workshop and an idea has been worked through the different steps enough times to be considered to have a possibility of being implemented, then the moderator can decide not to continue with the future workshop in week three and instead use the Dragon's Den.

Week 3: The Dragon's Den with backcasting.

If the ideas for solutions have been finalised and if the participants are more willing to discuss their ideas with the other participants could it be more suitable to use the Dragon's Den. Here, the dragons could be the management of SGRE, moderator or other related individuals. Then the participants can present their ideas and receive feedback.

During the Dragon's Den is it beneficial to use the backcasting event tool to highlight the eventual pitfalls or benefits of the ideas. By using this tool, the participants and the dragons can discuss how the idea can come to fruition and what they need to look out for, for the idea to succeed. Gamification can be used in the form of points in different categories such as: implementation, cost, resources, impact etc.
By using the backcasting tool and Dragon's Den together there is potential for both transparent communication of the idea and the potential changes. This event type also leaves ample space for praise and recognition for the idea generators. However, this is important for all ideas which are generated and not only for the ideas proposed in the Dragon's Den.

7.5 After the workshops

In this section will the required steps after the workshops be outlined. As described in the disclaimer in the chapter 3 on page 9, is this step not analysed in depth as SGRE already has multiple systems set in place to go through this step on their own [Jensen, 2021; Heilmann, 2021; Participatory observer, 2021].

The four different issue structures can aid the moderators to follow the system to create an innovative idea-generating process. The structures are a recommendation and thus it is still possible to change the contents of the workshops and still have the potential to get a beneficial outcome, but this is up to the moderators, who decide which elements are most relevant in their teams.
Moreover, it is relevant to note that the system can not necessarily produce the most beneficial or feasible idea the first time the workshops happens. This is because the participants could be unfamiliar with the innovative process and needs to be more experienced with it, before potential more advantageous ideas can be generated. Moreover, some issues could benefit from being worked on multiple times in the system, over the course of a few years. This is to allow for adequate time to work with an issue, which is especially relevant for the lenient issues, where it can be difficult to determine an adequate solution in the first try.
This supports the maintaining of the innovation culture, which is likewise relevant to sustain, when the workshops are over to ensure that the employees of SGRE continue to discuss potential ideas. This is relevant for sub-question 3, where continuous innovative development within SGRE is sought after. It can be questioned how to ensure an innovation culture is created or maintained, especially as Heilmann described that there is no uniform innovation culture across SGRE [Heilmann, 2021]. This is where the use of the experimental space can aid. If the three different types of work can be properly incorporated into the system can especially anchoring work have a positive impact on transferring the innovative mindset in the workshop and out to the daily life of the participants. An illustration of the system can be seen on figure 7.3 on the following page.

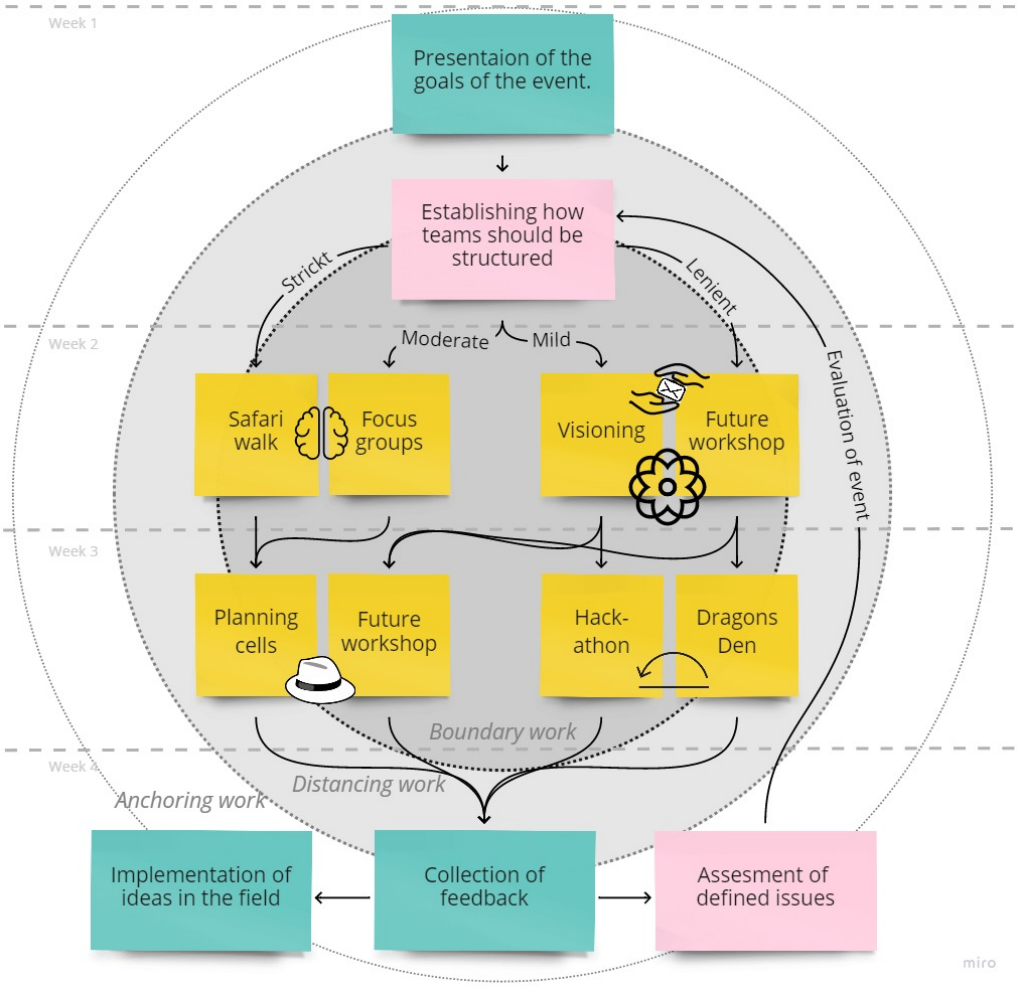

Figure 7.3. The final system structure with the theory of experimental spaces included.

The boundary work centers around the workshops themselves, but they are actually contained to the hours then they take place. The distancing work is the same, where every time the participants join the workshops they leave behind their preconceived ideas and participate in the workshop with an open mind. Then the anchoring work related to the entire system. While the system takes place is the ideal that the participants can still remember clearly all the discussion and findings, which were discovered in the workshops, but brings the information with them out into the field of the company.

After the workshops have occurred are a few step necessary to close off the workshops and prepare for the future iterations of it. During week 4 should the ideas and prototypes created during the workshops be collected and assessed. Moreover, the workshops should be evaluated by the participants to define improvements for the future. Lastly, should ideas which could be converted into solutions be implemented. As is can be seen in figure 7.3 are these steps included into the anchoring work.

Evaluation of the workshops

After the workshops are over should the entire Sustainable Innovation Event System be evaluated by the participants for potential improvements, which can be seen in 7.2 on page 59.
To create a smooth flow of a system, could it take time with trial and error, which means that evaluation after the workshops is needed to make sure that positive aspects are amplified and negative aspects are reduced. This is to ensure the best possible system in the end. The evaluation should hopefully occur as a part of the dialogue between the moderator and the participants, both inside the experimental space and outside of it. The moderators then have to reflect on the feedback they got from the dialogues and observations and report it to establish how improvements can be made. By improving the process gradually will the quality of ideas hopefully improve as well.
Another relevant aspect is to determine what types of barriers are occurring during the presentation, workshops, collection and implementation, which might not be voiced during the system itself. Therefore it can be needed to make the evaluation anonymous to ensure that the participants feel secure enough to highlight negative aspects of the process.

Assessment of the ideas

The ideas and suggestions for prototypes are sent to the management of the Sustainable Innovation Event System. Some of the ideas might be finalised and therefore ideal to continue to work with in future iterations of the workshops. This can be seen in figure 7.3 in the pink box in week 4. This is to ensure that half-finished ideas are not discarded, but kept for future iterations of the system.
Both finished or half-finished ideas can be collected internally SGRE, whereas Heilmann suggests using HYPE [Heilmann, 2021]. Her argument is because the software has a built-in function that can highlight entries as "needing future work". Thereby the ideas can be stored for future use. Though it can be questioned whether the use of HYPE will be utilised, due to the negative response for it by other employees [Jensen, 2021]. It can then be argued that another software for collecting ideas could be necessary, depending on the responses from the moderators.

After the ideas have been collected and structured how to achieve them is it necessary to examine whether SGRE should prioritise resources, time, staff and more into realising them [Michanek and Breiler, 2005]. All the ideas are not necessarily valid at the current point in time and it could be more relevant to initiate later, or when technology has developed further [Michanek and Breiler, 2005].
The assessment of the ideas should be handled by an environmental specialist, leaders of the local department or other innovation specialists. They need to define how to finance the prototypes and how to monitor them. SGRE has previous experience with and knows how to make estimates of potential expenses for their innovative projects [Heilmann, 2021], which is relevant when assessing the innovative ideas. When the assessment process is over should the ideas be created into prototypes, which can then be implemented and monitored, which SGRE has existing systems for [Heilmann, 2021]. It is necessary that SGRE selects employees to try out the different ideas or prototypes, before implementing the ideas permanently. In relation to that, it could be relevant to the employees suggesting the ideas were

the ones to test it out. This is especially relevant for the strict structure, where the issues are locally focused. Then implementing the ideas is it necessary to give adequate time for the employees to try out the idea [Heilmann, 2021]. Thereafter, they can determine whether the ideas are to be permanently implemented in SGRE. Moreover, it can potentially to examined if the idea could be implemented into other part of SGRE, after the idea has been tested.

Heilmann highlights that the assessment process of the ideas can be difficult for the participants when they reserve the feedback [Heilmann, 2021]. It is therefore needed that the feedback is phrased with constructive criticism and describes why the idea was not accepted. This will give the participants an understanding of what the idea lacked and what they need to mindful of for future workshops.

An important note for the assessment and implementation of the ideas is to ensure that action occurs, meaning that if the ideas are submitted and nothing comes of it, it will demotivate the employees and result in negative connotations to future workshops [Heilmann, 2021].

Therefore is feedback, both in terms of praise and encouragement needed to achieve engagement, as well as avoid the negative emotions related to previous suggested innovative ideas [Jensen, 2021].

Based on the elements described in this chapter, there is a structure for SGRE to implement a Sustainable Innovation Event System. This system describes preparations, both in terms of innovation and digital cultures, defining the participants and the training of moderators in innovation, workshops and tools, digitalisation, engagement, barriers and gamification. Thereafter is a structured description of the four weeks of the Sustainable Innovation Event System, where the ideas are generated. Lastly, a description of relevant points when performing the follow-up of the system.
Thereby, if SGRE follows the structure described in this chapter they can work towards creating environmentally-friendly ideas by performing the Sustainable Innovation Event System.

Discussion of the system and workshops structure 8

In this chapter will elements be discussed and reviewed, which was not discussed in chapter 7.

In the proceeding chapter, was a system for an event designed, which goal is to enable the creation of innovative ideas to handle environmental issues within a company. This system was analysed and discussed in relation to SGRE, which had defined specific requirements for the innovation event and related workshops. This included the event and workshops occurring digitally and the inclusion of all the employees of SGRE to participate, despite their differences.
Based on this, the researchers of this report collected knowledge regarding event structures and other related knowledge, to achieve the system for which SGRE aimed for. Thereby, as described in section 4.2 on page 12 in the method, was the collected knowledge created into a new system design specifically for SGRE, based on the limits and opportunities from SGRE. Moreover, as described in the method, is the system not finished and is still in a process of being modified. This is because the design has not been implemented into SGRE yet, which underlines the potential for further modifications. It can then be argued that the report is following the structure outlined in the method chapter, because of the continuous development. This development occurred through collaboration with SGRE and the researchers of this report, to highlight considerations for an event to succeed. Though, despite the proposed design, can it be questioned whether the system can aid in creating innovative ideas, with these requirements.

8.1 Can innovative ideas be achieved through an event?

Environmental improvements are needed to ensure the global goals of e.g. the Paris agreement or Agenda 21, which means that these improvements are inessential for the future. Heilmann affirms this and argues that if SGRE does not follow the development in environmental management and improve their environmental performance, they would be left behind [Heilmann, 2021]. Therefore does it highlight the relevance and SGREs aspiration to improve their environmental performance. Though it can be questioned whether an innovation event can aid them in achieving this goal.

Firstly, because of the extensive definitions of sustainability within SGRE, which affects how sustainability is defined and worked with. This means that there is no uniform management of sustainability, which could be due to the fact that SGRE is an international company and still undergoing a significant restructuring after the Siemens and Gamesa merger. This means that there is no guarantee that the actions for sustainable improvements are coherent and are following the same structure. Therefore it can be questioned if the suitable actions are working against each other, in a worst-case scenario.

Secondly, it can be questioned if all the employees of SGRE should participate in the event and following workshops. This is because SGRE is a large company with over 26.000 employees, which speak different languages and have varying points of view. Utilising this diversity is relevant for performing an event and workshops, though it can be questioned if this diversity can only be obtained if all the employees participate. Heilmann argued that cultural diversity is prominent within SGRE, both in terms of geographical, communication, work structures and more [Heilmann, 2021]. These differences could be valuable to highlight varied aspects of an issue during the workshops. Though can this diversity only be achieved if everyone participates? It can be argued that there could be similar outcomes, which can be reached with fewer employees participating in the workshops.
Moreover, what to do about employees who might refuse to participate and therefore have to be forced to? How would this affect the overall process and mindset of the participants, if this was to occur? Jensen argues that it would be better not to force any participants [Jensen, 2021] and thereby not achieve full participation of the entire company. Moreover, it can be argued that the potential financial cost or resource use for conducting an innovation event for all the employees would be expensive.
Thirdly, it can be questioned if all the employees of SGRE know what it entails to work with "environmental issues" and what to do to improve the environment? Dalsgaard argued that it can be expected that some of the general staff in SGRE don't know how to work with environmental issues [Dalsgaard, 2021]. Therefore it can be questioned which kind of value the employees with limited environmental understanding can give to the system and workshops. Moreover, it can be questioned if this limited understanding could lead to opposing environmental implementations, which could equalise the potential benefits from the other implementations.
Lastly, the requirement that the system and workshops should occur purely digital. It can be argued that having the event digitally can allow for increased participation of the employees, no matter where the employees are located. Though Dalsgaard argues that it can not be expected that e.g. the production workers of SGRE knows how to utilise digital technology because they are not expected to [Dalsgaard, 2021]. Then it can be questioned how many SGRE employees can utilise this form of technology. Moreover, how this limited knowledge can affect the workshops process and lead to e.g. potential delays or miscommunications.

Based on these can it be argued that there are multiple factors for whether if innovative environmental ideas can be created during an event with workshops. On the one hand, it can be argued that there are benefits, such as varying points of views, which can aid in the innovative idea creation process. Likewise, there are articles, which support idea generation during events [Huulgaard et al., 2020]. On the other hand with limited understanding of the environment, environmental issues and digitalisation prevent the creation of ideas.
Therefore, it can be argued that innovative ideas can be created during an event with multiple workshops, though it could require excluding or education of certain employees to avoid the negative aspects which could hinder or limit the creative process. Therefore, the actual outcome of an innovation event depends on what is submitted into the process and the implementation into SGRE.

8.2 Can the system be implemented into SGRE?

The presented system have different requirements, both in form of knowledge, preparations, time and more, in order to facilitate then system and generate innovative ideas. Though, it can be argued that it requires more knowledge before implementation can occur, to highlight uncertainties of: How will employees react to the issue structure? Are there unwillingness for becoming moderators? Is the theme structure understandable for the moderators? Who should assess the generated idea? These questions and more needs to be answered before implementation can occur. So despite recommendations and experience gathered from the interviews, are these only guidelines and does not give the full picture. Thus, it can be argued more time and research is needed, before implantation can occur.

8.2.1 Selection and training of moderators

A part of the implementation of the event is the training of the moderators to be able to conduct the workshops. In section 7.2.2 on page 53 is a description of the skills which the moderators need to acquire. The moderators do not need to become an expert of these skills, though an understanding of them all is indispensable when performing the workshops.
Though it can be questioned if selection and education of employees to become moderators is too demanding? Moreover, if it can be expected that a single person can learn these skill in a reasonable time before the workshops begin. It is known that there are different levels of understanding of the described skills, whereas Heilmann argues that she and her collages know innovation and event management [Heilmann, 2021]. Moreover, Jensen argued that there exists knowledge regarding the environmental issues and needs inside SGRE as well [Jensen, 2021], so there are employees which can teach the future moderators.
Then it can be questioned what the moderators own motivation is. What is their incentive for managing potentially multiple workshops? It can be argued that there is an incentive to improve the environmental standing of SGRE [Dalsgaard, 2021], to increase the satisfaction of the employees and the moderators themselves, by minimising environmental issues and aiding in minimising climate change. Alternatively, engagement for the moderators can be the social engagement, the freedom of working with issues as they see fit and the chance to show how they can handle the responsibility.
Therefore, if there is an incentive for the moderators to be educated and are motivated to manage the workshops, then it can be asked how many moderators are needed to be able to perform the workshops? There should be enough moderators to be able to understand the different local situations and which type of workshop structure would fit for a specific group of participants. It can be argued that a moderator could potentially handle a larger group of participants, from 25 and up to 100 participants, depending on the moderators level of local knowledge. Dalsgaard explained how he has been a moderator for an event with 150 participants before [Dalsgaard, 2021]. Therefore, it can be argued that the skill for handling large workshops are there.
Another aspect is the environmental issues that should be handled during the workshops. A group of participants only have time to handle one aspect pr. workshop, which also can affect the needed amount of moderators. Therefore,

a moderator could perform a lenient structure workshop and thereafter a mild structure workshop, if this fits the team. This means that a moderator could do multiple workshops with different participants in them.
It can then be argued that the specific number of needed moderators depends on the specific number of participants and which issues should be handled. Therefore, when the system is implemented into SGRE can a more specific number of needed moderators be defined, to fit the actual need.
This selection of issues are another related topic, which needs discussion.

8.3 Selection and priority of issues for the workshops

There are many different perspectives when deciding which issues to work with. Heilmann and Dalsgaard describe that many relevant issues need handling, such as blade recycling, blade improvements, production improvements or modifications, improvements in the offices or complying with the SDG [Dalsgaard, 2021; Heilmann, 2021]. Though Heilmann argues that there no coherent consensus regarding the priority of the issues [Heilmann, 2021]. Moreover, Dalgsgaard argues that it is difficult to decide which issue to work with [Dalsgaard, 2021].

Therefore, it can be argued to avoid this, should the priority of the issues reflect the chosen theme for the event. This gives a clear theme in which issues can be defined, that can aid in established consensus about priority. Moreover, future workshops can have different themes, which can be an insurance that different issues are highlighted and ensure that each type of issues will be prioritised. It can then be questioned for how many years some issues will have postponed handling, though it can be argued that the most pressing theme is based on SGRE overall environmental goals, which in terms defines the priority.

When an overall theme is in place and a workshop is going to start, can the chosen issue be decided on two different ways: Either the moderator chooses a specific issue within the overarching theme, which the participants are going to work with. Alternately, the moderator can present an overall issue within the theme, which the participants can decide with the underlying issue they want to work with. This gives the participants the option to affect the flow of the workshop themselves and allows for the creation of sub-groups within one workshop, where a different aspect of the same issue is handled. This can increase engagement for the participants because they can work with the issue which is most relevant or interesting for them. Though, it is relevant to note that it is not beneficial for every group of participants to chose the issue themselves. By giving the choice to some participant could it result in them becoming incapable of making decisions, thereby hindering the process.

Therefore, it can be argued that there is an aid in deciding what issue a workshop should be about. Moreover, the moderator can decide whether the participants should decide upon the issue or not. Though it is important to note that the priority and selection of the issues depending on the implementation of the system in SGRE.

8.4 Development of the workshop structure

The structure of the Sustainable Innovation Event System was based on the ideas of the researchers and theories regarding conducting an ongoing event, to form them into a system to improve the environmental issues in SGRE. Though, information and literature were available was sparse, and it was not possible to find any information about how to set up the structures of the event, as these most likely partake in consultancy company secrets, which is also the case with SGRE [Jensen, 2021]. The proposed system has not undergone a test, which is why it can serve as a useful reference point, but to implement the system directly into the company without running a pilot project would be unwise. Therefore, are relevant considerations presented, to highlight potential aspects of the system, which could undergo changes upon implementation.

8.4.1 Overarching system

The Sustainable Innovation Event System is divided into four different workshop structures, which have been presented as being issue centred. Though, there were many other ways in which these structures could have been designed. Varying alternatives had been proposed by the researchers, such as dividing it into engagement levels and thus having the participants be the focus of the chosen workshops and tools. This approach was designed to increase engagement and focused on including all employees at SGRE. However, potential unwilling employees should not be forced to participate [Jensen, 2021], and especially not if they were uninterested in generating ideas to combat environmental issues, which they could be indifferent about. Therefore, this event structure was deselect.
Other ways to structure the system could be dividing it into environmental issues and thus set up different types of workshops for different areas of problems, although this was deselect since the workshops can work with any type of issues. There was no incentive to decide the structure like this, as it can be argued having an overarching theme for the system could achieve similar results.
A striking feature of the Sustainable Innovation Event System is the fact that two different event types are presented in the workshops. Due to the theoretical framework described in section 6.3 on page 31 was it initially seen as advantageous to have two different types of events. One was focused on creating a common understanding of what the issue in relation to how to handle it and the other where participants could work concentrated on solving the issue and contribute ideas that could be turned into implementable solutions. By having these two different event types does it allow time for the participants to fully understand the issue, before working towards creating solutions for it. Though if the participants is familiar with the issue, then it could prove redundant to spend time understanding the issue.
Thus, in the presentation of the system itself to the entire company could the management of SGRE present the theme of the year to the employees and moderators, who then can work to specify the area of interest for the workshops.

8.4.2 Setting a theme

Having a theme for the workshop structures can aid SGRE in working focused on a specific issue, where it can be useful when e.g. the company is closing in on a deadline, which they have set, but are not close enough to complete or if, after

years of running the system, there consistent indicators that a problematic area has been neglected. The themes should be broad enough that it leaves room for the moderators to relate the topic to issues that are present at the workplace of their participants. At the same time should the topic be narrow enough to create a clear picture of what the moderator wants to work with. For example, are topics that relate to reaching the SDGs a major task and involves too many variables. If the topics are centred around subjects such as; water consumption, energy usage, soil pollution, eliminating landfill waste or coming with ways to deal with end-of-life solutions to turbines, then the topics can be worked with across multiple departments across the entire company. Topics about reducing scope 3 emissions can also be relevant, but it is still too undefined and will depend heavily on including external stakeholders and most work in the production line will most likely have very little experience in this subject.

A problem arises when the theme which has been presented is not relevant for all employees at SGRE. The question then becomes, what will have to be done with these employees during the event? Will they wait to participate in the next workshop or will they take part while focusing on another issue, which relates more to their work environment? This leads to another question regarding the system. It has come to attention through dialogue with SGRE that after a certain number of workshops structures, that it will no longer be beneficial to include the same participants in the same idea-generating process [Dalsgaard, 2021]. This is due to the expectancy that after specific employees have worked on a certain issue multiple times that they will have exhausted all ideas and no longer get a beneficial output of the event. Nevertheless, if the focus of the workshops is incentives to change the issue of the workshop, then this should take some time to occur. In the mean time can new employees and technologies be introduced into the workshops and thus change the dynamics of the discussions and nature of the ideas.

It can be expected that at some point will it no longer be relevant to include certain departments in the events, as there will be no relevant improvements to be made [Dalsgaard, 2021]. This can lead to a sense of superiority in the department and act as a competition element for other departments, who wish to become better. However, this sentiment of having reached the peak of what can be done with environmental measures must be avoided as this inhibits the innovation culture which SGRE is trying to promote. Innovation is not a destination but a process. It can be discussed whether or not some departments should get to skip a couple of workshops if there is no need to focus on the specific issue, but to completely write them out of the process would be unwarranted as there will with most certainly always be new ideas which can come out of any employee at any department in SGRE. Nonetheless, having fewer participants in the workshops means that there will be a need for fewer resources and postpone the participation fatigue which might occur if all employees at SGRE are persuaded to attend every time the system occurs. Alternatively, if a department has been effective in the event process, then it could be beneficial to take a few volunteers and include them into another team which have had trouble with solving similar issues. The downside to this could occur in the form of defensiveness from the team which have not solved their challenges, if they feel the aid is unwanted. Here the moderator has to create an environment in the experimental space where it is not possible to immediately say no and dismiss

ideas from the new participants. Still, there could be a significant chance of taking ideas and solutions from one department and using that knowledge to improve the innovative culture and idea generation to get creative implementable solutions to real problems which occur in the various parts of the organisation.

8.4.3 Critique of the system

Element of the Sustainable Innovation Event System could be critiqued due to information or considerations from the interviews.
Dalsgaard argued that the lenient structure was not suitable for the production staff in SGRE [Dalsgaard, 2021]. According to Dalsgaard would the blue-collar employees not understand the global perspective of the issues and can become too detached from their daily work, resulting in a lack of understanding and perspective to solutions on which they can have an impact. It is therefore important to relate the environmental issues to their work to make them feel like they can make an actual change instead of giving them abstract problems which affect the entire company. He argues that they are not equipped to solves these problems, so it could be beneficial to use this structure on management-level employees who are used to working with a larger, global perspective with an understanding of organisational structures within SGRE [Dalsgaard, 2021]. This gives an interesting perspective to the structure but did not have a significant effect on the design, as especially the Dragons Den becomes more relevant in that context. This is due to the assumption that the managers have a deeper understanding of what can be realistically implemented and how many resources it will take. Thus creating a thorough concept that is ready for assessment and hopefully implementation.
Another critique of the system of the workshop structures, where it can be difficult to differentiate between if an issue fits into a mild or a moderate structure. Because of the shared elements of the workshop structures, can it be beneficial for the moderator to pick the most fitting structure, depending on the specific issue or the needs of the participants.

Moreover, a potential critique could be the selection of event types and tools.
In the theory section 6.3 on page 31 were several event types and tools presented. All of these, except for the survey, have been used in the design of the Sustainable Innovation Event System. They were chosen based on available literature and thorough literary reviews and based on the expected relevance for SGRE. The relevancy was determined based on the criteria which SGRE set and was described in section 2.3 on page 4. The focus drew towards the event types which focused on dialogue and concept creation, as these were problem solution-oriented and provided with structures that had promising similarities to events and workshops which had already been introduced to SGRE. The delimitation was made quite early in the process of the analysis, as it was deemed unnecessary to report on event types and tools which wouldn't be used by SGRE or add value to the idea-generating process. It was deemed, by the researchers, to be a benefit if one-way communication event types were avoided as these would probably have a negative impact on the engagement of the participants. This is why survey has been described in chapter 6 on page 22, but not included in the system, as the even type was relevant enough for SGRE to use along with e.g. the thinking hats or to include polls with them to give it an element of gamification. However, using a survey as the only event type

for week 2 or 3, would most likely not accomplish many of the requirements from SGRE. Although it could be useful to include in the first week to get an idea of what areas of concern there are for the employees or in the last week of the workshop to gather feedback in a structured process and organise it later on.
It can be argued that there are event types and tools which could be relevant for SGRE to achieve their requirements which were not described in this report. Though it can also be argued that too many event types and tools could confuse the moderators or participants, therefore would too many types not be beneficial either. Thus the event types and tools presented in this report are deemed to be sufficient in providing a flexible event system for SGRE while maintaining a limited but varied amount of tools to keep track on.

8.5 Potential workshop outcome

The Sustainable Innovation Event System is not guaranteed to have immediate positive impacts on SGREs innovation culture and environmental system. Even if SGRE doesn't get any desirable outcomes of the workshops in the first couple of tries, then there is still ample opportunity to gain real implementable solutions which could have a positive impact on the company, as the employees are still training to use the tools to their full potential and how to work within the structure of the event. Moreover, as described in section 6.1 on page 22 is failure an expected outcome, though it is relevant to note, that this adds information that can be learned from for future iteration of the system. Therefore, a workshop might not produce any new innovative ideas, though the system as a whole was enriched by it. Therefore, the experience gained from opening and closing of the spaces will aid in future spaces, to allow for more successful or innovative ideas, which can be anchored into SGRE.
The workshop structure allows for flexibility to accommodate if some of the chosen event types and tools are proving to work in unfavourable ways. Thus is there the possibility to change between week 3 or the different workshop structures if it turns out that one of them is more successful than the others.

In a scenario where a certain department or group within the company has consistently had issues in working productively with the workshops over a longer period of time, it could be beneficial to bring in outside stakeholders or experiment with the various other tools, which has been presented in this report. Alternatively could the moderators be switched to ensure that the communication and synergy between the participants and moderators is positive and results in good ideas being discussed.

8.6 Digitalisation as a tool to reach innovative ideas

Digitalisation can be used as a tool to standardise and engage participants across an entire organisation as complex as SGRE. However, there are pitfalls with the use of these tools, such as there are with any tools. The problem with having digital events can be boiled down to engagement and concentration. It is far more difficult to stay engaged when the participants are located across the worlds and in isolated clusters, where there is little possibility of having face to face dialogue. It has therefore been recommended that SGRE divides the teams into departments

so that the participants can communicate with people they already know and have personal relations with. Hopefully by dividing the teams in this manner, can some form of physical attendance still occur to secure that participants can meet and have unhindered communication. Perhaps can tablets be distributed with instructions, to achieve a more digitally oriented handling of the system. This can be especially beneficial if the participants are experiencing barriers related to technology and how to use the available digital tools. Here the moderators can call in extra instructors to aid the participants in the technological aspects of the workshop and avoid dropouts. This can particularly be a challenge for the production line workers as there is no requirement for them to have any digital know-how in terms of completing their daily assignments [Dalsgaard, 2021]. Thus can a hybrid workshop be established with both digital and physical meetings. It could also be especially relevant to include other teams of participants from other parts of SGRE which have similar work. E.g. two separate teams from wind turbine blade production could be combined in a hybrid workshop. Then, digitally, are both the teams presented an environmental issue and given tools for how to view and work with the issue. The teams work physically with the issue with their own respected teams, where they can share their findings and ideas with the other team digitally. Then can sharing of knowledge easily be shared with other employees, which could benefit from this knowledge. Moreover, this hybrid work allows for utilising the strengths of digital technology and potentially minimising dropouts. Though if physical meetings occur is it relevant to structure the event and workshops within the current COVID-19 restrictions. Some types of event are easier than others to incorporate directly online, where others will have to take some extra socio-technological adaptations to achieve a desired outcome. Especially the "concept creating" event types can pose a challenge, as these rely heavily on communication and collaboration of the participants to acquire suitable ideas and solutions. If there is a lack of community feeling of solving an important issue, then the drive for solving a problem can be missing from the workshops [Jensen, 2021]. This would have a negative effect on engagement, as the main driver for this would be the participants' interest in the issue, and then all the assistive devices will not be enough to substitute personal interest.
Moreover, a large benefit of digitalisation is the possibility of visualisation. Issues can become more tangible when they can be seen on a screen or when there are interactive tools in which the participants can be creative. This can aid in communicating an idea, or become increasingly more difficult if the idea is difficult to visualise.

8.6.1 Collection and feedback from the workshops

Utilising digitalisation becomes essential when the ideas and feedback from the workshop have to be collected and organised. Here, the moderators must have a means of reporting their findings and feel assured, that the information, which they are submitting will be used constructively and not disappear into the mass of information. So far has SGRE been using the software HYPE, but the problem related to that, was that the ideas are sent to the next person, and then the next and etc until it either is rejected or passed. This meant that the ideas was distances from the original idea proposer and thereby the validity of the idea [Participatory observer, 2021]. This has been an element of critique and a barrier for idea-

generating in SGRE [Participatory observer, 2021]. Although it seems as the tool can be modified and used for the event [Heilmann, 2021]. How successful it can be used is uncertain, however, it can be argued that using HYPE and being aware of its flaws, is more beneficial, that to find an entirely new platform, which is likely to also present challenges, if nothing else in the implementation process alone.
It can be seen as an uncertainty in the report that there is no thorough analysis of the last stage of the workshop and more research hasn't been dedicated to the assessment of the ideas or the collection and subsequent implementation of feedback, however, there are plenty of tools and methods, which SGRE already utilise in their corporate setting. It would have been useful to work more detail with the anchoring of the ideas and how to empower the participants in improving the innovation culture over time by giving praise to the employees when their ideas are contributing to improving the innovation culture and having a positive environmental effect. This is to ensure a holistic view on innovation throughout the company, not just within the higher management.

8.7 Collaboration with SGRE

The researchers of this report have created an innovative system for an event in which idea generation for environmental issues is in focus, which was modified to work with SGRE and their options and limitations. Therefore has collaboration with SGRE and its employees affected the structure in this report. About this, can it be questioned how this collaboration has affected the system.
To ensure that the system is compatible with real-world companies, did it require input from an actual company. This meant that the event structure should reflect the actual need for SGRE to ensure that they receive beneficial input from the report, as compensation for their time and resource inputs.
This meant that the researchers had some opportunities which would not be possible without the collaboration: It gave the researchers the option to work with real issues and limitations, which have made the event structure more reliable. Moreover, there was no limit to who the researchers could interview or discuss with, which meant that the researchers could interview the employees which they felt was most fitting. Concerning this, interviewees from SGRE would often recommend the researchers reach out to other specific SGRE employees, which the interviewee found potentially beneficial for the report.
On the other hand, the collaboration also resulted in an unspecific scope, in which an event should be performed by 26.000 employees with unidentified issues. This has lead to difficulties in defining which aspect to focus on, to ensure the event structure was compatible within the entire SGRE company structure. Moreover, it was explained from the beginning by Jensen, that a test-run of the event structure was not possible, because he argued that they did not have the time and employees for it [Jensen, 2021]. This meant that the event and workshops structure is purely theoretical and actual conclusions can not been made without an test-run. This means that the researchers were not able to collect concrete data regarding the event structure to find improvements or modify the structure to be more compatible with SGRE preexisting culture. Though the researchers did have multiple meetings with employees from SGRE to discuss potential pitfalls if the event structure should be implemented into the company.

Therefore, through the collaboration and discourse with the employees of SGRE, was the system tested and modified to fit them. This does not guaranty that the system can be implemented, though the system has been ensured to fit within the goals and needs of SGRE. This means that the system has undergone a process of development, where the gathered knowledge and experience from SGRE has shaped it.
Therefore, based on this can the researchers not verify that the event structure can be implemented into SGRE, though with further modification can it be argued that the system can be implemented within SGRE.

Another important aspects of the collaboration, is the researchers personal connection with SGRE, as one of the researchers is currently an employee at SGRE. The employed researcher had access to specific employees through email and Microsoft Teams. This meant that the potential waiting time in response was reduced, because the employed researcher could contact the employees with their work-email instead of student-email. Moreover, the employed researcher had a unique access in understanding preexisting cultures and could give an unfiltered explanation of potential barriers or other challenges internally in SGRE.
It is relevant to consider the potential biases of the employed researcher and how it could have affected the report. A perspective of this is the questioning of preexisting cultures inside SGRE, where the employed researcher could have a predetermined acceptance of the current culture and handling. This or other potential biases has both of the researchers been mindful of and worked towards provide clear unbiased views on various topics.

In short, has the collaboration with SGRE both given the researchers new possibilities, such as access to employees and more. Though it has also lead to uncertainties regarding the undefined scope of creating an event for 26.000 with no specific environmental issues initially being presented.

Based on this chapter are there arguments for and against the implementation of the Sustainable Innovation Event System for SGRE. With the differences in culture and nonholistic understanding of sustainability can the operation of a company-wide event potentially be difficult. Though it is relevant to note, that changes are occurring within SGRE.
They are under constant development and are currently, as of May 2021, undergoing a large organisational restructuring to streamline and improve the organisation of the company. There is already awareness on sustainability, environmental concerns and the need to improve the innovation culture in the company and to secure a more uniform company mindset across its many employees and offices. There are already programs which are designed to have this effect, to increase the environmental awareness Dalsgaard [2021] or other initiatives in the company such as the innovation day [Heilmann, 2021], which can be used in connection to the Sustainable Innovation Event System, as they share the same framework of thought and to some extent the same toolset of event types and end goals.
Based on these factors can it then be argued that due to the future changes, that events and workshops with these focus, sustainability and innovation, could aid in incorporating the future changes and knowledge sharing. This means that the implementation of this structure could potentially be beneficial for SGRE, depending on the specific changes when the implementation of the system is complete.

Conclusion 9

In this chapter, the research question and subsequent sub-questions are answered to give recommendations for SGRE for how to run a innovation event.

The climate crisis is affecting everyone and there are needs for mitigating or reducing environmental pressures. These mitigations can be shaped in different ways, with SGRE wanting to create an innovation event to generate ideas for environmental issues. Though with COVID-19 and other limitations, described in this report, is it relevant to examine how to achieve this.
To do this was a research question formulated: *How can an innovative environmental system be facilitated digitally, which can be implemented in SGRE and its preexisting culture?*. To answer this question, is there a need to answer the sub-questions first, to cover the different aspects of the research question.

It is relevant to first conclude on the structure of the system, which is the focus of the first sub-question: *What type of event structure will aid SGRE in improving innovation and the environmental system in the company?*
The goal for the researchers was to create a system which could embrace environmental issues, which could be handled informatively. Therefore can it be concluded that there are different ways to structure the system, though by utilising the Sustainable Innovation Event System can the varying types of issues be embraced and handled, without falling outside the scope of the system. Concerning this, by having themes through an event can a holistic and structured workflow be established.
Moreover, it can be concluded some issue structures are more suitable for specific participants: Strict structure is suitable for employees in the production line, whereas the Lenient structure is suitable for management-level employees. Lastly, the mild and moderate structure could be combined, if there are problems distinguishing them.
The presented event types, tools and gamification are few, though it can be concluded at these are suitable to generate innovative ideas for SGRE and increase engagement for the participants.
The system should occur yearly, where the workshops is performed over four weeks, to give the participants time to contemplate the chosen issue. Alternatively, an event could be performed during a single week or day, or by combining week 1 and 2 to quicken the process. It can be concluded that the lack of specified structure in week 4 is relevant to work further on before it is implemented into SGRE.
The specific number of spend hours depends on e.g. the required preparation before a workshop, the employees preexisting understanding of the issue, needed time to thoroughly conduct the specific event type and tools and more. Therefore, the specific required hours per week depending on the specific team of employees and which issue structure they go through.
Based on this can sub-question 1 be answered, that the Sustainable Innovation Event System can achieve SGRE goal in generating innovative ideas by working

with environmental issues, with further modifications before implementation. Thus using the flexibility of the system along with familiar event techniques to engage participants in sharing ideas and implement them to improve the environmental concerns of the company and its innovation culture. Moreover, it can be concluded that the steps in opening and closing the spaces are needed, to ensure actual implementation of the ideas occurs.

In continuation of this, is the enabling of creating ideas of the employees relevant to conclude on, by answering sub-question 2: *How can digitalisation be utilised by the employees of SGRE, to enable them to create innovative ideas?* Concerning this did SGRE require, that all their employees should be able to participate to generate innovative ideas by using digital technology.
It can be concluded that the employees should participate if it fits in their preexisting daily work assignments and not by forcing participation. Moreover, utilising digital technology can allow employees to cooperate with international employees, if biases and views are considered before the collaboration.
Moreover, it can be concluded that not all the employees have a thorough understanding of sustainability, innovation and digitalisation which can negatively affect the outcome of the event. Therefore, it is recommended to educate these employees or to not involve them at all. Though, if they only lack digital understanding, could hybrid workshops with physical attendance be arranged following the COVID-19 restrictions.
To aid the participants in the innovative process and digitalisation are the moderators. It is concluded that moderators should be chosen and taught the required skills by current SGRE employees who possesses these skills. Moreover, to define the amount of needed moderators depends on the specific needs of SGRE and therefore require the system to be implemented. Though, it can be concluded that the same moderator can perform many workshops, for different groups, depending on their local understanding.
Based on these elements can sub-question 2 be answered, that digitalisation can be utilised to achieve innovative ideas. Though this depends on which employees are participating or how the digital technology is taught to the participants, through the help and structuring of the moderators.

Lastly, it is relevant to conclude on the continues process through the final sub-question: *How can the event system be a part of improving the innovative process when working with environmental issues in SGRE?*
It can be concluded that innovation is a process and changes will occur gradually and at different intervals in the entire company. Therefore, through events and the related workshops, can a process be established. Moreover, innovative ideas can be created during the event and workshops, through environmental and digital understandings can prevent or limit the creative process. Additionally, it can be concluded that there are preexisting innovation cultures, though these are non-holistic. Therefore, it is recommended to create a holistic innovative process, to ensure thorough understanding and application of innovation.
Additionally, it is concluded that some employees can be excluded from participating if their department is assessed to be "finished" with their environmental improvements until new technology or knowledge is found.
Therefore, to answer sub-question 3, can it be concluded that a continuous

innovative process can be established or the preexisting culture should be expanded company-wide.

By answering the sub-questions can the research question then be answered. Jensen, Heilmann and Dalsgaard argues that the Sustainable Innovation Event System can be implemented into SGRE, though there is an educational and structural requirement which are needed to ensure a thorough implementation and future process. Though it can be argued that the system will still undergo a process of modifications to fit within the preexisting culture.
This is to ensure that it fits within SGRE preexisting socio-technological system.
Therefore, it can be concluded that the Sustainable Innovation Event System can be implemented and modified to fit in SGREs systems and can aid in creating an innovative process, where innovative ideas can be created to combat SGREs environmental issues.

Methodological Reflection 10

Something which could have been beneficial for this case study would be to perform a test of the Sustainable Innovation Event System. Through the collaboration with SGRE was some uncertainties discussed, though not all were able to be examined through an interview. So through the information gathered through the interviews was the system formed through collaborative efforts. Though the system is made on a conceptual level and thus to define the system thoroughly, must a pilot be performed, see what does or does not work and define the uncertainties.

This means getting permission to extract a group of employees from their working hours to conduct if the four different issue structures could possibly work in the setting they were designed for. Then it could be estimated how efficient the system is if some of the tools and gamification techniques are having an effect on the participants. Moreover, it would give an in-depth perspective on their mindset and if this is actually an improvement in the environmental issues. Potentially could the pilot have been a part of the waste awareness program which was running at SGRE at the time of the report. However, there were many significant obstacles for this, as the structure of that event did not follow the structure of the proposed system and changing this would have led to bureaucratic challenges which would have prolonged the process for too long to comply with the deadline of the report.

Even if the pilot would be a possibility, then it is not certain that it would amount to anything concrete as the theory states that innovation is a process and not an outcome. Innovation does not just happen but has to be nurtured over a longer period of time. It is therefore uncertain if an implementable solution can come out of the very first occurrence of the workshops. In an ideal scenario would there be time to conduct the entirety of the system with a presentation from departments leaders, the use of a local moderator, event types and tool and other elements which might need to be included into the system to reach a desirable outcome.

Something else which could prove to have an interesting impact on the report could be the innovation culture aspect. Towards the end of the project period was it put to the researcher's attention that in Heilmanns department were there individuals which work directly with the innovation culture of SGRE and thus had key information about how innovation is approached across the entire organisation. Interviewing more of these employees could have lead to new information about how projects are run in SGRE and what elements seem to have been working in the company. Though due to time constraints could this not come to pass.

Bibliography

Abelson, J., Forest, P. G., Eyles, J., Smith, P., Martin, E., and Gauvin, F. P. (2001). Deliberations about deliberation: Issues in the design and evaluation of public consultation processes. *University Centre for Health Economics and Policy Analysis Research*, Journal 01-04.

Agger, A. and Hoffmann, B. (2008). *Borgerne på banen.* Number ISBN: 978-87-754-6420-3 in E-book. Velfærdsministeriet.

Agostini, L., Galati, F., and Gastaldi, L. (2020). The digitalization of the innovation process. *European Journal of Innovation Management*, 23(1):1–12. Copyright - © Emerald Publishing Limited 2019; Last updated - 2021-02-14.

Aksin-Sivrikaya, S. and Bhattacharya, C. (2017). *Where Digitalization Meets Sustainability: Opportunities and Challenges*, pages 37–49. Springer, Cham.

Altenburger, R., Aagaard, A., August, H.-J., Janssen, K. L., Blazevic, V., Lauche, K., Reis, W. S. D., Hunt, B., Glauner, F., Kotek, K., Schoenberg, A. M., Schwand, C., Berger-Grabner, D., Schwager, B., Bergmann, U., Tomoff, K., Jüchter, A., Wolf, A., Heim, M., Wyss, L., Venkateswaran, S., Roy, S., Willamowski, J., Hoppenot, Y., Castellani, S., Grasso, M. A., Neves, L., Scherrer, S., Astrachan, C. B., Schaefer, H., Voelker, F., Bachner, C., Murray, T., and Vitasovic, D. (2018). *Innovation Management and Corporate Social Responsibility - Social Responsibility as Competitive Advantage.* Number ISBN: 978-3-319-93629-1 in E-book. Springer.

Ambrecht, J., Lundberg, E., Andersson, T., and Getz, D. (2017). The value of events (1st ed.). *Routledge.* Downloaded: 17-03-2021.

Annarelli, A., Battistella, C., Nonino, F., Parida, V., and Pessot, E. (2021). Literature review on digitalization capabilities: Co-citation analysis of antecedents, conceptualization and consequences. *Technological Forecasting and Social Change*, 166:120635.

Apel, H. (2004). The future workshop. *German Institute for Adult Education.*

Baregheh, A., Rowley, J., and Sambrook, S. (2009). Towards a multidisciplinary definition of innovation - management decision. *Cambridge Mass MIT Press*, Journal 47(8):1323–1339.

Bhe, T., Glasmacher, P., Meckwood, J., Pereira, G., and Wallace, M. (2004). *Event Management and Best Practices Best Practic.* Number ISBN: 0738497878 in First Edition. International Business Machines Corporation.

Brinkmann, S. and Tanggaard, L. (2015). *Kvalitative metoder: En grundbog.* Number ISBN: 9788741277264 in Paperback. Hans Reitzels Forlag.

Brown, S., Getz, D., Pettersson, R., and Wallstam, M. (2015). Event evaluation: definitions, concepts and a state of the art review. *International Journal of Event and Festival Management*, 6(2):135–157. Copyright - © Emerald Group Publishing Limited 2015; Last updated - 2020-11-17.

Brundtland Commission (1987). Report of the world commission on environment and development: Our common future. Report, Brundtland commission.

Cambridge Dictionary (2021). *Event*. `https://dictionary.cambridge.org/dictionary/english/event`. Downloaded: 18-03-2021.

Cartel, M., Boxenbaum, E., and Aggeri, F. (2019). Just for fun! how experimental spaces stimulate innovation in institutionalized fields. *Organization Studies*, 40(1):65–92.

Chia, A. (2017). *Hackathons Unboxed : A Field Guide to Ideating, Leading and Winning*. E-book. Marshall Cavendish International (Asia) Private Limited.

Dalsgaard, E. S. (2021). *Interview with Waste Coordinator at SGRE for plant Aalborg*.

Del Río Castro, G., González Fernández, M. C., and Ángel Uruburu Colsa (2021). Unleashing the convergence amid digitalization and sustainability towards pursuing the sustainable development goals (sdgs): A holistic review. *Journal of Cleaner Production*, 280:122204.

Feng, Y., Audy, J.-F., Ronnqvist, M., and D'Amours, S. (2020). An educational game with dragons' den experiences for supply chain management training. *INFORMS Transactions on Education*, 21(1):1–63.

Fishkin, J. S., Luskin, R. C., and Jowell, R. (2000). Deliberative polling and public consultation. *Parliamentary Affairs, University of Texas*, Journal 53(4):657–666.

Flores, M., Golob, M., Maklin, D., Herrera, M., Tucci, C., Al-Ashaab, A., Williams, L., Encinas, A., Martinez, V., Zaki, M., Sosa, L., and Pineda, K. F. (2018). How can hackathons accelerate corporate innovation? *University of Cambridge - Cambridge Service Alliance*.

Gamify (2021). *What is Gamification?* `https://www.gamify.com/what-is-gamification`. Downloaded: 24-03-2021.

García-Gómez, A. (2018). Dragons' den: Enacting persuasion in reality television. *Discourse, Context & Media*, 21:1–9.

Goethe, O. (2019). *Gamification Mindset*. Human–Computer Interaction Series. Springer International Publishing, Cham, 1st ed. 2019. edition.

Graafland, J. and Noorderhaven, N. (2020). Technological competition, innovation motive and corporate social responsibility: Evidence from top managers of european smes. *De Economist*, 168:1–22.

Guhl, A. (2017). *Gamification Across Borders: The Impact of Culture*.

Gupta, S., Malhotra, N. K., Czinkota, M., and Foroudi, P. (2016). Marketing innovation: A consequence of competitiveness. *Journal of Business Research*, 69(12):5671–5681.

Hallenga-Brink, S. and Brezet, J. (2005). The sustainable innovation design diamond for micro-sized enterprises in tourism. *Journal of Cleaner Production*, 13(2):141–149. Sustainable tourism.

Hampton, G. (1999). Environmental equity and public participation. *Policy Sciences*, 32(2):163–174.

Head, B. W. and Alford, J. (2015). Wicked problems: Implications for public policy and management. *Administration & Society*, 47(6):711–739.

Heath, C., Knoblauch, H., and Luff, P. (2000). Technology and social interaction: The emergence of 'workplace studies'. *The British journal of sociology*, 51(2):299–320.

Heilmann, K. (2021). *Interview with Head of Open Innovation.*

Hopkins, M. S. (2010). A billion brains are better than one: Interview with thomas w. malone. *MIT Sloan management review*, 51(3):1–9.

Huff, A. S., Möslein, K. M., and Reichwald, R. (2013). Leading open innovation. *Cambridge Mass MIT Press*, Journal 16.

Huulgaard, R., Guldmann, E., and Kerndrup, S. (2020). *Staging a circular economy journey*, page 123–135. Edward Elgar Publishing.

Jensen, J. P. (2021). *Interview with Environmental Health and Safety Specialist.*

Jesson, J. K., Matheson, L., and Lacey, F. M. (2011). *Doing Your Literature Review: Traditional and Systematic Techniques.* Number ISBN: 978-1848601543 in 1'st ed. SAGE Publications Ltd.

Jong-Woo, K. and Kim, S.-W. (2018). A comparative study on the differences in cultural attributes of gamification between korea and austria. *Journal of the Korea Industrial Information Systems Research*, 23-1:109–122.

Kanstrup, A. M. (2021). *Interview with Professor from the Department of Planning at Aalborg University.*

Khaled, R. (2011). *It is Not Just Whether You Win or Lose: Thoughts on Gamification and Culture.* `www.gamification-research.org/wp-content/uploads/2011/04/16-Khaled.pdf`. Downloaded: 23-04-2021.

Komssi, M., Pichlis, D., Raatikainen, M., Kindström, K., and Järvinen, J. (2015). What are hackathons for? *IEEE Software*, 32(5):60–67.

Kratzer, J., Meissner, D., and Roud, V. (2017a). Open innovation and company culture: Internal openness makes the difference. *Technological forecasting & social change*, Journal 119:p. 128–138.

Kratzer, J., Meissner, D., and Roud, V. (2017b). Open innovation and company culture: Internal openness makes the difference. *Technological forecasting & social change*, 119:128–138.

Lohrmann, C. (2017). *Leadership in a Digital World: New Ways of Leadership for Sustainable Development*, pages 51–58. Springer, Cham.

Marzocchi, C. and Ramlogan, R. (2019). Forsaking innovation: addressing failure and innovation behaviour variety. *Technology Analysis & Strategic Management*, 31(12):1462–1473.

Matser, I. (2017). *Leading Change in Ongoing Technological Developments: An Essay*, pages 95–102. Springer, Cham.

Mazhindu, D. and Gregory, S. (2015). Dragons' den: promoting healthcare research and innovation. *Nursing management (Harrow, London, England : 1994)*, 22(4):28–33. Date completed - 2015-09-08; Date created - 2015-07-03; Date revised - 2020-12-17; Last updated - 2021-01-29.

McKinsey Global Institute (2020). *Climate risk and response: Physical hazards and socioeconomic impacts*. `https://www.mckinsey.com/business-functions/sustainability/our-insights/climate-risk-and-response-physical-hazards-and-socioeconomic-impacts`. Downloaded: 22-02-2021.

Michanek, J. and Breiler, A. (2005). *Idéagenten : en håndbog i idea management*. Number ISBN: 9788776920098 in Paperback. Jyllands-Posten.

Mulgan, G., Tucker, S., Ali, R., and Sanders, B. (2007). *Social innovation - What it is, Why it matters and How it can be accelerated*. E-book. The Young Foundation.

Ooms, W. and Piepenbrink, R. (2021). Open innovation for wicked problems: Using proximity to overcome barriers. *California Management Review*, 63(2):62–100.

Participatory observer (2021). *Direct observation during student job at company*.

Paterson, A. (2006). Dr edward de bono's six thinking hats and numeracy. *Australian Primary Mathematics Classroom*, 11(3):11–15.

Pratchett, L. (1999). New fashions in public participation: towards greater democracy? *Parliamentary Affairs*, 52(4):616–633.

Rowe, G. and Frewer, L. J. (2000). Public participation methods: A framework for evaluation. *Science, Technology, & Human Values*, 25(1):3–29.

Sanders, E. B.-N. and Westerlund, B. (2011). *Experiencing, exploring and experimenting in and with co-design spaces*. PDF version of the document. Downloaded: 17-03-2021.

Schramm, L. (2017). *Technological Innovation*. Number ISBN: 9783110429190 in Paperback. De Gruyter, Inc.

Schrot, O. G., Traxler, J., Weifner, A., and Kretzer, M. M. (2020). Potential of 'future workshop' method for educating adolescents about climate change mitigation and adaptation: a case from freistadt, upper austria. *Applied Environmental Education & Communication*, 0(0):1–14.

SGRE (2020a). Consolidated non-financial statement 2020. Report, Siemens Gamesa Renewable Energy.

SGRE (2020b). *One step closer to our net-zero emissions goal.* https://www.siemensgamesa.com/en-int/explore/journal/2020/04/siemens-gamesa-carbon-neutrality. Downloaded: 23-04-2021.

Sheaff, R., Pickard, S., and Dowling, B. (2009). Is evidence-based organizational innovation in the nhs a chimaera – or just elusive? *Social policy & administration*, Journal 43.3:290–310.

Sundhedsstyrelsen (2021). *Forebyg smitte.* `https://www.sst.dk/da/corona/Forebyg-smitte`. Downloaded: 11-03-2021.

Thastum, L., Baastrøm, T., Valbak, M., Pedersen, A. L., Hoffmann, B., and Læssøe, J. (N.A.). *Bæredygtig udvikling - som lokale, sociale læringsprocesser.* PDF version of the document. Downloaded: 17-03-2021.

Vidal, R. V. V. (2005). The future workshop: Democratic problem solving. *Technical University of Denmark.* Downloaded: 19-03-2021.

Wilson, C. (2014). *Interview Techniques for UX Practitioners: A User-Centered Design Method.* Number ISBN: 978-0-12-410393-1 in E-book. Elsevier.

Yin, R. K. (2009). *Case Study Research: Design and Methods.* Number ISBN: 9781412960991 in 4th ed. p. cm. (Applied social research methods v. 5. SAGE.

Interview guide for the Jonas Pagh Jensen A

This interview guide was created for the interview with Jonas Pagh Jensen on the 22/2/2021.
The beginning of the interview started with a short introduction of the interviewers and contained general statements such as “"May we refer to you and your statement in the report?"”. The estimated time for this part of the interview was set to 5 minutes.

Topic 1: Introduction - 15 min

- How do you define sustainability?
- How do you define innovation?
- Are these definitions the same across the different department within the company?
- How has innovation been worked with in the company previously?
- which challenges could occur when developing new initiatives and implementing them into the organisation?
- How is the internal communication regarding innovation being used in the company?
- What are the external and internal challenges and possibilities for SGRE in relation to sustainability and the SDGs?
- Does the company structure allow for implementing new innovative initiatives?

Topic 2: Innovation event - 20 min

- What is the innovation event?
- What is the focus of the innovation event? (sustainability, SDG, other?)
- What is the scale of it?
- Which organisational scale is it? (Just specific facilities like Aalborg, Brande? / Entirety of Denmark? / the entire company) and will all the employees be invited ti participate in the event?
- Do you expect to include other stakeholders externally from SGRE? (If so, who?)
- What will the expected time frame be for the event?
- Other aspect of what the scale of the event is?
- What do you wish to get out of this project and which possibilities and limitations are there?
- how do you expect it will be implemented into SGRE?
- How are you going to reach this goal?
- What challenges do you see during its process and finalisation?
- Should the management of innovation stay the same or should it change to reach your goals?
- How will you work with innovation in the event?

- How are the employees of the company going to participate with the innovation event?
- When do you expect to begin the event?

Topic 3: Frame of the event - 15 min

- How will the event occur during the COVID19 pandemic? (geographic separation)
- What are the organisational challenges for the event in relation to COVID-19 digitisation?
- Do you expect to test the event before incorporating it into the company?
- What do you require of the format to achieve your goals?
- if the innovation event becomes a company wide event: Will the other departments of SGRE be willing to cooperate and engage with a innovation event with other departments?
- Which considerations are there regarding implementing the solutions from the innovation event into the context of SGRE?
- Do you expect to re-run this, e.g. on an annual basis?

General questions and open dialogue with the participant - 5 min

Total estimated time is 60 minutes of interview.

Interview guide for Anne Marie Kernstrup

B

This interview guide was created for the interview with Anne Marie Kernstrup on 8/4/2021.
The beginning of the interview started with a short introduction of the interviewers and contained general statements such as “"May we refer to you and your statement in the report?"”. The estimated time for this part of the interview was set to 5 minutes.

Topic 1: Innovation - 7 min

- How can digitalisation be used to promote innovation concerning environmental work?
- Which types of innovation is suitable when conducting a digital innovation event?
- Can all innovation types result in beneficial results when innovation occurs digitally?
- Which unique challenges might occur when working with innovation on a digital platform?

Topic 2: Digitalisation - 7 min

- Is digital media compatible when interacting with 26.000 employees?
- How willing are participants to change their digital culture? How can unwillingness or resistance be avoided?

Topic 3: Gamification - 7 min

- Which experiences do you have with gamification? Are you familiar with the potential benefits or disadvantages of gamification?
- Are there specific elements of gamification, which you see as particularly useful when working with idea generation?

Topic 4: Event - 7 min

- How can physical interactions occur on a digital platform? Which opportunities and challenges could occur?
- Which event types are most suitable to happen digitally?
- Which idea generation tools are most suitable to happen digitally?

General questions and open dialogue with the participant - 2 min

The total estimated time is 30 minutes of the interview.

Interview guide for Emil Skov Dalsgaard C

This interview guide was created for the interview of Emil Skov Dalsgaard on the 06/05/2021.
The beginning of the interview started with a short introduction of the interviewers and contained general statements such as “"May we refer to you and your statement in the report?"”. The estimated time for this part of the interview was set to 5 minutes.

Topic 1: Week 1 - 13 min

- The moderator needs to be trained in:
  - Innovation
  - Environmental issues
  - Engagement
  - Barriers
  - Event types and tools
- The moderator needs to be taught to be able to organise the participants for the event.
- The moderator needs to examine and select the environmental issues which are used for the event.

Topic 2: Week 2 - 13 min

- The moderator needs an understand the four issue structures and the benefit the participants get out of it.
  - Strict structure
  - Moderate structure
  - Mild structure
  - Lenient structure

Topic 3: Week 3 - 13 min
The moderator needs to have an understanding of the participants' idea-generating process and their potential needs for more knowledge, data and more.

Topic 4: Week 4 - 14 min

- Does the presented event seem implementable into SGRE?
- Are there event types and tools which seem familiar to you?
- Can the event be compared to previous events at SGRE?
- Are the employees at SGRE trained enough in digital tool use to do this event?
- What is your understanding of gamification?

General questions and open dialogue with the participant - 2 min
The total estimated time is 60 minutes of the interview.

Interview guide for Kathrin Heilmann D

This interview guide was created for the interview of Kathrin Heilmann on the 06/05/2021.
The beginning of the interview started with a short introduction of the interviewers and contained general statements such as “"May we refer to you and your statement in the report?"”. The estimated time for this part of the interview was set to 5 minutes.

Topic 1: Innovation - 13 min

- What is it you do in your line of work?
- Which type of innovation is prevalent in SGRE?
- Is the approach to innovation the same across the company or are there varying ways of working with innovation in SGRE?
- What is SGRE current innovation culture?
- How do the employees of SGRE work with innovation?

Topic 2: Digitisation - 13 min

- How do you utilise digital technologies in relation to innovation?
- What experience did you get by using digital technologies during the pandemic in relation to innovation?
- How can digitalisation aid in creative idea generation?
- Do you utilise gamification? If yes, how do different cultures react to it?

Topic 3: Presentation of the event - 13 min
Here the researchers of this report presented the event structure described in this report.

Topic 4: Implementation of the event - 14 min

- Does the presented event seem implementable into SGRE?
- Are there event types and tools which seem familiar to you?
- Can the event be compared to previous events at SGRE?
- Are the employees at SGRE trained enough in digital tool use to do this event?
- What incentive does the employees at SGRE have to bring innovative ideas?
- How is credit and praise given as rewards for contributing with new ideas?
- Which current environmental issues needs to be worked innovatively on?
- Which priority of environmental issues are there?

General questions and open dialogue with the participant - 2 min

The total estimated time of the interview was 60 minutes.