

Contemporary Challenges: Making a Difference

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Abstract

This report explores the root cause of climate change and global warming. It focuses on the 'define' aspect of the Design Thinking framework which will give a foundation for designing an impactful solution for climate change. It considers ethical, environmental, economic and practical factors of the problem and will outline the effects the problem will have on the Earth and society should no solution be put in place.

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Introduction

The adverse effects of Climate Change can negatively impact the lives of the next generation, the extensive use of non-renewable energy sources can cause some difficulties for our children (Patel, 2023). The negative effects of burning fossil fuels include reduced quality of air, crops, water and much more. Additionally, the loss of habitat and fertile land caused by using non-renewable resources may show hardship in supporting the growing population (Denchak, 2022). In this report I will use the Design Thinking framework to define the problem in order to design a solution.

Main Body

The 'Define' stage is an important part of the design thinking framework, which helps us solve problems in a creative which benefits those who are affected. In this stage, we take all the information we gathered from talking to people and understanding their needs and experiences, and we use it to define the problem we want to solve.

The 'Define' stage is comparable to focusing in on the most important aspects of the problem. By carefully analysing the data collected during the 'Empathise' stage, which includes things like interviews and observations. We analyse this information to find patterns and common themes.

Identifying common patterns and themes is crucial in designing an effective solution. Highlighting these things enables us to design a solution which caters to a broader spectrum of people rather than zooming in on isolated incidents which may or may not be due to climate change. Tailoring our 'define' section in this way will enable us to solve the root causes of climate change and create a scalable and efficient solutions which will allow us to save resources and money by treating the issue rather than the symptoms (Murtell, 2021).

Once we have a better understanding of the user's needs, desires, and pain points, we can reframe the problem in a more specific and actionable way by fine tuning the points we already have. We must ensure that we are focusing on the right problem to solve and not making assumptions.

During the 'Define' stage, we also create a clear problem statement that guides our thinking and keeps us on track. This statement summarizes the user's problem and sets the direction for the next stage, 'Ideate,' where we produce creative ideas to solve the problem (Tuttle, 2021).

Climate change is an incredibly broad topic which cannot have only one solution. There are a range of factors feeding to the effects of climate change, all of which will require personalised and tailored solutions. By breaking down the concept of climate change into manageable sections we will be able to create an extremely specific idea of the particular impacts this aspect of climate change has on the environment, how to define it and how to design a specific solution which will solve the problem at its root for the long term.

Fossil fuels are among the biggest contributors to climate change. Fossil fuels are remains of organisms and plants formed under pressure; they are burned to supply energy which fuel our daily lives. When these fuels are burned, the fumes are that of carbon dioxide, this molecule traps heat from sunlight within Earth's atmosphere causing it to have an overall warming effect on the climate around the world. This is commonly known as global warming.

A warming temperature may be insignificant in miniscule quantities however due to fossil fuel; we have seen measurable effects which will gain in severity over the years. Warmer temperatures can cause melting ice caps which results in a loss of habitat for arctic organisms, rising sea levels causing loss of land which results in loss of habitat and housing for both animals and humans and loss of fertile land which will affect the growth of crops which are needed to sustain the growing population. In addition to this, climate change can cause a host of health complications such as Asthma, Cancer and Heart Disease (Bertrand, 2021).

Fossil fuels are also the root of several other current day issues such as the depletion of fossil fuels which are our current main source of energy, the time and energy used to mine fossil fuels, ethical concerns in regard to mining, and disruptions to eco systems and biodiversity. From this we can identify that the overuse of fossil fuels are a common source of concern to the environment, solving this problem will save time and resources by tackling the root of the problem and it will be scalable enough to cause a large positive impact for various issues using only one solution.

Conclusion

In conclusion, climate change as a problem can be clearly defined; global warming due to fossil fuels is when Carbon Dioxide caused heat to be trapped which can cause flooding, habitat loss, loss of fertile land etc. These effects will result in difficulties to support the growing population as there will be a shortage of land for housing and crops, shortage of crops for food and more. Solving this problem will allow future generations to live a life free of anxiety regarding their place on Earth.

References

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