SCENARIO PLANNING FOR A CIRCULAR FUTURE: PETERBOROUGH CONTEXT

INTRODUCTION

Cranfield

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The city of Peterborough aims to become the environmental capital of the UK. As part of this mission, they aspire to eliminate the linear concept business model of 'take-make-dispose.' Their vision involves the city functioning in a fully circular path by 2050. However, currently, one of the biggest challenges for the council is bridging the gap between generating the interest from individual businesses and transforming the interest into action within their businesses.



AIMS AND OBJECTIVES

The aim of the project is to develop a tool to encourage businesses and stakeholders within peterborough to engage in becoming fully circular by 2050.

The objectives are as follows:

Define some case studies alongside Opportunity Peterborough based on the local industries such as manufacturing and services.

Understand the barriers and challenges that are **7 7 7 4** preventing businesses from transitioning into a full circular economy.

To bridge the gap between interest and action within businesses with the view to alleviating current scepticism, by demonstrating the consequences of a linear economy and the benefits of a circular economy.

To create future scenarios within Peterborough, depicting how, in 2050, the city could move to a Circular Economy transition and its benefits and, in contrast, how it could continue on a linear model and what would be its consequences.

To validate the future scenarios through a visual digital tool.

Provide key recommendations to improve 矛 the circularity of Peterborough's economy in the future and beyond the scope of this project.

METHODOLOGY

Both qualitative and quantitative research methods were applied. We predominantly used primary research, including questionnaires and semi-structured interviews. This was complemented by the use of Secondary data, comprising citywide data on resource flows and an assortment of company specific data.

Design thinking approach was adopted from the onset to scope out the different phases of the project.

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DEFINE

PROTOTYPE

EMPATHISE

FIG.03 DESIGN

THINKING DIAGRAM



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Secondary as well as primary data from specific business case studies were used to construct foresight scenarios for the city of Peterborough towards the year 2050, in the form of a motion graphic tool.



Using the afore-mentioned data and foresighting techniques, this scenario depicts two distinctive pathways (the linear partway versus the circular pathway), culminating in the revelation of potential benefits and consequences of either pathway.

CURRENT - LINEAR PATHWAY



FUTURE CIRCULAR PATHWAY

By 2050 MORE 20% THAN Reduction in the amount of resources required by the city.

By 2050

RISE IN

DWINDLING

RAW MATERIALS

RISE IN PRICES OF GOODS

UNEMPLOYMENT



will work in the circular economy sector, this includes up to 300 net new jobs in circular economy.

By 2050



Overall, the city could celebrate huge economic prosperity from achieving full circularity.

KEY FINDINGS

The tool was tested with Peterborough businesses during an interactive workshop, leading to the following conclutions:

- The final tool can be used as a motivational instrument to deliver the urgency of switching to circular economy. Specific convincing elements were the use of impactful data presented in a visually impacting manor.
- Using foresight to create scenarios of a closer date may be more impactful and cause less doubt.
- A circular business model may appear more tangible through a foresight scenario of a smaller time-frame, and through the progression of a tool that can output specific monetary savings for individual companies.
- In order to motivate businesses into action, there must be further research into how consumer demand will change, and consequently how this may impact upon their business within the future.

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