Project Proposal

18 August 2025 09:22

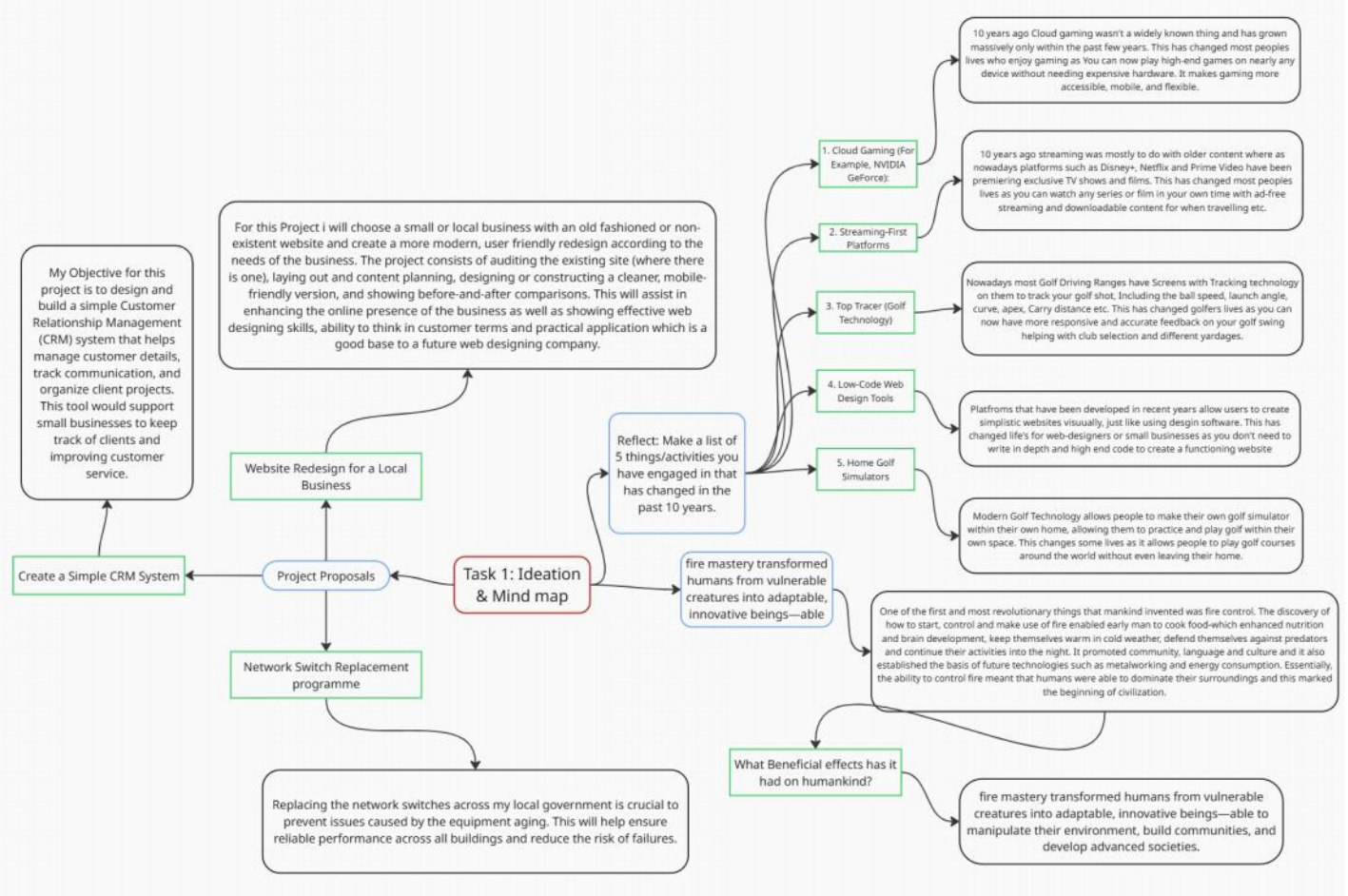
Changemakers: Creativity and Value Creation
Assignment 1: Innovation & Research.

Dylan Bell - 2417050

Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Mind map

18 August 2025 09:48



Aim & Objectives and Research area

18 August 2025 09:51

Aim:

To create and implement a contemporary, accessible, and fully responsive website for a small/local business, with the aim of increasing their online presence, the general user experience, and making it accessible to all devices and users. The project will be focused on implementing some of the best practices in web design and development, such as clear navigation, mobile optimisation, and consistent branding. The project will attempt to address the functional and aesthetic requirements of the business and the target audience, as well as to give a professional portfolio to facilitate further needs.

Objectives:

1. To audit the existing website (if applicable) and identify usability issues, outdated content, and design flaws.
2. To gather and analyse customer and business needs through informal discussions or secondary research.
3. To plan and design a responsive, mobile-friendly layout that reflects the business's brand and goals.
4. To implement the redesign using basic web development tools or platforms (e.g., HTML/CSS, WordPress, or design mock-ups).
5. To evaluate the effectiveness of the new design by comparing it against the previous version using criteria such as layout, clarity, loading time, and user accessibility.

Research philosophy

18 August 2025 09:59

For my project, the research philosophy Pragmatism would be the most suitable as it focuses on real-life results, practical application, and flexibility in methodological choice. This philosophy suits a web design project for local businesses. Pragmatism doesn’t have a strict approach to inquiry over another, it allows the application of any methods or tools that are best at solving the problem that is being solved. In this example, it means getting to know the objectives of the business, defining user requirements, and using best practices in web design to make the online presence more efficient and interesting to use.

Search tools & Strategies

18 August 2025 10:01

Search tools, academic databases, and search strategies will be combined to find relevant academic and industry research for my project. These tools will help to find reliable information on user experience, responsive web design, small business websites, and digital accessibility, which are the main themes of this project.

Google Scholar will be one of the main tools I will use in this project as it is an easily available academic search engine which includes different scholarly articles, conference papers and more. It allows for more broad and flexible searches which can be useful when searching for certain terms. I will also be using EBSCO to locate peer-reviewed journals and business technology articles. This database is important for research into how small businesses benefit from digital transformation and improving their online presence.

Effective search strategies are important when finding relevant research from different sources. This includes using Boolean operators to refine results. For example, searches like "web design" or "small business" will help narrow the focus.

I will also utilize Phrase searching using quotation marks to obtain more precise results. Applying filters such as publication, discipline, and peer-review status will also help when it comes to relevance and quality.

In addition, I will apply filters in academic databases to ensure articles are relevant to my research. Filters such as date range, subject area and source type help Make sure that information is both current and academically reliable.

The search strategies that I have explained can be combined to help increase the efficiency and strength of the research process. It makes sure that the data which is used to make decisions is solid, current and applicable to the needs of a local company which is trying to enhance its online presence.

References

18 August 2025 10:02

IEEE Xplore, 2025. *Digital Library*. Available at: https://ieeexplore.ieee.org/Xplore/home.jsp

ScienceDirect, 2025. *Scientific Articles in Web Design and UX*. Available at: https://www.sciencedirect.com

EBSCOhost, 2025. *Research Databases*. Available at: https://www.ebsco.com

Google Scholar, 2025. *Academic Research Search Engine*. Available at: https://scholar.google.com

Question 1

18 August 2025 10:02

To help improve validity, research objectives will be clearly set, all data collected will be relevant to the objectives of the research which is to improve user experience, accessibility and online presence of businesses. The results will be cross-checked using triangulation, for example, the use of several data sources, e.g. user surveys, usability testing, competitor analysis, which will enhance the precision of conclusions.

For reliability, usability test scripts and questionnaires will be standardised to ensure that all the participants are provided with the same instructions and conditions. It will also have consistent quantitative data on user behaviours using digital analytics tools like Google Analytics that can be compared over time to be consistent.

Although the project will focus on a single local business, more general principles of UX and accessibility, will make it possible to apply the findings and recommendations to other small businesses. This will be backed up by a comparison of research findings with available scholarly and industry research on web design of small enterprises.

For the ethical considerations, all participants in usability tests and surveys will be informed and will sign informed consent, this will ensure that they are fully aware of the purpose of the project, their role, and the way their data will be used. Data will be anonymised and stored in a secure location and only used for the purposes of this project. Also, intellectual property rights to the current content of the web site will be observed and any new items of design will be original or licensed.

research strategies/data collection methods

18 August 2025 10:07

During this project, I will use mixed methods as a data collection method using quantitative and qualitative techniques. I will use three key methods to gather this information. To begin with, the customers of the business will be sent online surveys. These will consist of brief and straight forward questions regarding the appearance, usability, and information searchability of the current site. Secondly, I will conduct usability tests, during which a small group of individuals will attempt to perform typical tasks on the site, including locating contact information or making a reservation, and I will monitor and record issues. Thirdly, I will examine the current performance of the site by using website analytics.

I will conduct a pilot study before the actual research to ensure that the methods of data collection are effective. This will entail conducting a pilot test with a brief survey and one or two usability activities with individuals who are close to the target audience. Once they are done, I will inquire about their feedback concerning whether the questions were clear, the tasks were sensible, and the process was simple to follow. I will then adjust according to their responses to make the final research better. This will assist in ensuring that the data I will collect later will be accurate, relevant, and useful in the redesign.

Quantitative and qualitative analysis.

18 August 2025 10:08

The quantitative and qualitative methods will be used to analyse the collected data. Quantitative analysis is to measure and compare the numerical data, including the speed of finding information, time spent on the site, and the number of users who leave without any interactions. These outcomes will be measured against the pre- and post-redesign to gauge the improvements.

Qualitative analysis will aim to find out the reason why users act in a particular manner. This will involve the review of the open-ended survey answers, usability testing observations, and trends in responses. This will allow me to identify recurring themes and I will be able to determine what users like, what makes them feel confused, and what changes can be made to improve their experience. These two forms of analysis will provide a balanced picture of not only the quantifiable results but also the human element that would affect the usability and the attractiveness of the site.

References

18 August 2025 10:10

Google Analytics Help (2025) *Analytics basics*. Available at: Analytics Help

Nielsen Norman Group (2024) *Usability testing 101*. Available at: https://www.nngroup.com/articles/usability-testing-101/

Qualtrics, 2024. *Mixed Methods Research*. [online] Available at: Mixed Methods Research: Using Qualitative and Quantitative Data

Appendices

18 August 2025 10:14

Is innovation changing things for the better?

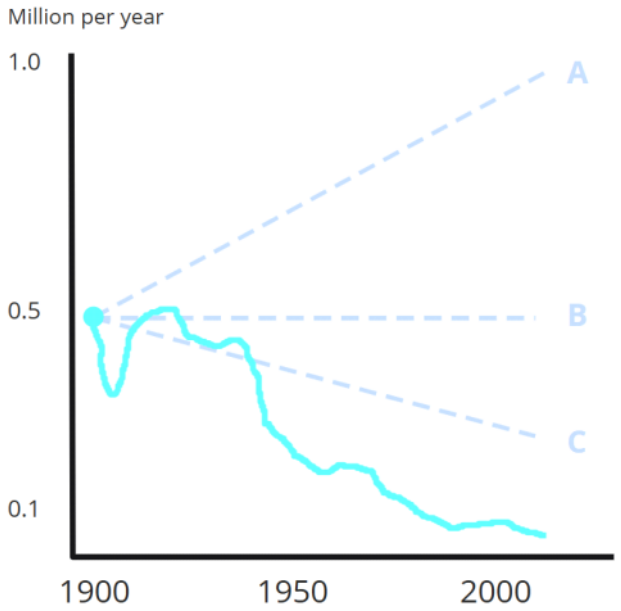
Deaths from natural disasters actually fell to **less than half** over the last 100 years.

In 1900, roughly half a million people died a year from natural disasters such as floods, fires, earthquakes and droughts.

When polled, **only 12%** of the Swedish public chose option C, that deaths from natural disasters had fallen to less than half.

50% agreed with option A, believing that the rate had more than doubled.

C. Decreased to less than half



Is innovation changing things for the better?

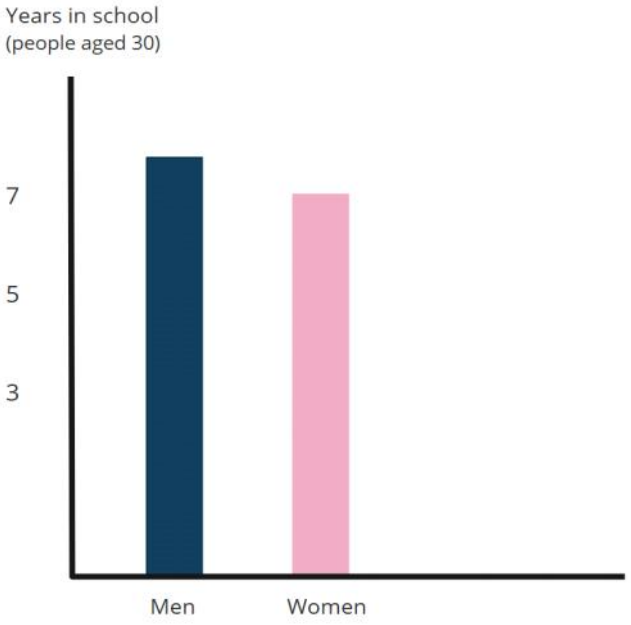
Across the world, **women aged 30 have spent 7 years in education.**

While we haven't achieved gender equity, the overall average is much closer than many people realise. In fact, when polled, only 24% of the USA public chose option A. **52% chose option B**, that women had spent 5 years in school.

Hans Rosling argues that "when you answer, you answer according to the worst places, and there you are right, but you miss the majority."

Do you agree with that?

A. 7 years



Is innovation changing things for the better?

In fact, the percentage of people living in extreme poverty almost halved.

This data was collected in 2014, and more recent data shows that this percentage has fallen even further.

In 1990, 35.9% of the global population lived in extreme poverty**. In 2017, it was only 9.3%.** Although this still means nearly 1 in 10 people live in extreme poverty, this has fallen from over 1 in 3 people in 30 years.

C. Almost halved

As you can see here, many aspects of life have been improved by **modern innovation.**

In general, we are doing much better than in the 'good old days', with higher quality of life and improved access to resources.

These three questions were posed by **Hans Rosling** in a **2014 TED Talk.** In the next activity, we will look at more of his work to see if innovation is really changing things for the better.

What is the fourth Industrial Revolution?

Revolution		Year	Information
	1	1784	Steam, water, mechanical production equipment
	2	1870	Division of labour, electricity, mass production
	3	1969	Electronics, information technology, automated production
	4	?	Cyber-physical systems

Reflect

As you can see, the characteristics of each industrial revolution have changed a lot over time.

Now you have seen an overview of the fourth industrial revolution, we will look at some of the new technologies that will potentially change our way of living.