

Innovation and Research

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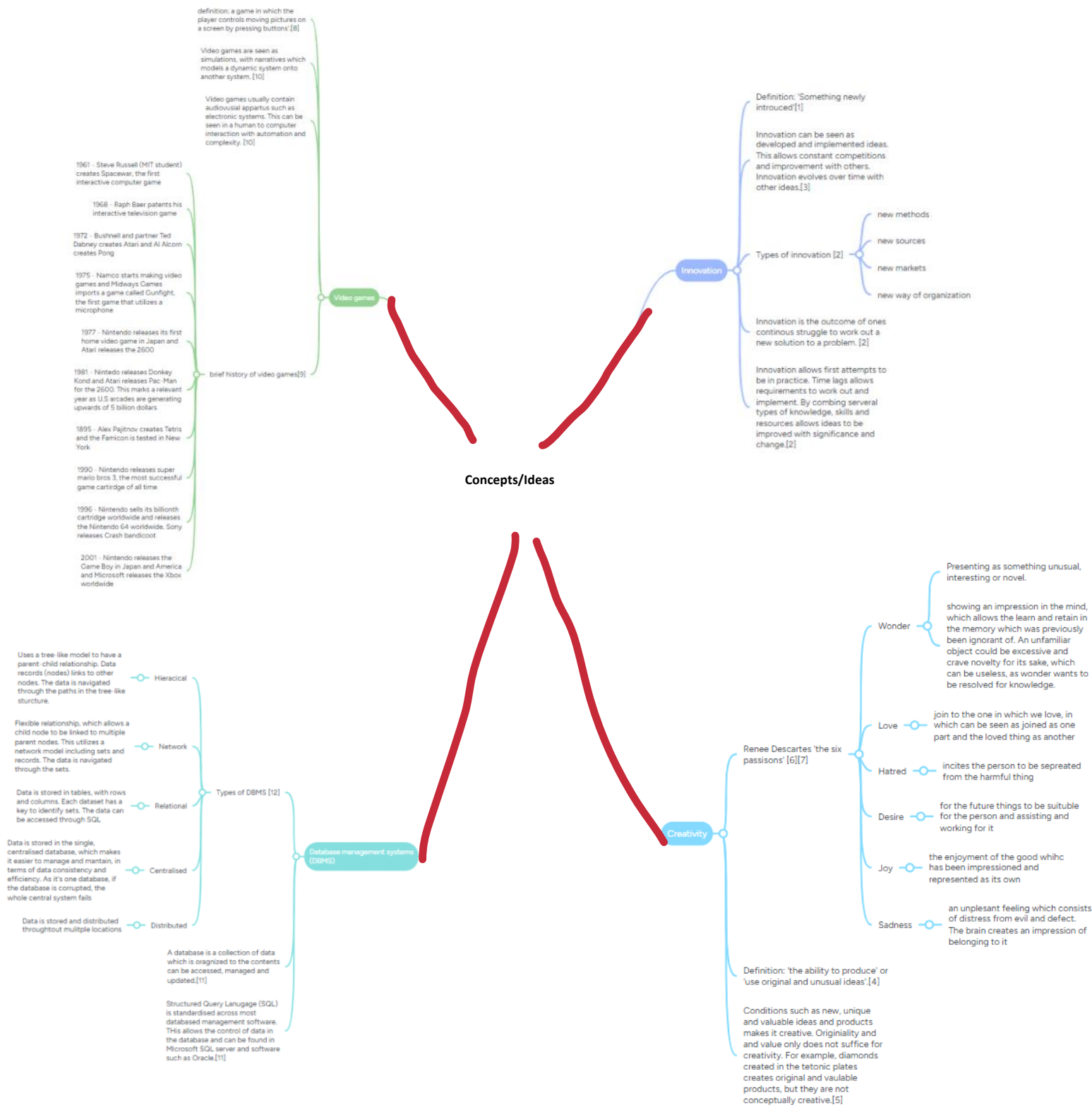
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Changemakers:
creativity and Value
Creation

ACCA5033



I would like to take forward the section labelled 'Database Management Systems'



References

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6:46 PM

References

- [1] "innovation." www.dictionary.com. <https://www.dictionary.com/browse/innovation>
- [2] J. Fagerberg, "1 Innovation: A Guide to the Literature," in *The Oxford Handbook of Innovation*, J. Fagerberg and David C. Mowery, Ed., Oxford University Press, 2006, pp. 0. doi: 10.1093/oxfordhb/9780199286805.003.0001 Available: <https://doi.org/10.1093/oxfordhb/9780199286805.003.0001>
- [3] J. Björk and M. Magnusson, "Where Do Good Innovation Ideas Come From? Exploring the Influence of Network Connectivity on Innovation Idea Quality," *J.Prod.Innovation Manage.*, vol. 26, no. 6, pp.662–670, 2009. doi: 10.1111/j.1540-5885.2009.00691.x. Available: <https://doi.org/10.1111/j.1540-5885.2009.00691.x>
- [4] Cambridge Advanced Learner's Dictionary & Thesaurus, "creativity." dictionary.cambridge.org. <https://dictionary.cambridge.org/dictionary/english/creativity>
- [5] B. Gaut, "The Philosophy of Creativity," *Philosophy Compass*, vol. 5, no. 12, pp.1034–1046, 2010. doi: 10.1111/j.1747-9991.2010.00351.x. Available: <https://doi.org/10.1111/j.1747-9991.2010.00351.x>
- [6] A. M. Schmitter, "17th and 18th Century Theories of Emotions," in *The {Stanford} Encyclopedia of Philosophy*, Edward N. Zalta, Ed., Metaphysics Research Lab, Stanford University, 2021,
- [7] D. Kambouchner, "Descartes and the Passions," in *The Oxford Handbook of Descartes and Cartesianism*, S. Nadler, Tad M. Schmaltz and Delphine Antoine-Mahut, Ed., Oxford University Press, 2019, pp. 0. doi: 10.1093/oxfordhb/9780198796909.013.11 Available: <https://doi.org/10.1093/oxfordhb/9780198796909.013.11>
- [8] "video game." dictionary.cambridge.org. <https://dictionary.cambridge.org/dictionary/english/video-game>
- [9] S. L. Kent, *The Ultimate History of Video Games, Volume 1: From Pong to Pokemon and Beyond . . . the Story Behind the Craze That Touched Our Lives and Changed the World*, Crown, 2010. [Online]. Available: <https://books.Google> Scholar.co.uk/books?id=PTrcTeAqeaEC
- [10] N. Esposito, *A Short and Simple Definition of What a Videogame Is*, 2005. doi: 10.26503/dl.v2005i1.177
- [11] R. Narang, *Database Management Systems*, Prentice Hall India Pvt., Limited, 2018. [Online]. Available: <https://books.Google> Scholar.co.uk/books?id=B-cJhhsh4NAC
- [12] susobhanakhuli. "Types of Database Management Systems." www.geeksforgeeks.org. <https://www.geeksforgeeks.org/dbms/types-of-database-management-systems/>

Aims and objectives

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Aim

- To implement AI into a Database Management System by auto-Indexing

Objectives

- Collect and identify the ways of indexing in a DBMS
- Develop and compare machine learning AI algorithms to index data
- Evaluate the AI model through statistical data for efficiency and accuracy
- Implement the chosen AI model into a test database
- Conclude whether the model is suitable and evaluate user satisfactions with the model

Research Philosophy

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For this project, the philosophy that would be suitable to implement is the epistemology research philosophy. Specifically, Coherentism epistemology.

Epistemology is derived from the Greek words, 'episteme' and 'logos'. 'episteme' means understanding and 'logos' translate to reason. There are different variations of the meaning of epistemology. Locke's derivation is the understanding of human operations. Plato's meaning was to find out what it is to have knowledge and Kant's meaning was to see the conditions of human understanding. To conclude epistemology, it's to understand cognitive success in yourself or others. Cognitive success can be achieved by different virtues. This must be the success from a theory, not a person. This can include research, strategy or program. This is perceived as a mental state, act or procedure. What makes cognitive success a success is down to 3 states: contractualism, consequentialism and constitutive. [1]

Coherentism epistemology can be perceived as coherent system of beliefs. This can be defined as the hypothesis is true, if all the standards cohere and or true. Sometimes false positives can be seen. Coherentism has two systems of beliefs which have to be satisfied. The theory must be justified and it must be sufficient to be justified.

A negative to Coherentism Epistemology is that incoherent beliefs can be justified. Incoherence and coherence are contraries, which should be looked upon with this philosophy. [2]

Search tools/strategies

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Research databases are databases which include research papers, books and other informational papers that can be easily retrieved and read. The databases which will be used for this project include Google scholar, JSTOR. Other databases such as the library can also be utilized.

Google scholar is shown to be a subsection of Google's search engine. Containing journals, prints, reports thesis and many more documents. Google scholar is not specialized and shows many topics. Usually, medicine and sciences are seen on the database. As its a search engine, it directs to other publisher websites. It is usually operated via open-source or commercial. Text cites that its 'fast and easy' to search topics. Keyword matching is one of their way to search through the database as well as a relevance algorithm. [3]

JSTOR is an acronym for Journal Storage. It was founded in 1993 as a non-profit by the Mellons foundation. It then went online by 1997. It allowed universities, schools and researchers to gain information. JSTOR allows metadata, and search result points scans to be able to access data easily. The database contains texts, images, journal pieces and book chapters. [4]

Search tools are needed for secondary research. Search tools are utilization which allow easier search of topics. These can include Keywords, Boolean and truncation. [5]

Keywords allows the search to defined into one concept. These can include words in the question or key concepts of the idea. Adding more keywords allow a broader search which increases the journal articles you may find. Adding less keywords allows less distortion from the search, improving the accuracy of the journals that it will find.

Adding Boolean operators such as AND, OR, NOT allows the database to group keywords and concepts. Using AND allows to join keywords for the database to search for all the keywords entered. Using OR allows to group keywords for the database to search for the articles containing it and broadens the search.

Using NOT excludes terms from the search to allow the database not to search for it.

Wildcards (*) can be used for plurals, variants of the word and word endings. Using * is a universal symbols for wildcards but some databases may have other variants of symbols or characters. [5]

References

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References

- [1] A. M. Schmitter, "17th and 18th Century Theories of Emotions," in *The {Stanford} Encyclopedia of Philosophy*, Edward N. Zalta, Ed., Metaphysics Research Lab, Stanford University, 2021,
- [2] &. Murphy and Peter, "Coherentism in Epistemology." iep.utm.edu.
<https://iep.utm.edu/coherentism-in-epistemology/#SH1b>
- [3] K. Skhal, "Wireless information system for emergency responders (WISER)," *Journal of the Medical Library Association*, vol. 94, no. 1, pp.97, 2006.
- [4] L. Gitelman, "Searching and Thinking About Searching JSTOR," *Representations*, vol. 127, no. 1, pp.73–82, 2014. doi: 10.1525/rep.2014.127.1.73. Available:
<http://www.jstor.org.ezproxy.uwtsd.ac.uk/stable/10.1525/rep.2014.127.1.73>
- [5] M. Holland, M. Dutton and S. Glover, "How it's done: search tools and techniques for major bibliographic databases," *Journal of Paramedic Practice*, vol. 13, no. 5, pp.210–213, 2021. doi: 10.12968/jpar.2021.13.5.210. Available: <https://doi.org/10.12968/jpar.2021.13.5.210>

Document strategies

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Document strategies assesses the model used that can be found to be suitable for the project. Usually considerations such as validity, reliability, generalizability and ethics may come to influence what strategies may be used.

Typical case sampling or purposeful sampling allows identification of information-rich cases in qualitative datasets. This can be done using selected groups of people that relates to the theory. This means people with knowledge or expertise in that selected field. Also, conditions like communication and participation can affect the sampling. For this type of sampling, validity and reliability are seen as the most effective, as they maximize with their expertise and knowledge. Aims and objectives must be met with the sampling thus studies suggest that assumptions may happen with this case. It can be seen as testing until there are no new methods arisen. [1] Ethically, people who have been chosen give information which is needed for the project/thesis. This allows the disclosing of private information to a minimized degree.

Snowball sampling is a non-probability sample. It can be useful for unattainable population. It can be seen as a gradual process. It continues until there is a data saturation. This can be classed as the weakest method of sampling as it has the largest risk of error as target characteristics are not selected. As it's a non-probability method, there is no generalizability as it's connected to other people in the sample. [2] Ethically wise, it may pose a risk as people in the sample may have to disclose private information.

Random sampling comes in two types: simple random and stratified random.

Simple random minimize bias. This allows the general population to be used as it's randomized. There are a number of methods to collect data using random sampling, a number table or a lottery-type pick. A lottery-type picking method allows the random distribution of tasks to be spread out to random chosen people. The data table method allows generated numbers to be placed onto the sample. This can be selected out of the numbered people. [3]

Stratified random sampling divides the sample to groups based on characteristics. Then, random selected few may be chosen from each group. This allows accuracy as variability is reduced and represents a larger representation from larger population. [3]

As this reduces bias, the challenge that this sample face is that it might create burden to unwanted chosen people.

For this project, Purposeful sampling would be a suitable strategy as it allows experts with the system to utilize their knowledge and background with the AI model

Data collection methods

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For this project, the most suitable way to collect data would be to use secondary and primary data.

For secondary data collection, utilizing keywords, wildcards and Boolean searching to be able to aid research about AI models and the correlation with databases for indexing. Concept mapping will help to give insight to research topics and the depth needed for this project

For primary data collection, experimentation and testing of AI models are performed to aid with implementation. This will help improve the building of the model as well as feedback from sample users.

See appendix for examples of data collection.

Quantitative and Qualitative analysis

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Quantitative data can be based on numerical data. This is called statistics. Statistics can be analysed, presented and interpreted. Data needs to be understood before being analysed, such as statistical test and application. Quantitative data can be taken from statistical sources such as automatic processes. The data must be error-free and is suitable for analysis. [4]

Descriptive statistical analysis can be described as data with a description. This can be seen as a graph or table. AS it is difficult for humans to analyse raw data, interpreting data points through visual benefits by showing trends and patterns. Data can be represented in histograms, bar charts, table charts or line graphs. [5]

Qualitative analysis can be seen as data collected in context and voice. This allows interpretation and understanding of social behaviours, rather than numerical data. Data can be seen in perspective, attributes in subjects or interactions. Gathering data can be interview questions to focus groups. This allows adaptability with the data. [6]

Focus groups allows discussions within a select group of subjects to gain information, usually about the experience with selected topic. This allows several perspectives to be discussed and recorded. Usually, a moderator records and controls the group. The significance of the role makes the moderator gives good leadership and interpersonal skills. The advantages of this data collections allows insight into people's shared understanding of the topic and how they can be influenced within the group. The disadvantage can be seen when focusing on an individual basis. Group view may allow bias. Other factors include the availability and arrangement of the subjects in the focus group

References

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References

- [1] L. A. Palinkas, et al., "Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research," *Administration and Policy in Mental Health and Mental Health Services Research*, vol. 42, no. 5, pp.533–544, 2015. doi: 10.1007/s10488-013-0528-y. Available: <https://doi.org/10.1007/s10488-013-0528-y>
- [2] M. Naderifar, H. Goli and F. Ghaljaei, "Snowball Sampling: A Purposeful Method of Sampling in Qualitative Research," *Strides in Development of Medical Education*, vol. In Press, 2017. doi: 10.5812/sdme.67670.
- [3] D. Makwana, et al., "Sampling Methods in Research: A Review," vol. 7, pp.762–768, 2023.
- [4] K. Williamson and G. Johanson, *Research Methods: Information, Systems, and Contexts*, Chandos Publishing, 2017. [Online]. Available: <https://books.Google Scholar.co.uk/books?id=GVPXDgAAQBAJ>
- [5] R. W. Cooksey, "Descriptive statistics for summarising data," in *Illustrating statistical procedures: Finding meaning in quantitative data*, Springer, 2020, pp. 61–139.
- [6] M. L. Weng, "What Is Qualitative Research? An Overview and Guidelines," *Australasian Marketing Journal*, vol. 33, no. 2, pp.199–229, 2025. doi: 10.1177/14413582241264619. Available: <https://doi.org/10.1177/14413582241264619>
- [7] D. L. Morgan, "Focus groups," *Annual review of sociology*, vol. 22, no. 1, pp.129–152, 1996.

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Make a list of 5 things you have used or activities you have engaged in that would not have been around 10 years ago.

1. Social media
2. AI
3. Taxi services/uber
4. Streaming services
5. Electric cars

 Apply

Now that you have watched the video, **which innovation do you think has had the biggest impact on the development of society as we know it today?**

Why do you think this innovation has had such a big impact? Think about how you would *justify* your choice.

Electricity is used for most, if not all of daily life. For convenience and for survival.

Do you still agree that this invention has had the **biggest** impact on the development of society?

Electricity

What **beneficial** effects has it had on humankind?

Justify your response in a **forum post**.

Everything has been made convenient for daily life. Lighting, cooking, cleaning, and communication has improved greatly in terms of efficiency and speed.

Of the technologies listed by the World Economic Forum, which, if any, do you think will have the biggest impact in your discipline area in the next 5 years?

Justify your answer in the box and in reference to its evidence.

Computing capabilities will improve in 3-5 years. As the Technology grows in power and efficiency, so is the computer computation.

Do you consider yourself to be a creative person? Justify your response. I consider myself as a creative person as I enjoy drawing and enjoying creating or sketching new ideas.

In a couple of sentences describe an experience from your past where you feel you were discouraged or encouraged to be creative and how this might have affected how you feel about your levels of creativity.

Why is creativity important in your subject area? What might you be asked to do that might involve the need for you to be creative?

I was encouraged to be creative when I learn how to draw my first still life and it turned out alright. Creativity is important in data engineering as it needed for problem-solving and finding way to utilize functions and set data using creative methods.

Unit 1 Topic 1 completed!

You should now:

- Develop the evolutionary pressure inputs, importance and benefits of creating and maintaining a strategy.
- Identify concepts used to describe the progress of technology and innovation.
- Take it yourself as someone capable of being creative if you don't already!

If you don't want to stop using these built-in tools, you can visit [my page](#).

[Open my page](#) >

Here are listed the references that are available for you.

[References](#) >

[Back](#) [Go to](#)

Across the world, how did deaths per year from natural disasters change in the last century?

A. More than doubled

B. Remained about the same

C. Decreased to less than half

On average, women aged 30 have spent how many years in school? (Men of the same age have spent 8 years)

A. 7 years

B. 5 years

C. 3 years

In the last 20 years the percentage of people living in extreme poverty worldwide has...

A. Almost doubled

B. Remained about the same

C. Almost halved

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

Check

Drag the revolution to the correct definition.

a. Steam, water and mechanical means of production

First Industrial Revolution

These are the correct definitions for the first and fourth industrial revolutions. If you'd like to remind yourself of the definitions of each, hit [update this slide](#).

d. Cyber physical systems

Fourth Industrial Revolution

Check

By 2025, what percentage of people are expected to be wearing mobile sensors connected to the Internet of Things?

☐ 2%

☒ 75%

☐ 10%

Within one year alone, how many sensors are estimated to be connected to the Internet of Things?

☐ One billion

☐ One trillion

☒ One sextillion



Update



Reflect

Describe the last time you felt as though you were being creative. For example, you might have been painting, playing a musical instrument, sewing, or cooking. **How did it make you feel?**

I've been drawing, video editing and playing guitar recently.

Using creativity to **avoid stress** is:

- A contemplation tool
- A distraction tool
- A means of self-development to face challenges by building up self-esteem and confidence

Correct

That's right. You selected the correct response.

Analysis: the study of what is valuable.

Epistemology: the study of knowledge.

Ontology: the study of being.

Correct

	Correct	Incorrect	Ignored
Positivism	☒	☐	☐
Utilitarianism	☐	☒	☐
Interpretivism	☐	☐	☒
Postpositivism	☐	☐	☒
Phenomenology	☐	☒	☐

Do you feel more drawn to:

☐ Critical realism or more so? ☒ Yes, I do.
☐ I support your (checkboxes) more (or, all)?

critical realism

I agree with the Critical Realism philosophy as there's reasoning for the reasons for it and utilizing this allows the understanding of the bigger picture

Unit 1 Topic 2 completed!

You should now:

- recognise the links between causality and feelings of well-being and understand how to investigate that link in your own life
- define your personal 2-philosophy using the best bits of philosophy, psychology and neuroscience and explain how these concepts can impact your investigations
- define your research philosophy, as well as five statements

If you have taken more courses on this module, you can now report them.

[Report progress](#)

Here's a quick overview of the differences that are available to you

[See more](#)

[illegible]

- ❌ Asking the library staff
- ❌ Using a piece of software
- ✅ Remove all superfluous words

Reflect

Consider your research assignment.

Can you think of a **focus question** that you could outline what is going to be in or out of scope for your research?

Write it down using the Notes icon down below or elsewhere.

 Reflect

You have come to university to study a particular subject, but what is the **area of interest** that has caused you to take time to study this?

Enter your answer into the box below. You will revisit this later.

Data, computer systems and electronics;

1. A keyword is like a...

- ☐ A word that unlocks others.
- ☐ A word like a hashtag that summarises the meaning of a sentence.
- ☐ A way of distilling meaning that can be used to search databases.
- ☒ All of the above.

3. Drag all the correct common Boolean operations to the book. Drag the incorrect options into the bin.





Unit 1

Topic 4 completed!

Now do this:

- Write a systematic way to walk through the **Task** above on your chosen subject which focuses on the **challenge** of your interests.
- **Engage** how to create a series of **challenge** questions.
- Use **feedback** to improve the focus of your problem or research questions.

If you have taken notes using the **Task** above, think you are now **ready** to **begin**.

[Begin your topic 4](#)

Now is a chance for the **reflexions** that put **action** into **being**.

[Reflexions](#)

[Back](#)

[Go on](#)

Question 1 of 3

Which of these are good research questions?

Read each set of questions as they appear below and select which you feel is the best research question of the two.

- ☐ What effect does the pandemic have on people's minds?
- ☒ What effect has the isolation of young adults had on their mental health?

Question 2 of 3

Read each set of questions as they appear below and select which you feel is the best research question of the two.

☐ What factors led to homosexuality being legalised in the UK in 1967?

☒ How do Welsh rugby fans relate to the LGBTQ+ movement since Gareth Thomas announced that he was gay?

Question 3 of 3

Read each set of questions as they appear below and select which you feel is the best research question of the two.

☐ Where do most immigrants come to the UK from?

☒ What are the similarities and differences in the experiences of recent Syrian immigrants in the UK?

- How do you **truly** feel when you learn something new?
- How do you **truly** feel when your told that you're wrong?

I feel accomplished that I've learn a new thing.
I feel sad, but then I remember that it's a learning process and learn from the mistake

Question 1 of 2

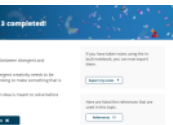
Which **two** **instincts** are in conflict when we are learning from feedback?

- ☐ The worry of not finishing on time.
- ☒ The joy from learning something new.
- ☒ Fear of being shown up for being wrong.
- ☐ The feeling of success from completion.

Question 2 of 2

According to Heen's TED talk, the people who actively sought critical feedback were:

- ☐ Less successful.
- ☒ More successful.
- ☐ Very upset.
- ☐ Ignorant.



🔍 Reflect

Take some time to reflect on what you already know about the **importance of networks**.

Networks allow communication between people or parties in order for support

🔍 Apply

Thinking about the video you have just watched:

• What did the video tell you about the **power of networks**?

• Have you, or anyone you know, been presented with opportunities through **personal connections**?

Note down these connections and their importance. These may help you to identify stakeholders later on.

The power of networks creates opportunities, builds up resilience and help social change.
Yes, personal connections have given me recommendations to universities and colleges. Also job opportunities as well.

🔍 Apply

You should now know that a stakeholder analysis is a process of identifying those people before the project begins, grouping them according to their level of participation, interest, and influence in the project.

Using what you have learnt so far, spend some time creating your own **power/interest matrix**, making sure to identify what your stakeholders and their level of interest. Remember, it is key to identify personal contacts early on.

High	Keep Satisfied	Manage Closely
Low	Monitor	Keep Informed
	Low	High

Level of interest

high	customers	Company leader
low	suppliers	Employees
	low	high

Unit 3 Topic 1 completed!

You should now:

- Be able to demonstrate what a personal contact network is and define what makes a good network.
- Understand the importance of stakeholders in developing your idea.
- Be able to create a stakeholder map for a specific project.

If you have taken notes using this in both windows, you can now export them.

Export My notes 1

Here are listed the references that are cited in this topic.

References 10

Back Exit 10

Topic 2

🔍 Reflect

Before delving deeper into this section, take some time to think of a time where you needed funding support.

Who did you think to approach?

Why did you choose them over someone else?

For funding, I would of approached my family as they trust me as I trust them, and would support me whatever they can do.

Accelerators

a small seed investment with a period of mentoring

Incubators

where entrepreneurs can develop their ideas

Angel investors

investment during their early stages of growth

Venture philanthropy

an approach to funding charities or social enterprises

Loans

convenient financing for almost any purpose

Bootstrapping

growing the business via the use of personal funds

Crowdfunding

the best ways to test an idea in the market/gain funds

Venture capital

a person or a firm that offers funds for % of ownership

🔍 Reflect

In task 1 of this module, you looked at 'the power of networks'. We explored situations where we have perhaps benefitted from a **network connection** or have been able to **benefit others**.

➤ How does this fit within adding value?

Take some time to explore where value has been added in these situations.

Topic 4

🔍 Reflect

“Prototyping is the conversation you have with your ideas”

(Wujec, as quoted in Hoang, 2020)

Spend some time thinking about the quote above.
What do you think is meant by this statement?

Prototyping allows drafts of work to be made and what to improve and what is good in the design.

🔍 Reflect

Think back to your **first year**, specifically to an assignment or task where you produced an **end product** - good or bad. For example, an essay, presentation or physical/digital object.

Using what you have learnt about prototyping and agile thinking so far, **can you identify where these techniques and processes may have improved your end product?**

Remember to note down how this may have improved your end product, so you can revisit and apply this same level of thinking to future assignments or tasks.

I've done a lot of drafts/iterations of a presentation to improve it, but producing it fully. As well as creating a mind map for map out what needs to be done.

🔍 Check

Take a few moments to complete this activity, which will help you summarise what you have learnt in this section.

Question 1 of 4

Producing a piece of work that looks and operates close to the finished article is:

- High-fidelity testing
- Low-fidelity testing

🔍 Check

Question 2 of 4

Producing a rough representation of ideas and concepts that help us validate our direction is:

- High-fidelity testing
- Low-fidelity testing

Question 3 of 4

Which are examples of low-fidelity prototyping?

- Research proposal
- Storyboarding
- Conversations & Role play

Question 4 of 4

The benefits of low fidelity testing are?

- It's quick and inexpensive
- Any changes will take a lengthy period of time to action
- Disposable

Topic 3

🔍 Apply

Reflecting on Robertson's definitions of narrative coherence and narrative fidelity, how would you rate Suki's performance?

It is excellent, 10/10!

If you haven't already, watch the video below and then drag the markers on the graph to match.

👉 **Does Suki's fundraising strategy fit the theme of a time?**

Narrative coherence

Does the video make sense? (Does each component form a meaningful part in the overall discussion?)

1 2 3 4 5

Narrative fidelity

Does the story seem accurate to how the experience and future impact? Can you relate to it and identify with the experience?

1 2 3 4 5

🔍 Reflect

So you rated the **narrative coherence** of the Dove campaign as: **4**

and its **narrative fidelity** as: **4**

What were the strengths and weaknesses of the campaign?

🔍 Check

Take a few moments to complete this activity, which will help you summarise what you have learnt in this section.

Question 1 of 3

What is prototyping?

- A process for narrowing focus to a specific, meaningful challenge
- Allowing an authentic audience to interact with your proposed solution
- An experimental process of implementing ideas into tangible forms

🔍 Check

Question 2 of 3

What does feed forward mean?

- Looking at what we could be doing next
- Looking back at what you have done

Question 3 of 3

Why do we test? Select which reasons you think apply.

- Testing your ideas can move you beyond the 'thinking without limits' creative phase and determine which of your ideas is likely to gain attention
- The more flexibility there is for optimising your initial idea
- Testing your ideas can allow you to keep on target and steer clear of bad decisions

Unit 3 Topic 4 completed!

You should now:

- Be able to demonstrate an understanding of the key stages of prototyping and the process of testing.
- Be able to demonstrate an understanding of agile methodologies and identify prototyping techniques and their value.
- Have a deeper understanding of developing ideas and apply this to your own work.

If you have taken notes using this in both windows, you can now export them.

Export My notes 1

Here are listed the references that are cited in this topic.

References 10

Back Exit 10

perhaps benefitted from a **network connection** or have been able to **benefit others**.

➤ **How does this fit within adding value?**

Take some time to explore where value has been added in these situations.

Network connections allow sharing of content and insight from similar companies creating a professional tool and giving mutual benefits for both parties.

Check

Take a few moments to answer the following questions to help you summarise what you have learnt in this section.

Question 1 of 3

What is 'Benchmarking'?

- ☒ A point that something can be compared to
- ☐ A limit point
- ☐ Something that cannot be changed

Check

Question 2 of 3

True or False. Added value refers to the negative results obtained from actions undertaken following Benchmarking.

- ☐ True
- ☒ False

Check

Question 3 of 3

When looking at research, added value refers to what?

- ☐ Value for money of university fees
- ☐ Time gained through studying
- ☒ New knowledge and understanding of the subject being researched

Loan

Unit 3 Topic 2 completed!

You should now:

- Be able to demonstrate an understanding that types of funding available for enterprise and research projects, and select appropriate sources of funding in research environments
- Be able to show knowledge and understanding of the concepts of benchmarking and value added
- Be able to create a contemporary funding campaign for a new venture

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Unit 3

and its **narrative fidelity** as: 4

What were the strengths and weaknesses of the campaign?

Now, reflecting on your own life, what experiences have you had lately and how could you use them to create stories? How would you make these stories coherent and true to life?

Can these experiences relate to a project idea you have in some way? Could you make a persuasive narrative for that project?

The dove campaign shows a easy to understand message with powerful images. It's a little abstract but not a lot to not send the message. The weaknesses of this project is that it had to be suited for commercial use so they broaden the topic. I've been improving my life by working out and learning more. Cohering these stories such as improvement of quality of life could work. These experiences may not be able to relate to the project idea as the project idea is more technical

Unit 3 Topic 3 completed!

You should now:

- Understand how the use of storytelling can frame ideas and as a persuasive communication tool
- Recognise signs to improve self-confidence and performance, especially when presenting your idea, concept or product
- Be able to communicate or pitch your concepts, ideas or products (with some practice)

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Unit 3

Resilience

Heightened ego

Behaviour problems

Check

What do authentic leaders have?

The ability to recall information

Purpose

Behaviour problems

Topic 1

Reflect

Sometimes students will say that their subject **does not require** an understanding of quantitative analysis. However, **qualitative data will appear in every medium**. Taking your subject as a trial, use Google and type:

"Quantitative research of ____"

What results do you see? Note these down in 'My notes' for future reference.

Quantitative research of numbers and statistics analysis
Research of defined variables

Check

Question 1 of 2

What a survey of 100 students, chosen at random, from your university and asking them the question "On a scale from 1-5, how satisfied are you with your profession?" is a good sample?

☐ Yes

☒ No

Correct!

The survey has been conducted at random to avoid any bias. The sample will of course have some bias, as it is a sample of the entire university, but has mitigated this by randomising the trial.

Check

Question 2 of 2

Could research of the recovery of people from Covid living on the island of Jersey be used to be applied to people living in the city of New Delhi, India?

☒ Yes

☐ No

☐ It depends

Correct!

It depends. Do you think that the people living in Jersey are comparable to the people who live in New Delhi? If you think the research is valid, if you think the research should not be used in the New Delhi context.

Unit 4 Topic 1 completed!

You should now:

- Be able to apply a numerical precision to arguments in a context that brings a level of precision to our work.
- Be able to explore data using different examples of graphs and charts and present data using a variety of methods.
- Have a deeper understanding of using charts that communicate in the best way possible.

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Topic 2

Reflect

Consider why a researcher might use qualitative research methods and list some benefits and disadvantages of this.

Do qualitative methods suit all research?

What are the limitations of qualitative research methods?

Qualitative research shows in-depth understanding of the topic. Advantages; detailed data, understanding of the data and flexibility of the data. Disadvantages of this makes it time consuming and difficult to generalize. Not this method suit all research as there is a lack of numerical data.

Reflect

Being able to sort your data and identify themes and patterns is the next stage in qualitative analysis and is often where your research starts to get exciting!

- Do you see patterns and themes in your everyday life?
- How do you recognise them and what do they look like?

Write a couple of sentences describing what a theme or pattern is.

Yes, I see patterns in everyday life. Such as trends in data, traffic on the road at certain times and population of the grocery shops at times.

Reflect

When you look at the example video transcriptions made from Dewi, Jordan, Anwen and Araf, can you identify what themes are the ones that appear to be significant?

Can you think how would you go about doing this as well as creating the evidence to be referenced in the future?

If you would like to view those transcriptions again, select the characters.

Jordan – video games, console
Dewi – chickenpox, football
Anwen – malaria, africa, charity
Araf – education, fitness

Reflect

Creating **charts** is a fantastic way of understanding the data we collect. The software most people are familiar with is called **Excel**. Excel can take the tables of numbers you collect on your research and present them as **bar charts**, **line charts** and **scatter charts**. These can be copied into your research in the usual way.

Think back to any research you have conducted, how did the authors present the data they have collected? How have you presented data in the past? Do charts make data, especially complex and large volumes of data, easier to read?

Authors usually use line/scatter graphs to reflect numerical data. I've presented all subjects such as bar and scatter graphs which make it easier to analyse and create conclusions for

Reflect

What graph or chart would be best to describe the correlation between **academic success** to **students reading age** results?

Why would you use this?

Make sure to note down your reasoning for future reference.

A scatter graph, as it shows correlation

Reflect

Consider the quote by Aristotle:

"The aim of art is to represent not the outward appearance of things, but their inward significance."

Is this something you agree with?

I agree with this as it's not how it's presented, but how it works on the inside and the deeper meaning of it.

Apply

Take at least 15 minutes to write out your plan on how you would organise your data.

- Will you adopt any of the suggestions as above?
- Do you have any further points to add?
- You may want to consider where you may store the recording files - cloud storage, USB, etc. What are the benefits of cloud storage?

Using interviews and focus group to organize responses to the project idea. This would allow individual and group feedback on what to improve and what is beneficial for the idea.
Cloud storage allows easy access to the data whether there is internet or not.

Check

Question 1 of 1

Step 1	✓	Familiarising yourself with the data
Step 2	✓	Generating initial codes
Step 3	✓	Identifying themes
Step 4	✓	Reviewing the themes
Step 5	✓	Giving your themes a name
Step 6	✓	Writing about your themes

Unit 4 Topic 2 completed!

You should now:

- Have demonstrated knowledge and understanding of how to manage quantitative data ready for analysis.
- Have identified a way to respond to identify patterns and trends in your data.
- Have improved the understanding of the role of Excel as a quantitative analysis software.

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Topic 3

Reflect

Reflect on your own experiences. **What does failure mean to you?**

What mistakes or failures have you made in the past that really **set you back**?

Failure means something that isn't right but can be worked on to be improved in the future.
Failure to meet deadlines, procrastinating, car accidents

Reflect

From when we are children, we are taught that **failure is not an option**. Yet we are not taught how success is achieved. Too often it seems like if someone is smart or lucky or special, they can succeed without ever tasting failure.

Can you think of someone famous or a personal acquaintance that seems to be **successful from having been lucky**?

By this we mean someone that has some claim to success from something they did rather than winning the lottery.

Thomas Edison is lucky as he stole the patent of the lightbulb and brought it off as his own. Since modern day, Thomas Edison is now related to the invention of the lightbulb while Humphry Davy should've gotten the recognition.

Topic 4

Take a moment to work out why you are studying.

Why is it that you are setting yourself the hard work of creating your project or assignment?

Can you think of one word that encapsulates all of this?

Growth, curiosity, innovation

Reflect

In the previous topic, you may have recalled a mistake that you have made in life that caused you to learn.

Now for some serious thinking: in all honesty, and keep it private to yourself, when you explain this mistake to a third party, do you make yourself seem better than you were?

Most people when being honest will say that they do. Being aware of our hindsight bias will help us innovate better versions of ourselves.

No, I tell it as it is. Lying gets nowhere.

Unit 4 Topic 4 completed!

You should now:

- Have recognised some techniques that you can use to improve your learning.
- Have described the things in your project that you care about which are important enough to share with others.
- Have produced some data that you can apply to create a poster illustrating your research.

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Data collection

Monday, August 11, 2025 11:25 PM

Keywords to use when searching:

Data#

DBMS

Database

AI #

AI models

Index#

Experimentation and testing

- Microsoft Azure AI integration for indexing
- Machine learning AI for auto-indexing
- Utilizing data analysts/data scientist/computer scientists for the implantation of the AI auto-indexing
- Utilizing users such as employees to see how user-friendly the service is

