

Response Summary:

Welcome to the Project Outline Form

What is this for? The Project Outline Form supports you to design a research project, and you can discuss this form at a project meeting with your supervisor. On completion of this form, you and your supervisor will receive an email with your responses.

Who needs to take part? All taught post-graduate students on a full-time course at WMG.

What information will be asked? You will be asked to provide details about yourself, your supervisor, your course, your project, and professional development. Please ensure the email addresses you provide are correct. If there is an error in the email addresses provided, you can resubmit the form or forward your responses to your supervisor.

When do you need to submit this form? Please submit this form at least a week in advance of meeting your supervisor. You will need to arrange a meeting with your supervisor to discuss your Project Outline.

How many times can I submit this form? Please submit this form only once. However, if there is an error, you may resubmit.

How much time will it take to complete this form? On average, this form will take around 30 minutes. You can access the Analytical Skills in SPA to help you complete this form.

How will this data be used? The data from this form will be shared with the SPA team, Supervisor, Discipline Group Leads, Course Leaders, Programme Coordinators, and Student Office to develop teaching and learning and support student research.

Will my data be safe? The information will be stored at password protected file.

What if I have a question? If you have a question about the project requirements of your course, contact the Course Leader.

If you have a question about this Project Outline Form, research methodology or research ethics, contact the SPA Team at WMG-FT-SPA@warwick.ac.uk.

Before You Start

You will need to have the following information

1. Your student ID and email
2. Your course details
3. Your supervisor's name and email address
4. Your Project Outline information

If you require more time, you can download the PDF version of this form (see link below) to complete this form offline. You can return to this form and copy and paste your responses. Partially completed forms will not be saved online.

Useful links:

[PDF Version of the Project Outline Form](#)

[Dissertation, SPA module](#)

[Designing research, SPA module](#)

[Project information, WMG Full-time MSc intranet](#)

Part 1: Student Information

Q8. What is your name?

Saksham Goel

Q9. What is your student ID number? (If you are part of a group project, please list all of your student numbers more than one student please write down all student numbers separated by a semi-colon [;] Your student number is written on your ID card in the bottom right-hand corner above the Warwick emblem).

2289056

Q10. What is your Warwick student email? (If more than one student please write down all student emails separated by a semi-colon [;] - for example, jane.andrews@warwick.ac.uk; lauren.schrock@warwick.ac.uk). YOU MUST ONLY INCLUDE UNIVERSITY OF WARWICK EMAIL ADDRESSES.

u228956@live.warwick.ac.uk

Part 2: Course details

Q3. What course are you enrolled on? Please take care to click the correct box - for explanation see below: *Courses are listed showing level of study (Master of Engineering - for those students on the 'integrated programme): Apprenticeships (at PG level: PG - full time courses are listed first and indicated with the letters FT: Part time courses are listed after Fulltime and are listed PT).*

- MSc (FT) Engineering Business Management

Q14. What is the name of your project supervisor?

Martin Kunc

Q15. What is your supervisor's Warwick email? (example name@warwick.ac.uk)

martin.h.kunc@warwick.ac.uk

Part 3: Project Topic Details

Please note that you may change or modify your project topic details after you submit this form and with your supervisor's guidance.

The University is committed to promoting a quality research culture by ensuring high standards of research integrity are followed. This means that no research can take place until all of the required approvals and authorisations have been given from the appropriate institutions. You can only start data collection after your ethical approval has been granted.

Q17. What is your research topic?

Examining the role of logistics in enhancing supply chain agility in the textile industry

Good

Q66. Please explain how the project meets the requirements of your degree.

The project aims at logistics required for manufacturing and engineering of textile products and the degree aims at the engineering management operations in the industry.

Good

Q18. What is the problem your research aims to address?

The textile industry faces several challenges in its supply chain, including complexity, demand volatility, short product life cycles, raw material availability, cost pressures, and sustainability.

It will be good to expand it for your dissertation with more evidence of the size of the industry and the costs related to supply chains.

Q20. Why is resolving this research problem important? (Why are you undertaking this research?)

Resolving supply chain challenges in the textile industry is important for meeting customer demands, improving efficiency, mitigating risks, enhancing sustainability, and fostering innovation. By addressing these challenges, textile manufacturers can build a more resilient and sustainable supply chain that is better equipped to meet the needs of the industry and its stakeholders.

Good

Q21. What is your one research question? (You are providing a tentative research question, so it can change later).

What are the emerging trends and technologies that are likely to shape the future of the textile supply chain, and how can textile manufacturers prepare for these changes?

It is one question so the second question can be part of your research objectives

Q22. What is your research aim?

To identify the emerging trends and technologies that are likely to impact the textile supply chain in the future and to develop recommendations for textile manufacturers on how to prepare for and adapt to these changes.

Good

Q23. What are your research objectives? Please state 4-5 objectives.

- 1.) To identify and analyze current and emerging trends and technologies in the textile industry, including developments in materials, manufacturing processes, logistics, and sustainability.
- 2.) To identify best practices and case studies of textile manufacturers who have successfully implemented emerging trends and technologies in their supply chain and achieved improvements in efficiency, sustainability, and customer satisfaction.
- 3.) To develop recommendations for textile manufacturers on how to prepare for and adapt to emerging trends and technologies in the supply chain, including strategies for investment, collaboration, and innovation.
- 4.) To develop recommendations for textile manufacturers on how to prepare for and adapt to emerging trends and technologies in the supply chain, including strategies for investment, collaboration, and innovation.

Good

Q24. What is your justification for your research? (How will your project make a contribution to practice (e.g. industry, organization) and/or knowledge (e.g. literature gap)?)

The textile industry is undergoing rapid technological change, with new materials, processes, and business models emerging all the time. Manufacturers need to keep up with these changes in order to remain competitive and meet customer demands. The research can help manufacturers stay informed about the latest trends and technologies, and develop strategies for adopting them.

Good

Part 4: Project Research Methods

Please note that you may change or modify your methods for your project after you submit this form and with your supervisor's guidance.

Postgraduate taught students are not permitted to travel overseas for the purposes of collecting data. All fieldwork and other investigations relating to a non-UK matter, issue or phenomena must be undertaken virtually whilst the student is resident in the UK.

Q25. What type of data will you be using?

- Both Primary and Secondary Data

OK

Q26. What is your justification for your data choice?

Primary data - To gain insights on specific topics that are not covered in existing secondary sources and to validate or supplement the findings from secondary data sources.

Secondary data - To gain an understanding of the historical trends and patterns in the textile industry and to identify gaps in the existing literature that may require further research.

Good

Q29. Secondary Data

Answer

| | | |
|--|---|--|
| Source(s) of data | Surveys, Observations,experiments,journal articles etc. | Only journal articles and reports are secondary data |
| Number of source(s) | It may be more than 30 20-30 | |
| Data type (Quantitative/Qualitative or Mixed) | Mixed | |
| Sampling technique(s) | Convenience , Random , stratified and Snowball | |
| Sample size(s) | Not fixed | |

Q30. Primary Data

Answer

| | |
|-----------------------------|--|
| Target population(s) | Population may include textile manufacturers, suppliers, distributors, retailers, and other stakeholders in the textile supply chain including experts in the textile field. |
| Sample size(s) | 100 I don't recommend doing surveys or questionnaires. The information may not be deep enough and the costs to do it quite high in terms of effort and time. |

Q15. Please specify the data collection method(s) for your research design for your primary data:

- Qualitative survey
 - Quantitative questionnaire
- See my previous comment. Do you have academic sources for your questions? Questions should come from existing papers and not invented.

Q16. Please specify the sampling technique(s) for your research design for your primary data:

- Convenience
 - Random
 - Stratified
 - Snowball
- Have you check them in SPA? It is important to know the concepts.

Q17. Please specify the data analysis method(s) for your research design:

- Content analysis
- Descriptive statistics
- Other (please state):
Text mining Do you know how to do text mining? What will be the database?

Q31. Please provide a summary of your research project methodology. Please note your response must be at least 800 characters. (Focus your answer on how you will collect and analyse your data)

The aim of this research project is to identify emerging trends and technologies that are likely to impact the textile supply chain in the future and develop recommendations for textile manufacturers on how to prepare for and adapt to these changes. The methodology for this research project involves both primary and secondary data collection and analysis.

For the primary data collection, the target population is textile manufacturers, and a stratified random sampling technique will be used to select participants from the population. The sample size will depend on the size of the population and the available resources, but efforts will be made to ensure that the sample is representative of the population in terms of location, size, and type of product. **Manufacturers from where? Global or a specific country?** Data will be collected through a survey questionnaire and semi-structured interviews. The survey questionnaire will be designed to collect quantitative data on the current practices, challenges, and perceptions of textile manufacturers towards emerging trends and technologies in the industry. The questionnaire will be pre-tested and validated before being administered to the sample. **This needs to be done by beginning of May since a survey can take up to 2 months** The semi-structured interviews will be conducted with a purposive sample of textile manufacturers who are identified as key informants in the industry. The interviews will be designed to collect qualitative data on the experiences, attitudes, and perspectives of these manufacturers towards emerging trends and technologies in the industry. The interviews will be audio-recorded and transcribed verbatim for analysis. **Do you have the contacts?**

For the secondary data collection, a systematic review of academic and industry literature will be conducted to identify and analyze existing research and reports on emerging trends and technologies in the textile industry. The literature review will be conducted using a comprehensive search strategy that includes electronic databases, search engines, and reference lists of relevant articles and reports. **Good, this has to be done first before the survey and interviews** Both the primary and secondary data will be analyzed using a combination of descriptive and inferential statistics, content analysis, and text mining. Descriptive statistics will be used to summarize and present the quantitative data collected through the survey questionnaire, while inferential statistics will be used to test hypotheses and examine the relationships between variables.

Content analysis will be used to analyze the qualitative data collected through the semi-structured interviews. The transcripts will be coded and categorized into themes and patterns using a systematic and iterative process. The themes and patterns will be compared and contrasted with the quantitative data to provide a more comprehensive understanding of the experiences, attitudes, and perspectives of textile manufacturers towards emerging trends and technologies in the industry.

Text mining will be used to analyze the secondary data collected through the literature review. Computational tools and algorithms will be used to extract and analyze large volumes of text data from sources such as social media, online forums, and news articles. The results of the text mining analysis will be compared and contrasted with the primary data to provide insights into public opinion and sentiment towards emerging trends and technologies in the industry. **Will you use social media?** Ethical considerations will be taken into account throughout the research process, including obtaining informed consent from participants, ensuring anonymity and confidentiality, and avoiding any harm or exploitation of participants. The limitations of the research, such as the potential for sampling bias and the subjectivity of data analysis, will also be acknowledged and discussed in the research report. **You need to start working on your ethics approval.**

In conclusion, this research project will use a mixed-methods approach to identify emerging trends and technologies in the textile industry and develop recommendations for textile manufacturers on how to prepare for and adapt to these changes. The methodology involves both primary and secondary data collection and analysis, including a stratified random sampling technique, survey questionnaire, semi-structured interviews, systematic literature review, and a combination of data analysis methods. The research will be conducted with ethical considerations in mind and will acknowledge the limitations of the methodology.

Part 5: Ethical Consideration and Limitations

Q62. What are the ethical considerations for your study?

Informed consent: You should ensure that all participants in your primary data collection have given their informed consent to participate in the study. This means that they should be fully informed about the purpose of the study, the nature of their participation, and any potential risks or benefits of participation. Participants should also be informed that they can withdraw from the study at any time.

Confidentiality and anonymity: You should ensure that the privacy and confidentiality of the participants are protected. This may include using pseudonyms, keeping data secure, and ensuring that the data is only accessible to the research team. You should also obtain consent from participants regarding how their data will be used and shared

Good

Q78. How will you mitigate or avoid these ethical risks in your study?

As with this project, it will be ensured that all the participants in the primary data collection are given their informed consent to participate which means that they should be informed about the study. Data collected should not harm any stakeholders in the textile industry and transparency about the purpose of research will be there.

Good

Q63. What are the limitations of your project?

The textile industry is a rapidly changing landscape with emerging technologies and trends that are constantly evolving. The study may become outdated quickly, and the recommendations that are developed may not be relevant or applicable in the future.

Good

Part 6: Professional Development

Q52. Please select the Warwick Core Skills that you would like to improve during this project:

- Critical thinking
- Problem solving
- Communication
- Information literacy
- Sustainability
- Ethical values
- Organisational awareness

Good

Q32. How will you develop your selected skills during this project?

Research skills: The ability to design, plan, and conduct research using both primary and secondary data sources, including survey questionnaires, semi-structured interviews, and literature reviews.

Data analysis skills: The ability to analyze and interpret data using a combination of quantitative and qualitative data analysis methods, such as descriptive and inferential statistics, content analysis, and text mining.

Communication skills: The ability to communicate research findings clearly and effectively to a range of stakeholders, including academic peers, industry experts, and non-experts.

Problem-solving skills: The ability to identify and define complex problems related to emerging trends and technologies in the textile industry and develop practical recommendations to address these challenges.

Critical thinking skills: The ability to analyze and evaluate research findings, literature, and industry reports, and to draw conclusions and make recommendations based on this analysis.

Time management skills: The ability to manage and prioritize multiple tasks and deadlines associated with the research project.

Ethical considerations: The ability to identify and address ethical considerations in research, such as obtaining informed consent, ensuring anonymity and confidentiality, and avoiding harm or exploitation of participants.

Good

Part 7: References

Q34. Please tick, from the list below, the type/s of references you plan to use in your research project

| | |
|--------------------------|------------|
| Journal Articles | tick below |
| Conference Papers | tick below |
| Books | tick below |
| Company Websites | tick below |
| Statistics | tick below |
| Reports | tick below |
| Social Media | tick below |

Part 8: Project Plan

Q60. Project Plan: How much time do you plan on spending for each of the following actions? Please select the most suitable option with one response for each task. For 'Other', if there are no additional actions, please write 'none' in the text box and select 'Very little time'.

| | | |
|---|--------------------------------------|--|
| Research design | Little time (between 10 to 50 hours) | Your project is complex so give more time to this part |
| Finding the sources for the review of literature | Some time (between 50 to 100 hours) | |
| Writing the first draft of review of literature | Little time (between 10 to 50 hours) | It will take more time |
| Designing the methodology | Little time (between 10 to 50 hours) | It will take more time given the complexity of data collection |
| Collecting data | Some time (between 50 to 100 hours) | |
| Analysing the data | Some time (between 50 to 100 hours) | You have multiple sources so it will take more time |
| Writing the dissertation | Most time (over 100 hours) | |
| Other | Little time (between 10 to 50 hours) | |

Q43. To complete an independent research project and dissertation, I confirm I understand and agree to the following:

| | |
|---|---------|
| <i>I must conduct this project in an ethically responsible manner.</i> | I agree |
| <i>I must maintain academic integrity throughout the research project and dissertation.</i> | I agree |
| <i>My research project fits the requirements of my degree.</i> | I agree |
| <i>I must be in the UK when collecting primary data. This means I cannot be overseas (including the EU) unless I have finished collecting primary data.</i> | I agree |

Q37. If you have any further comments or questions for your supervisor, please state them here:

Embedded Data:

N/A