

## **AI-Assisted Scoping Literature Review & Business Innovation Proposal**

This assignment is designed to deepen your understanding of scoping reviews while equipping you with advanced AI literacy skills. Although the work will not be graded, you will receive detailed feedback from the TIM professors involved in developing the scoping review process. Their insights are aimed at enhancing your research proficiency, refining your approach, and ultimately supporting your long-term career in Technology Innovation Management.

### **Assignment Overview**

In this assignment, you will choose a relevant business challenge within the TIM domain and develop a broad scoping review question using the PCC framework (Population, Concept, Context). You will leverage AI-assisted tools alongside scholarly databases to conduct a comprehensive literature search, screen and synthesize the findings, and link these insights to a practical business innovation. The final report will include a reflection on your experience with the AI tools used during this process.

The purpose of this exercise is twofold:

1. it provides you with immediate, hands-on experience in using modern AI techniques to manage and analyze large volumes of data, and
2. it prepares you to apply these strategies in real-world scenarios—be it for venture pitches, market analysis, or new product development.

Before you start, please review the dedicated web page [insert web link], which offers a detailed guide for scoping reviews. This guide is available as a video, a document, and a podcast, ensuring you have multiple resources to support you throughout the process.

### **Assignment Details and Methodology**

Your research process should be approached as a coherent narrative rather than a series of disconnected steps. To complete the assignment, your method should follow the below steps.

1. Define the Scope:
  - Identify a TIM-related business challenge.
  - Formulate a clear scoping review question using the PCC framework (Population, Concept, Context).
2. Literature Search:
  - Use AI tools to generate search terms and assist in organizing your literature search.

- Access scholarly databases alongside AI-driven resources to ensure a thorough collection of sources.
3. Screen & Select:
    - Screen search results for relevance.
    - Categorize sources and apply clear inclusion/exclusion criteria.
  4. Extract & Analyze:
    - Extract key insights from the selected literature.
    - Identify common themes, trends, contradictions, and gaps in knowledge.
  5. Synthesize Findings: Write a narrative synthesis organized by themes or chronology that tells the story of your research findings.
  6. Develop Recommendation:
    - Propose a practical business innovation or solution informed by your scoping review.
    - Ensure your recommendation directly addresses the initial business challenge.
  7. Reflect on AI Usage:
    - Document how AI tools were used (e.g., for generating search terms, organizing articles, summarizing findings).
    - Reflect on both the effectiveness and ethical considerations of using AI in your process.

*Note: This methodology is purposefully structured to provide you with real-world research proficiency, merging traditional academic approaches with innovative AI tools. These skills will prepare you to tackle rapidly evolving technology challenges.*

## **Deliverables**

Submit a single document (PDF or Word) of approximately 2000–3000 words, including the following sections:

- Introduction: Introduce the business challenge, state your research question, and explain the relevance of the topic within the TIM field.
- Methodology: Describe your search strategy, detail how AI tools were integrated with traditional research methods, and outline your inclusion/exclusion criteria in a narrative format.
- Literature Synthesis: Present the key themes, trends, and knowledge gaps you identified from the literature. This section should be written as a cohesive narrative that connects your findings logically.
- Business Recommendation: Propose a practical solution or framework based on your literature findings, ensuring that your recommendation addresses the initial business challenge.
- AI Usage Reflection: Reflect on how the AI tools contributed to your process, including both their benefits and any limitations or ethical considerations encountered.
- References: Provide a complete list of all sources in APA format.

Additionally, please include the following appendices in your submission:

- Appendix A: A PRISMA-ScR flow diagram that illustrates your search and selection process.
- Appendix B: An AI tool usage log detailing dates, tools used, the purpose of each tool, and brief notes on their impact.

### **Why This Assignment Matters for You**

Engaging with this assignment will not only enhance your academic and research capabilities but also develop essential skills that are highly sought after in the technology innovation landscape. You will gain practical experience in integrating human expertise with AI-driven automation, a combination that is crucial for addressing complex, rapidly evolving challenges. The detailed feedback from our expert researchers is intended to guide your professional growth and help you refine these competencies for future success.

### **Submission Instructions**

Please submit your final write-up (including appendices) as a single PDF or Word document to: [nusa.fain@carleton.ca](mailto:nusa.fain@carleton.ca) by 31<sup>st</sup> March 2025.

We look forward to your innovative insights and reflections on the use of AI in your research. Remember, this exercise is an opportunity for learning and professional development—your detailed feedback will provide valuable guidance for your future projects.

Good luck, and embrace the opportunity to shape the future of Technology Innovation Management!