Imperial College London

Department of Earth Science and Engineering

MSc in Applied Computational Science and Engineering

Independent Research Project
Project Plan

Current Content Discovery for Module Teaching

by

Guanyuming He

Email: guanyuming.he24@imperial.ac.uk
GitHub username: esemsc-gh124
Repository: https://github.com/ese-ada-lovelace-2024/irp-gh124

Supervisors:

Sean O'Grady
Rhodri Nelson

June 2025

Abstract

TBD.

1 Introduction

Since the emergence of the first Business schools in the late 19th century [2, 1], several distinct pedagogical teaching strategies have been applied. Among these strategies, the recent case study method, which is about using real world business cases to teach students, has found widespread adoption [?]. One method that has seen a large adoption [?] in the recent years is the case study method. First institutionalized at Harvard Business School in the early 20th century, this method is designed to simulate managerial decision-making by presenting students with real or realistic business situations, encouraging structured analysis and discussion.

The case method is valued for its ability to expose students to complex, context-specific problems that lack clear-cut solutions [?]. Unlike lecture-based teaching, which often emphasizes theoretical abstraction [?], case-based instruction engages students in applied reasoning and deliberation within a collaborative classroom setting [?]. Studies in management education suggest that this form of instruction can support the development of analytical reasoning, communication skills, and practical judgment when implemented carefully and with adequate support [?].

However, despite its continued use and institutional support [?], the case method faces a significant constraint: the availability of timely and relevant case material [?]. Business environments are dynamic, and cases can quickly lose pedagogical relevance due to changes in market conditions, regulations, or technology [?]. Additionally, developing new cases requires substantial faculty time and institutional resources [?], and access to proprietary or sensitive company information is often restricted [?]. These challenges limit the method's responsiveness to current developments in business practice and create tension between realism and feasibility in curricular design [?].

2 Methods

Abc

3 Results

4 Discussion

5 Conclusion

References

[1] Steven A Sass. *The pragmatic imagination: A history of the Wharton School, 1881-1981.* University of Pennsylvania Press, 2016.

[2] John-Christopher Spender. The business school in america: a century goes by. *The future of business schools: Scenarios and strategies for*, pages 9–18, 2020.