# **Sheridan College**

# **SOURCE: Sheridan Institutional Repository**

Honours Bachelor of Business Administration

Case Studies

2024

# **Artificial Intelligence for Post Secondary Accounting Students**

Sarah Rahim Sheridan College

Follow this and additional works at: https://source.sheridancollege.ca/swpilon-case-studies-business-admin

Part of the Accounting Commons, Artificial Intelligence and Robotics Commons, and the Education Commons

Let us know how access to this document benefits you

## **SOURCE Citation**

Rahim, Sarah, "Artificial Intelligence for Post Secondary Accounting Students" (2024). *Honours Bachelor of Business Administration*. 1.

https://source.sheridancollege.ca/swpilon-case-studies-business-admin/1



This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License. This Case Study is brought to you for free and open access by the Case Studies at SOURCE: Sheridan Institutional Repository. It has been accepted for inclusion in Honours Bachelor of Business Administration by an authorized administrator of SOURCE: Sheridan Institutional Repository. For more information, please contact source@sheridancollege.ca.

# **Case Study**

# A Case Study on the Use of Artificial Intelligence for Post Secondary Accounting

# **Students**

Sarah Rahim

#### Case Study Exercise: Ming's Focus Group

A fictional case study has been developed with the purpose of generating discussion around the use of artificial intelligence (AI) for post-secondary students. The framework for this case is based on best practices and principles in case writing by Leenders et., al (2001) in their book, Writing Cases.

The case in this report was designed to encourage honest and forthright discussions on Al-related issues students may encounter in academia and accounting/business programs. While this case focuses on an accounting student, it can be adapted for a wide variety of post-secondary programs and disciplines that utilize Al technologies and tools.

#### Case Context and Scenario:

This case will be built from the perspectives and experiences of Ming, who plays the role of a typical higher-level accounting student. The context and specifics of the case follows:

#### Ming

Ming is a third-year accounting student in the Bachelor of Business Administration program at Parkshore University in Burlington, Ontario. She lives with her 13-year-old son in an apartment in Oakville. She is excited for the opportunity to return to school after having worked as a Payroll Clerk for over 10 years in China. Although she has been attending Parkshore for nearly three years now, she is introverted and has not managed to make any friends there, nor through her part-time campus job as a Library Page. Also, Ming's family has barely spoken to her since she finalized her divorce and announced she would be taking her son with her to Canada.

Ming is taking five courses this semester: Fundamental Auditing, Introduction to Creativity, Advanced Taxation, Business Law, and an Internship Preparation class. Major term essays are due in Week 12 for both Business Law and Introduction to Creativity. Ming also has a group case study in Fundamental Auditing class due in Week 13. Fundamental Auditing and Advanced Taxation have cumulative final exams scheduled in Week 14. In Week 14 she also has two reflections due for Introduction to Creativity and Internship Preparation.

She has been feeling a bit discouraged because when she tried to make a couple of suggestions in her audit group, her teammates paused and looked confused. This made Ming feel sad. She stopped participating in class discussions because she has lost confidence in her speaking skills. Lately, she has been feeling highly stressed with her schoolwork, job, and childcare responsibilities. She cannot believe it is already Week 9. So far, she has applied to 26 jobs but has not yet been able to secure an internship for next semester.

After a long day at work, Ming checks her phone. She received some unread notifications – 2 new emails and several from the audit group chat. The first email is from a Campus Recruiter at Echo-Book Accounting, requesting an interview next week. Ming is extremely nervous because Echo-Book is the

largest accounting firm in the city, and she has not done a job interview since she started her campus job two years ago.

The second email is from her Advanced Taxation professor. He informed Ming that she received a grade of 52% on the midterm exam. He wants to set up a time to speak to Ming.

The group chat contains several missed messages. As Ming scrolls through, she discovers that the rest of the group members decided to proceed with using an open-source generative artificial intelligence program (ChatGPT) to generate the whole case study report. They want Ming to edit it to make sure it sounds more 'human-like' so they can hand it in. Suddenly, Ming feels extremely overwhelmed. She recalls that they are allowed to use AI sometimes, but students were not given clear instructions on how to use it or when to use it, so she's not sure how to proceed.

#### Al Pilot Project

Ming is part of a pilot project at Parkshore. The pilot includes all third-year students in the BBA program. All students within the pilot have classes integrated with AI technology. Each student has been provided with an account allowing them to access an AI tutor and chatbot. The AI platform has similar capabilities to the open-source ones that most of the public uses. Professors teaching in the program also have access to the same AI tools with an additional AI teaching assistant. Since the AI tools are still being tested, there is no formal AI policy at Parkshore yet, but one is expected to be implemented in the next couple of weeks after a focus group is held.

#### **Focus Group**

Tonight, Ming is participating in the Associate Dean's focus group discussing the new pilot program. The Associate Dean expressed that the information discussed in the focus group will be used for information purposes only and there will be no consequences associated for issues discussed in the group. The group will be conducted online using written communication, and each student will have a pseudonym to maintain anonymity. The Dean also highlighted that student feedback will be given highest priority when designing the program and its courses. The students were also told that the AI program would be at risk of not receiving accreditation if there were no measures established to regulate and enforce academic dishonesty issues. Moreover, AI could be banned at Parkdale altogether if academic integrity breaches increase. However, if accreditation is successful, Parkdale would be ranked as the top university in all of Ontario.

Ming is happy she was chosen to participate in this group. She is excited to share her experiences and to be a part of something so important to the school. She hopes that Parkdale becomes accredited and moves up to the highest-ranked university because her degree would be even more meaningful when finding future employment.

#### Focus Group Memo

As part of the focus group, each participant was asked to prepare discussion points outlining their experiences with AI and to make suggestions on how they can permanently integrate the technology into the program. The points are expected to include the following elements:

- 1. 3 ways that AI was (or could be) useful to your learning.
- 2. 3 ways AI was not (or may not be) useful to your learning.
- 3. 2 ways that AI were (or could be) misused, and examples of how each misuse could be managed.
- 4. 1 example of how the professor could use AI in one of your current courses to help you better prepare for your career.

Ming has written notes of her experiences and has engaged in scholarly research on areas where she thinks needs AI can be useful for her courses and career. She needs to finish up her notes for tonight's focus group, so she can meaningfully contribute and make a difference.

### B. Preliminary Teaching Note

#### Case Synopsis

This case study follows Ming, a third-year accounting student at Parkdale University, who is part of a pilot program integrating AI into their program. She is also a busy mom who works part-time on campus. She has been having a challenging semester and feels overwhelmed. Ming is tasked with creating discussion points to prepare for a focus group providing feedback about the pilot project. Ming will be attending the focus group anonymously. There are incentives designed within the case to encourage students within the focus group to speak open and honestly so they can continue to use AI at their university and so the program can become accredited.

#### **Teaching Objectives**

This case study has been designed for an introductory business class. Students should be familiar with the capabilities of AI tools but do not require prior experience with using them. The course relies on students' diverse experiences and backgrounds to facilitate a rich discussion. It encourages students to work through real-life practical and ethical issues surrounding AI use as a student.

At the end of this case study, the student should be able to meet the following learning outcomes:

- Identify situations where AI can aid their learning.
- Examine uses of AI that will hinder their learning.
- Generate examples of how AI can be integrated into courses in a similar program.
- Identify and discuss unethical uses of AI and its consequences.

#### Issue

The issue in this case is how students can use AI responsibly for their education without compromising academic integrity and ethical standards imposed by their school.

### Suggested Student Assignment

Students should read the case and engage in a 45-minute discussion sharing ideas for Ming's discussion points in the focus group. This can be completed as an entire class, or in breakout groups of 4-5 students. Alternatively, students can prepare a formal report with Ming's discussion points at a suggested length of four pages. Students can also review their own school's AI and academic integrity policies to reconcile their ideas.

### Case Analysis

While this case study illustrates a wide range of applications for AI, some examples of answers to the focus group questions are as follows:

- 1. Ways that AI was (or could be) useful to learning:
- It can help both students and educators become more efficient and save time (Talwar, 2023).
- An AI personalized tutor can provide individual feedback and help students overcome their shortcomings (Kochmar, et al., 2022).
- The language models can enhance students' language skills and increase their confidence with English (Wang, et al., 2023).
- It gives students access to real-time answers and feedback, so they gauge their learning immediately (Vashista et al., 2023).
- It can enhance student engagement by learning through games and animations (Jaiswal & Arun, 2021).
- 2. Ways AI was not (or may not be) useful to learning:
- Al can generate fictitious data, which can impair students' learning (UNESCO, 2023).
- AI may accelerate biases towards already marginalized groups (Selwyn, 2022).
- Professional judgment required for accounting careers are developed through experience and a reliance on AI stifles its development (Zhang et al., 2023).
- An over-reliance on AI for language skills forsakes much of the human aspect of interaction, including cultural implications (Wang, et al., 2023).

3. Ways that AI were (or could be) misused, and examples of how each misuse could be managed.

## Examples of Misuse:

- Using generative AI to create an essay or other written assignment.
- Obtaining ideas from AI and not referencing them.
- Using AI to answer test or homework questions.

# Management of Misuse:

- Teachers can reduce student workloads, so they have adequate time and are not motivated to cheat (Alshurafat et al., 2023).
- Remove written essays from courses in favour of assignments focusing on thought processes (Shapiro, 2023).
- Ensure graded assignments are completed in the classroom so teachers can monitor students (Sallaberry et al., 2023).
- Involve students in the creation of an AI-specific policy (Sallaberry et al., 2023), and strictly enforcing the policy.
- Schools can invest in advanced plagiarism detection AI tools that detect algorithms from open AI sources (Lancaster, 2023).
- 4. Examples of how a professor can integrate AI technologies and tools in a variety of courses to help their students to develop real world employability skills and competencies:

#### **Fundamental Auditing:**

- Students can use AI to analyze audit data sets, using it to find anomalies or suspicious transactions, to parallel how AI is used in the field (Fedyk, Hodson, Khimich, & Fedyk, 2022).
- Educators can invite a guest speaker from an auditing firm (Tominc & Rožman, 2023) to demonstrate how AI can be used to identify patterns that indicate fraud (Fedyk, Hodson, Khimich, & Fedyk, 2022).

#### Introduction to Creativity:

- Educators can use AI to assist with personalizing assignments based on a student's degree discipline. This is similar to "adaptive testing," as discussed by Wang et al (2023) in their article (p. 8).
- Teachers can design complex scenarios requiring higher-level problem-solving skills, allowing students to collaborate with AI to solve the problem (UNESCO, 2023).
- Students can experiment with AI to enhance their creative ideas for assignments, as successfully demonstrated in the study by de Vincente Yague Jara et al. (2023).

#### Advanced Taxation:

- Students can experiment with AI to analyze complex tax laws, specific client deductions and credits (Thomson Reuters, 2023).
- Use AI to generate fictious tax client profiles with varied income situations, then permit the student to leverage AI to practice tax advisory (Thomson Reuters, 2023).

#### **Business Law:**

- Referencing AI to understand laws and stay up to date with changes (Thomson Reuters, 2023).
- "Adaptive testing" can be designed, where students can receive individualized study materials and tests relating to their specific discipline (Wang, et al., 2023, p. 8). For example, accounting students can receive a test based on tax and audit laws.

#### Internship Preparation:

- Permitting generative AI tools for the purposes of creating a resume. This will allow students access to expanded vocabulary and keywords (Wang, et al., 2023), and an understanding of how they can leverage transferrable skills from their previous jobs.
- Allowing access to AI to help students practice their communication and interviewing skills, which will allow students to gain confidence (Wang, et al., 2023).

#### Case Conclusion

By following Ming's experience with AI usage in the case study and creating discussion points for a focus group, students have been provided an opportunity to relate AI tools to their own personal academic experiences while upholding ethical principles expected by their academic institution. Simultaneously, educators should have gained authentic insight into their students' perspectives and experiences with AI. This can provide a mutual understanding which can assist in establishing feasible AI policies for the course. A future exercise can be for educators to develop an AI-integrated course assignment so students can practice applying the principles learned from this case.