

CREATING FLIPPED CLASSROOM SIMULATION EXERCISES TO GAMIFY TEACHING AND LEARNING

PRACTICAL TIPS AND CHALLENGES



**HKU
BUSINESS
SCHOOL**
港大經管學院

In the wake of COVID-19...

How can educators maintain students' attention?

What is a “flipped classroom”?

How can we “gamify” teaching in a remote and asynchronous learning environment?

Is there a simple, customizable, and cost-effective way to do so?

A photograph of a lecture hall with students seated in blue chairs, facing a screen displaying "Project UR". The room has wood-paneled walls and recessed ceiling lights. The text is overlaid on the image.

HKU Teaching Development Grant

A Flipped Classroom Approach to Gamify the Teaching and Learning of Business Ethics

Purpose of the Flipped Classroom Project

Underlying Challenges:

- Further integrating ethics in the Faculty of Business and Economics
- Better Teaching and Learning experience where it is increasingly difficult to keep students' attention
- Adjusting to COVID - both online and asynchronous learning

Our Questions:

- Can adding simulations to the course activities enhance teaching and learning in this new environment?
- If we make it easy for other instructors, would they be willing to integrate our case simulations into their courses?

What We Did and Learned

Existing Online Business Ethics Simulations

Issues with commercial solutions we examined:

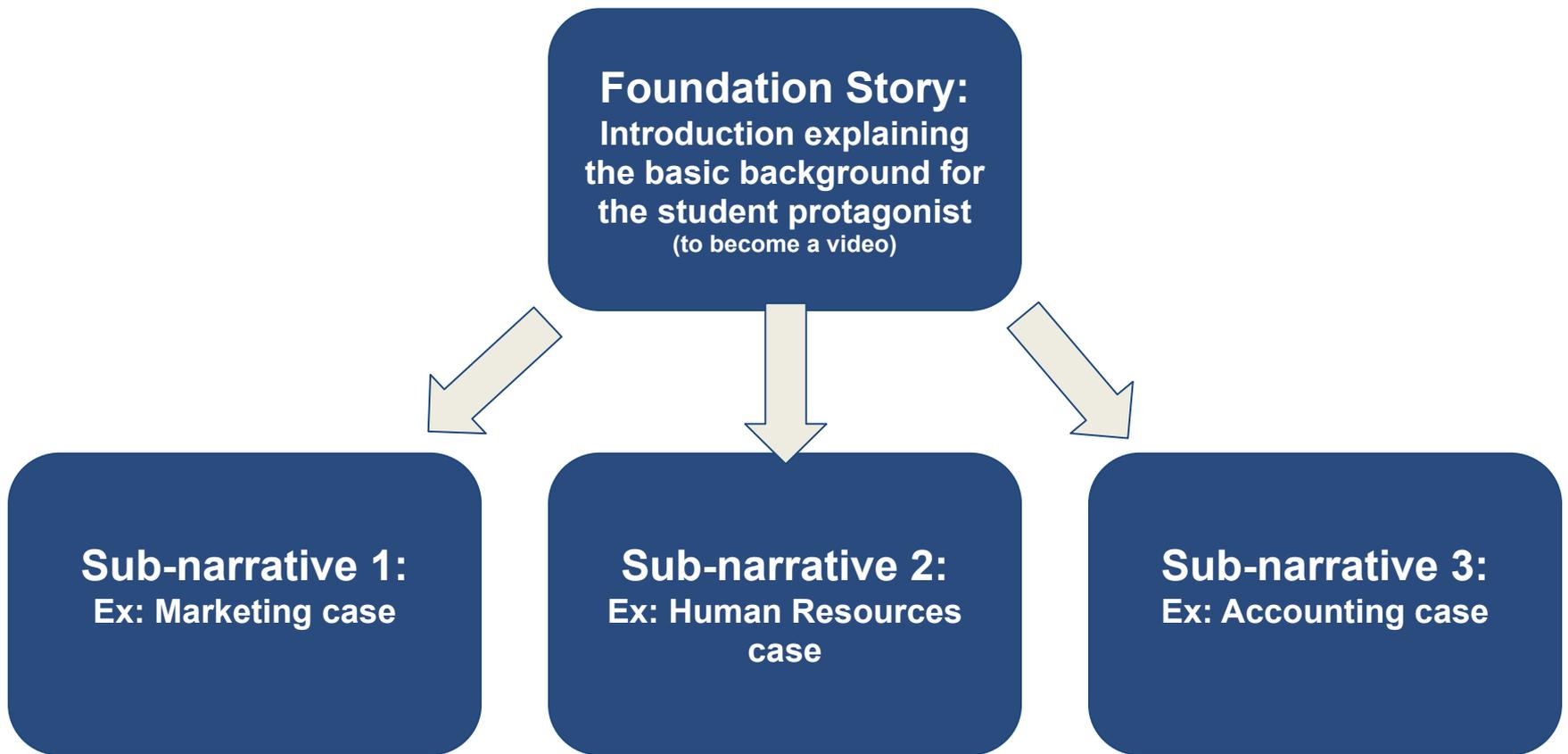
- **Technology:** Development costs are high, limiting the ability to customize or update. Most simulations utilize outdated technology.
- **Cost:** Expensive, often costing over US\$100 per license
- **Customization:** Teachers want activities that relate to their areas of experience, and that are timely and relatable to students. So many primarily want to do simulations that they are involved in making.

The Dream:

Choose your own adventure books
Bandersnatch on Netflix

Our Solution

Use Google Forms to create a series of case studies that have the same foundation story, but multiple sub stories with issues relating both to ethics and other relevant subject matter, e.g. marketing, leadership, etc.



Requirements:

- Vague gender, geography, etc., to keep it relatable to all students
- Plug-and-play model: allow teachers to use the cases in any combination or order
- Make it as easy and adaptable for the teacher as possible, including multiple different teaching options

Pilot Simulation: Marketing - Monkey business, or just kidding around?

Google Form Interface

Case 1: Marketing - Monkey business, or just kidding around?

Introduction: The Opportunity of a Lifetime!

It has been 5 years since you joined Leah, Inc. ("Leah"), a multinational consumer products conglomerate, focusing on cosmetics, personal well-being, and healthcare products. Leah is one of the major players in the European and North American consumer products markets. To expand its global presence, particularly in Southeast Asia, Leah recently acquired a competing business.

Hoiyiu Limited ("Hoiyiu"), the newly acquired company, is a regional leader in multiple areas of consumer products, particularly palm oil and coconut related products. Within its portfolio, Hoiyiu owns and operates multiple palm and coconut oil refineries. Hoiyiu's many products are very popular throughout Southeast Asia, and Leah acquired Hoiyiu hoping to speed up its growth in the region.

Focusing mainly on production and distribution, Hoiyiu does not own any upstream assets within the supply chain, namely any palm or coconut plantations. Instead, Hoiyiu partners with various plantations and small farm collectives for its raw materials. Those types of relationships are very challenging to develop organically, especially for a foreign company. As a result, even though some of Hoiyiu's equipment and systems were a bit out of date, the Leah team believed that the combination of Leah's superior technology and business processes with Hoiyiu's regional connections and distribution network will lead to sustainable growth in the increasingly lucrative Southeast Asian consumer goods market.

The acquisition of Hoiyiu was clearly a major milestone for Leah, and everyone at Leah is talking about the immense potential for growth it poses. That is why you were shocked recently to learn you were being offered the role as Senior Manager of the merger transition team.

Leah's Chief Operating Officer over the Asia Pacific region explained that your primary duty would be to help smooth over the merger and restructuring process. She emphasized cross-border integration would be critical, but that you had to ensure a smooth transition between the existing Hoiyiu management and staff into the Leah global family. She stressed that there would be a steep learning curve over the coming two years, but that she was confident that someone as talented and hardworking as you would be up for the challenge. The global CEO even said that if you successfully managed the merger for a period of two to three years, you could expect a high-level management position in Leah's global headquarters in London.

When you first arrived at the Hoiyiu office, you could tell the staff did not really know what to make of your presence. They were clearly deferential and pleasant with their "new boss," but you could also sense some hesitancy - possibly even apprehension - whenever you walked into a room. In speaking with some of the

Foundation Story: Introduction to the Simulation Game

Google Form Interface

The marketing strategy proposal

Things have been really busy since you moved thousands of miles and started managing the merger transition team as part of the acquisition of Hoiyiu Limited ("Hoiyiu") by Leah, Inc. ("Leah"). Although you've loved learning so many new things, adapting to a new culture has been pretty stressful, and the pace has been really hectic. Every day you wake up to a seemingly never ending list of tasks and emails.

One of the major projects on that list is to finalize a new Hoiyiu marketing strategy. Although you are not exactly a marketing expert, as the Senior Manager of the merger transition team, your approval is required for the strategy proposal to be finalized. You were given this task specifically to help ensure any Hoiyiu proposal conforms to Leah, Inc.'s marketing ideals and corporate code of conduct. And although the Hoiyiu marketing team has been cordial and included you in the process, you get the feeling that they are not excited to have you, essentially an outsider, looking over their shoulder and approving their work. And to be fair, their advertising campaigns have always been successful in the past, so you are not really sure how much value you can add.

This morning you finally had time to review the Hoiyiu marketing team's proposal, and can understand why the Hoiyiu team believes it will generate substantial sales. It's obviously well put together. The proposal focuses on boosting the sales of two recently launched product lines: an anti-ageing cosmetic beauty line targeting middle-age adults and a skincare product line targeting teenagers and pre-teens.

One of your main jobs is to smooth the merger and help ensure its profitability, and you are confident that any concerns or delays from you will likely cause tension. But you are also supposed to help bring Hoiyiu's operations in line with Leah's high standards, and help avoid any long-term concerns.

While considering the proposal, you received a notification. Looking at your email, you see that Leah's Chief Marketing Officer for Asia Pacific is nudging you to have your approval by the end of the week, which is only two days away.

The Chief Marketing Officer's email ends with this line: "Good luck with launching the new product lines. We are counting on you to work with the local marketing team to make this a success!"

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Sub-narrative: Marketing Case Study Instructions

Google Form Interface

Should you take the time to confirm whether Hoiyiu products are cruelty-free, or choose to ignore it for the time being? After all, Hoiyiu hasn't done anything to hurt animals - if anyone did (which is still unconfirmed), it was Hoiyiu's suppliers and contractors. And you don't want to upset the marketing team or slow down the company growth. You know that this decision will have a long-term effect, and could have both positive and negative consequences no matter what you choose to do. What would you do?

- I would choose to take some time (which potentially means delaying the proposal and risks upsetting the marketing team) to confirm whether Hoiyiu products are cruelty-free, so that we can ensure the company's values are in line with our brand ambassador's values. If we find that Hoiyiu's products are not cruelty-free, I would recommend making the necessary changes to our suppliers and processes to ensure Hoiyiu's products can be labeled as cruelty-free.
- I would not delay the process by doing additional research on whether Hoiyiu's products are cruelty-free. Instead, I will tell Anita the situation and allow her to make up her own mind. I realize that, if she turns the offer down, this decision could derail the entire proposal and anger the marketing team. But it's better for these issues to be out in the open rather than risk an ugly and public fall-out with Anita down the road. This doesn't fix any possible animal-cruelty concerns, but we can deal with those later.
- I do not think it is necessary to do additional research or to tell Anita about the possible concerns. Hoiyiu has done nothing wrong, and I do not want to delay the process or upset anyone on Hoiyiu's marketing or management team this early in the merger process because it could affect our working relationship in the future. The marketing team has done a good job in the past, and I am not an expert. I am better off relying on their expertise for the time being.

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Multiple-Choice Decision-Making

- Choose your own adventure, with different consequences
- Stories can be as complicated or simple as you like
- Can add short or long answer questions

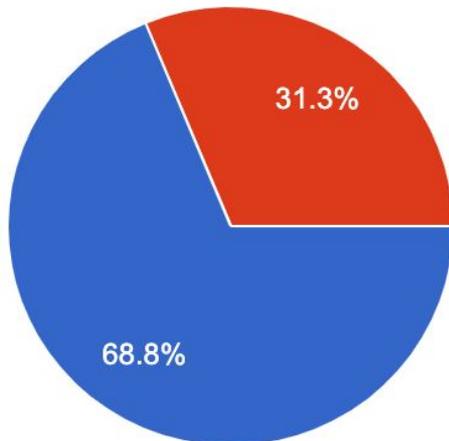
Benefits of Google Forms

- **Technology:**
 - Free, stable, and easily accessible
 - Mobile friendly
- **Cost:**
 - Free
- **Customization:**
 - Highly customizable
 - No coding or outsourcing required
- **Added bonus:**
 - Data collection & aggregation allows for learning across time and groups
 - Collection of both qualitative and quantitative responses and feedback

Example of How Google Form Collects and Aggregates Data

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16 responses

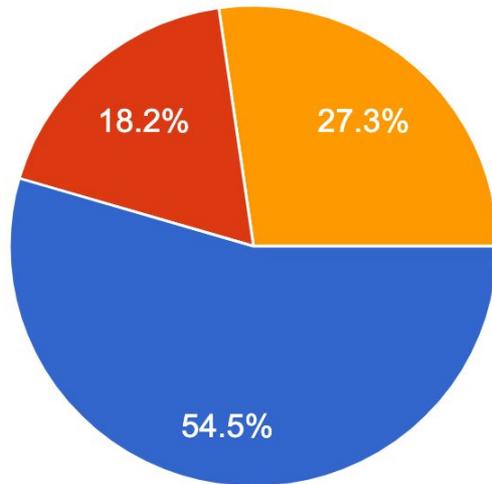


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Example: Would you declare your product cruelty free?

The Chief Marketing Officer is demanding a report and your suggestions so that the marketing strategy discussion can move forward. What would you do?

11 responses



I would explain that I confirmed Hoiyiu's coconut suppliers do use monkey labor, and recommend that Leah push Hoiyiu to immediately find an alternative supply of coconuts that do not use animal labor. This will cost time and money up front, but will help ensure our long-term brand reputation and profitability.



I would explain that I confirmed that Hoiyiu's coconut suppliers do use monkey labor, but would explain that so do many others. This is an important issue for a long-term discussion, but is not an immediate concern. I would not recommend immediate action.



I would explain that I confirmed that Hoiyiu's coconut suppliers do use monkey labor, but would suggest that doing so is actually accepted by local culture and actually deemed more ethical because it avoids poor humans from having to risk injury by climbing the trees and picking the coconuts themselves.

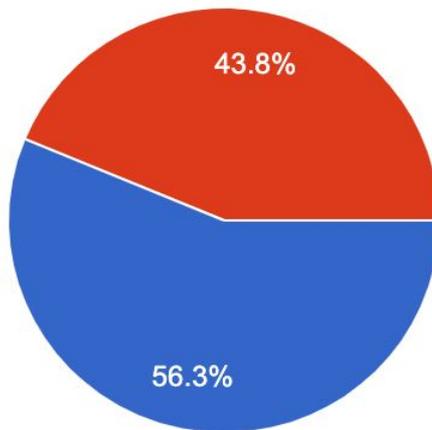


In order to avoid any additional delays or bad feelings among the team, I would simply ignore the issue and move on. There will be time to address these potential concerns another day, and maintaining team comradery is more important than this single issue.

Example: What does the law say?

So what do you do now?

16 responses



Although I know it will take more time and money, this marketing campaign is important and you must be sure it's legal. You will ask the lawyers to confirm the laws in every country where Hoiyiu will be sponsoring influencer content, and ask them to draft relevant disclosure language for each jurisdiction where such disclosures are necessary.



I think the lawyers' preliminary advice is sufficient, and decided to not seek additional legal advice. I will suggest Hoiyiu put a general disclosure on each influencer video.



Since there really isn't a legal standard in this area, and Hoiyiu is not likely to get into trouble even if they technically violate the rules in one of the countries, I decided that there really isn't a legal need to put disclosures on the videos.



Since the legal questions are not fully answerable, I will pull the plug on the whole thing, and to disapprove the plan to use influencers. You will recommend the marketing team find another way to market the skincare product.



STUDENT FEEDBACK

Student Feedback — Quantitative

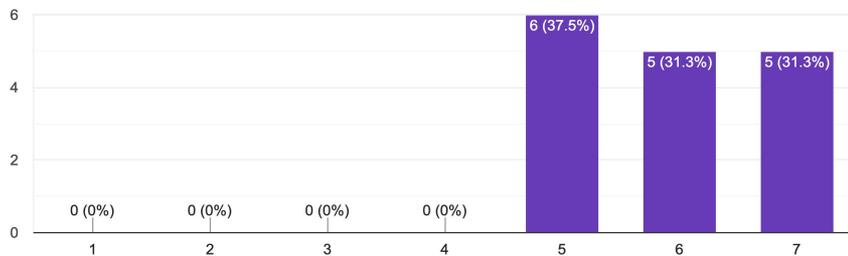
Students were generally positive about the simulation.

- 100% of students agreed that it helped them use knowledge and skills in a practical useful way.
- 100% of students agreed that they would like to participate in similar simulations in the future, with 68.8% giving the highest possible score.

Note: This is one set of class results, but it is generally representative of other student responses.

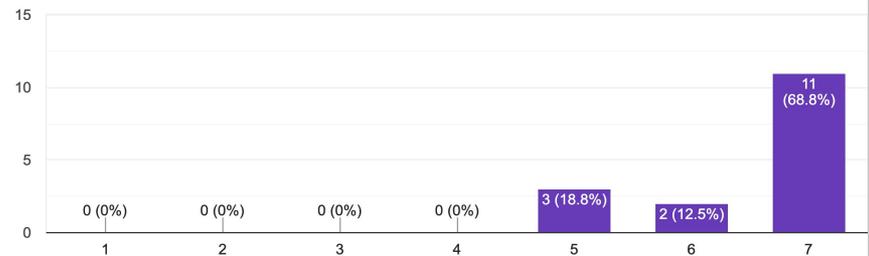
The case study helped me use knowledge and skills in a practical and useful way.

16 responses



I hope to participate in similar case study simulations in the future.

16 responses



Student Feedback - Qualitative

- **Stress:** Some students said it was stressful for them to make the decisions.
- **Comments & Questions:** Several students suggested that we should include text boxes for general comments and questions for each major question.
- **Conclusion?** Students are looking for a “conclusion” and are used to questions that have specific right and wrong answers.
- **Guessing:** Some students “guessed” at what they assumed was the “correct” answer because it was a business ethics class.
- **Reading:** Some students found the simulation a bit too text-heavy.
- **Reality?** Some students expressed that there would definitely be a big difference between a “click” and how a decision is made in the real world.



INSTRUCTOR FEEDBACK

Instructor Feedback - Qualitative

- Generally positive reaction to the virtual case, and most considered it to be well-designed and a nice break from traditional cases.
- Mixing 2-3 virtual cases with traditional cases in a semester-long course seems to be a nice mixture. Some suggested one virtual case at the beginning, middle, and end of semester.
- One of the benefits of the virtual case was decision-points in the middle of the case as opposed to traditional cases where such generally comes at the end.
- One student commented that the case was interesting, but he but expected more feedback at the end about the choices/outcomes undertaken.
- Though students liked the cases, they expressed various thoughts around the likely different outcomes in a hypothetical case versus how a decision was to truly be made in the real world with real consequences.
- It can be challenging for a teacher to implement such simulations in remote and asynchronous learning environments.
- Teachers were concerned about students going for the “correct” answers instead of making honest decisions.

PRACTICAL CHALLENGES FOR TEACHERS

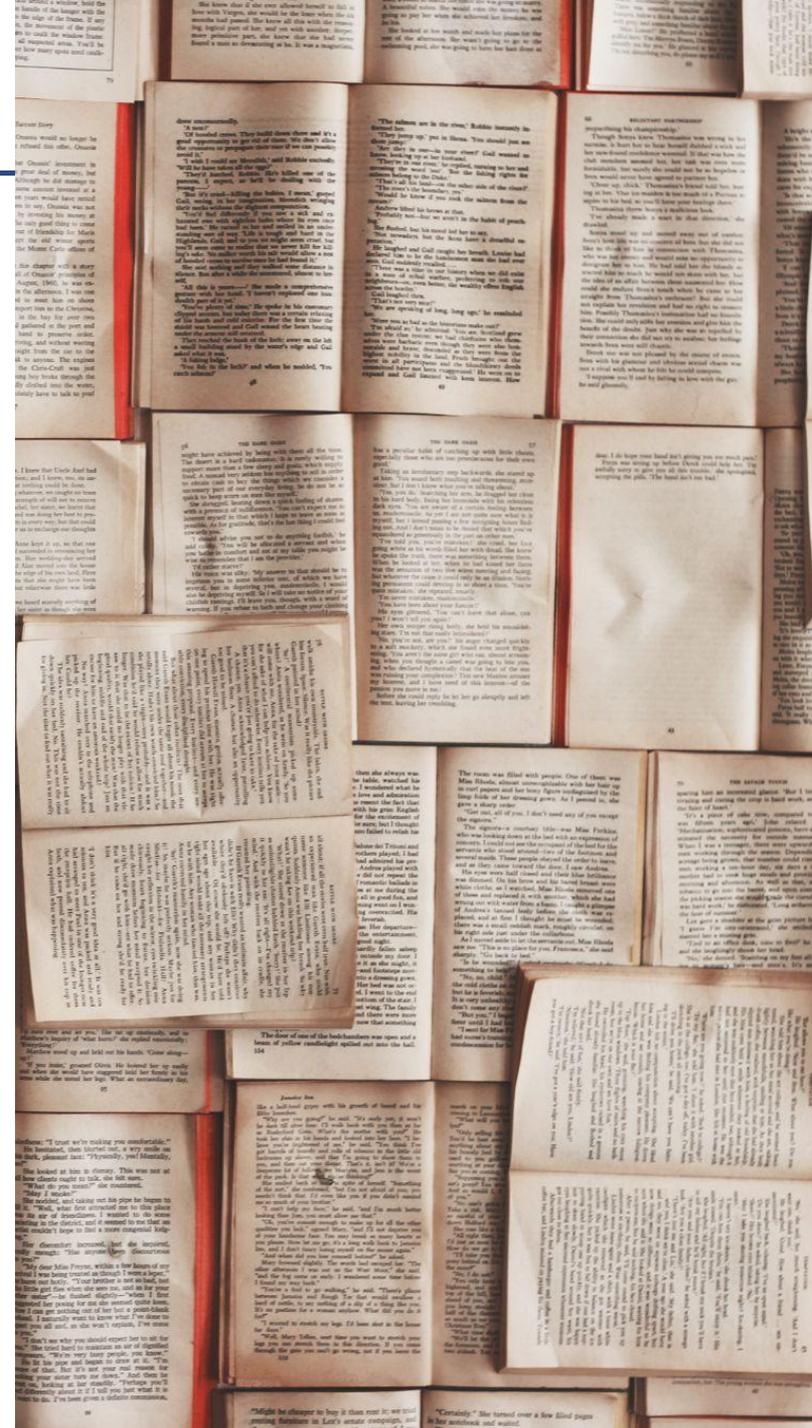
A person is shown from the chest down, wearing a light-colored shirt, sitting at a desk. They are holding a black pen and writing in a spiral-bound notebook. To their right, a laptop is open on the desk. The background is softly blurred, showing what appears to be a classroom or office setting with other people. The overall lighting is warm and focused on the person writing.

Challenge 1: Writing the Simulation

Writing the simulations is challenging:

- Building the characters, particularly the main character that the student will play
- The language & content
- Creating realistic workplace scenarios
- Coming up with realistic decision-making choices without steering students towards certain “correct” answers

But when it is well-written,
student will really enjoy.



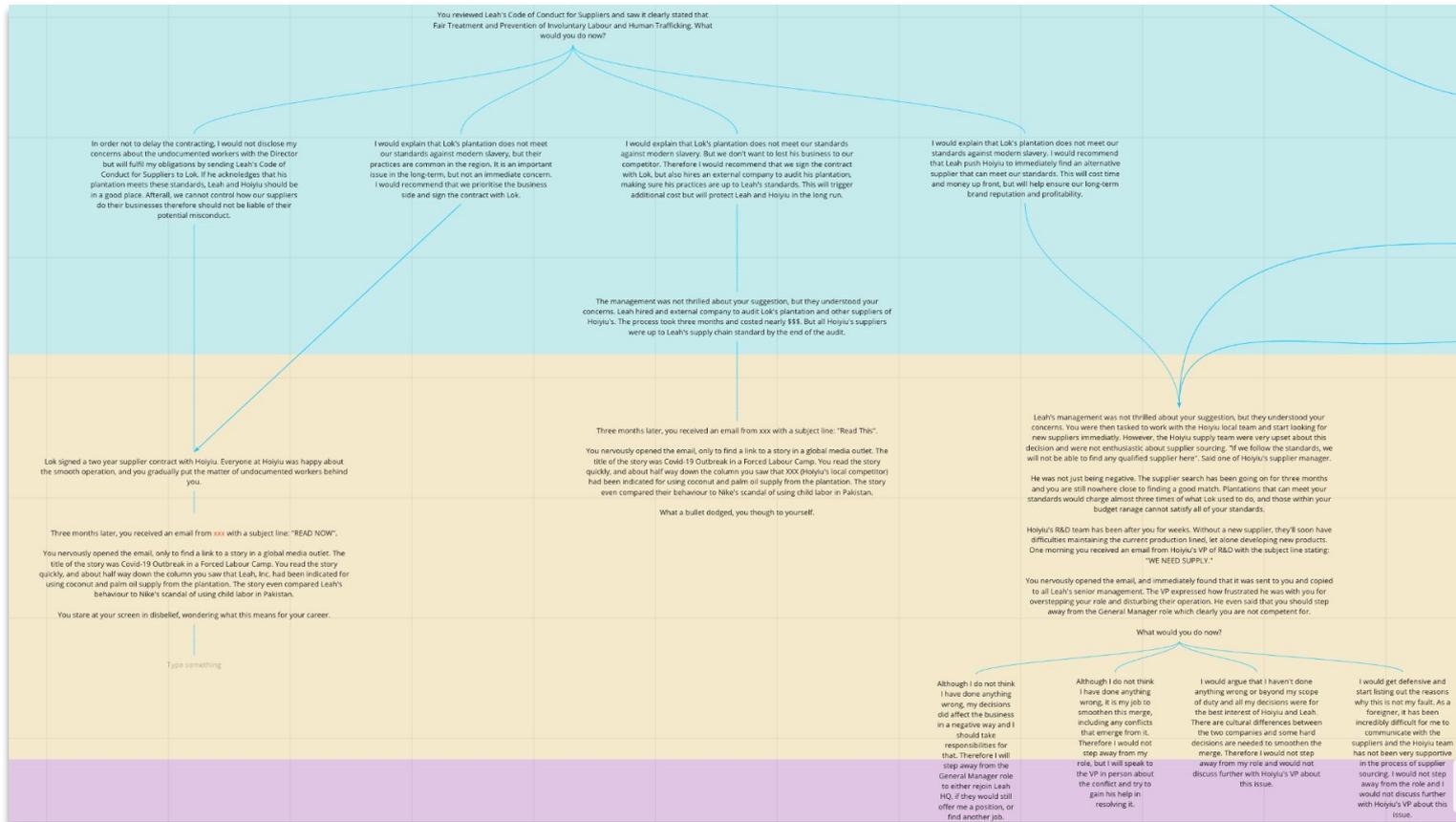
Challenge 2: Google Form Technical Issues

Google Form “Loop”

The image displays a Google Form titled "Copy of Case 1: Marketing - Monkey business". The form contains a text block and a multiple-choice question: "What do you do now?". Below the question are four radio button options. A red box highlights a button labeled "After section 12 Continue to next section". A second screenshot, also with a red border, shows a dropdown menu for "Continue to next section" with 15 options, including "Go to section 1 (Case 1: Marketing ...t kidding around?)", "Go to section 2 (Introduction: The ...y of a Lifetime!)", "Go to section 3 (The marketing strategy proposal)", "Go to section 4 (The anti-ageing co...iddle-aged adults)", "Go to section 5 (Make Hoiyiu cruelty-free?)", "Go to section 6 (Come clean to Anit... concerns later?)", "Go to section 7 (Relying on the expertise of others)", "Go to section 8 (The skincare produ...ers and pre-teens)", "Go to section 9 (What does the law say?)", "Go to section 10 (Keep digging, or move on?)", "Go to section 11 (Check the code of conduct)", "Go to section 12 (Trust in the team)", "Go to section 13 (The story breaks)", "Go to section 14 (Conclusion)", and "Go to section 15 (Optional Reading)".

Google form could pose limitations depending on how the storyline is written and the students' decisions. Students can be redirected to the same questions again and again.

Resolution to Challenge 1 & 2: Use Miro to Plan the Simulation Game Decision Matrix



One may use [Miro](#) to plan the simulation game decision matrix. It aids the process of writing of the scenarios, and avoids the creation of the aforementioned Google Form “loop” problem.

Challenge 3:

Teachers May Find Such Simulation Game Different To Manage

- This is new for most teachers, and thus can be challenging for a teacher to implement such simulation games in remote and asynchronous learning environments.
- It requires thoughtful lesson-planning to drive meaningful discussion based on the simulation(s).

Resolution to Challenge 3: Comprehensive Teaching Notes

- We created detailed teaching notes to guide how to use the simulation, provided a lesson plan, and sets of questions for the teacher to drive meaningful discussions in their lessons.

Lesson Plan

Time	Activity	Notes
5 min	Read Introduction Students will read the case introduction on their own.	Self-learning activity
5 min	Read Case Study Students will read the case study on their own.	Self-learning activity
10-60 min	Simulation: What would you do? Students will answer the questions on their own and submit their answers via the online form . Note: the length of this activity will vary depending on the type and quantity of questions selected by the teacher.	Self-learning activity
15 min	Whole-class discussion Teacher-led discussion introducing major ethics themes and the learning objectives, and briefly introduce the case method. Emphasize that participation is the key in case studies. The teacher can also share data from student answers.	In-class activity

Ethical Issues to be Considered

Marketing Ethics Frameworks

When analyzing marketing ethics, the following frameworks can be utilized:

Marketing Ethics Frameworks	
Value-oriented framework: What values are potentially being infringed?	Examples: <ul style="list-style-type: none"> Honesty Privacy Transparency Vices
Stakeholder-oriented framework: Who is going to be affected by the advertisement?	Examples: <ul style="list-style-type: none"> People who may be unable to make sound decisions for themselves (e.g., children, some elderly, etc.) Consumers Voters Society
Process-oriented framework: What tools are the marketers using?	Examples: <ul style="list-style-type: none"> Promotions Price cuts Research Testimonials

Challenge 4:

Students Found the Simulation Too Text-Heavy

Some students found the simulation slightly text-heavy.

Case 1: Marketing - Monkey business, or just kidding around?

Introduction: The Opportunity of a Lifetime!

It has been 5 years since you joined Leah, Inc. ("Leah"), a multinational consumer products conglomerate, focusing on cosmetics, personal well-being, and healthcare products. Leah is one of the major players in the European and North American consumer products markets. To expand its global presence, particularly in Southeast Asia, Leah recently acquired a competing business.

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Resolution to Challenge 4: Integrate Videos and Images in the Google Form

- In order to enhance engagement, we will integrate images, videos, voice messages.

What des the law say?

Your legal team responded:



A large lecture hall with students seated in blue chairs, facing a stage with a projector screen displaying "Project UR". The room has wood-paneled walls and a curved ceiling with recessed lighting. The text "Implications for Teaching & Learning" is overlaid in the center in a bold, dark blue font.

Implications for Teaching & Learning

Broad Application of Gamified Learning

- Can be used for any program-level learning requirements (e.g., ethics)
- An effective way to harmonize teaching and learning across cohorts
- A tool to collect students' decisions and aggregate data across cohorts and years





E-LEARNING

Using The Simulation Model As An Assessment Tool

Using The Simulation Model As An Assessment Tool

- You can test student knowledge through the decisions they make, and ask for both quantitative and qualitative questions throughout the process.
 - MCQ, short-answer, and essay questions
- You can also flip it around and ask the students to create a simulation as part of their assessment.
 - Involving significant aspects of higher-level thought and learning, including evaluation, synthesis, analysis, etc.

Let's give it a try...

Sample Simulation

Please scan the QR code to participate:



Things to note:

- You are limited in what multimedia tools you can add, but images and video links work.
- Go to section based on answer
- Can shuffle the option order if desired
- Click “Responses” to see the results, and “Create Spreadsheet” to create a sheet that captures all the response data.
- Make sure you send the right link!



QUESTIONS?