

G122 AY2024 SEMESTER 2 - GRADED ASSIGNMENT (GA) Critical Thinking and Problem-Solving Skills

Instructions

- The deliverable is a **set of PDF slides**, to be **submitted individually**. This Graded Assignment accounts for 50% of your overall module grade.
- Please use this provided PowerPoint declaration template, complete it, save your work as a PDF, and **submit it in PDF format**.
- Name your file as: [Student ID]_[Full Name]_G122 GA. For example: 2300000_Alethia Boo Chin Dee_G122 GA
- Submit your work by **2 December 2024, 8:00am**. Late submissions without approved Leave of Absence (LOA) will incur corresponding penalties (see section on Late Submission).
- Submission is strictly via **SA2.0 Web Portal** (<http://mysa.rp.edu.sg>) "Submission Folder" only. No other platforms, such as LEO2.0, Email, or SA2.0 Quest, will be accepted.
- Embed all multimedia files in your PDF slides, if applicable, and reference the sources you have cited.
- Ensure that you submit the correct set of slides. Any resubmissions via SA2.0 Web Portal after 2 December, 8:00 am, will incur a penalty (see section on Late Submission).

Grading Criteria

Component	Weightage (%)	Description
Factors of a system in a complex problem	32	<ul style="list-style-type: none"> Identify the different factors (up to four levels) and stakeholders that contribute to the complex problem. Provide evidence to support the explanation.
Relationships among factors in a system	32	<ul style="list-style-type: none"> Analyse how the factors and stakeholders are inter-related and describe the impacts on the complex problem.
Evaluation and explanation of proposed solutions	24	<ul style="list-style-type: none"> Explain how the proposed solution(s) accounts for the identified factors and stakeholders in the analysis of the complex problems, to address the problem.
Credibility of sources	12	<ul style="list-style-type: none"> Cite credible sources to support explanation throughout the presentation
Total	100	

Late Submission

- If you have an approved LOA, your submission deadline will be extended to the next working day after the LOA period ends.
- Late submission of the Graded Assignment without approved LOA will be subjected to the penalty shown below.

Time after submission deadline, t	0 < t ≤ 24 hours	24 < t ≤ 48 hours	48 < t ≤ 72 hours	t > 72 hours
Downgrading applied to submitted work	10% of the maximum score for the submitted work	20% of the maximum score for the submitted work	30% of the maximum score for the submitted work	100% of the maximum score for the submitted work, i.e. award zero

- Note that the time after submission deadline includes weekends and Public Holidays.

Plagiarism

- Republic Polytechnic takes a very serious view of plagiarism, which is an academic offence.
- Any student caught copying or sharing one's work to others will face disciplinary action.
- Disciplinary actions will include, but are not limited to, an outright failure for the Graded Assignment and downgrading of the module grade.**

Checkpoints

- To help you assess that you are on track in your Graded Assignment outcome and pace, there will be two checkpoints scheduled on Lesson 05 and Lesson 06. You are to use these checkpoints effectively.
- In Lesson 05, by 11:59 pm, submit a draft of your Graded Assignment to your facilitator for feedback. A more complete piece of draft will allow your facilitator to provide constructive feedback so that you can improve on your final deliverable.
- In Lesson 06, leverage in-class consultation time to clarify on feedback received from your lecturer in Lesson 05. Continue to improve on your deliverable.

Topic

Introduction

Fashion is also serious business. In 2023, the global industry was estimated to be worth \$1.7 trillion. And more than 300 million people all over the world work on clothes, somewhere along the value chain ([Source](#))

As consumers, we have the power to influence this industry through our choices.

Summary of current Landscape

1. Fast Fashion:

The rise of fast fashion brands has led to a culture of disposable clothing, where garments are produced quickly and cheaply, resulting in increased waste and resource depletion.

Read: [What is Fast Fashion?](#)

2. Global Supply chains

Clothing items often travel thousands of kilometers from production to retail, contributing to carbon emissions and environmental degradation. The transportation of goods contributes significantly to greenhouse gas emissions.

Potential Issues

Environmental Impact:

The production of clothing uses large amounts of water, energy, and harmful chemicals.

Watch: [The Environmental Impacts of Cotton](#)

Societal Impact:

Workers in the fashion industry, particularly in developing countries, are often subject to poor working conditions and low wages.

Watch (from 1:00:05):

[The story of Shima, a garment worker in Bangladesh](#)

Waste:

Approximately 92 million tons of textile waste are generated globally each year, much of which ends up in landfills.

Watch: [The Clothing Waste Crisis](#)

Our fashion choices impact ourselves, the planet, and others.

As President of the RP Sustainability Club, you will present a proposal to the Principal to encourage RP students to make more sustainable fashion choices.

You will present the factors and stakeholders contributing to sustainability issues related to fashion in Singapore and RP. Analyse how actions can be initiated in RP and propose solution(s) with balanced consideration for the various stakeholders.

You will submit this proposal as part of your Graded Assignment (GA).

You are required to analyse the complex problem using Systems Thinking and present a proposal to respond to the complex problem.

In your research, analysis and evaluation, please consider the following:

- Include Lesson 4–6 Systems Thinking Workbook to support your responses.
- What are the factors/ stakeholders that contribute to the complex problem?
- How are the factors / stakeholders interconnected in the system?
- What are the impacts of the interrelationships in the complex problem?
- What solution(s) can be implemented to address the complex problem?
- Is your solution(s) reasonable?
- Does your solution(s) account for the factors/ stakeholders identified?
- Are your arguments presented clearly and logically?
- Did you use credible resources as evidence to support your arguments?

Format guidelines for the proposal:

- Maximum 12 slides (the 12 slides should include your work only, and do not include the instructions, guide and declaration page).
- You may include verbal elaboration in the form of audio recordings in your slides ONLY if you deem that some form of explanation is necessary to supplement your slides. However, the total duration of the audio recordings should not exceed 5 minutes. Please embed the audio files directly within your PDF slides.

Refer to the earlier sections for overall details on the deliverable.

Assignment Cover Sheet

Assessment and Academic Integrity

Students must uphold and maintain academic integrity at all times. Cheating, plagiarism and other forms of academic dishonesty are considered serious offences for which disciplinary actions will be taken. Students should not plagiarise or pass off as their own, the writing or ideas of another, without acknowledging or crediting the source from which the ideas are taken.

Declaration:

I have read and understood the rules and regulations pertaining to assessments and academic integrity in RP and declare that:

- This assignment is my original work – all sources have been properly referenced and acknowledged. I have not copied any content from another person or source (i.e., website, ChatGPT, etc) and submitted it as my own.
- I will declare any form of generative AI as part of this assignment.
- I am aware that I may be asked to verify the authenticity of our work if plagiarism is suspected.
- If found guilty of committing any act of academic dishonesty, I understand that I will be liable for disciplinary actions, including but not limited to immediate failure for this assessment or even dismissal.

My declaration

AI Tool(s) used

Explain what questions or prompts were asked and how the generated output was used

e.g. ChatGPT

e.g. I asked: How do our fashion choices impact ourselves, the planet, and others? I then used the ideas and expanded on them by conducting my own research. The ideas referenced can be found in Slide 2, 5, and 8.

Chat gpt	I asked how can companies make sure to be ethical, one of the example is corporate social responsibilities which I researched about it and decided to use it.

Student Name and ID

Date:

Liau siong kai (24015531)

13/11/2024

Grading Criteria

Component	Weightage (%)	Description
Factors of a system in a complex problem	32	<ul style="list-style-type: none">• Identify the different factors (up to four levels) and stakeholders that contribute to the complex problem.• Provide evidence to support the explanation.

Mindmap of **factors** that affect fashion sustainability issues

- Remember to do the four levels – individual, community, society and global
- Look at the **issues** raised here to do your four levels for the mindmap.

The True Cost SUSTAINABILITY & THE FASHION INDUSTRY

Factor 1([EVIDENCE](#)):

Factor 1([EVIDENCE](#)):

Stakeholder/Factor 1

Stakeholder/Factor 1

Governments may not provide sufficient incentives (e.g., tax breaks, grants) for companies to adopt more sustainable or ethical practices. Often, policies prioritize economic growth over sustainability, encouraging companies to maintain cheap labor and resource-intensive production methods

Many consumers buy more than they need due to trends, sales, or emotional purchasing, leading to overproduction and excessive waste. The culture of constantly wanting new items fuels fast fashion and its environmental toll..

Factor 2([EVIDENCE](#)):

Factor 2

The NEA, despite its strong environmental initiatives, may not have specific, stringent regulations targeting the fashion industry's environmental impact. While some regulations around general waste management exist, there is often a lack of sector-specific policies that push fashion companies to minimize waste, water use, and carbon emissions in a more impactful manner. This regulatory gap can slow down progress in making fashion more sustainable.

Individual stakeholders/factors

Stakeholder/Factor 2

Designers may prioritize aesthetics, cost, or speed of production over environmental or ethical concerns. For example, trendy designs that require mass production or seasonal collections lead to overproduction and waste

Society/National factors/stakeholders

Factor 2([EVIDENCE](#)):

Global factors/stakeholders

Community stakeholders/factors

Stakeholder/Factor 1

Stakeholder/Factor 2

Stakeholder/Factor 1

International trade organizations(WTO,IMF and World bank) These organizations can influence global supply chains, leading to unsustainable practices if regulations on environmental standards are weak or not enforced across member countries. They often try to cut cost which could result in not following regulations.

•Global media creates pressure for consumers to constantly update their wardrobes to stay in style, further driving overconsumption and the rapid turnover of

Stakeholder/Factor 2

When a group of people influence each other, the preference for fast fashion or the disregard for garment longevity occur and can contribute to higher waste, pollution, and overproduction.

Without knowledge of issues like textile waste, pollution, and exploitation in garment supply chains, consumers may continue to support unsustainable practices

Factor 1([EVIDENCE](#)):

Refer to Part IV in Systems Thinking workbook

Factor 2([EVIDENCE](#)):

Factor 2([EVIDENCE](#)):

Factor 1([EVIDENCE](#)):

Factors/Stakeholders (Individual)

Factor 1: Many consumers buy more than they need due to trends, sales, or emotional purchasing, leading to overproduction and excessive waste. The culture of constantly wanting new items fuels fast fashion and its environmental toll..

Source: EVIDENCE):"/>

Factor 2: Designers may prioritize aesthetics, cost, or speed of production over environmental or ethical concerns. For example, trendy designs that require mass production or seasonal collections lead to overproduction and waste

Source: EVIDENCE):"/>

Factors/Stakeholders (Community)

Factor 1: Without knowledge of issues like textile waste, pollution, and exploitation in garment supply chains, consumers may continue to support unsustainable practices

Source: Factor 1([EVIDENCE](#)):

Factor 2: When a group of people influence each other, the preference for fast fashion or the disregard for garment longevity occur and can contribute to higher waste, pollution, and overproduction.

Source: Factor 2([EVIDENCE](#)):

Problem		Methods employed to support the explanation
Relationships among factors in a system	32	<ul style="list-style-type: none">• Analyse how the factors and stakeholders are inter-related and describe the impacts on the complex problem.

Identify the various relationships between **factors in a system**

(Ref : Systems Thinking workbook); at least 4 levels; any of the loops eg vicious cycles, virtuous cycles, balancing loop etc

Part IV. Causal Loops to highlight dynamic inter-relationships

Level 1: Creation of Supply Need → Low and Quick Production

The need for affordable yet stylish clothes makes fashion companies produce goods as fast and cheaply as possible. It is triggered by the need of the people for trendier, cheap clothes, therefore encouraging the company to keep costs as low as possible to be competitive in the market.

Manufacturing companies often relocate their work to countries where labor is cheaper and where there are limited rules related to environmental protection and worker protection to maintain low production costs. This continues the demand for cheap products

. [Fast Fashion Getting Faster: A Look at the Unethical Labor Practices Sustaining a Growing Industry | International Law and Policy Brief](#)

Level 2: Poor treatment of laborers → Poor working conditions and low pay.

To keep production costs low, companies pay workers very low wages and ignore their safety and well-being. As a result, this leads to bad working conditions, unsafe factories, and few rights for workers.

Relationship: The firms are continuously using cheap labor, which eventually gives hazardous and low-wage jobs; they can only retain such abysmal working conditions because the same old condition contributes to cost-cutting and gives cheaper availability of products. This is where the three elements - cost-cutting, low wage, and bad working condition presents direct relationship.

Level 3: Give no relief to workers but only sustain adverse conditions.

They will continually exploit them unless intervened, for instance, through care about workers' rights, government action, and a watchful eye by the public. Without intervention or regulation on the rights of workers, mistreatment persists.

Relationship: Due to insufficient 'why' to alter things for good, the inept working condition stays as it is. This prolongs the inaction of the exploitation of laborers and ultimately brings down the cost of production, making it sure that the 'cheap labor' is maintained to keep the prices low.

[Mental health at work](#)

Level 4: Reinforcing feedback loop (Vicious circle)

Where these factors interact, there is almost a self-reinforcing circle in which the system of production maintains a vicious circle of bad wages and bad conditions, with the firms gaining from their lower labor costs and an increased demand for the cheap clothes, while the workers remain in hazardous conditions and poor wages.

Factor: While people want cheap and good-looking clothes, corporations have a reason to continue their production in countries with cheap labor. This keeps workers being exploited and worsens working conditions. Such conditions indeed bring more profit for the companies but continue to generate social and economic inequality.

[The Big Read: Undervalued, underpaid, disrespected – for some, a decent day's work just isn't treated the same by society - CNA](#)

Feedback Loop:

Cheap goods demand shifts production to countries that have cheap labor. Poor working conditions characterize this, coupled with very low wages. Because the production cost should be at its lowest, cheap goods are in higher demand; this encourages further exploitation of workers.

Overall Explanation:

The vicious circle in this case is that the demand for inexpensive products results in companies seeking out cheap labor, and hence, it is for low pay that such working conditions remain unsafe, since both are factors of minimizing production costs. Unless checked through legislation, consumerism awareness, or workers who take up the cause for themselves, such a vicious cycle continues, hurting society. The pressure to keep costs at a minimum leads to worse conditions for the worker and hence makes the problem worse.

Evaluation and explanation of proposed solutions	24	<ul style="list-style-type: none">• Explain how the proposed solution(s) accounts for the identified factors and stakeholders in the analysis of the complex problems, to address the problem.
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You need to follow up on the solutions based on the factors/stakeholders that you have discussed earlier in the slides. Share the pros and cons of each solution, cost of implementation and whether it is a quick fix or a long term solution

Proposal for solutions in RP

1. Events – who are stakeholders (RP students, staff, vendor etc)
2. Pros
3. Cons
4. Evaluate solution; quick fix, long term;

Solutions to Improve Practices and Environment at Republic Polytechnic

To improve practices at Republic Polytechnic (RP) and ensure a better experience for both students and staff, there are several potential solutions to consider. Let's explore each one and evaluate its benefits and challenges, along with how much effort is needed to put them into action.

1. Fairer Treatment and Support for Student Workers

RP should make sure that students working part-time or interning are treated fairly. This includes paying them fairly and making sure they work in a safe, respectful environment.

What's Good About It:

- Better for Students:** Students get a better work experience when they're paid well and treated with respect.
- Attractive to Future Students:** If RP is known for fair treatment of workers, it could attract more people to apply.
- Better Reputation:** It shows RP cares about the welfare of its students.

Challenges:

- Cost:** Ensuring all students are paid fairly and work in good conditions might cost RP more money.
- Complicated to Manage:** It would require a lot of effort to track and ensure fairness across different departments.

How Much It Costs to Implement:

- Moderate:** Setting up fair working practices might require investment in time and resources, but it's doable.

Quick Fix or Long-Term Solution?

- Long-Term:** This will take time to establish properly, but it's a great move for RP's future.

2. Improved Internship Programs

RP can do more to improve internships for students. By making sure they're meaningful and supportive, RP can help students gain more valuable work experience.

What's Good About It:

- Real-World Experience:** Students will get real experience in their field, which helps them after they graduate.
- Boosts RP's Reputation:** Companies that provide good internships might want to partner more with RP.
- Better Learning:** Students will learn more because they'll see how their studies connect with real-world work.

Challenges:

- Monitoring:** RP would need to make sure the companies are treating students well, which can be tricky.
- Extra Costs for Companies:** Partner companies may need to spend extra time and money to support the interns.

How Much It Costs to Implement:

- Moderate:** Setting up and improving internship programs will require time and effort, but it doesn't need a huge budget.

Quick Fix or Long-Term Solution?

- Long-Term:** Building strong internship partnerships and making sure they're valuable will take time, but it's worth it.

3. Raising Awareness Among Students and Staff

RP could run campaigns to raise awareness about fairness, ethical behavior, and the importance of a positive learning environment for both students and staff.

What's Good About It:

- **More Informed Students:** When students understand the importance of ethical practices, they'll be more likely to follow them.
- **Encourages Positive Change:** Staff and students would work together to create a better culture at RP.
- **Affordable:** Awareness programs can be done through social media, posters, or even short sessions, which aren't expensive.

Challenges:

- **Takes Time:** Changing people's attitudes and behaviors won't happen overnight.
- **Hard to Measure:** It's difficult to track how effective these campaigns really are.

How Much It Costs to Implement:

- **Low to Moderate:** You can do a lot with a small budget by using existing platforms and resources.

Quick Fix or Long-Term Solution?

- **Long-Term:** Changing the culture and getting everyone on board with new values takes time, but it will create lasting change.

[Promoting positive behavior: Strategies for student success](#)

4. Corporate Social Responsibility (CSR) in Partner Companies

RP can encourage the companies they work with to adopt responsible practices. This means supporting ethical working conditions for students who intern or work with these companies.

What's Good About It:

- **Improved Reputation:** RP will be known for working with ethical companies, which can help attract better partners.
- **Better Learning for Students:** Students will gain experience in companies that treat workers well and act responsibly.
- **Long-Term Partnerships:** RP can build stronger, more trusted relationships with companies that share its values.

Challenges:

- **Not Every Company Will Agree:** Some companies may be hesitant to invest in CSR practices.
- **Different Standards:** CSR can look different depending on the company, which can make it difficult for RP to maintain consistency.

How Much It Costs to Implement:

- **Moderate:** Encouraging CSR practices doesn't require huge costs, but it does take time and effort to set up and maintain.

Quick Fix or Long-Term Solution?

- **Long-Term:** Building strong CSR relationships takes time, but it's a good investment for the future.

5. Embracing Technology to Improve Efficiency

RP can use more technology to streamline administrative tasks and improve the overall student experience. This could include using automation to speed up processes like registration, course management, or even communication between students and staff.

What's Good About It:

- **Faster Processes:** Technology can automate boring or repetitive tasks, allowing staff and students to focus on more important work.
- **Better Use of Time:** Students and staff will have more time for learning and teaching, rather than dealing with paperwork.
- **Long-Term Savings:** While the initial investment is high, the savings over time will be significant as manual work decreases.

Challenges:

- **High Initial Costs:** Setting up new technology systems can be expensive.
- **Training Needed:** Everyone will need some time to get used to the new systems, which could be challenging at first.
- **Risk of Job Loss:** Some administrative jobs might be replaced by technology.

How Much It Costs to Implement:

- **High:** The upfront costs for technology and training are significant, but it's worth considering for the long run.

Quick Fix or Long-Term Solution?

- **Long-Term:** The setup for new technology takes time, but it can make things more efficient and save money over the years.

[How to Improve Admin Efficiency Through Technology \(9 WAYS\)](#)

Conclusion

Improving practices at RP is not something that can happen overnight, but with the right strategies, we can make RP a better place for students, staff, and everyone involved. Whether it's by treating student workers better, improving internships, encouraging ethical behavior, or embracing technology, these changes will take time, but they'll make a big difference in the long run. The best approach is to use a combination of these solutions, allowing RP to grow as a more ethical, efficient, and supportive institution for everyone.

proposed solutions		address the problem.
Credibility of sources	12	<ul style="list-style-type: none">• Cite credible sources to support explanation throughout the presentation

At least 5 credible sources which are **recent, reputable and relevant.**
You do not need to have a separate slide for this.
You can include sources **within the analysis in the above slides.**

Proposed Solutions

Proposed Solution	Who are the stakeholders	Pros	Cons	Remarks/Cost/Unintended consequences
Fairer Treatment and Support for Student Workers	RP students,	Students gets treated well and is more efficient in their work	Difficult to manage and track so many people	Cost is relatively moderate but it is a good long term solution.
Improved Internship Programs	Rp student(2 nd year)	Students gets the internship that they want and enjoy learning in that company and gain a lot of experience which help in their career	Difficult to track companies treatment of our students	Might be more costl for Rp to set up a improved internship programme, but it is a good long term solution.
Raising Awareness Among Students and Staff for ethical behaviours , etc.	Rp staff and students	Rp student and staff will be more informed about ethical behaviours making them follow them. Affordable.	Hard to change attitude and behaviours and cannot measure how effective the campaign is.	Rather affordable .

Proposed solution	Who are the stakeholders	pros	cons	Remarks/Cost/Unintended consequences
Corporate Social Responsibility (CSR) in Partner Companies	Companies partnered with Rp that offers internship programme	Better reputation for Rp as the companies are being more ethical and students will gain experience in a safer environment.	Companies might not agree. Hard for Rp to maintain this consistency as the companies social responsibility might be different in every company.	Rather affordable, long term solution to build better relationship with more reputable companies.
Embracing technology to improve efficiency	Rp staff	Things get done faster and better, staff can focus on more important task	Admin jobs could be lost and training staff to get use to the system might be difficult	Rather high initial cost. But it is a great long term plan if efficiency is desired