



Contemporary Challenges: Making a Difference

Name: Lakshana Krishna Kumar

Student ID: 2226194

Content Page

Section 1

Section 2

References

Appendix

Type of Problems

Wicked and complex issues are two different but interrelated categories of hurdles that, due to their complicated origin and varied traits, oppose simple solutions. Wicked problems are complicated societal difficulties that tend to be frequently uncertain, lack a definite answer, in addition are extremely difficult to resolve (Conklin, 2006).

Wicked issues, as defined from Rittel and Webber throughout the 1970s, include several fundamental characteristics. Their nature is unambiguous by nature, with fuzzy limits and different meanings among parties. Resolutions are neither technically true nor false but rather reflect subjective opinions and ideals. Additionally, wicked problems sometimes become inextricably linked to other concerns, causing it tricky to solve one without harming others.

In contrast, complex problems are concerned with elaborate systems and interactions (Snowden & Boone, 2007). They have multiple elements which operate in constantly changing and irregular methods. The degree of complexity emerges from the interdependence of various components, resulting in spontaneous features that make them more than the combined result of their separate parts. Within complex systems, cause-and-effect linkages are frequently challenging to foresee, and actions might result in unexpected repercussions.

Both of these wicked and complicated issues contain ambiguity, interconnectivity, as well as the lack of obvious answers. They necessitate techniques that welcome ambiguity, stimulate multidisciplinary cooperation, as well as promote adaptable tactics (Rittel & Webber, 1973; Snowden & Boone, 2007). The impact of climate change, improvements in healthcare, and poverty around the world are examples of problems that need inventive thinking, systems approaches, and continual learning to properly traverse their intricacies.

Due to the fact that because of their ease, single-purpose materials such as throwaway plastic bags, containers, and wrappers have become commonplace throughout present-day culture. Nevertheless, its widespread usage has raised serious worries about the environment. Polymers such as these are infamous for their environmental endurance, resulting considerably to concerns such as marine contamination, habitat deterioration, and biodiversity injury (Eriksen et al., 2014). They offer a significant issue since they are not recyclable, often needing years to degrade, and they can disintegrate creating microplastics over time that enter environments and threaten habitat (Eriksen et al., 2014; Geyer et al., 2017). As the negative environmental effects of single-use plastics become more and more clear, the necessity for quick action and an adjustment towards more environmentally conscious options becomes more apparent (Geyer et al., 2017).

The issue of society's continuing disposal of massive amounts of single-use plastic is classified as a "wicked problem" due to its intricacy and varied nature. The matter has been defined by uncertainty in its description, as the limits and extent of garbage made from plastic can frequently be ambiguous, and it additionally encompasses a large number of different parties with varying points of view. Furthermore, there is no uniform answer because efforts to managing single-use plastic waste differ depending on geographical, social to cultural, and economical factors (Amabile, 1997). The issue of plastic that can only be used once trash is intricately intertwined with a variety of sectors, including consumer behaviour,

manufacturing, garbage management, and ecological concerns, leaving it challenging to address one without no influencing others (Gudykunst & Kim, 1997). As a result, it poses a tremendous problem that necessitates innovative and transdisciplinary ways to limit its environmental impact.

Problems Faced during the Design Thinking Process

Once a leader leads a team through the method of design thinking, various problems might occur, such as groupthink, limited resources, as well as reluctance to change, all of which can have a consequence on the process's efficacy.

Janis (1972) defines groupthink as a behavioural trait that occurs when members of a group prioritise unity along with harmony above critical thinking and alternative opinions. Groupthink may limit innovation and result in uniformity in approaches to solving problems in a setting of design thinking. Participants might feel hesitant to share unusual ideas or criticize established notions, obstructing the development of novel solutions (Brown, 2009).

Design thinking can be constrained by limitations on resources such as time, cash, or the availability of vital resources (Liedtka, 2014). A shortage of resources might limit the capability of the group to perform deep studies, successfully prototype, or execute ideas, thus contributing to inferior results (Liedtka, 2014).

When implementing fresh methods for solving issues such as design thinking, rebellion towards change is a typical difficulty (Maurer, 2010). If teammates are used to utilising more typical linear methods, they may be resistant to embracing a user-centric, adaptive style. This reluctance can take the form of a refusal to abandon traditional practices as well as scepticism regarding the benefits of design thinking (Maurer, 2010).

To avert groupthink, executives might establish a climate that supports open discussion, variety of thinking, and mental security (Edmondson, 1999). Resource restrictions can be overcome by meticulous preparation and resource prioritization according to the crucial stages of the process of design thinking (Liedtka, 2014). Reducing opposition to change requires good communication, training, and real results that demonstrate the advantages of design thinking (Maurer, 2010).

Skills Needed to Deal with The Problems

Leaders managing complicated and tough situations, including single-use plastic trash, needs a varied range of talents to manage these problems successfully.

When tackling complex problems, communicating effectively is critical since it requires organizing activities, expressing ideas, and creating understanding among varied stakeholders (Yukl, 2006). Leaders must be skilled at listening intently, engaging in compassionate communication, and translating complicated concepts into comprehensible words for a variety of listeners (Lussier & Achua, 2018).

Logical and analytical concepts are used in problem-solving thought to discover the fundamental causes of complicated difficulties and design new solutions. To comprehend the complexities of the situation, leaders must adopt methodologies such as root-cause assessment and systems thinking (Senge, 1990; Heifetz et al., 2009).

When dealing with complicated problems with various aspects, time management is critical. To guarantee that expenditures are concentrated on high-impact areas, leaders have to distribute their spare time effectively prioritise activities, and oversee resources wisely (Covey, 1989; Allen, 2001).

Link to presentation:

https://iumwgroup-my.sharepoint.com/:f/g/personal/21050003_student_iu_mw_edu_my/Ev9NwXGRXSFFnLpB3kwrtAUBfzUcWhNqf9zzUt10ncmh6Q?e=0yqlL1

Section 2 – Reflection

- **Description** of the experience

The encounter began by delving into the heinous problem of society's overuse of single-use plastics. This challenge spurred an exploration of the design thinking process, which included empathising, clarifying, ideating, prototype development, and testing ideas. The emphasis moved to pinpointing the obstacles encountered throughout the course of the project, specifically groupthink, constraints on resources, and reluctance to adapt. Collaboration, figuring out solutions, and time managing abilities were emphasized as important both for the members and the leader. Finally, a debate focused on the benefits, drawbacks, and ethical concerns associated with these resolving issues endeavour.

- **Feelings** and thoughts about the experience

Initially when we started on the assignment, none of us really figured out on what we had to do for this assignment. Given my crew comprises a minimum of four members, we chose to divide the task fairly among them. This will make it possible us to accomplish our tasks together with more ease. The workload equality for every member demonstrates group fairness. Until the last draught of the presentation is turned in, there is scheduled a pitch session on design thinking, which means we must first work on it. Due to we as a group did not set a deadline, we were obliged to do work at the last minute, perhaps just a few hours prior to class. Following that, we learned the importance of deadlines, and I was assigned to focus on innovative thinking and ethical considerations. Though we gave ourselves schedules for any of us to finish the task independently, there are now certain obstacles that are preventing us from doing so.

- **Evaluation** of the experience, both good and bad

Developing a presentation on responsible plastic waste reduction methods was an amazing learning opportunity that increased my grasp of the issue and refined important skills. It enabled me to conduct extensive research while also improving my verbalization and design skills. While the process had both positive and negative aspects, such as the feeling of fulfillment and inspiration from educating others, as well as challenges, such as the requirement for a successful organization as well as time oversight, it subsequently identified the essential function of clear story structure and appealing illustrations in conveying complicated concepts to an audience. In the not-too-distant future, I intend to prioritise early preparing, solicit input for advancement, and set aside enough time for practise to improve the entire presenting environment.

- **Analysis** to make sense of the situation

This experience taught me that tackling difficult challenges involves not just inventiveness along with a thorough grasp of human behaviour and organisational dynamics. As groupthink may stifle innovation, creating an inclusive workplace for varied viewpoints is critical. Due to resource restrictions, careful planning and prioritisation are required, making optimal resource utilisation important. To overcome resistance to change, powerful management, excellent communication, and the capacity to handle value conflicts are required.

- **Conclusion** about what you learned and what you could have done differently

This experience underlined the multifaceted nature of wicked issues as well as the need of a design thinking approach in addressing them. It emphasised the need of flexible problem-solving abilities as well as leadership traits while dealing with complicated challenges. It also taught the group that it is best if we do not leave our assignments to get it done the last possible timing.

- **Action plan** for how you would deal with similar situations in the future, or general changes you might find appropriate.

In future endeavours, I would deliberately seek out varied opinions to prevent groupthink. In addition, I would create a comprehensive resource management strategy and deploy resources efficiently. On top of that, I would work on improving my managerial skills, interactions, and ability to solve problems in order to successfully handle opposition to change. Furthermore, ethical issues like as openness and damage minimization would be incorporated at every level of the process.

References

1. Conklin, J. (2006). *Dialogue mapping: Building shared understanding of wicked problems*. John Wiley & Sons.
2. Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155-169.
3. Snowden, D. J., & Boone, M. E. (2007). A leader's framework for decision making. *Harvard Business Review*, 85(11), 68-76.
4. Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, 40(1), 39-58.
5. Gudykunst, W. B., & Kim, Y. Y. (1997). *Communication and cross-cultural adaptation: An integrative theory*. Psychology Press.
6. Eriksen, M., Lebreton, L. C., Carson, H. S., Thiel, M., Moore, C. J., Borerro, J. C., ... & Reisser, J. (2014). Plastic pollution in the world's oceans: More than 5 trillion plastic pieces weighing over 250,000 tons afloat at sea. *PLoS ONE*, 9(12), e111913. [DOI: 10.1371/journal.pone.0111913]
7. Geyer, R., Jambeck, J. R., & Law, K. L. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, 3(7), e1700782. [DOI: 10.1126/sciadv.1700782]
8. Eriksen, M., Lebreton, L. C., Carson, H. S., Thiel, M., Moore, C. J., Borerro, J. C., ... & Reisser, J. (2014). Plastic pollution in the world's oceans: More than 5 trillion plastic pieces weighing over 250,000 tons afloat at sea. *PLoS ONE*, 9(12), e111913. [DOI: 10.1371/journal.pone.0111913]
9. Geyer, R., Jambeck, J. R., & Law, K. L. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, 3(7), e1700782. [DOI:10.1126/sciadv.1700782]
10. Eriksen, M., Lebreton, L. C., Carson, H. S., Thiel, M., Moore, C. J., Borerro, J. C., ... & Reisser, J. (2014). Plastic pollution in the world's oceans: More than 5 trillion plastic pieces weighing over 250,000 tons afloat at sea. *PLoS ONE*, 9(12), e111913. [DOI: 10.1371/journal.pone.0111913]
11. Geyer, R., Jambeck, J. R., & Law, K. L. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, 3(7), e1700782. [DOI: 10.1126/sciadv.1700782]

Appendix

Section of the Presentation	Presenter
Types of Problems	Lakshana
Design Thinking	Chooi Fang Ling & Jansika
Problems Faced in Design Thinking	Lakshana
Skills Needed	Lakshana
Discussion	Pravina
Ethical Considerations	Chooi Fang Ling
Conclusion	Jansika