

TASK2: Three application of complex nature using different literatures.

Application Domain	Complex Problem Identified	Justification	Literature Source
1.Urban Mobility Systems	Fragmented transportation networks leading to inequitable access and environmental harm.	Urban mobility involves conflicting needs of commuters, policymakers, and environmental goals. Design thinking enables participatory co-creation of solutions (e.g., integrated transit apps) while balancing equity, sustainability, and efficiency. Complexity arises from dynamic user behaviors, legacy infrastructure, and political barriers.	Dorst (2015), <i>Frame Innovation</i>
2.Public Housing Design	Balancing affordability, sustainability, and social inclusion in housing projects.	Public housing requires reconciling tight budgets, environmental regulations, and diverse community needs. Design thinking's iterative prototyping and empathy tools (e.g., user journey mapping) address systemic inequities and spatial constraints. Complexity stems from conflicting stakeholder priorities and long-term social impact uncertainty.	Buchanan (2001), <i>Design Research and Social Innovation</i>
3.Cybersecurity for SMEs	Protecting small businesses from evolving cyber threats without overwhelming limited resources.	Cybersecurity for SMEs involves technical complexity and human behavioral factors (e.g., phishing risks). Design thinking bridges user-centric training tools and scalable technical solutions. Complexity arises from rapidly changing threat landscapes, resource constraints, and low cybersecurity literacy.	Kolko (2011), <i>Exposing the Magic of Design</i>