Critical Thinking, Design Thinking, Leadership and Teamwork

Topic 2 : Design Thinking for Complex Problem Solving

Complex Problem Table:

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| S.No | Application Domain | Complex Problem Identified | Justification |
| 1. | Agriculture | Sustainable Food Production | Requires balancing productivity, environmental impact, and economic viability. |
| 2. | Transportation | Transition to Renewable Energy in Transport | Technological, political, and economic challenges affecting global pollution and climate change. |
| 3. | Mech. Eng. : Automotive Industry | Electric Vehicle Integration | Infrastructure, battery technology, and consumer acceptance are major challenges worldwide. |
| 4. | Aerospace Engineering | Thermal Management and Material Durability | Extreme temperatures and mechanical stress during hypersonic travel necessitate new materials, cooling techniques, and safety measures. |
| 5. | Social Media Management | Misinformation Detection & Control | Real-time monitoring of vast data, understanding social context, balancing freedom of speech, and ensuring algorithmic fairness. Constantly evolving problem. |