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. | Water Resource Management | Ensuring Access to Clean Drinking Water | Addressing unequal water distribution, pollution, and overuse through desalination, recycling, and sustainable resource management. |
| 2. | Education | Bridging the Digital Divide | Providing equal access to technology and internet for quality education, especially in rural and underprivileged regions. |
| 3. | Energy | Sustainable Battery Production | Developing environmentally friendly, efficient, and long-lasting batteries to support renewable energy systems and electric vehicles. |
| 4. | Food Security | Sustainable Agriculture for Growing Populations | Balancing increased food production with environmental preservation, soil health, and climate change mitigation. |
| 5. | Cybersecurity | Preventing Large Scale Data Breaches | Strengthening digital security against cyberattacks, data leaks, and ransomware threats while ensuring user privacy and regulatory compliance. |