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| S.no | Application domain | Complex problem identified | Justification |
| 1. | **Waste Management** | Efficient Segregation of Biodegradable & Non-Biodegradable Waste | It requires public awareness, infrastructure changes, and advanced sorting mechanisms to ensure proper recycling and disposal. Manual separation is inefficient, and automated systems need high accuracy. |
| 2. | **Water Conversion** | Reducing Water Wastage inn urban households | We are identifying excessive water usage in homes is difficult due to lack of real-time tracking. Implementing effective monitoring and behavioural change strategies at scale is complex. |
| 3. | **Public Transportation** | Reducing delays in buses & train services | It can be managing unpredictable traffic, passenger flow, weather conditions, and mechanical failures while keeping schedules accurate is a challenging task. Requires a balance between cost, efficiency, and practicality. |

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***Complex Problem Table***