NAAN MUDHALVAN PROJECT PHASE 2: **INNOVATION**

PROJECT TITLE: **WATER QUALITY ANALYSIS**

DATA ANALYTICS OF WATER QUALITY ANALYSIS

VALUABLE INNOVATION STEPS:

STEP1: DATA COLLECTIONS

- Review the initial design concept to ensure it aligns with the identified problem.
- Gather feedback from stakeholders and subject matter experts for improvements.
- Incorporate necessary changes to enhance the design's effectiveness.

STEP2: CLEANING DATA

- Clean and reprocess the data to remove outliers, errors, and inconsistencies.
- Ensure data quality before analysis.
- Transformation data into proper format for further processes

STEP3: EVALUATE AND ANAYLSIS

Machine Learning Models:

- Train machine learning models to predict water quality based on chemical components present in water.
- This can help pinpoint potential sources of water quality.

Cluster Analysis:

- Use clustering algorithms to group similar noise patterns together.
- This can help identify areas with distinct noise characteristics.

STEP4: DATA VISUALIZATION

- Create interactive maps and visualizations to communicate water quality patterns.
- Finding components present on water such as PH, sodium, carbon, hydrogen etc..

STEP5: DISCRIBE RESULT (COMMUNICATOIN)

- Result is predicted by using appropriate calculation method using statistic evaluation as per our data collections.
- Finally result of water quality is predicted.

WATER QUALITY ANALYSIS DESIGN