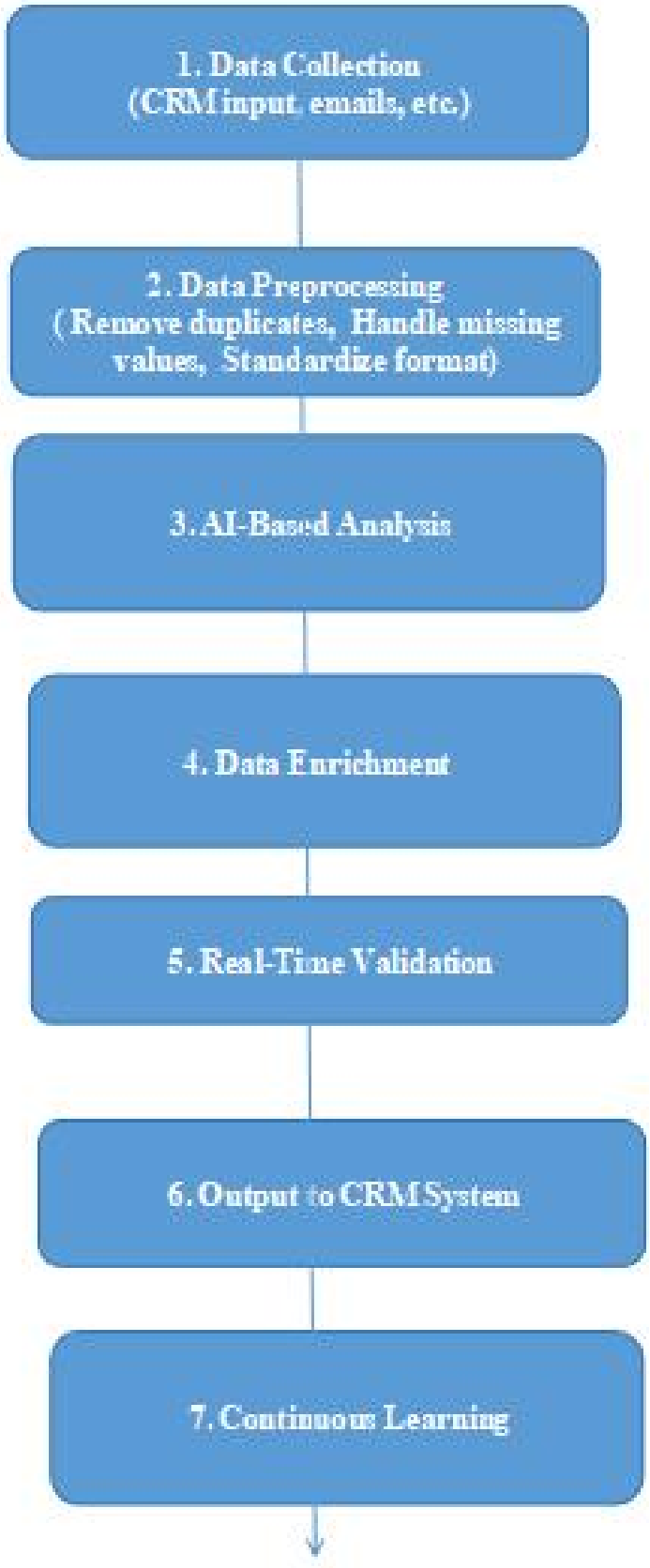
# Phase:02 DESIGN

# Project-02:AI-Enhanced Data Accuracy in CRM Systems Using AI Data Analysts

## College Name:Dr.Ambedkar Institute Technology(Dr.AIT).

**RAVI K R** **CAN_36049468**

# Flowchart: Working Methodology of AI-Enhanced CRM Data Accuracy System



## Explanation of Working Methodology Flowchart

### 1. Data Collection

The process starts with gathering customer data from multiple sources like CRM inputs, emails, call transcripts, web forms, and social media. This raw data often contains inconsistencies and errors due to manual input or disparate systems.

### 2. Data Preprocessing

- Once collected, the data undergoes preprocessing to prepare it for AI analysis. This includes:
- Removing duplicate records that can skew insights.
- Handling missing or incomplete information by either filling gaps or flagging them.
- Standardizing data formats (e.g., phone numbers, addresses) to ensure uniformity.

### 3. AI-Based Analysis

AI algorithms analyze the preprocessed data using:

- **Natural Language Processing (NLP)** to interpret and extract meaning from unstructured text fields like notes or emails.
- **Machine Learning (ML)** models to detect patterns, classify data, and predict customer behavior.
- **Pattern Recognition** to identify anomalies, inconsistencies, or potential errors.

### 4. Data Enrichment

The AI system supplements the existing CRM data by integrating external sources such as social media profiles, public records, or third-party databases. This enriches the data quality, filling missing information and updating outdated records.

### 5. Real-Time Validation

As new data enters the CRM system, real-time validation tools powered by AI automatically check for errors or inconsistencies. The system suggests corrections or flags suspicious entries to maintain ongoing accuracy.

### 6. Output to CRM System

Cleaned, enriched, and validated data is then saved back into the CRM system. This ensures that all departments—sales, marketing, support—work with reliable and consistent information, enabling better customer interactions.

### 7. Continuous Learning

The AI models continuously improve by learning from new data and user feedback. This iterative learning process helps refine the AI's accuracy over time, adapting to evolving customer behaviors and data patterns.