

What is a Data Pipeline?

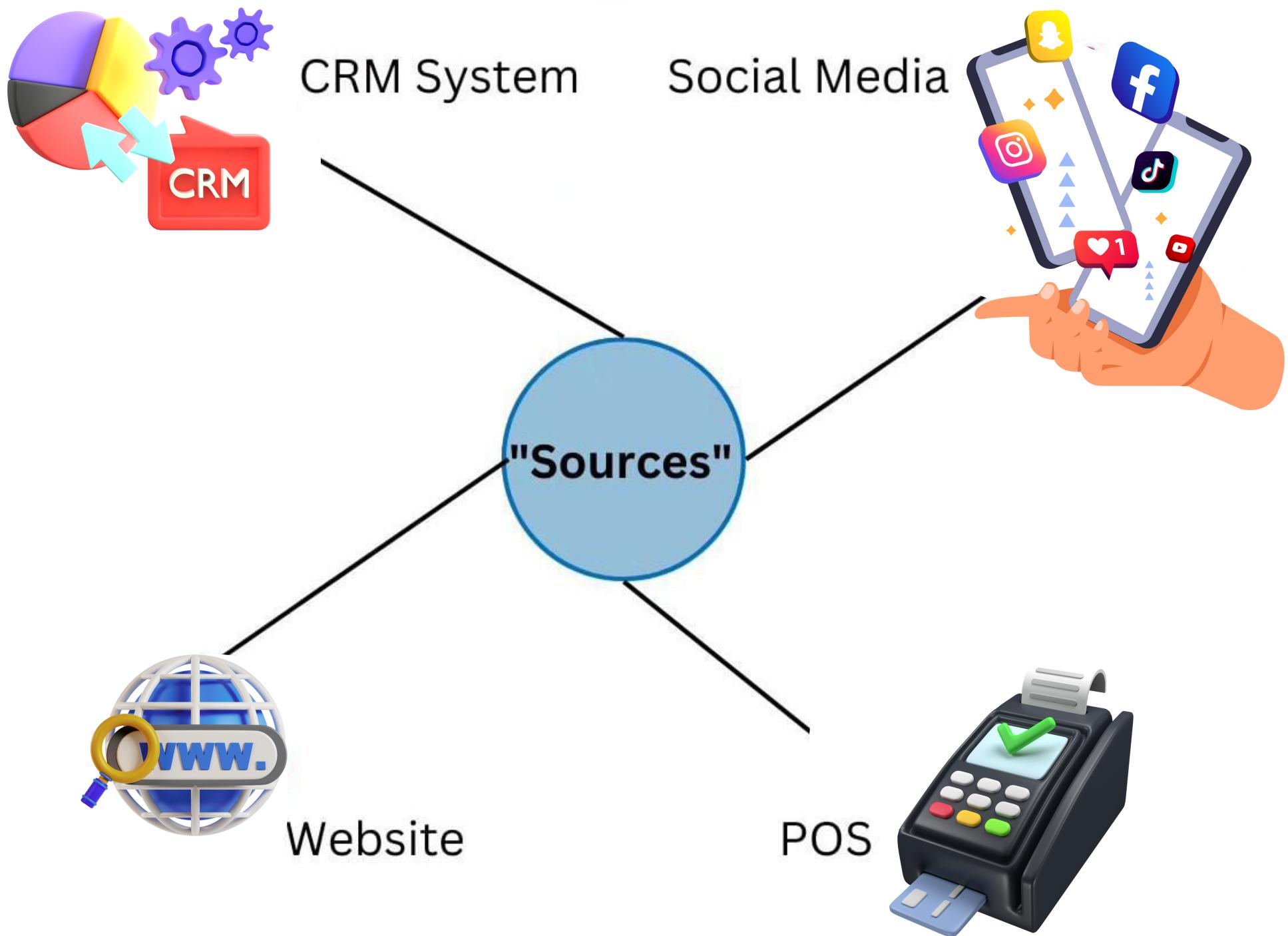


Explained in Fun and Easy Way

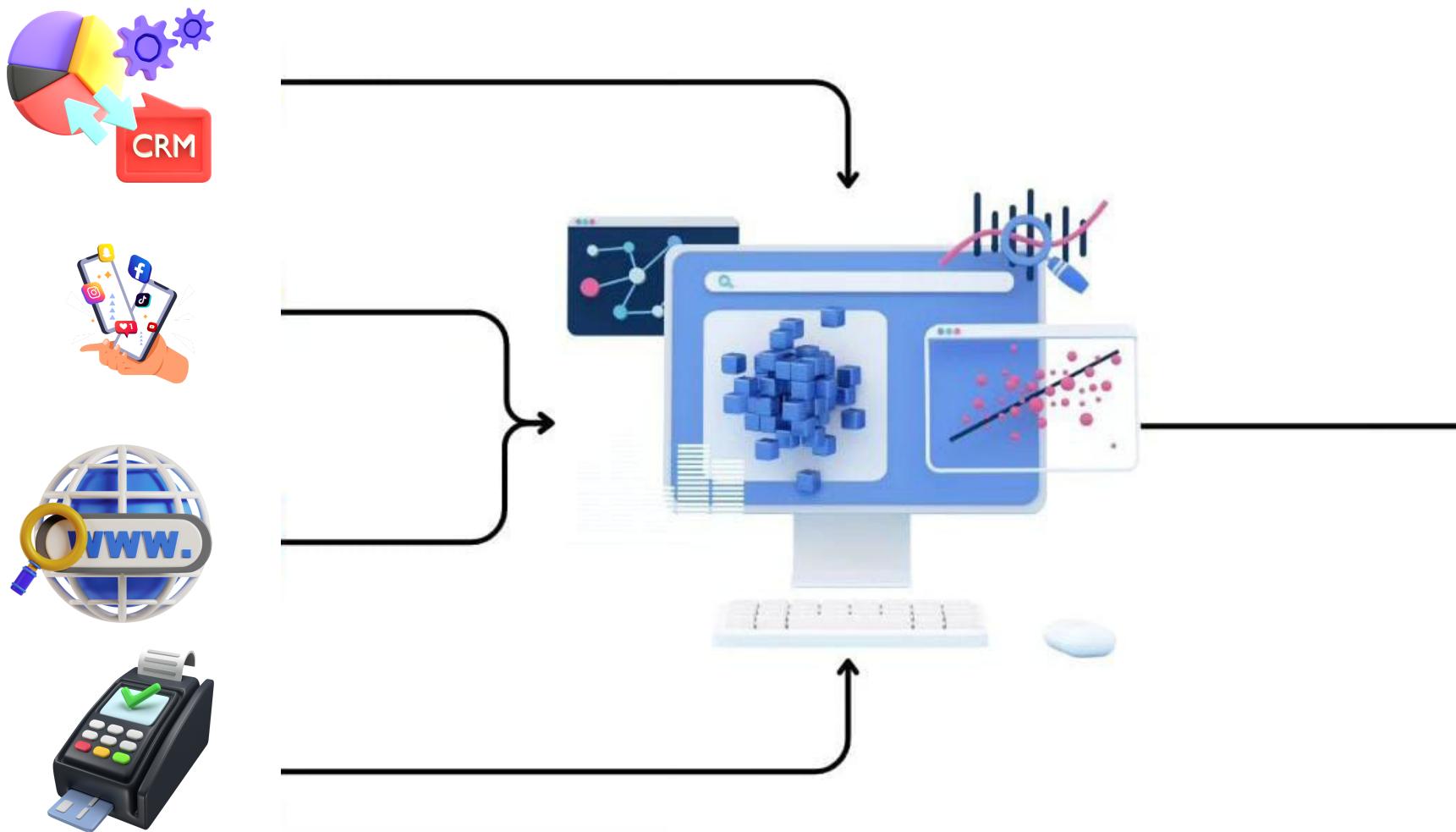
Imagine a retail company that wants to analyze its sales data to understand customers behavior



The company then decides to collect data from its website, physical store and other systems



The **collected** data is brought into a central system where it can be easily **managed**.

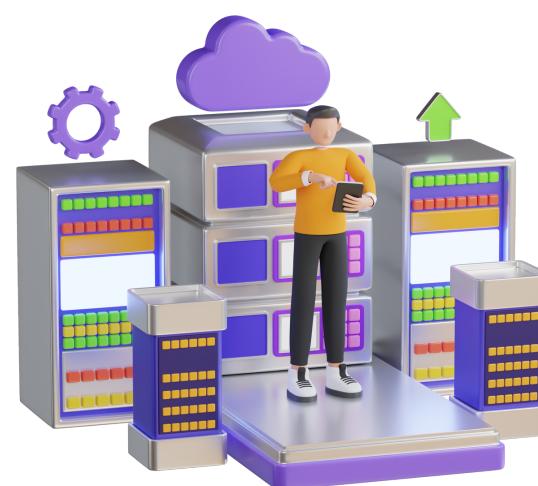


The data is then **checked** and to remove any errors or inconsistencies, ensuring **accuracy**.

Information is **organized** and structured in a way that makes it **easy** to analyze.



Data Transformation



Data Storage

Processed data is then **stored** in databases or data warehouses for easy **access** and **retrieval**.

Various techniques are applied to extract **insights** from the stored data, such as identifying popular products or trends.



Data Analysis



Reporting

The insights are presented in **visualizations** and **reports** that are easy to understand, aiding decision-making.

Based on the analysis, the retail store can make **informed decisions** like adjusting inventory levels or launching promotions.



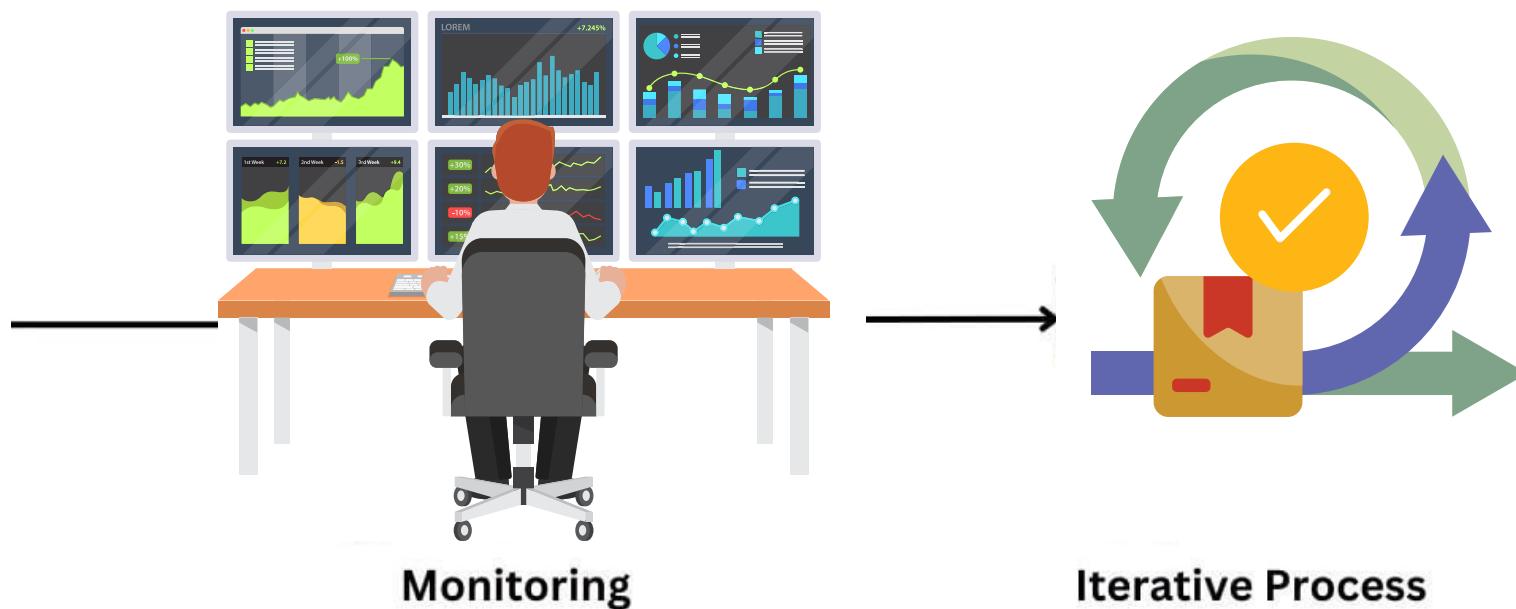
Decision Making



Action Implementation

Decisions are then put into **action**, like restocking popular products or offering discounts on certain items.

The **effects** of implemented actions are monitored to see if they are achieving the desired outcomes.



The **pipeline** continues to operate in a **loop**, constantly collecting, processing, analyzing, and implementing actions to improve retail operations.

Data Pipelines allows you to;



Automate Data Flows



Have Flexible Integrations



Be Cost-Effective



Produce better Insights



Maintain Data Consistency



Thank You.

