

## Overview:

The project involved integrating multiple E-Commerce sites with cloud based ERP Solution. The client is a leading Distribution Management Group. They are a pioneer in software distribution and designs services for their business partners, stakeholders and their customer-base operating in various domains. The solution helped the client to enhance their supply chain system and improve efficiency through business process automation to meet the unique needs of the distribution industry.

## Client details:

**Name:** Confidential | **Industry:** E-Commerce | **Location:** UK

## Technologies:

AWS-Services: AWS-Lambda, DynamoDB, Amazon SQS, Amazon SNS, Event Bridge

API-Gateway, PostgreSQL, Infor, Python, ReactJS

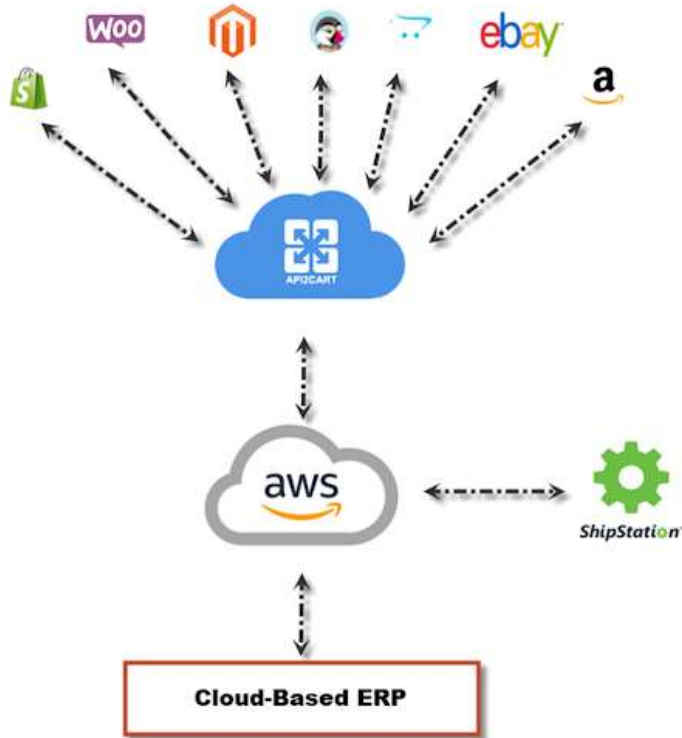
## Project Description:

This application helped the client to improve their services and integrate multiple E-Commerce sites with ERP Solutions. Some salient features of the application:

- Each E-Commerce site can be used by a single tenant or multiple tenants. Also, multiple sites can be used by a single tenant or multiple tenants. So, instead of single site integration, API2Cart was used which works upon the baseline of one API integration for N E-Commerce sites.

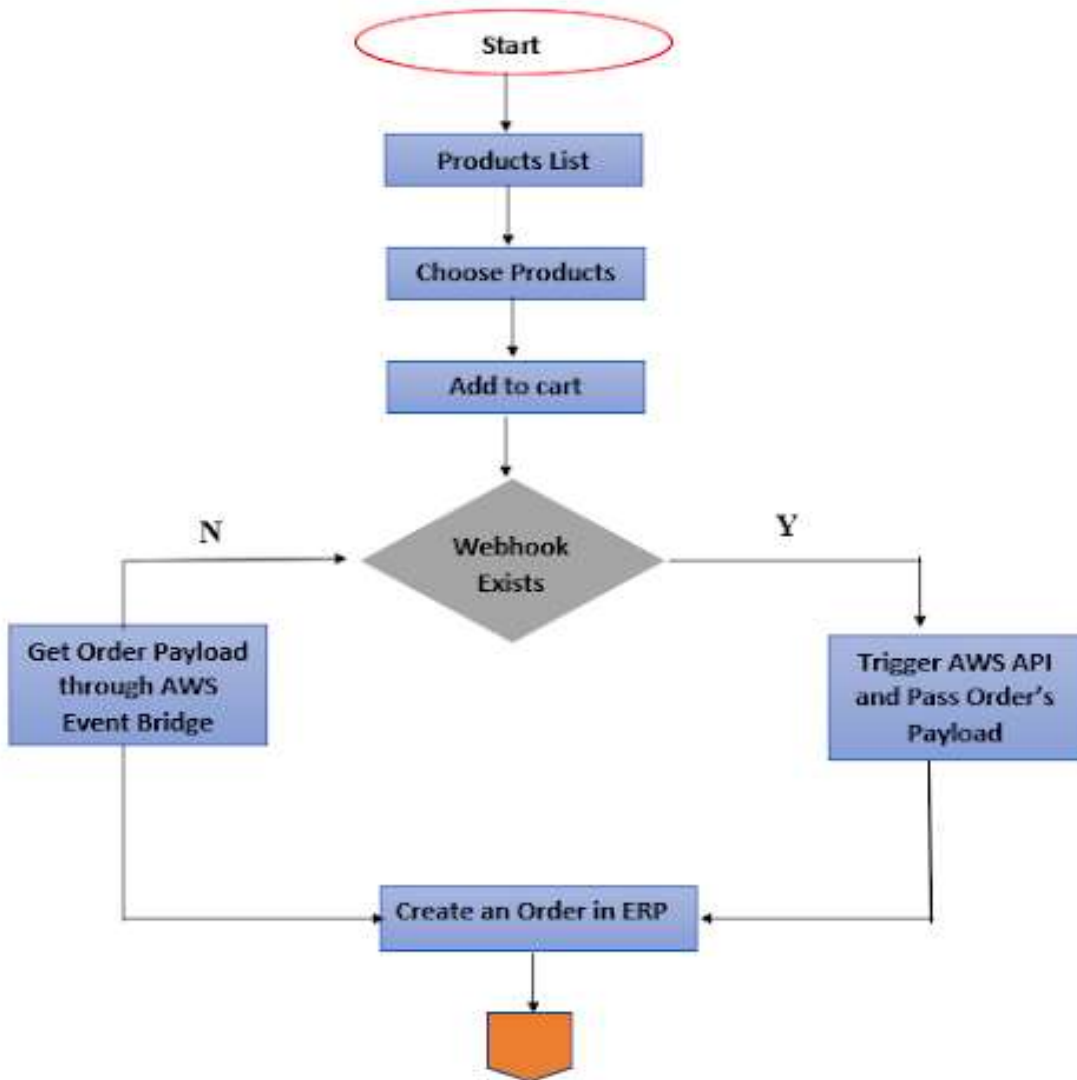
- The admin can track tenant activities through the admin portal. By accessing the admin portal, customers can add multiple Tenants, can create unique credentials for them, manage their accounts, assign them different privileges etc.
- The customer can log in and view the products from the existing product list. Once it's added to the cart, the site checks for Webhook. If it exists, an AWS API is triggered and order's payload is passed. If it doesn't exist the payload is generated through AWS Event Bridge. At the end, the order is created in the ERP.
- Once the order is created, the application checks for the customer linked in E-Commerce in ERP. If the linkage exists, the order is placed with the customer number. If it doesn't exist, the application pulls the customer number from AWS DynamoDB.
- The admin can modify the prices and inventory in ERP and the changes reflect in the E-Commerce site.
- To handle shipping information, Ship-Station, a shipping platform was used. It helps the admin to gain complete control and manage orders at every stage of shipping process from multiple channels. The admins can access orders based on multiple criteria. They can sync orders from different sources by connecting a selling channel, manually create orders, upload a CSV, or input via API.
- Once the order is placed, the admin/customer can generate invoice from ERP. Once the payment is authorized and funds collected the order status changes to Invoiced.
- ReactJS & AWS services are the main technologies which have been used to develop this platform.

## Architecture:

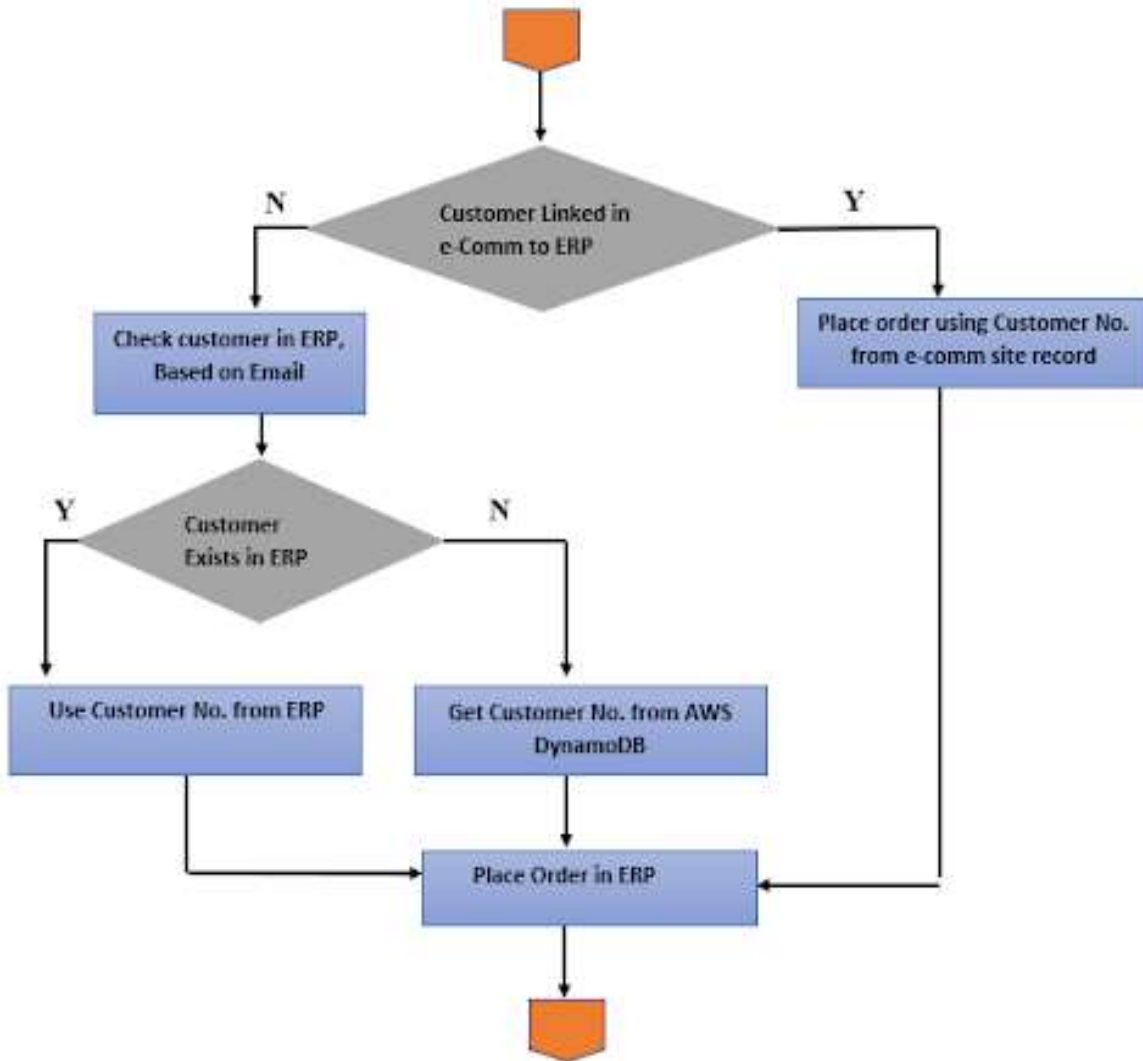


## Flow Diagram:

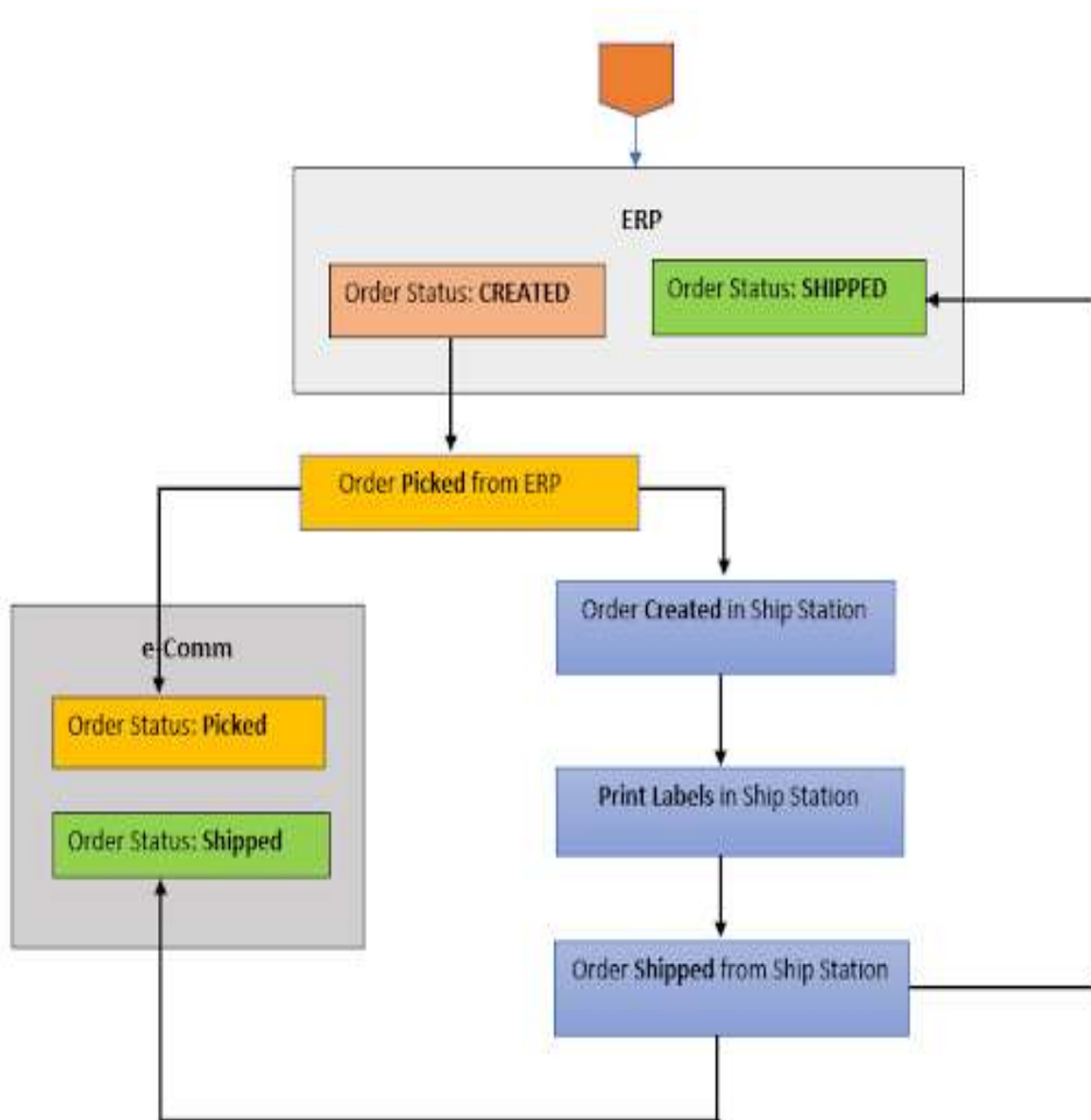
### Sales e-Commerce to ERP



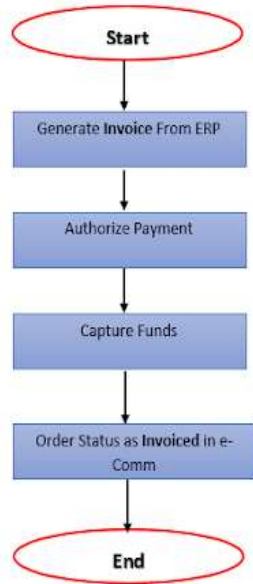
## Customer linkage and creation



## Shipping update from ERP to E-Commerce



## Invoice Update from ERP to E-Commerce



## Pricing and Sync between ERP & E-Commerce

