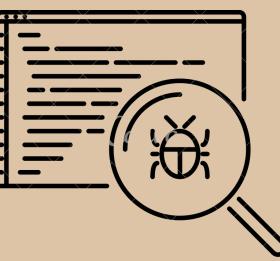


DEBUGON (ONDC X BECON'25) !



PROBLEM STATEMENT :

**“SEAMLESS INTEGRATION ON OPEN NETWORKS
USING ONDC PROTOCOLS”**



TEAM NAME: CHILL

MEMBER 1: ANSH JAIN

MEMBER 2: AMAN SHARMA (TEAM LEAD)

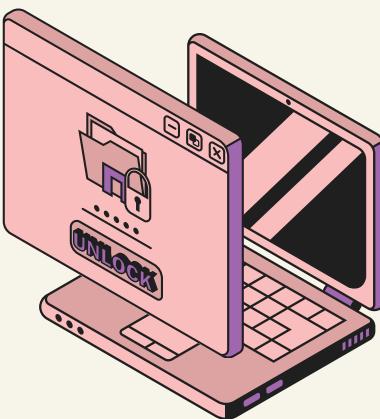
MEMBER 3: SHIVAM KUMAR JHA

MEMBER 4: ARNAV BHATIA

MEMBER 5: ASHISH NEGI

Presenting our solution

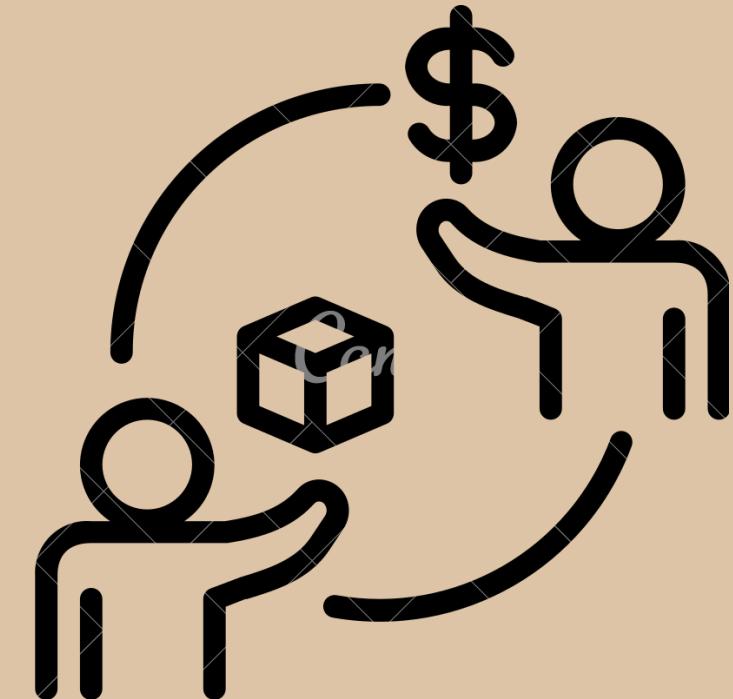
**ONDC-WOOCOMMERCE
ADAPTER**



PROBLEM OVERVIEW!

TRADITIONAL TECH LIMITATIONS

- Time-consuming payload interpretation across Buyer App, Seller App and Logistics Apps.
- Complex cross-platform compatibility requirements with existing e-commerce systems.



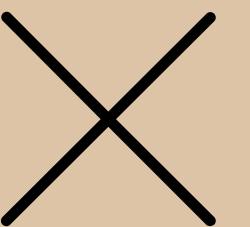
CHALLENGES IN OLD PACKAGES

- Need for advanced technical knowledge and support systems.
- Creating a modular adapter layer that works across different platform architectures(woocommerce, shopify,etc.) by small sellers.
- Mapping ecommerce operations and proprietary data (e.g., Woocommerce cart items) to ONDC's compliance and JSON payloads.

OUR SOLUTION!

WOOCOMMERCE-ONDC-ADAPTER : “PLUG IN, STAND OUT!”

Our adapter seamlessly integrates WooCommerce stores with the Open Network for Digital Commerce (ONDC), enabling merchants to quickly join and thrive in the open network ecosystem. With rapid deployment, automated scaling, and secure transactions, it makes ONDC integration efficient and accessible for all businesses on woocommerce.



DELIVERABLES

1. JavaScript/Python based SDK package.An icon showing a brown cardboard box with a blue triangle on top labeled "SDK Canvas". Next to it is a red clipboard with three red stars.
2. Interactive Dashboard Integration Example For Buyer's Side & Seller's Side.



WIRE FRAME & PROOF OF CONCEPT!

Join ONDC Network

Connect your WooCommerce store to India's largest digital commerce network

1 Store Details — 2 WooCommerce Credentials — 3 Terms & Conditions

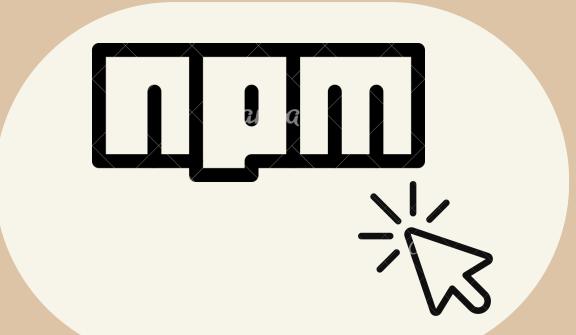
WooCommerce Consumer Key *

WooCommerce Consumer Secret *

Next →

Back

Secure Integration Expanded Reach Easy Setup



ONDC Adapter

Watch Demo Video NPM Adapter Package

WooCommerce ONDC Adapter

Seamlessly connect your WooCommerce store to ONDC Network

System Overview

Authorization & Verification

protocol-handler.js

Implements ONDC's authentication with Ed25519 signatures

```
const crypto = require('crypto');
const axios = require('axios');
const { createHash } = require('crypto');
const ed25519 = require('@noble/ed25519');

class ONDCProtocolHandler {
  constructor(config) {
    this.config = config;
    this.baseUrl = config.gatewayUrl || 'https://gateway.ondc.org';
    this.subscriberId = config.subscriberId;
    this.uniqueKeyId = config.uniqueKeyId;
    this.signingPrivateKey = Buffer.from(config.signingPrivateKey, 'base64');
  }

  async createsigningString(requestBody, created, expires) {
    // Generate BLAKE-512 digest of request body
    const digest = await this.generateBlakeHash(JSON.stringify(requestBody));
  }
}
```

API Contract Implementation

catalog-service.js

Handles catalog integration and ONDC compliance

```
class CatalogService {
  constructor(wc) {
    this.wc = wc;
  }

  async handleSearch(searchRequest) {
    try {
      const { category, location } = searchRequest.message.intent;

      // Get products from WooCommerce based on search criteria
      const params = {
        per_page: 100,
        category: category?.id
      };

      const products = await this.wc.get("products", params);
    }
  }
}
```

Pro Teams Pricing Documentation

npm Search packages

woocommerce-ondc-adapter

1.0.0 • Public • Published 21 hours ago

Readme Code (Beta) 5 Dependencies 0 Dependents 1 Version

This package does not have a README. Add a README to your package so that users know how to get started.

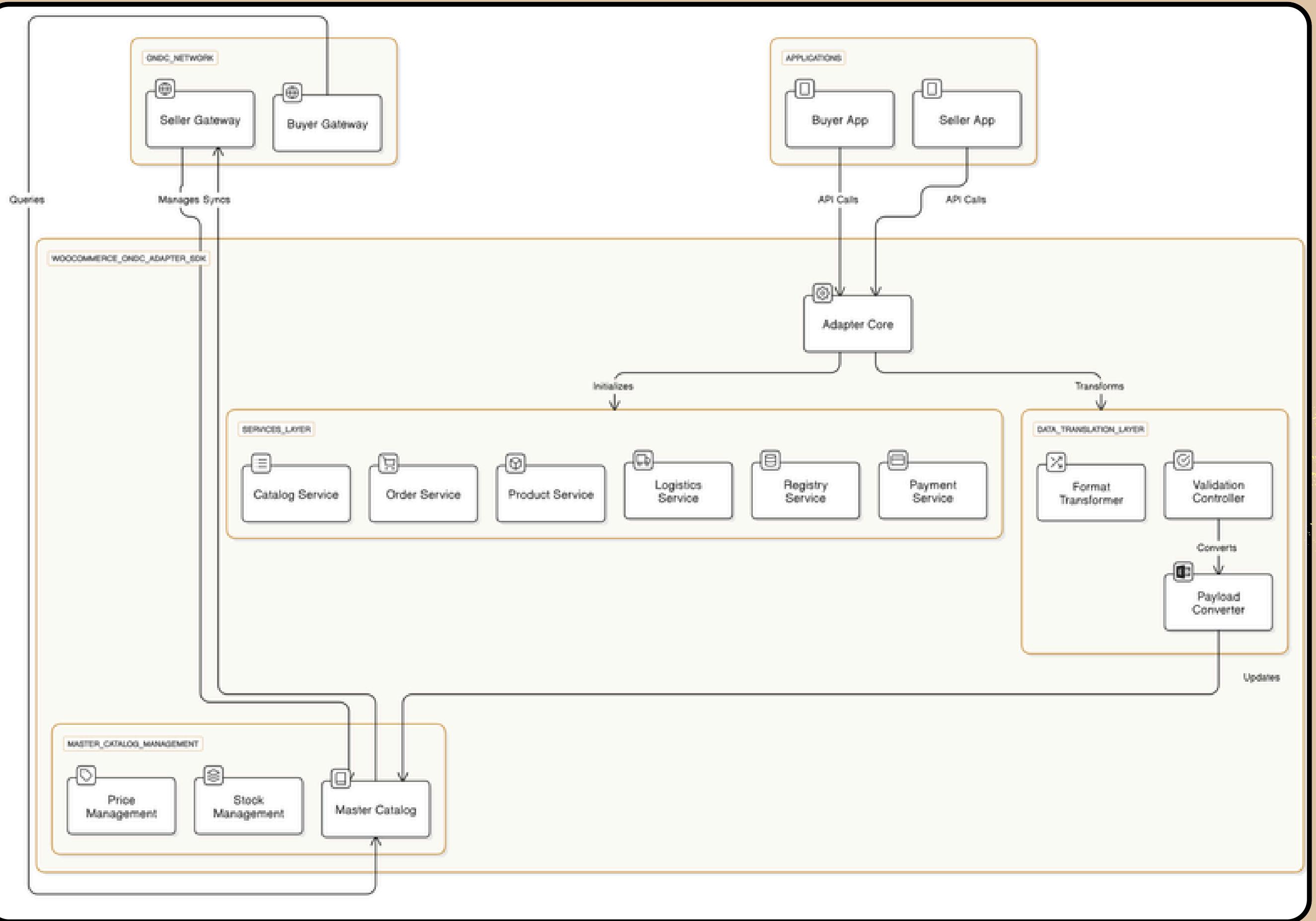
Keywords

ondc woocommerce ecommerce adapter retail

Install > npm i woocommerce-ondc-adapter

Weekly Downloads

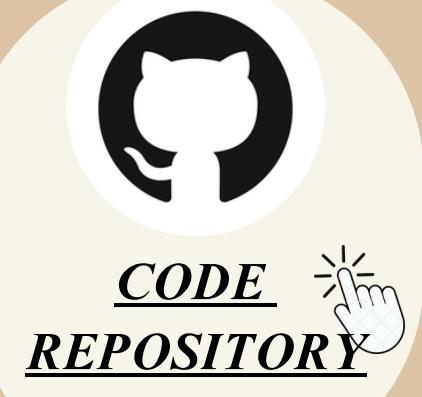
51



**PROTOTYPE's
VIDEO**

SYSTEM ARCHITECTURE!

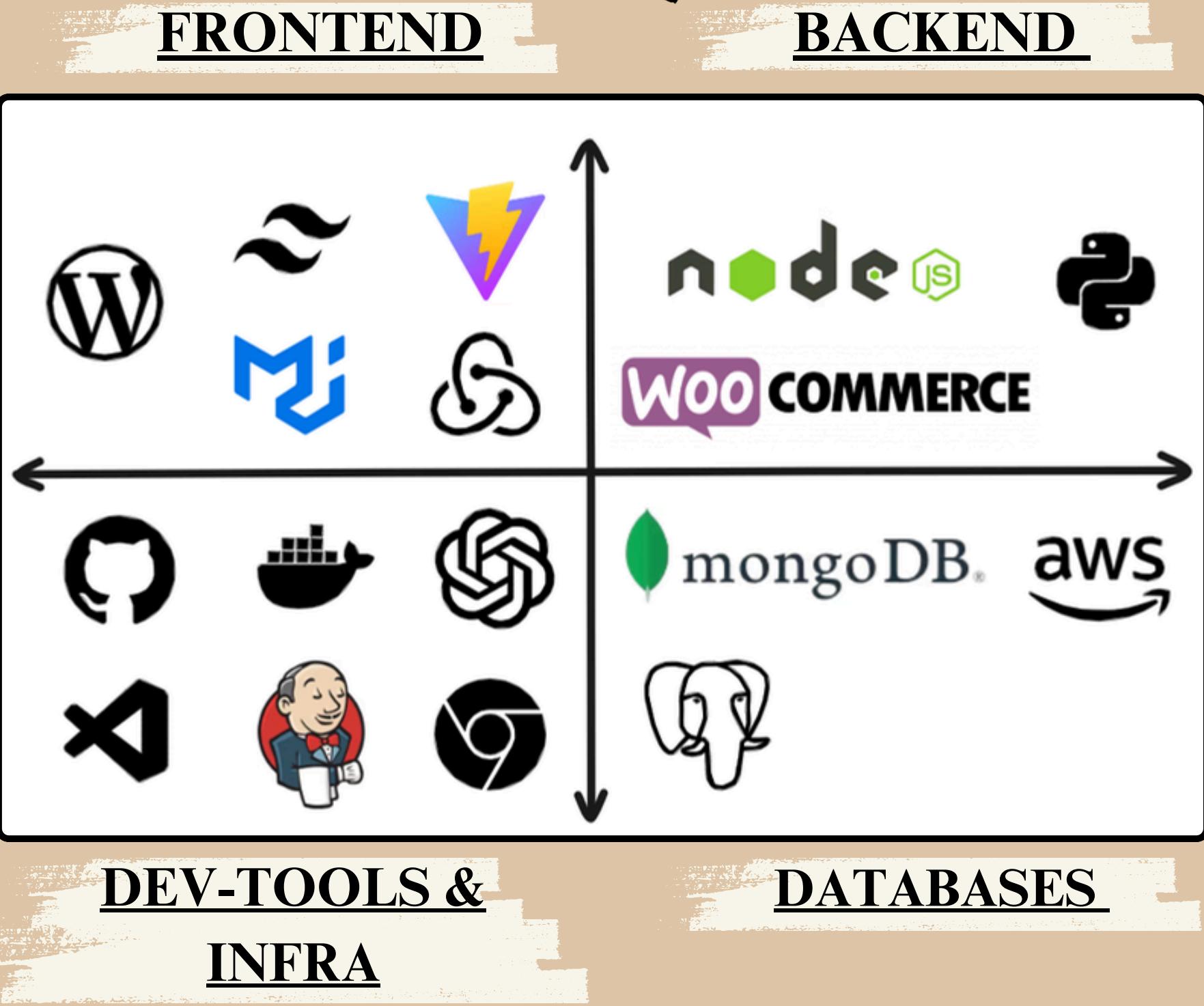
**LIVE
DEMO**



**CODE
REPOSITORY**



TECH-STACK & FEASIBILITY!



- Reusable components of adapter enables **swift deployment** and effortless scaling, ideal for other ecommerce platforms like shopify.
- Fortified payload translation and ONDC Compliance ensure secure, **reliable ecommerce operations** within WooCommerce
- NPM adapter guarantees seamless **payload consistency**, harmonizing with ONDC protocols with all the provided ecommerce functions by woocommerce.

MARKET ANALYSIS!



- **Market Need:** Growing demand to get registered on ONDC for small businesses that manage ecommerce through plugins like woocommerce.
- **Target Audience:** E-commerce businesses seeking to leverage ONDC for expanded reach and efficiency.
- **Market Opportunity:** Significant potential for adoption among SMEs and entrepreneurs looking to enhance their e-commerce capabilities.
- **Growth Potential:** Rapidly increasing e-commerce market in India and removing the monopoly of big platforms like amazon and spotify, with ONDC.
- **Barriers to Entry:** Technical complexity and time-consuming integration processes, addressed by our streamlined SDK and adapter solutions.



SCALABILITY!

Load Distribution

Implements distributed processing across multiple instances to handle increased transaction volumes.

Modular Architecture

Employs plug-and-play design for seamless scalability and integration.

Data Management

Optimizes performance with incremental caching and asynchronous transaction handling.

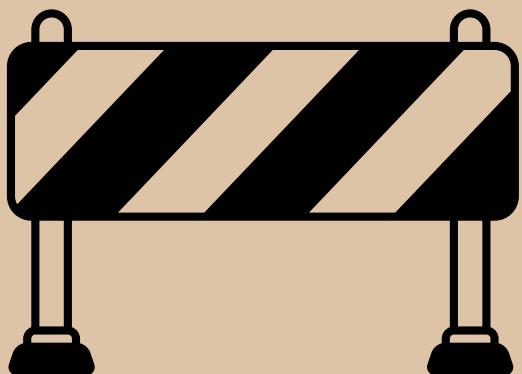
Platform Expansion

Ensures efficient resource usage with minimal copy of data(avoiding redundancy) and queue management.

Resource Optimization

Enables rapid onboarding and integration with standardized adapters with easy implementation.





Platform independent and reusable component design
reduces barriers, democratizing ONDC access for
businesses of all sizes to compete equitably.

ONDC-compliant API contracts ensure secure, consistent payload handling and interoperability across network participants.

ALIGNMENT WITH ONDC'S GOAL

Standardized protocols for verification and authorization, unifying commerce experiences while minimizing integration complexity.



Accelerates market entry, cuts costs and boosts operational efficiency, empowering growth through ONDC network participation.



CONCLUSION!

SUMMARY

1. Developed a seamless ONDC integration solution using Woo-Commerce with SDK/Adapter in JavaScript.
2. Solution enables efficient ONDC integration for businesses of all sizes, with potential for expansion to other e-commerce platforms.
3. Provided EASY comprehensive specifications and architecture for easy adoption and future scalability.

CALL TO ACTION

We thank ONDC in transforming digital commerce with seamless ONDC integration.

We're seeking VISIONARY MENTORSHIPS AND PARTNERSHIPS

to scale our solution across e-commerce platforms and empower the future of open networks.

Thank You

