An **Analytics and AI framework** for perform analytics, diagnostic, predictive, prescriptive analysis, and automating CRM.

approach, key features, and impact.

PulseTrend.ai

NextGen.AI

Niranjan W Meegammana (Cyber Security & AI)

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Shilpa Sayura Foundation

Date	Region	Rep	Customer	Product	Channel	Deal Stage	Deal Value	Lead Source	Status	Cost	Revenue
2025-01-09	East	Frank	Robinson-Armstrong	Product C	Retail	Proposal	12352	Referral	Won	703	12352
2024-12-26	West	Alice	Bradley, Rhodes and Bailey	Product A	Online	Prospecting	18516	Referral	Won	3275	18516
2025-03-13	North	Alice	Reed Inc	Product C	Wholesale	Negotiation	28299	Phone	Lost	2832	

Approach

Distributed Enterprise Architecture
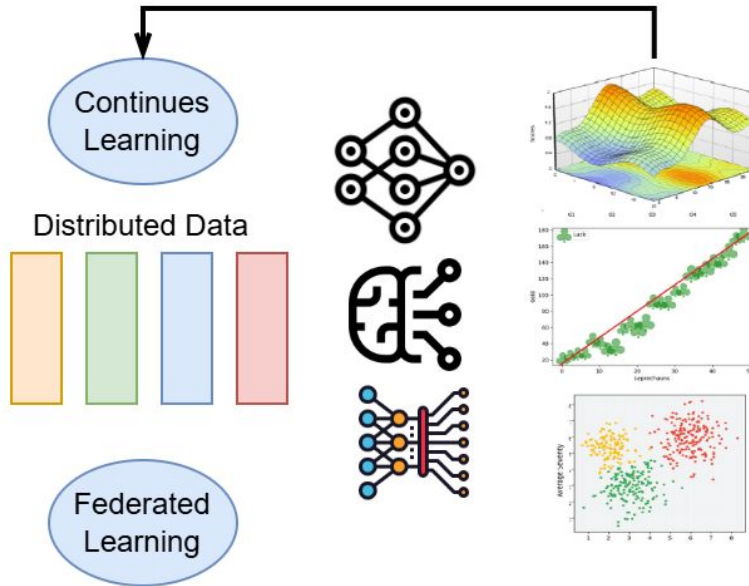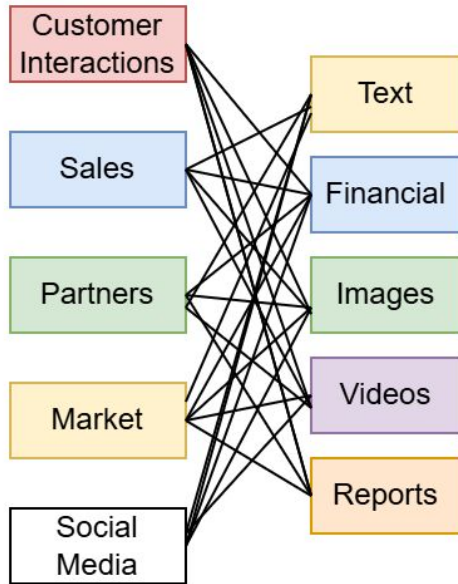
- Analytics
- Diagnostics
- Predictions
- Prescriptions
- CRM Support
- Decision Making

Framework: PulseTrend AI

Descriptive Analytics
- **Lead Scoring** (XGBoost, MLP RF)
- **Sales Pipeline** (LSTM, ARIMA)
- **Customer Profiles** (GNNs)

Diagnostic Analytics
- **Lost Deal** (Decision Trees)
- **Feedback Analysis** (BCRT, RoBERTa)

Predictive Analytics
- **Forecasting** (LSTM, Transformer)
- **CLV Prediction** (XGBoost)
- **Churn Prediction** (XGBoost)
- **NBO** (BERT4Rec, Matrix Factorization)

Prescriptive Analytics
- **Pricing** (RL, Bayesian)
- **Discounts** (Bayesian,. RL)
- **Strategy** (GPT, Knowledge Graphs)

AI-Powered Sales Automation
- **AI Email Assistants** (GPT-4)
- **Task Prioritization** (XGBoost)
- **Follow-Ups** (GPT)
- **CRM Support** (NLTK)

Customer Engagement
- **Voice AI** (Whisper)
- **Content Generation** (GPT-4)
- **Campaigns** (LLMS, Recommenders)
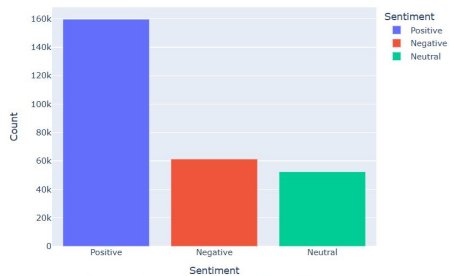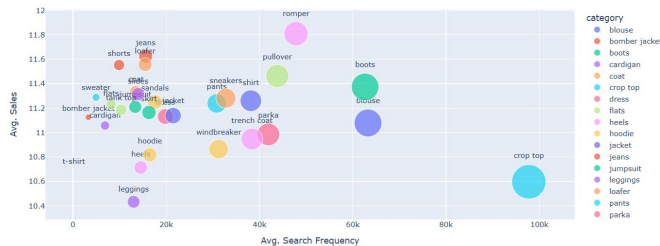- **Journey Mapping** (Clustering)
- **Win-Back** (GPT-4)

Impact

- **Feedback Analysis** – Improve Customer Experience & Service
- **Sales Trend Analysis** – Identify Growth Opportunities
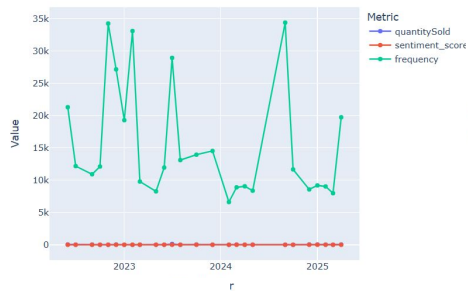- **Demand Analysis** – Forecast Future Demand
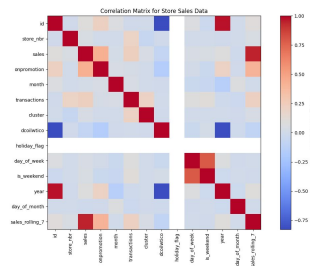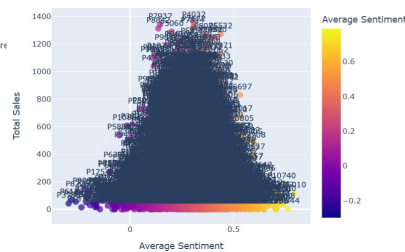

Overall Sentiment Distribution

Sales, Sentiment, and Search Trends for P1001

Sales vs. Average Sentiment per Product

Top Keywords from Customer Feedback

Emerging Trends: High Search but Low Sales

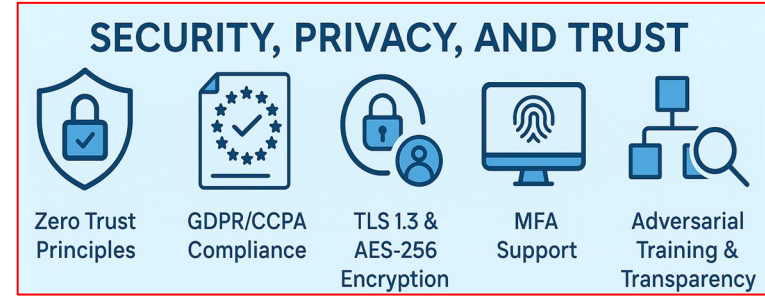Correlation Matrix for Store Sales Data

Crm Support

Desicion Support

Features & Security

- Customer Analysis

- Sales Forecasting & Demand

- Sales Performance

- AI based CRM - Support

- AI Assisted Decision Making

https://github.com/shilpasayura/pulsetrend

SECURITY, PRIVACY, AND TRUST

Zero Trust Principles | GDPR/CCPA Compliance | TLS 1.3 & AES-256 Encryption | MFA Support | Adversarial Training & Transparency

PulseTrend.info.lk

Cloud Demo