Intelligent Product Platform

Get AI solutions for Finance with IPP

Adoption of **Artificial Intelligence and Machine Learning** Techniques in Enterprise Architecture is imperative to steer business with informed decisions.

- **Minimize cost** by building small ML models specific to a use case.
- Focused models for individual business problems are **highly efficient** and **easy to deploy.**
- Isolated data used for different domains in an organization ensures **data privacy and security**.

Intelligent Product Platform IPP

Supervised Learning

Azure Cloud

Structure Data

Generated Python Models

Model Pipeline

Challenges

Ever Increasing Scope

Limited Budget

Scarcity of Trained Personnel

Options for AI Solutions

Quicker Turnaround

Export Serialized Models

Minimal Personnel Training

Analyse Results

Reduced Data Footprint
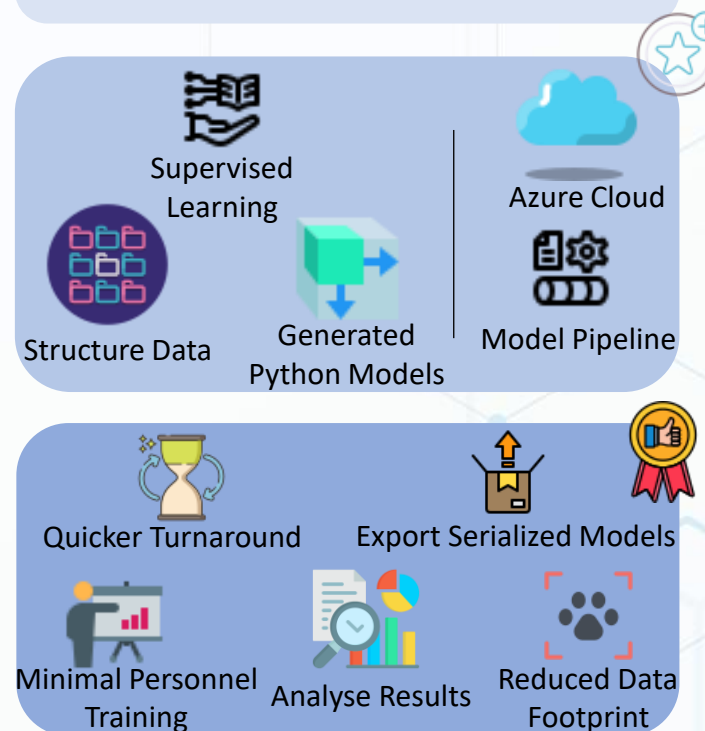
What is IPP?

Intelligent Product Platform
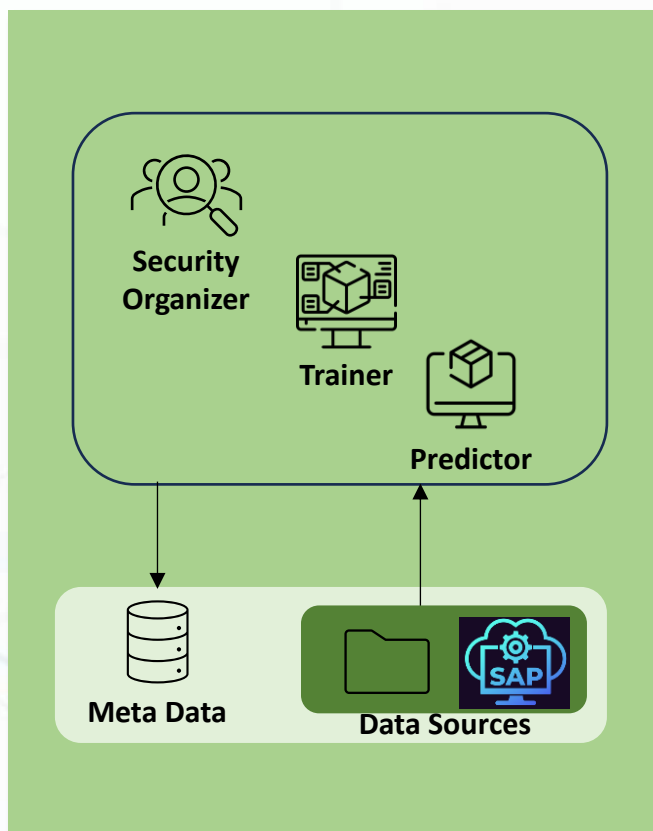
- **Intelligent Product Platform (IPP)** is GecaTech's Software as a Service application.

- IPP can be provisioned both as Public Cloud option or as an Private Cloud Option (alternatively On-Prem) on Azure.

- Business Experts can **quickly build Machine Learning(ML) Models** for their business scenarios by easily parametrizing the models.

- ML Models are **generated automatically** and trained with the business scenario data.

- IPP Models are **serialized** and can be **exported** to other platforms as necessary.

- IPP Platform **compliments** the GenAI tools in the ERP Platforms.

- While **GenAI tools** aid predominantly in **Data discovery**, **IPP** enables Business Modellers with limited AI/ML knowledge to **design their ML models** suiting to individual business scenarios.

- IPP can **securely exchange** data with other Systems in **OData** Protocols.

IPP – Persona Based Activities

Intelligent Product Platform
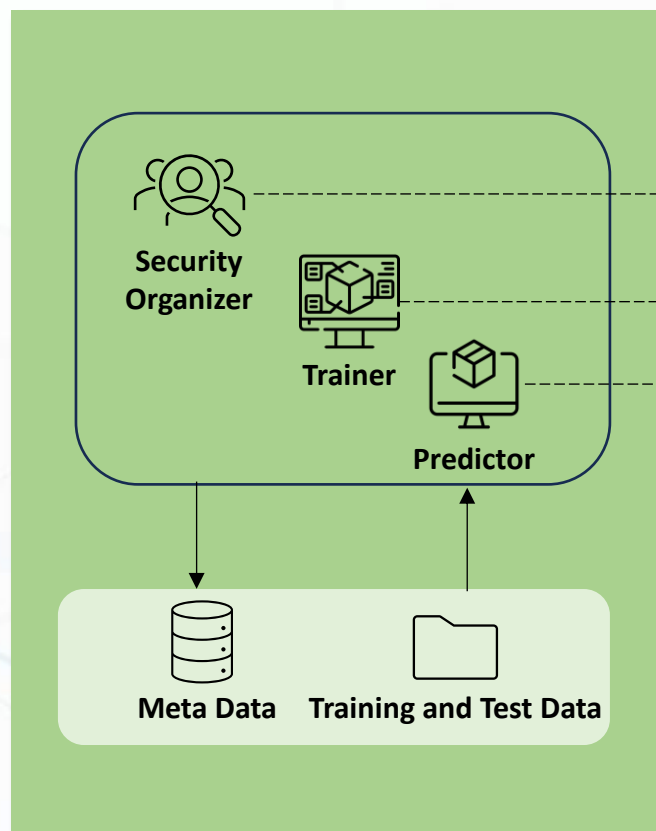
Administrator
- User Management
- Organization Management
- Schema Management
- Role Provisioning

Security Organizer

Trainer

Predictor

Data Product Modeller
- Modelling Environment
- Schema Usage
- Data Product Creation
- Variant Creation
- Model pipeline Creation
- External Connection Management

Meta Data   **Training and Test Data**

Business Consultant
- Prediction Using Published Models
- Result Analysis
- Decision Making

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Supported Algorithms in IPP

Classification

1. K-Nearest Neighbor
2. Random Forest Algorithm
3. Extreme Gradient Boosting
4. Support Vector Machine
5. Logistic Regression
6. Decision Tree
7. Naive Bayes
8. Gaussian Naive Bayes
9. Bayesian Belief
10. Ada Boost
11. Ridge Logistic Regression
12. Artificial Neural Network
13. Recurrent Neural Network

Regression

1. K-Nearest Neighbor
2. Random Forest Algorithm
3. Extreme Gradient Boosting
4. Support Vector Machine
5. Decision Tree
6. Naive Bayes
7. Linear Regression
8. Ada Boost
9. Ridge Regression
10. Lasso Regression
11. Artificial Neural Network
12. Recurrent Neural Network

Forecast Models

1. Long Short-Term Memory
2. Gated Recurrent Unit

Custom Algorithm

Organization/ domain specific algorithms can be added

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Demo Scenario: Optimize Product Price

Product pricing plays a pivotal role in influencing customer purchase decisions, **optimizing revenue**, and driving personalized sales strategies, while **maximizing profit margins**. The potential for greater Artificial Intelligence applications in Finance sector are high, which could lead to a positive impact in terms of profitability and hence growth.

Influencers such as, including but not limited to, **product, product category, product rating, seasonality, competitor's price of the product, lag price,** and other features that impact the **Mark-Up of the Product's Base Price**.

1. Product pricing is used by businesses to find the optimal price for the product by analysing the historic data of products and current demand in the market.

2. Leveraging the Machine Learning capabilities, businesses can build reliable models using IPP reducing the complexity in processing.

3. Typically, a regression ML problem, data preprocessing is done in IPP for handling missing values for influencers before prediction.

4. Extreme Gradient Boosting Algorithm is the most relevant for the scenario turning in an accuracy of 87% in IPP.

Distribution of Influencers
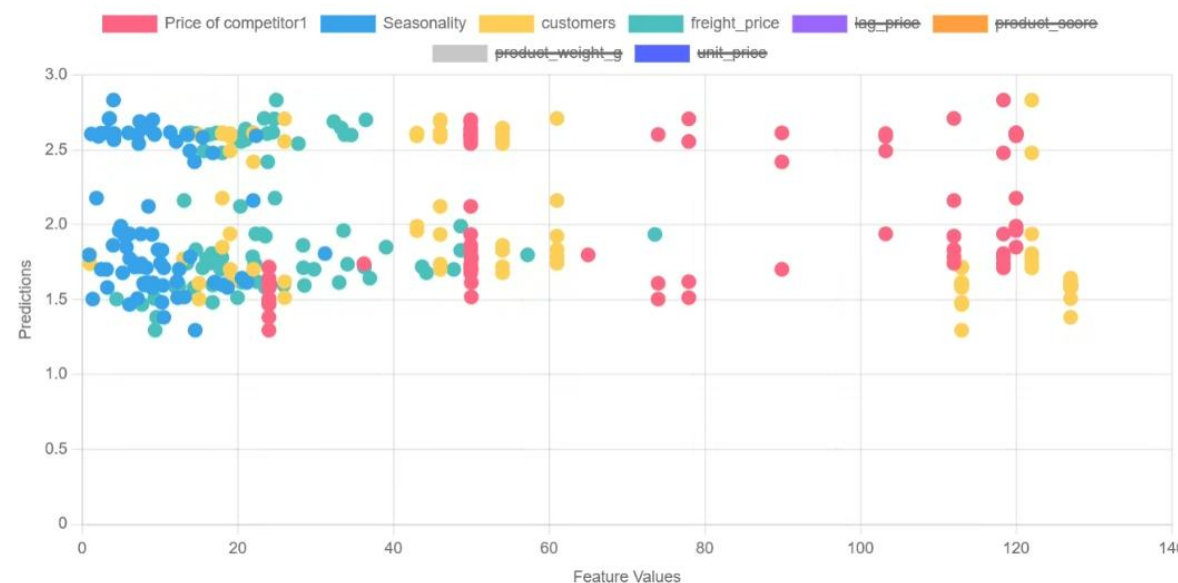
Thank You!

Boopalan Ganesan

Boopalan.ganesan@gecatech.com

+91-8754753126