

TECHNICAL REQUIREMENTS FOR METRICS UP

- 1. Team: UZBEK IT**
- 2. Area: Entrepreneurship and Fintech**
- 3. Project title: METRICS UP**
- 4. Product: BI Platform for outsourcing logistics companies**
- 5. Project Purpose**

The purpose of the Metrics Up project is to provide logistics companies with a Business Intelligence (BI) platform designed to optimize:

- Key Performance Optimization (with recommendations for best work division)
- Forecast rate for coming 10days
- Allocate resources effectively
- Detect anomalies.
- Data Visualization

By leveraging advanced data visualization (dashboards, charts, and tracking tools) and sophisticated data analysis techniques (such as clustering models and forecasting algorithms), the platform enhances decision-making capabilities. This comprehensive approach not only improves operational efficiency but also empowers logistics companies to potentially achieve a minimum increase of 35% in profit margins. Through smarter insights and data-driven strategies, businesses can unlock new revenue opportunities and maximize their profitability.

6. Roles of team members

No	Fullname	Role	Tasks
1	Shakhrillo Bobokulov	Captain Full-stack developer	Design system architecture Develop front-end user interface Integrate front-end and back-end Focus on UX
2	Anvar Ortikov	Backend Developer	Manage database schema Integrate data analysis models Optimize performance Ensure security of the application
3	Shokhrukh Shokirov	Data Analyst	Collect and clean data Analyze historical loads Develop forecasting models Create visualizations Summarize findings in reports Test/debug interface components

7. Technology Stack:

- **Core:** Python, Django, Numpy, Pandas, PostgreSQL
- **ML Models:** ARIMA, K-Means, Isolation Forest
- **Visualization:** Seaborn, Plotly, DataTables
- **Security:** SSL/TLS, RBAC, GDPR tools, Twilio
- **ML Libraries:** Scikit-learn, Statsmodels

8. User Roles on project.

No	Roles	Functions
1.	Superadmin	System Control User Access Management Data Management System Configuration
2.	CEO	Company Oversight Dashboard Access Reporting
3.	Manager	Dashboard Access Reporting Load Management Tracking and Reporting
4.	Dispatcher	Load Management Tracking and Reporting

9. Main areas of work

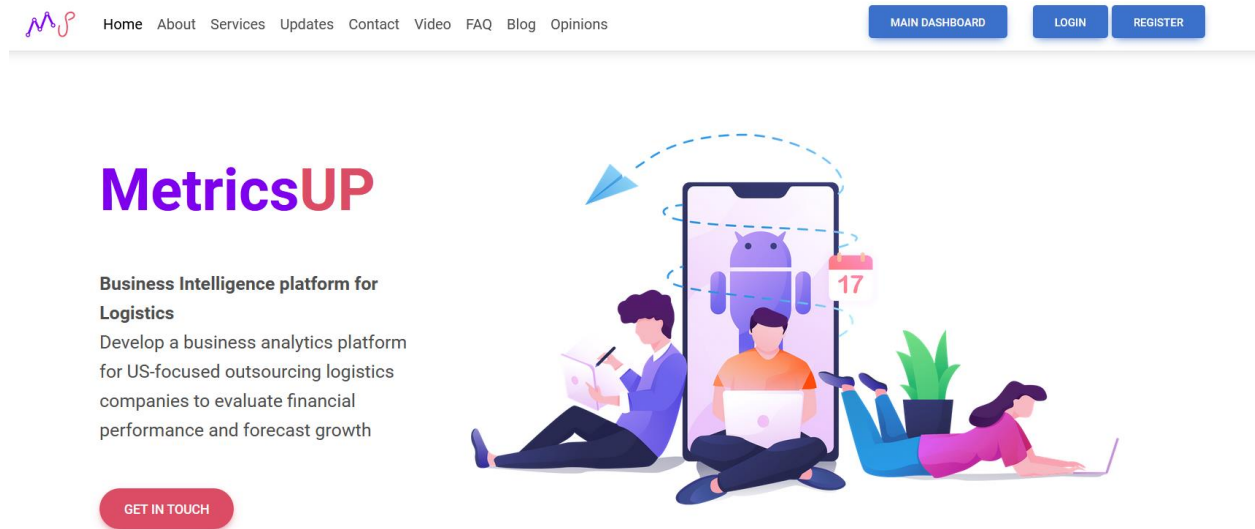
Key Stakeholders (Main Customers): Outsourcing logistics companies for the USA

Business model type: Subscription Business Model(B2B)

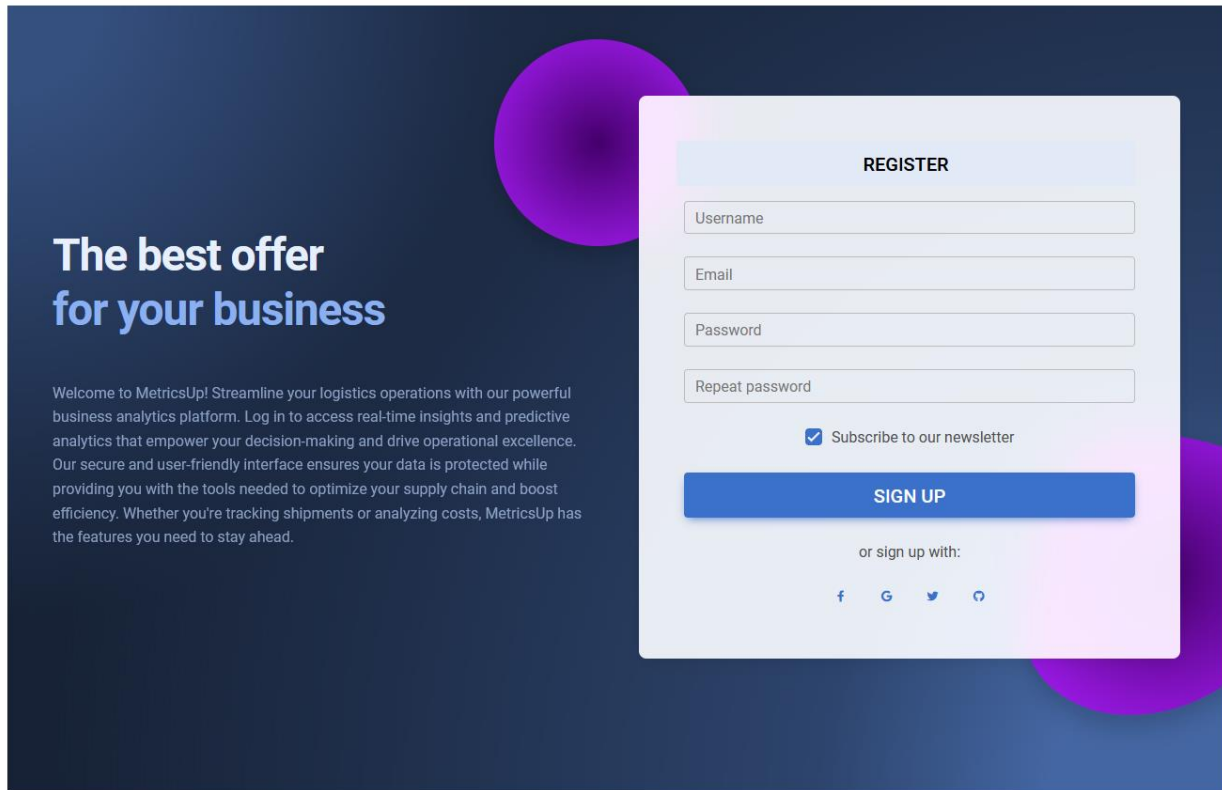
Yearly Price: 40 mln. UZS

No	Country	TAM (Total Available Market)	SOM (Service Oriented Market)
1.	Uzbekistan	4 000 companies	2 000 companies
2.	Kazakhstan	1 200 companies	400 companies
3.	USA	100 000 companies	12 000 companies
4.	Mexico	7 000 companies	3 000 companies
5.	Brazil	3 000 companies	1 000 companies
6.	Ukraine	2 000 companies	800 companies
7.	Lebanon	900 companies	300 companies

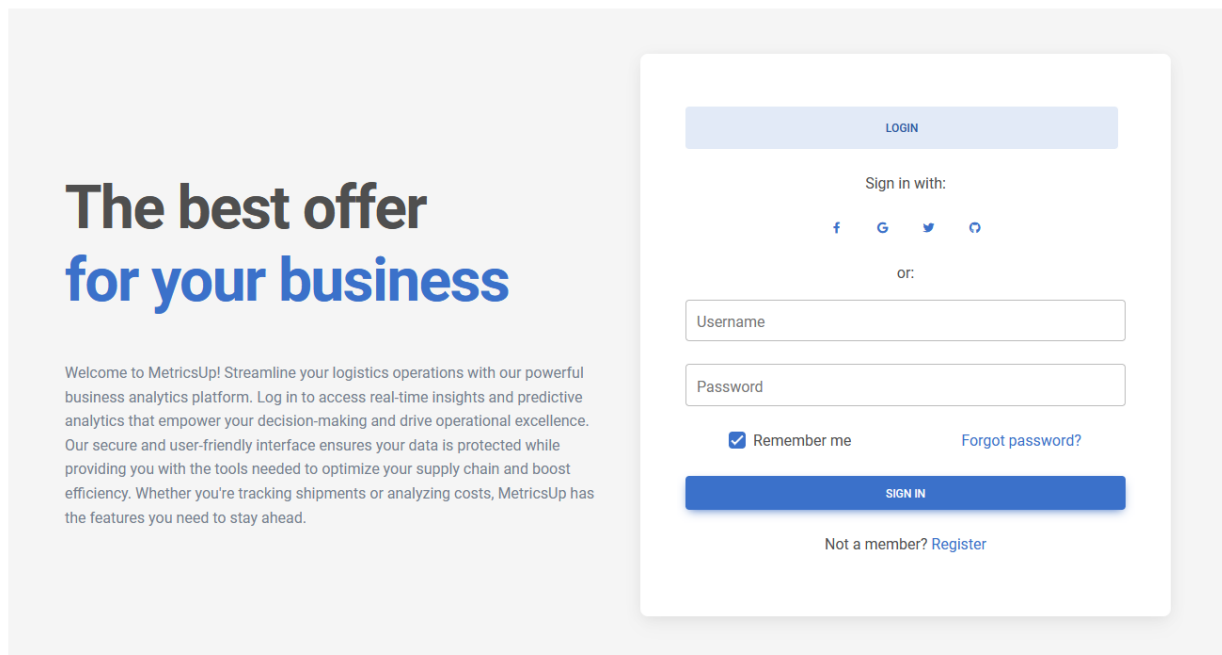
10. Brief description of the system blocks



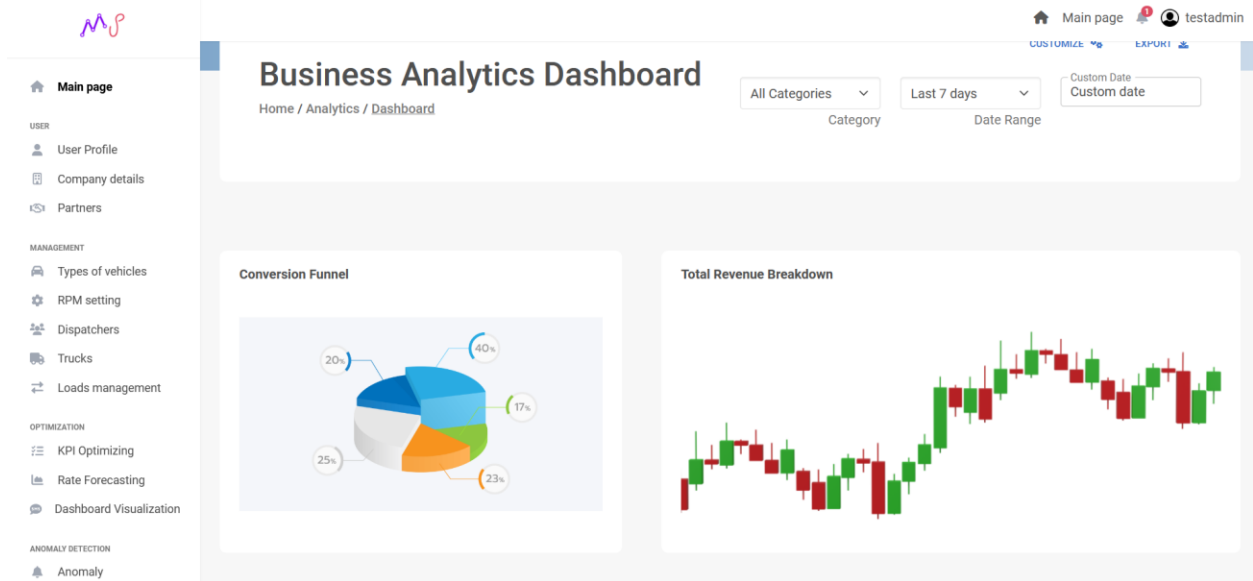
10.1 Main Page(With all important information for visitors and customers)



10.2 User registration section



10.3 User Authorization section



10.4 Main Dashboard(After authorization)

The Vehicle types list table displays a list of vehicle types with columns for ID, Vehicle type name, and Actions. The table includes a global search bar, a 'Show 10 entries' dropdown, and a 'Previous 1 Next' pagination control. The table data is as follows:

ID	Vehicle type name	Actions
1	Dry van	
2	Reefer	
3	Trailer	
4	Flat Bed	

Showing 1 to 4 of 4 entries

Previous 1 Next

10.5 ETL(Vehicle Type list with CRUD and data export in formats)

Main page

User Profile

Company details

Partners

Types of vehicles

RPM setting

Dispatchers

Trucks

Loads management

KPI Optimizing

Rate Forecasting

Dashboard Visualization

Anomaly

Main page

testadmin

Trucks list

Global search

Show 10 entries

ID	Unit	Type of truck	Company owned	Status	Actions
1	908	Dry van	True	True	
2	909	Dry van	True	True	
3	910	Dry van	True	True	
4	911	Dry van	True	True	
5	912	Dry van	True	True	
6	801	Reefer	True	True	
7	802	Reefer	True	True	
8	803	Reefer	True	True	
9	804	Reefer	True	True	

ID

Unit

Type of truck

Company owned

Status

Actions

Showing 1 to 9 of 9 entries

Previous 1 Next

10.8 ETL(Trucks list with CRUD and data export in formats)

Main page

User Profile

Company details

Partners

Types of vehicles

RPM setting

Dispatchers

Trucks

Loads management

KPI Optimizing

Rate Forecasting

Dashboard Visualization

Anomaly

Main page

testadmin

Loads management

Global search

Show 10 entries

ID	Load no	Truck	Truck type	Dispatcher	All miles	Total amount	Rate	Pick up date(State)	Drop date(State)	Actions
1	7084282	801	Reefer	Nicola (ANVAR ORTIKOV)	1563.0	3200.0	2.05	2024-09-07(NJ)	2024-09-08(LA)	
2	PFHS-18584	908	Dry van	Shokh (Shoxrux Shokirov)	1814.0	4000.0	2.65	2024-09-08(NV)	2024-09-11(NY)	
3	186964	909	Reefer	Sheiykh (Shakhrillo Bobokulov)	542.0	1450.0	2.68	2024-09-08(AZ)	2024-09-09(TX)	
4	42314	801	Reefer	Nicola (ANVAR ORTIKOV)	1891.0	3250.0	1.72	2024-09-08(NE)	2024-09-09(CA)	
5	28891	801	Reefer	Nicola (ANVAR ORTIKOV)	830.0	2600.0	3.13	2024-09-10(GA)	2024-09-11(OK)	
6	3016624	801	Reefer	Nicola (ANVAR ORTIKOV)	669.0	1600.0	2.39	2024-09-11(TX)	2024-09-12(NE)	
7	M178040	801	Reefer	Nicola (ANVAR ORTIKOV)	749.0	1200.0	1.6	2024-09-13(GA)	2024-09-14(IL)	
8	1105161	802	Reefer	Nicola (ANVAR ORTIKOV)	517.0	1700.0	3.29	2024-09-10(PA)	2024-09-11(MA)	
9	9082	908	Reefer	Shokh (Shoxrux Shokirov)	2000.0	2800.0	1.4	2024-09-12(NE)	2024-09-13(MA)	
10	8022	802	Reefer	Nicola (ANVAR ORTIKOV)	500.0	750.0	1.5	2024-09-12(AL)	2024-09-13(AL)	

ID

Load no

Truck

Truck type

Dispatcher

All miles

Total amount

Rate

Pick up date(State)

Drop date(State)

Actions

Showing 1 to 10 of 13 entries

Previous 1 2 Next

10.9 ETL(Loads management with CRUD and data export in formats)

Select Date Range for KPI Analysis

Start Date

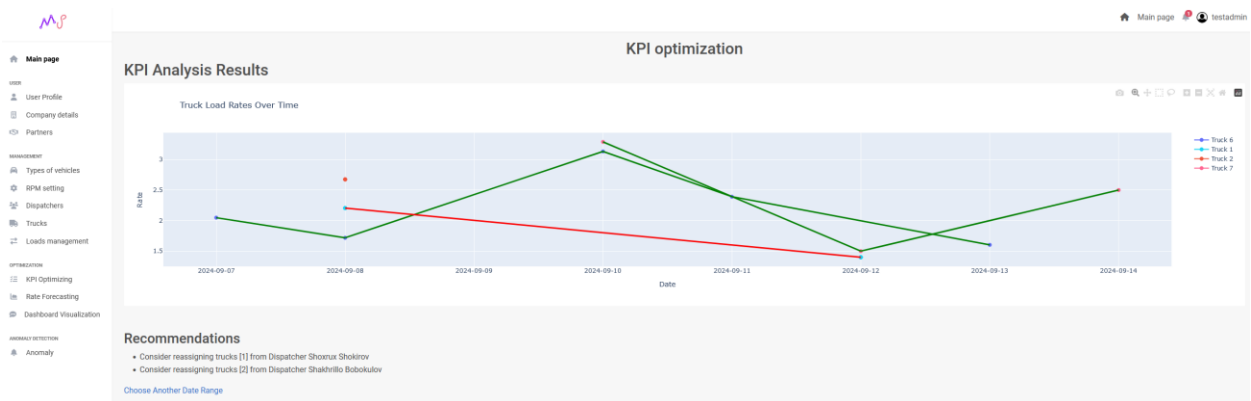
mm / dd / yyyy

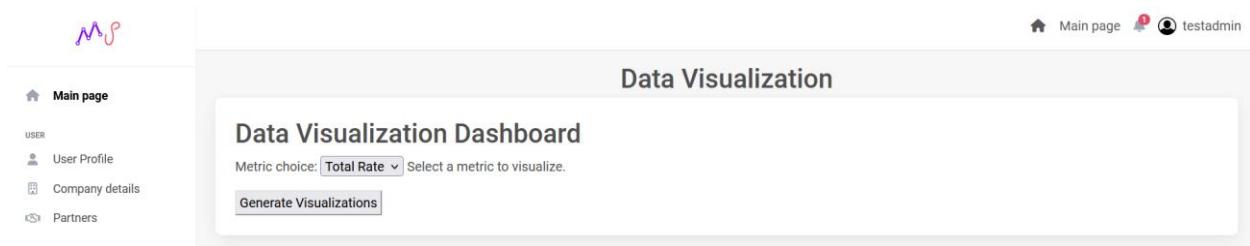
End Date

mm / dd / yyyy

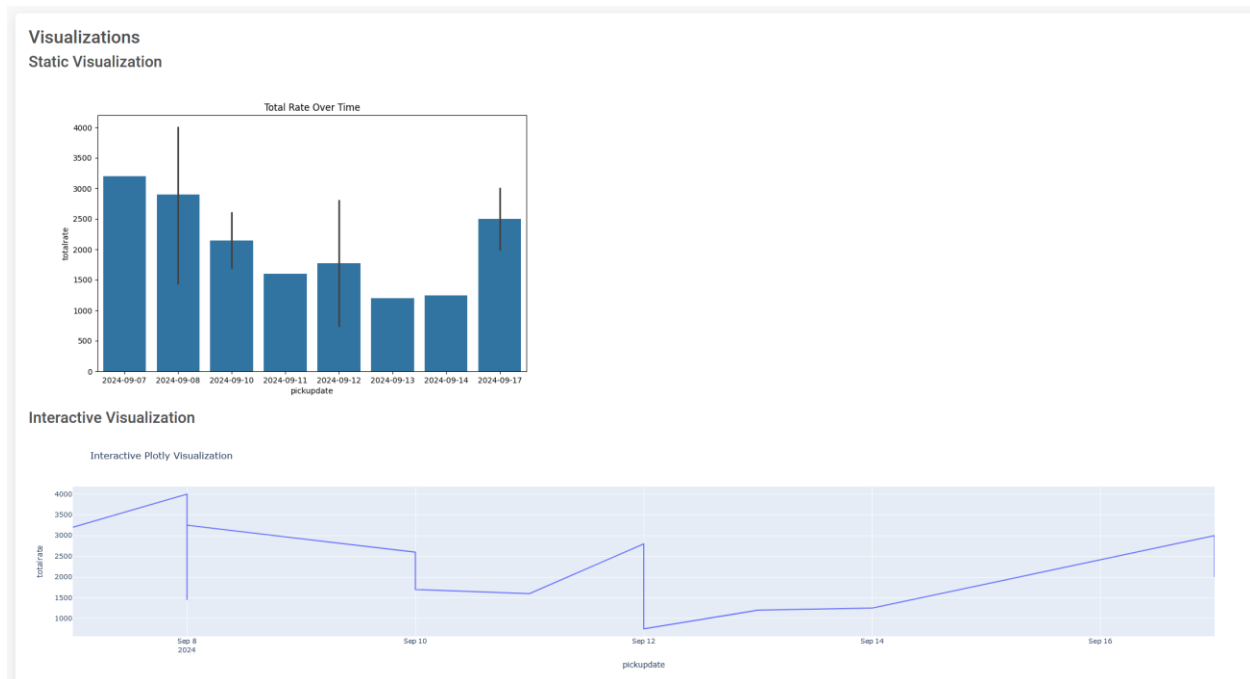
Submit

10.10.1 KPI optimizing date selection

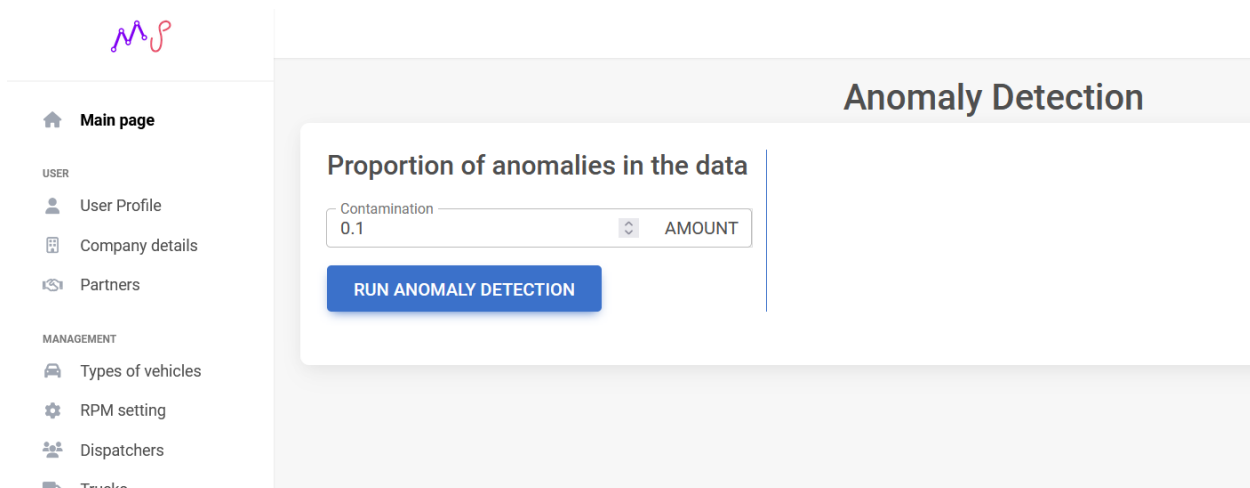




10.12 Dashboard visualization selection



10.13 Dashboard visualization result



10.14 Analyze anomaly sigma selection form



🏠 Main page

USER

 User Profile

 Company details

 Partners

MANAGEMENT

 Types of vehicles

 RPM setting

Anomaly Detection complete

Results Anomaly Detection

ID	Load	Total Rate	All miles	Is anomaly?	Created at
11	PFHS-18584	4000.0	1814.0	True	Sept. 21, 2024, 7:50 p.m.
12	9082	2800.0	2000.0	True	Sept. 21, 2024, 7:50 p.m.

10.15 Anomaly Result