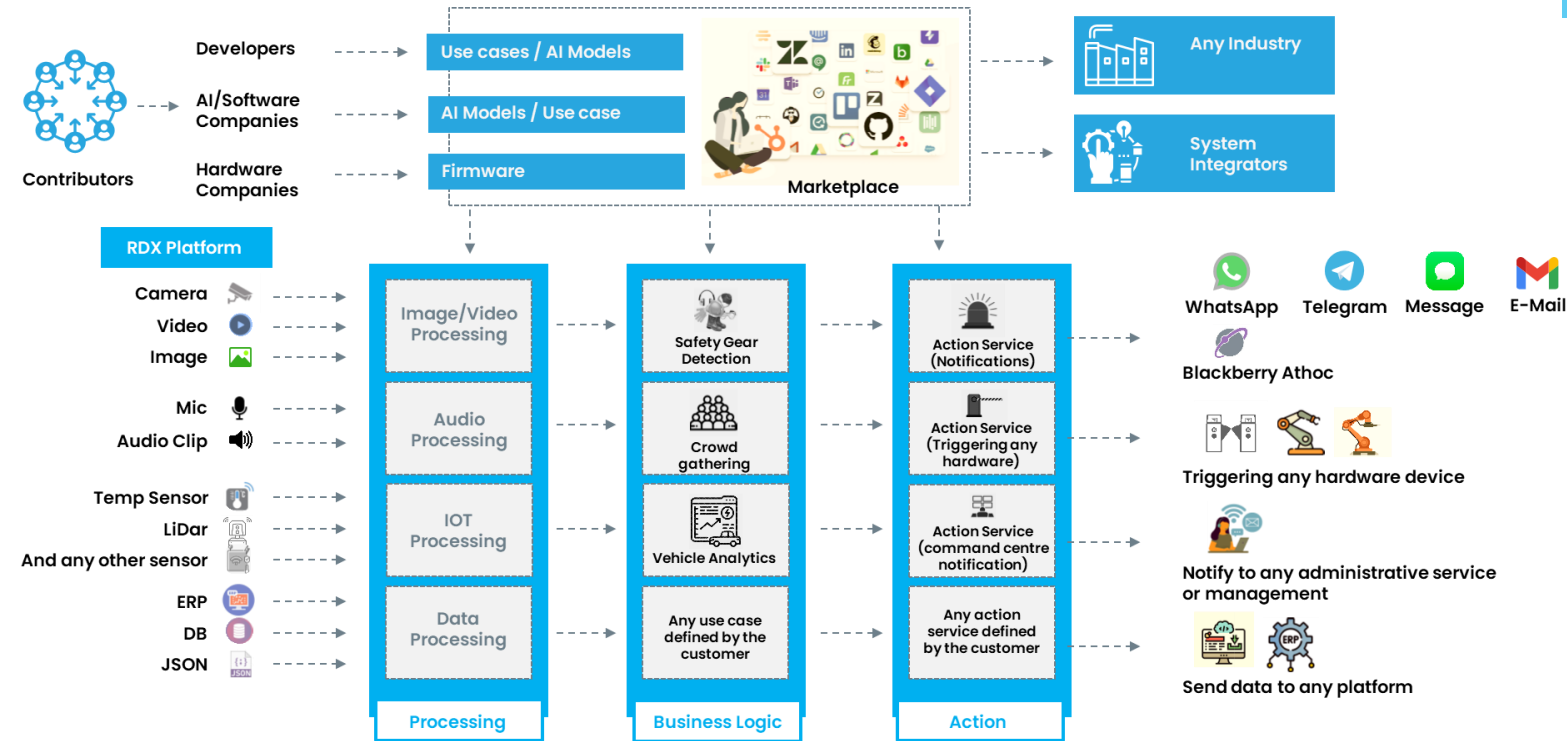




ENABLING DIGITAL TRANSFORMATION & AUTOMATION

Introduction to AI Eco System



The RDX Ecosystem is a platform tailored for logistics and port operations like those at Allcargo Group. Developers or AI/IoT companies can upload AI models, use cases specific to port operations, or IoT triggering services to our Cloud marketplace. End users at Allcargo can seamlessly download these to the AI deployment platform hosted on their Edge Computing device through an easy-to-use drag and drop interface. This process allows Allcargo to deploy end-to-end automation processes suited to their specific requirements, enhancing efficiency, safety, and productivity in port operations.

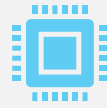
Family of Products in **AI Eco System**



AI Marketplace



How are we Accelerating Digital Transformation with **AI** **Ecosystem**



Seamless Integration: Bridging the gap between diverse technologies, AI Ecosystem simplifies the integration of various AI models and IoT devices for comprehensive data processing.



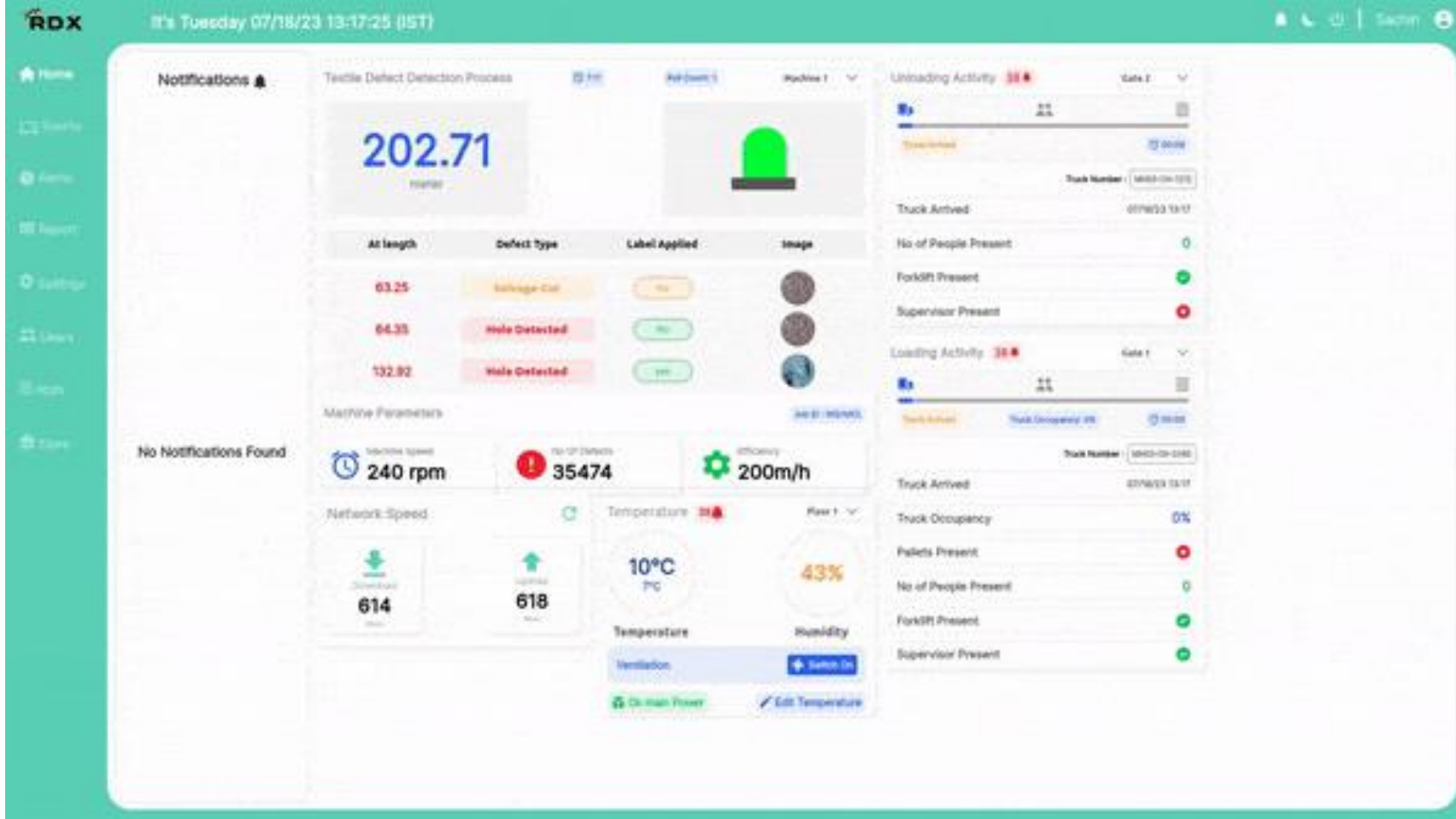
Coordinated Actions: AI Ecosystem makes it easy to trigger multiple IoT/PLC/SCADA devices, send alerts, and convey analytical data based on predefined workflows, improving operational efficiency.



Rapid Product Deployment: Accelerate digital transformation initiatives with the ability to swiftly develop, scale, and continuously improve products while benefiting from a robust built-in support system.



Unified Vendor Management: Streamline vendor interactions by implementing solutions from a single unified platform, eliminating the inefficiency and complexity of dealing with multiple vendors.



Use Case AI Based Automatic Textile QC Check

- **Setup:** We connected high-speed USB cameras and a PLC-based label applicator to the AI platform.
- **AI Deployment:** Deployed AI services that can identify 45 different types of cloth defects.
- **Real-time Monitoring:** The defect identification process is displayed on the dashboard in real time.
- **Automatic Labeling:** If a defect is found, the platform triggers the PLC device, which applies a label to the defective cloth.
- **Outcome:** This setup automates the complete end-to-end Quality Control process for a textile company.



Use Case

Railway Track Defect Monitoring

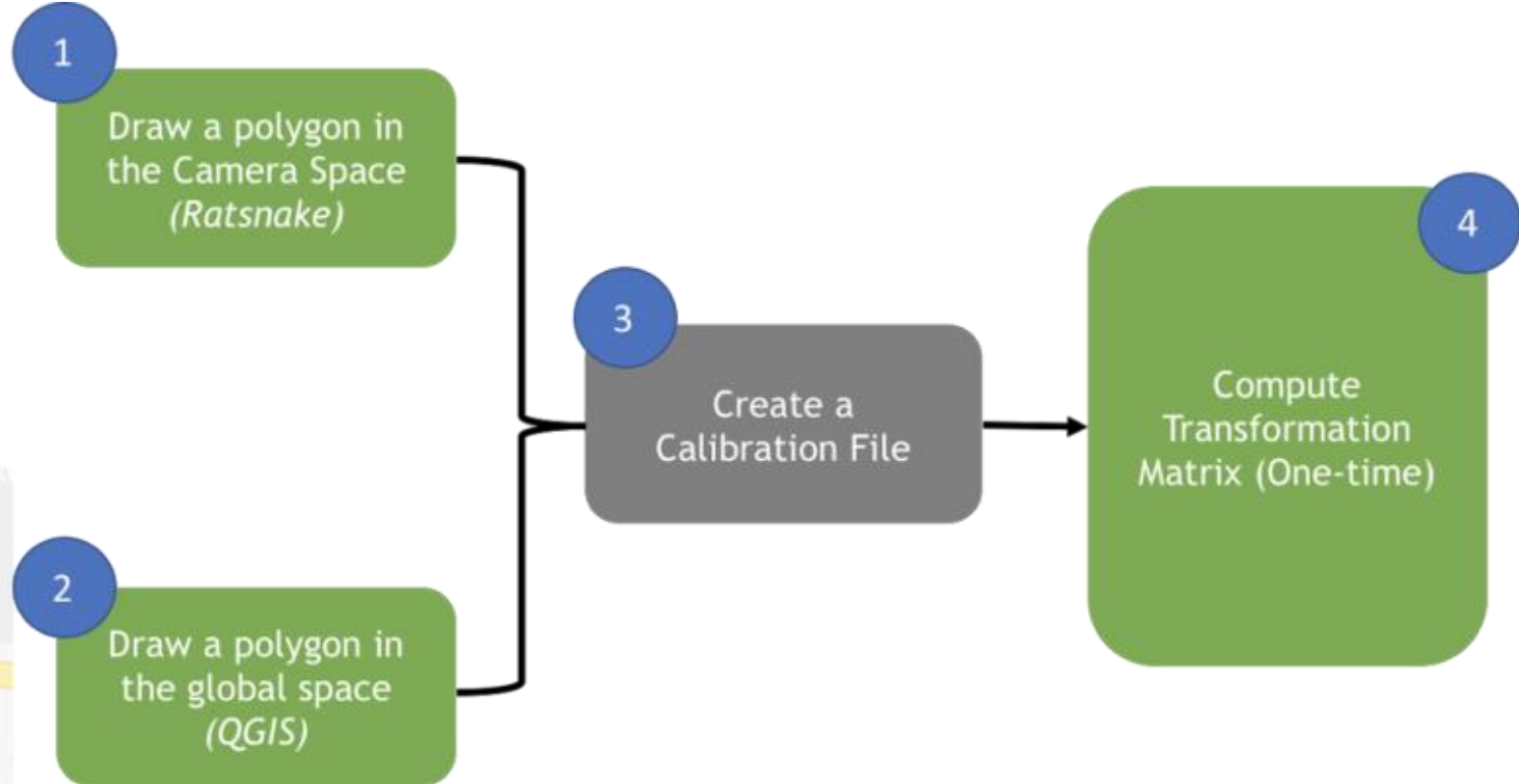
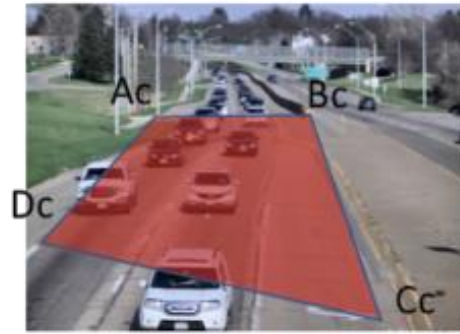
Setup: A dedicated hardware device was designed and installed on the brake van of a train.

Continuous Monitoring: This device continuously scans the railway track clips during the journey.

Defect Detection: If a clip is found to be missing from the track, the device activates.

Location Extraction: The device's built-in GPS module extracts the geolocation of the missing clip.

Alert Generation: An alert is generated on the central dashboard, pinpointing the exact location of the missing clip with an accompanying image.



Use Case

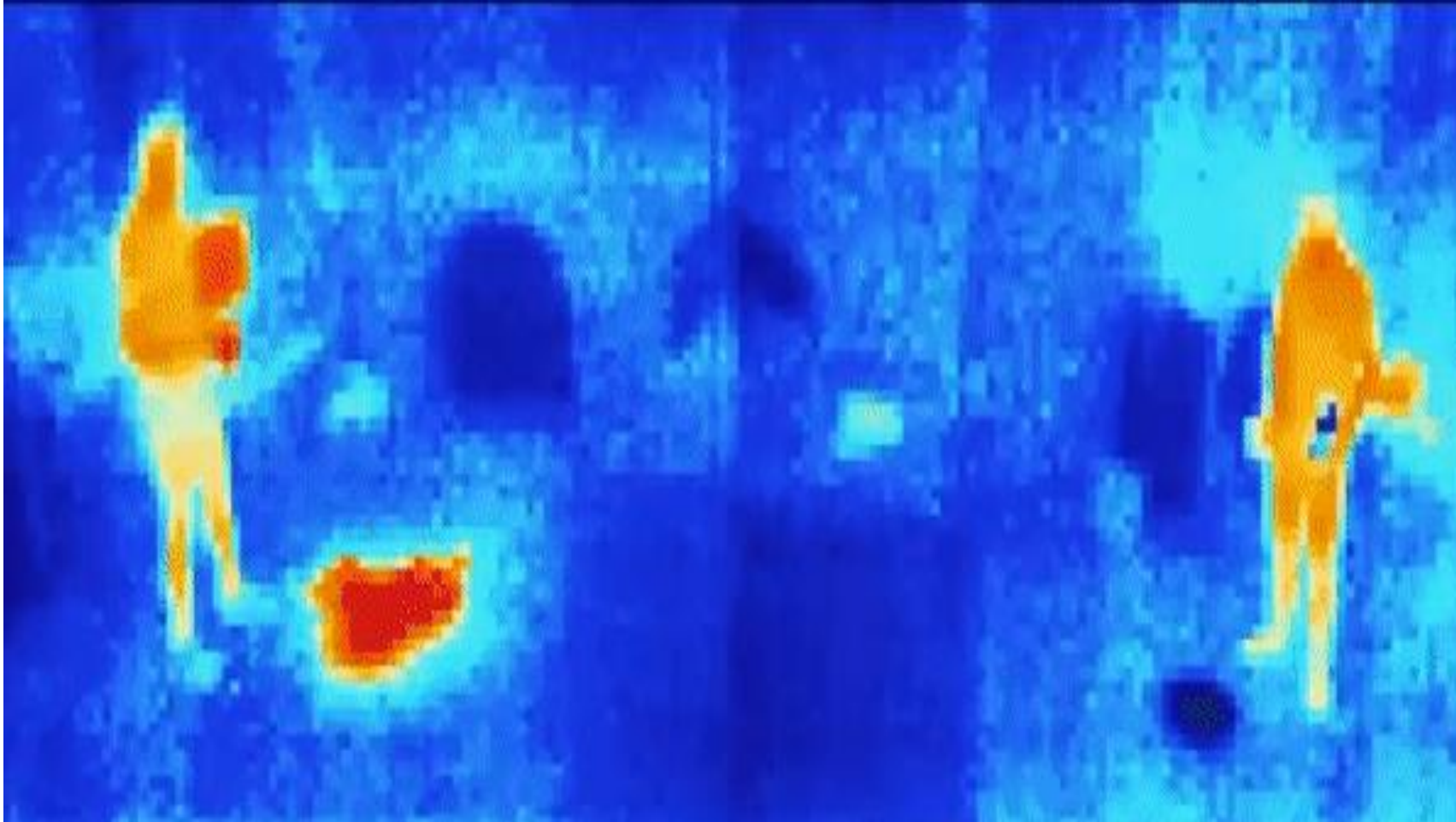
AI Based Visual Positioning System

Capability: Our platform can calculate the exact geolocation (latitude & longitude) of detected objects.

Mapping: Detected objects are mapped on Google Maps, providing a clear and familiar interface.

Transformations: Crucial for many use cases that require object tracking, movement summarization, and geofencing.

Applications: Useful for business intelligence and safety measures, enhancing operational efficiency and security.



Use Case

GDPR Compliant Person Detection using Thermal Array

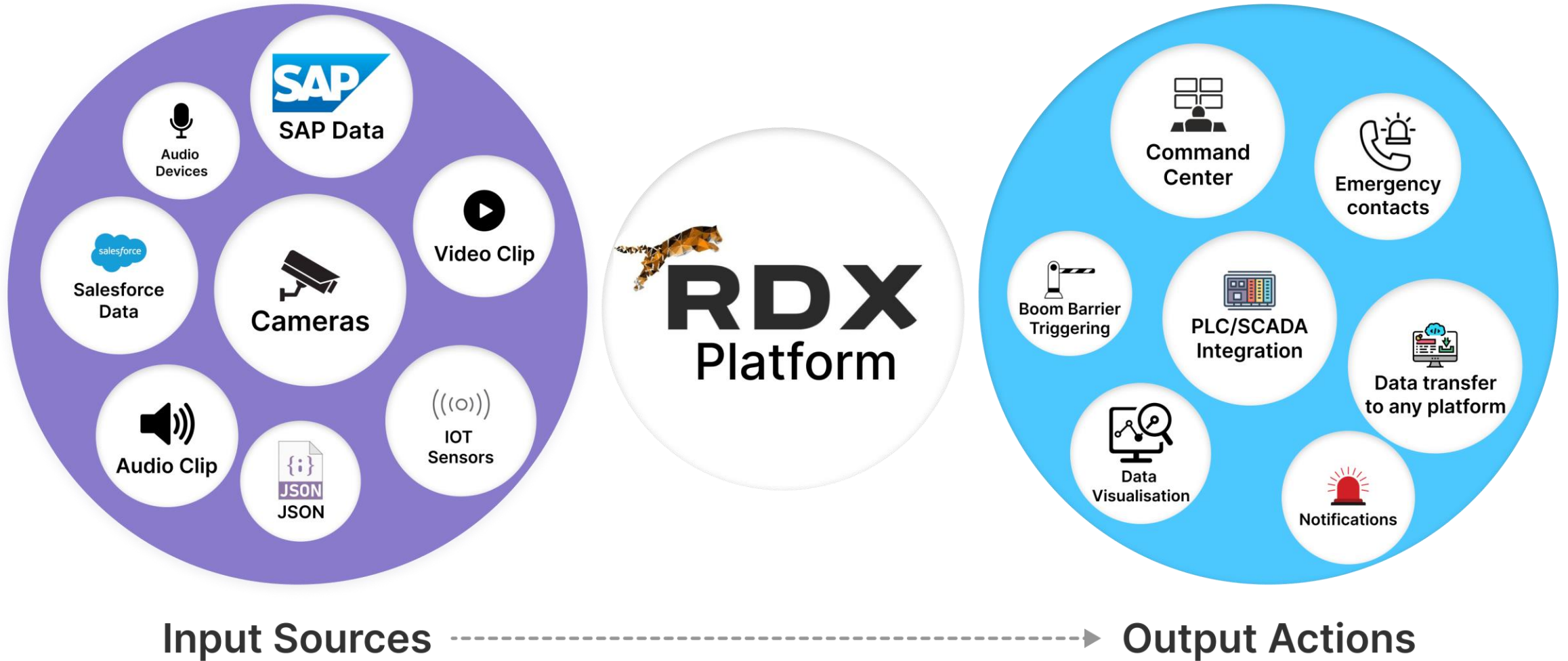
Setup: Connected an IoT Thermal Array Camera to our platform, set up in areas where traditional cameras are prohibited.

GDPR Compliance: Created a GDPR-compliant person detection system, preserving privacy by not revealing personal identities.

Loitering Detection: The system can detect a person loitering for more than a specified time.

Impact: This detection system helped reduce gold smuggling at Sri Lankan airports while respecting privacy regulations.

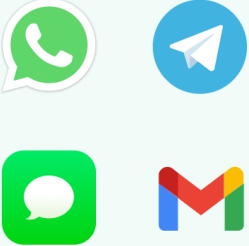
Features – Connect Any type of Input & Output Device



Features – Cloud Marketplace for Use Cases, AI models & Action Services



Features – End to End Automation via ACTION SERVICES



Notification Service Active


Service type- Action service Installed version- 2.5.9 Last updated- 04/04/2023

General Settings Device Permissions User Permissions

View Logs

Update Uninstall

Sources where service is running	Status
Parking lot Camera	Active
Thermal camera outside the kitchen	Active
Parking lot Camera 5	Inactive
Thermal camera outside the kitchen 324	Error
Parking lot Camera 2	Inactive
Thermal camera outside the kitchen 324	Error



Hooter Active


Service type- Action service Installed version- 2.5.9 Last updated- 04/04/2023 Beta

General Settings Device Permissions User Permissions

View Logs

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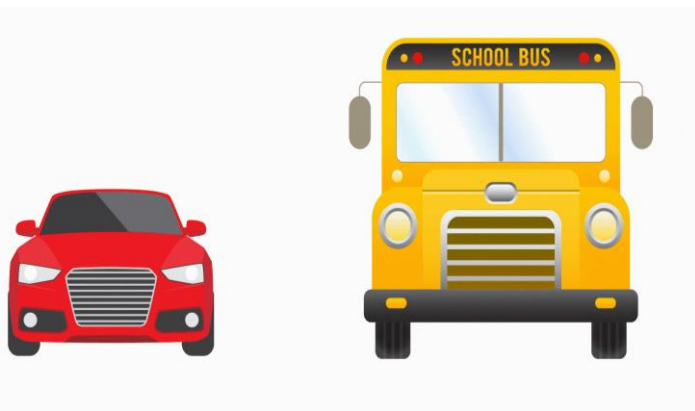
General Settings Device Permissions User Permissions

View Logs

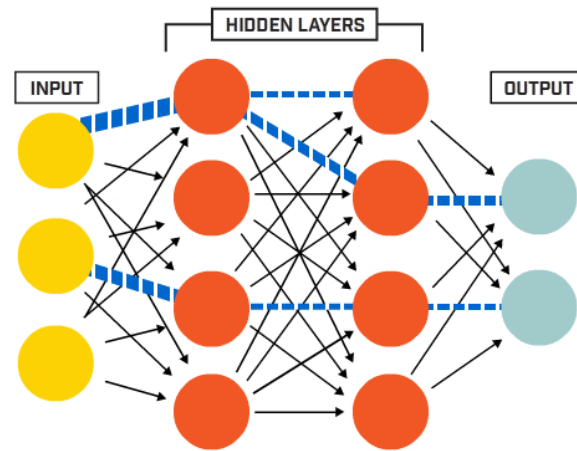
Update Uninstall

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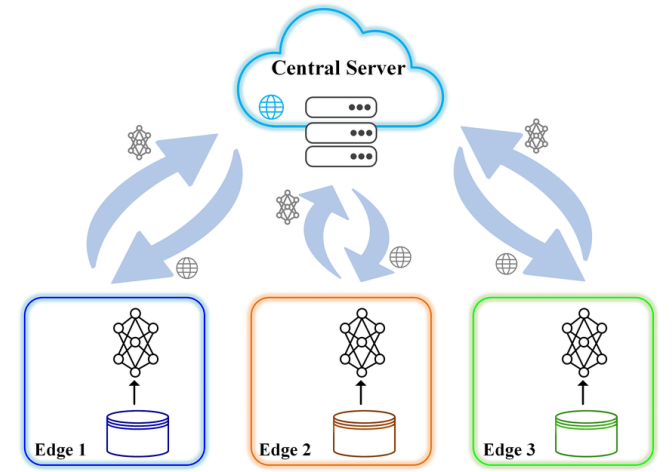
Features – Hyperlocal Model Deployment Pipeline



Auto Annotated data Collection



No Code AI Model Training



Model deployment to edge device via central cloud

Features – Built – In Central Ticketing System

Description

Description

This Ticket is assigned to Amit Kumar and it should be worked upon by 12:34 AM on 12th October and this is again random text. This box is limited to three lines, after that it'll...

2019283bnkj....png 2019283bnkj....png

5 more attachments Download all

Comments

Comments

JD Jekin Dedhia 32 mins ago
Here are a dew ways to start a peroproject overview in this application.

KK Kushagra Kishore 15 mins ago
This is a very random comment, dont read it. Whole pourpose of this comment is to fill text.

KK Add a comment...

Hierarchy

Details

Assignee **KK** Kushagra Kishore

Reporter **JD** Jekin Dedhia

Priority **Low**

Status **To Do**

Deadlines

Deadlines

Due date 12 Oct 2022

Due time 12:34 AM

Tag

Parking Lot Cam-1
Andheri West

Car detected at the wrong parking space in region rail & some filler text

12 Nov 2022 10:55:22 AM **KK**

Description

This Ticket is assigned to Amit Kumar and it should be worked upon by 12:34 AM on 12th October and this is again random text. This box is limited to three lines, after that it'll...

2019283bnkj....png 2019283bnkj....png

5 more attachments Download all

Alert actions IOT Hooter Telegram Central Ticketing Whatapp Email

Details

Assignee **KK** Kushagra Kishore

Reporter **JD** Jekin Dedhia

Priority **Low**

Status **To Do**

Comments

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This is a very random comment, dont read it. Whole pourpose of this comment is to fill text.

KK Add a comment...

view less

Features – Real Time Process Monitoring Widgets

RDX It's Wednesday, 16th November 5:02PM (IST) Kushagra

Notifications 17 nov

- Critical** Please beware the truck has been tilted to 20 degrees. 10:55:22 AM
- Critical** Person with weapon detected in office premises. 10:55:22 AM
- Critical** Unauthorized access detected in the vault room. 10:55:22 AM
- Critical** Gunshot detected in the lobby area of the office. 10:55:22 AM

18 nov

- Moderate** Car Detected in No Parking Region Roil. 1:59:54 AM
- Moderate** Car Detected in No Parking Region Roil. 1:59:54 AM
- Critical** Car Detected in No Parking Region Roil. 1:59:54 AM

Textile Defect Detection Process Machine Name 1

101 meter

At length	Defect Type	Label Applied	Image
52m	Hole detected	Yes	
52m	Selvage cut	No	
52m	Selvage cut	No	

Machine Speed: 240 (rpm) | No Of Defects: 240 | Efficiency: 200m/h

Temperature: 36°C (7°C) | Humidity: 45%

Stock locator system Warehouse 1

Search: A2

Stack	Color
Stack 1	Blue
Stack 2	Yellow
Stack 3	Red

Last Activity: 22-03-32

Loading Activity Bay Gate 1

Truck Occupancy: 100% Finished

Truck Number: MH03-CH-2345

Truck Arrived: 17/05/23, 12:03

Truck Occupancy: 87%

workforce involved: 8

Pallets Present:

Supervisor Present: 59:23

Forklift Present:

Unloading Activity Bay Gate 2

Truck Arrived: 59:23

Truck Number: MH03-CH-2345

Truck Arrived: 17/05/23, 12:03

Features – Self Configurable Dashboard

RDX It's Wednesday, 16th November 5:02PM (IST) Kushagra

Home
Camera
Alerts
Report
Settings
Users
Apps
Support

Edit Default widgets

Network statistics
Network statistics Widget helps you check the status of your network

System Overview
Here is an overview of your system

Time Details Edit

Network Speed

System Information

Device Limitations

SAVE

Metric	Value
Network Latency	0.012 MS
Jitter	0.017 MS
Packet Loss	0.0%
Byte Sent	69b
Byte Received	99b

Camera Type	Active	Inactive	Total
IP Camera	12	8	20
USB Camera	12	8	20
CSI Camera	12	8	20

Component	Usage
Ram	7GB/16GB
CPU	20/100%
Storage	769/800GB
GPU	28/100%

Limitation	Current	Max
Camera's Limit	12/20	20
Use Case's Limit	8/20	20
A.I.'s Limit	4/6	6

Some **Other** Features



Enhanced data privacy



Plug & Play Deployment Process



Scalable Media server Pipeline



Easy Integration with
Any platform



Developer options to create
usecases



End to end process automation
integrating any IOT/PLC Scada

- Home
- Camera
- Alerts
- Report
- Settings
- Users
- Apps

Choose Source

Camera

Filter

Applied Filters

- High Priority
- Missed Deadlines
- Assigned to Kushagra Kishore
- Status Open
- Starred alerts
- Notification Type: Open
- Parking Lot camera Number 1
- Bandra west

Priority

- High
- Medium
- Low

- Missed Deadlines
- Upcoming Deadlines

Tags

- Starred messages
- Moderate Notifications
- Critical Notifications

Camera

Name: Location:

Assigned to: Reporter:

Go to page 13 No Of Entries 100 Bulk Actions Delete Sort By Date

<input type="checkbox"/> Critical	Parking Lot Cam-1 <small>Andheri West</small>	Car detected at the wrong parking space in region rail & some filler text	12 Nov 2022 <small>Sunday</small>	10:55:22 <small>AM</small>	KK		view more
<input type="checkbox"/> Critical	Parking Lot Cam-1 <small>Andheri West</small>	Car detected at the wrong parking space in region rail & some filler text	12 Nov 2022 <small>Sunday</small>	10:55:22 <small>AM</small>	KK		view more
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AI Dashboard – Alert Screen

- 🏠 Home
- 📷 Camera
- 🚨 Alerts
- 📊 Report
- ⚙️ Settings
- 👤 Users
- 🗄️ Apps

Choose Source

Camera ▾

View

List ▾

Filter

Applied Filters

- High Priority 🔴 Missed Deadlines 🔴
- Assigned to Kushagra Kishore 🔴 Status Open 🔴
- Starred alerts 🔴 Notification Type: Open 🔴
- Parking Lot camera Number 1 🔴 Bandra west 🔴

Priority

- High
- Medium
- Low

- Missed Deadlines
- Upcoming Deadlines

Tags

- Starred messages
- Moderate Notifications
- Critical Notifications

Camera

- Name: Parking Lot Cam-1 ▾
- Location: Bandra West ▾
- Assigned to: Kushagra Kishore ▾
- Reporter: Jekin Dedhia ▾

Go to page 13 > No Of Entries 100 ▾ Bulk Actions Delete ▾

Sort By Date ▾



RTMP Camera [view Link](#)

Sapphire Property Cam... Active

📍 Bandra West

- 🔴 Check Missed Notificatons
- 📦 Check Hierarchy
- 📄 Check Logs
- 📺 View Live Feed

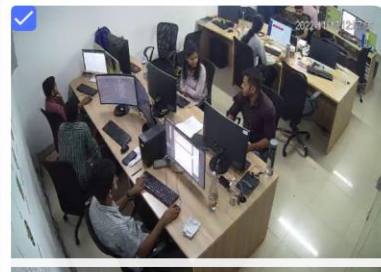


RTMP Camera [view Link](#)

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RTMP Camera [view Link](#)

Sapphire Property Cam... Active

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- 📦 Check Hierarchy
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Use case details

Use case	Current Schedule	Status	Configuration
Arm's Detection	1AM-3:30AM	Active	view
Vehicle Detection	2:20AM-3:15AM	Inactive	view
Arm's Detection	1AM-3:30AM	Inactive	view
Yellow Number Plate	2:20AM-3:15AM	Active	view

[View All Schedule](#)

Use case details

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[View All Schedule](#)

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Yellow Number Plate	2:20AM-3:15AM	Active	view

[View All Schedule](#)

AI Dashboard – Source Screen

Types of Use Cases built on **AI Ecosystem**



Analytics & Alerts: AI Platform can generate alerts and produce analytical reports using Video, Audio, Data and IOT processing.



Workflow Automation: AI Platform can automate all the workflows of a client by connecting ERP, CRM, Inventory management, etc. together in a single unified dashboard.



Real-Time Industrial Process Monitoring: User can monitor all the ongoing processes in a factory, plant, refinery, port or a warehouse on a single dashboard with AI platform by processing the data coming from PLC/ SCADA, IoT Sensors, Cameras, etc.



Process Automation: AI platform can automate some processes in a factory, Plant, Refinery, port by interacting with PLC/ SCADA systems and triggering output devices as per client defined parameters.