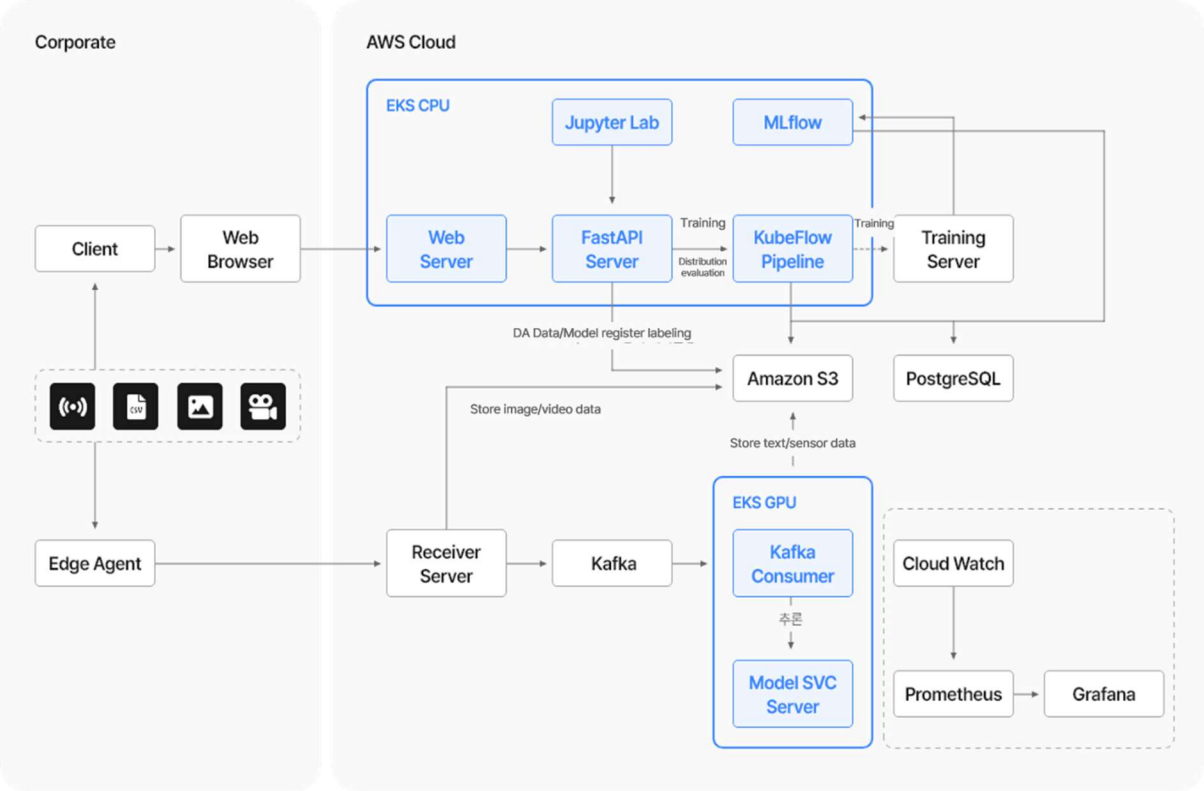
Beyond Telecomm.

MLOPS

1. Description

MLOps is a platform that streamlines data labeling and AI model development, management, and deployment. It enables reliable and efficient application of rapidly changing data to business using AI. Additionally, it offers service for promptly implementing innovative idea in business environment, as required by company.



2. Key Features

● Collect and store data

· Collect/save and manage various data such as sensor data, csv, video, and image

● Data labeling

· Provide labeling function, which is a prerequisite for model training

· Provide Auto Labeling function

- Jupyter Lab for model development
  - Provide flexibility to directly develop own model using Jupyter Lab development environment
  - Enable to register model the user creates in Model Registry
- Model training, evaluation, and distribution
  - Provide function to train, evaluate, and distribute model
- Monitoring
  - Provide monitoring capability for data collection and storage history
  - Provide model performance monitoring

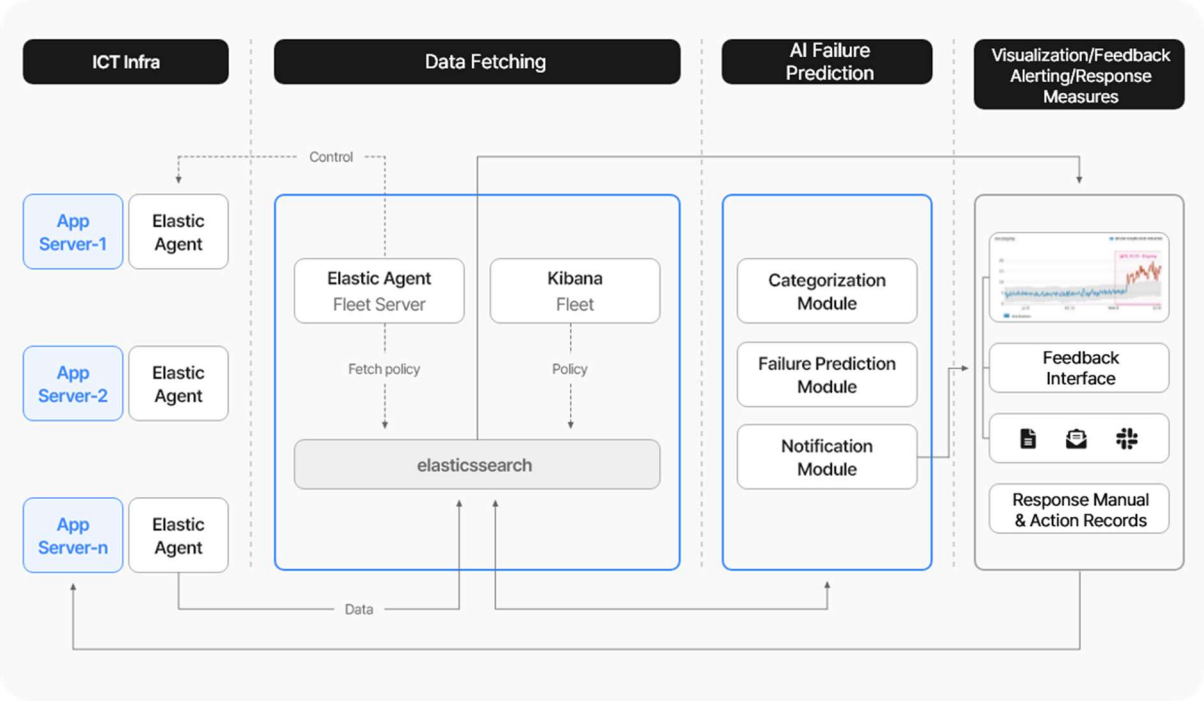
3. Benefits

- Easily collect and store data using API and utilize model inference service
- Speed up labeling task and reduce cost with Auto Labeling feature
- Develop model quickly, manage efficiently, and support timely service launch

FAILURE PREDICTION SYSTEM

1. Description

Failure Prediction System, based on AI technology, offers service for predicting failure in advance by learning from log and statistical data. It automatically gathers various metric(performance, statistics, etc.) and log(hardware and software) from operational ICT infrastructure and performs failure prediction through AI engine.



2. Key Features

● Automated data pipeline

· Automatically collect, transform, and store log and statistical data from service server

● Automated distribution of predictive models

· Automatically distribute prediction models to service pipelines

● Visualization of prediction

· Enhance readability and facilitate quick response by visualizing prediction result

● Alerting

· Send prediction result via Slack or Email

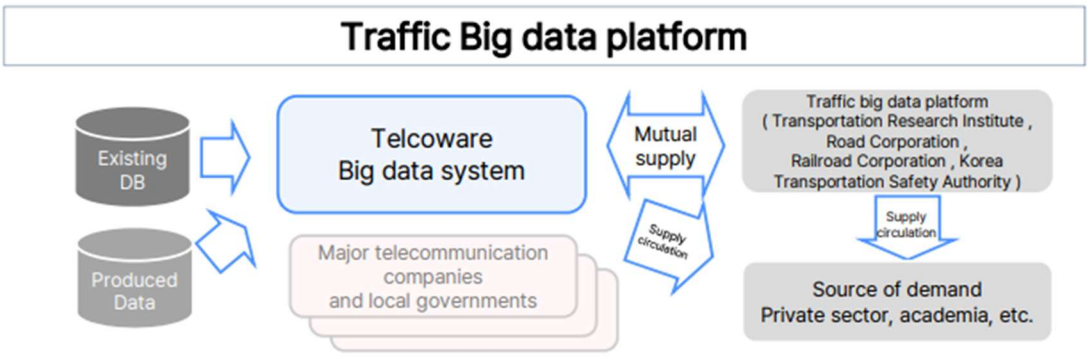
3. Benefits

- Ensure high availability and high reliability by eliminating potential issues
- Minimize loss and cost resulting from service disruption
- Ensure adequate time for preventive system diagnostic through early detection of anomaly
- Reduce time to identify root cause of abnormal sign
- Improve workflow efficiency through focusing on failure management
- Improve customer satisfaction through service stability

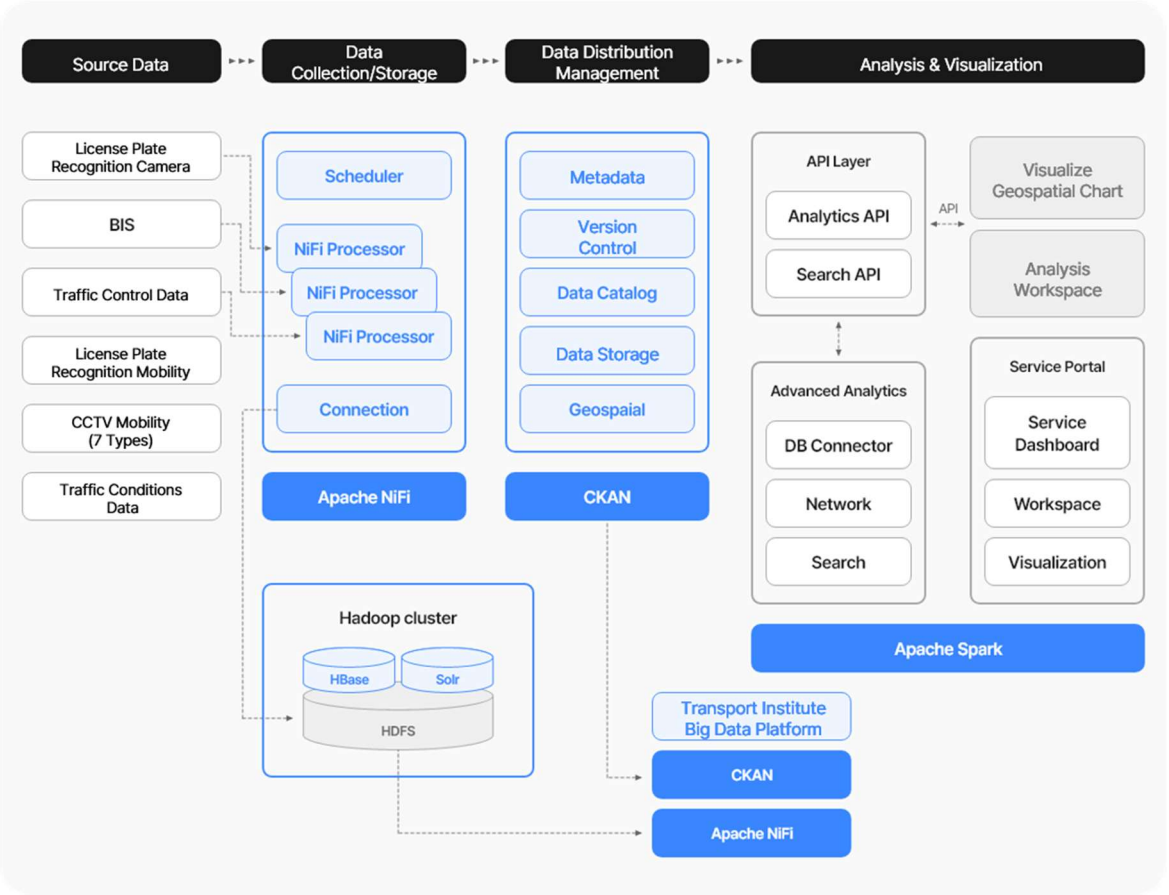
TRAFFIC BIG DATA SYSTEM

1. Description

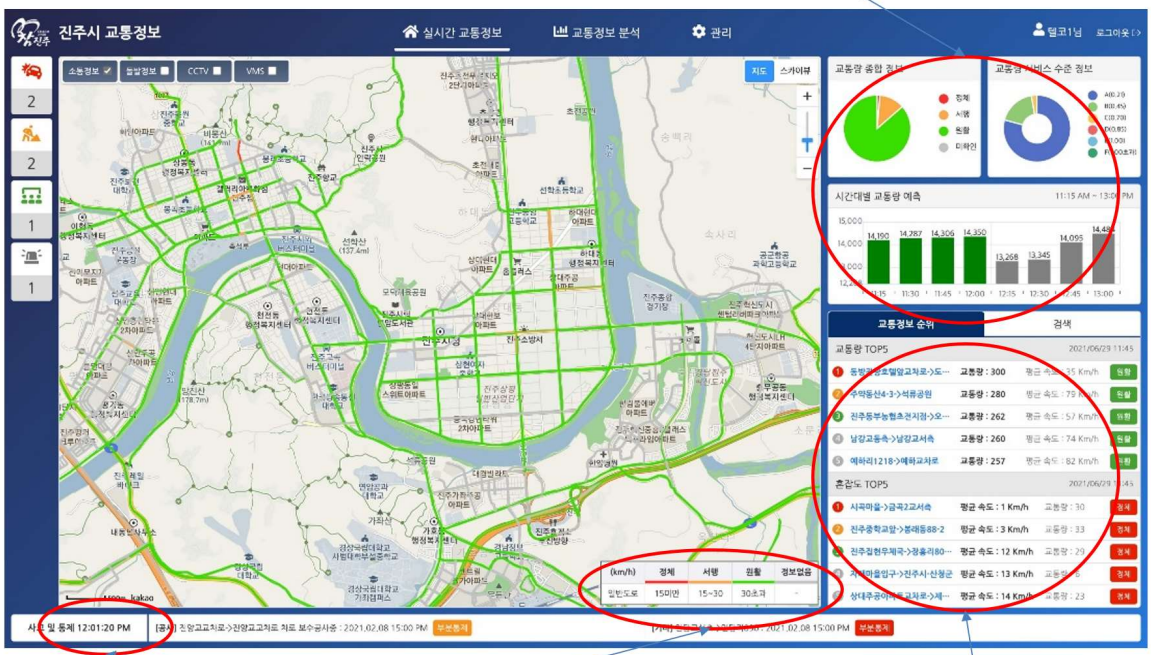
Traffic Big Data System promotes data accumulation, activates distribution, and contributes to opening of public data in traffic field. By providing core data for optimal data convergence, the system enables creation of new value in future traffic.



	Step 1	Step 2	Step 3
Purpose	Big data production/ construction Big data platform connection	Big data Build / Open	Big data construction/opening and distribution activation
Data	Existing car number , BIS	+ Mobility traffic volume, speed, density, etc.	+ Non-traffic Environment , status , events, etc.
Technology	Hadoop, NiFi, CKAN		

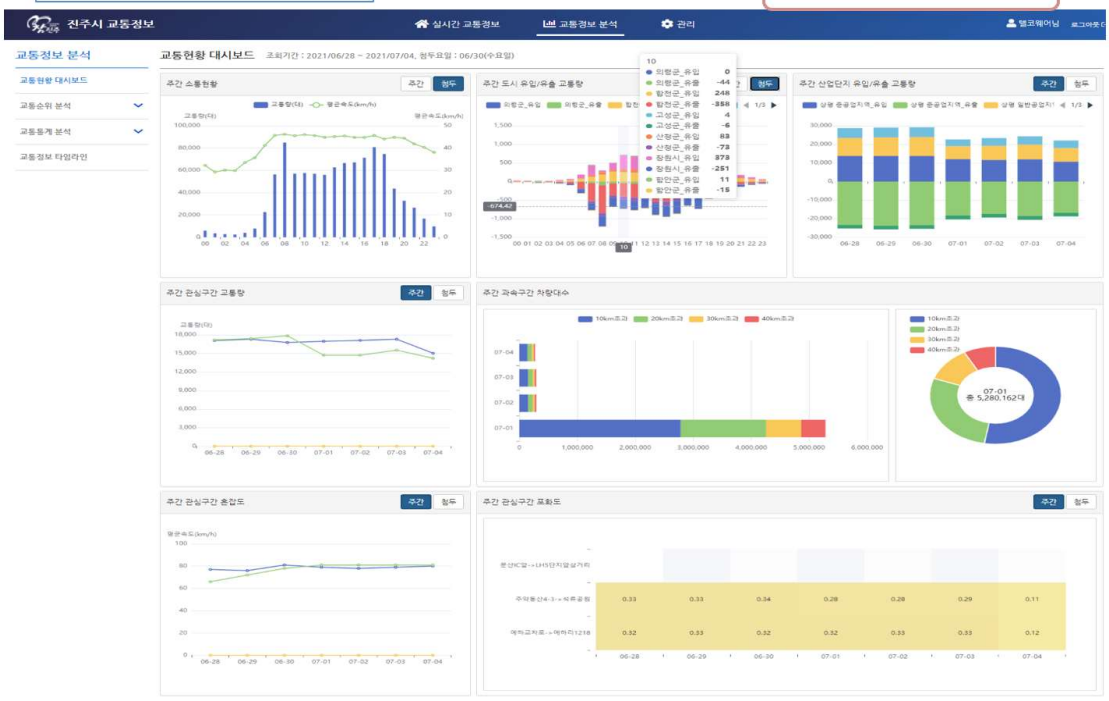


Real-time traffic information



Traffic status dashboard

View key traffic information at once



Traffic information analysis

Detailed analysis by traffic information : Inflow / outflow from Jeongchon Industrial Complex

산업단지	유입/유출	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	비고
정촌	유입	54	23	14	12	31	39	132	487	354	292	327	309	347	402	450	360	457	668	559	383	215	162	104	61	
	유출	12	3	4	6	7	15	56	124	137	134	147	157	153	200	190	176	216	284	174	145	83	70	35	24	

2. Key Features

● Traffic big data production and enhancement

· Create high-value traffic big data based on demand utilizing vehicle number recognition, and CCTV video analysis

· Collect and generate license plate recognition data and non-traffic data

● Elevate data quality to meet market demands

· Construct data and ensure compatibility through open format

· Construct data based on encryption and anonymization

● Unified open and sharing system via platform

· Establish unified open and sharing system through platform, in coordination with Korea Transport Institute's previously selected platform in traffic field

● Efficient data operation infrastructure

· Utilize center infrastructure with Hadoop cluster

DIGITAL BRAND SOLUTION

1. Description

Digital Branding is a crucial strategic concept that innovates traditional brand concept to suit digital environment and redefines customer experience in modern way. It encompasses the following key characteristics:

- Customer-centered digital experience

Digital Brand focuses on customers' lives and interactions in a digital environment and provides a digital platform that they can conveniently access and interact with.

- Digital Native Target

Primarily focused on Digital Native generation, who are familiar with digital technology and online service, and expect effective communication and interaction through these channels

- Differentiated service

Digital Brand offers unique digital service that sets them apart from traditional brand, delivering fresh experience to customer, ultimately securing competitive advantage and fostering customer loyalty.

- Data-based personalization

Digital Brand identifies customers' needs and preferences through data analysis and provides customized services and advertisements to individual customers.

- Rapid change and adaptation

As digital environment changes rapidly, Digital Brand swiftly adapts to these changes and responds promptly to new customer demands.

In the process of building a digital brand, telecommunication operators can benefit in following ways:

- Brand reinforcement

Building a new digital brand sets it apart from existing brands, strengthening the brand’s identity

- Customer-customized service

Precisely understand customer needs and requirements through data analysis in digital environment, and provide customized services

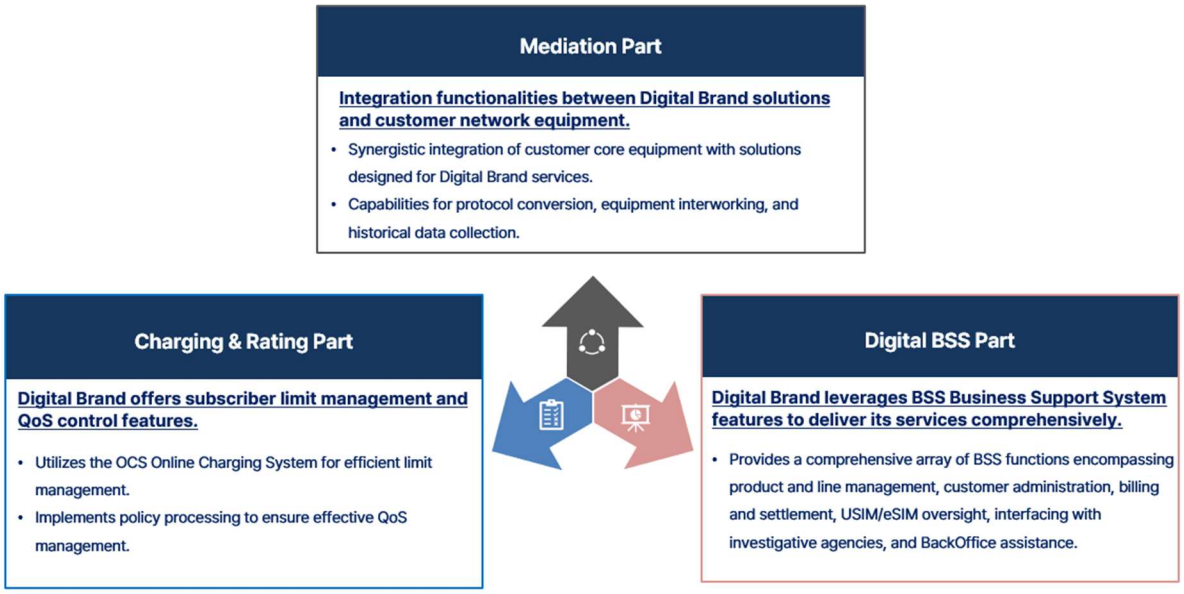
- Secure competitive advantage

Offering a superior digital experience to customer through digital brand can secure competitive advantage and attract more customers to market

● Quick innovation

Digital Brand is adaptable and capable of swift innovation, allowing it to respond promptly to market trend

Our Digital Brand solution consists of three areas as shown below.



2. Key Features

● Speed to Market (immediately reflect requests)

· Address customer feedback and requirements promptly

● Personalization

· Offer personalized settings, such as DIY plan design, prepaid option without contract, and hourly data purchase

· Provide various add-on feature based on individual needs

● On Demand (real-time)

· Enhance user experience through real-time app responsiveness

● Continue Innovation (sustainable growth)

· Rather than meticulously planning service to match evolving market, focus on rapid service launch and continuous adjustment based on customer feedback to maximize satisfaction and foster brand growth

