



# SMARTLINK

# SERVICE INTRODUCTION

CyberLogitec



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S M A R T L I N K I N T R O D U C T I O N

## SmartLink Introduction

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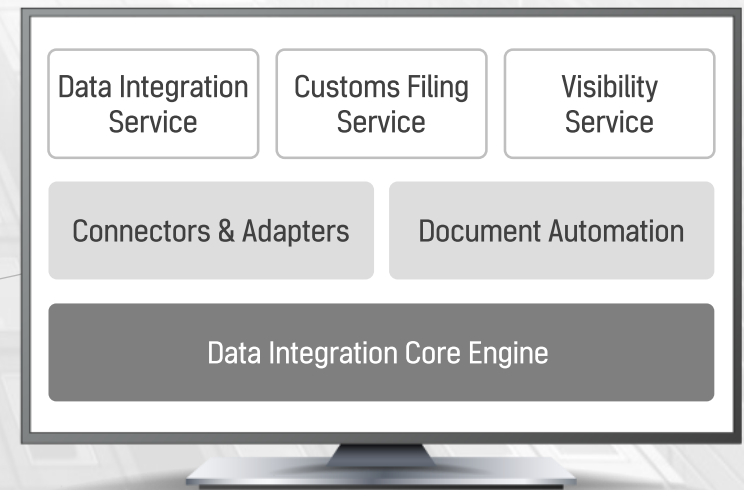
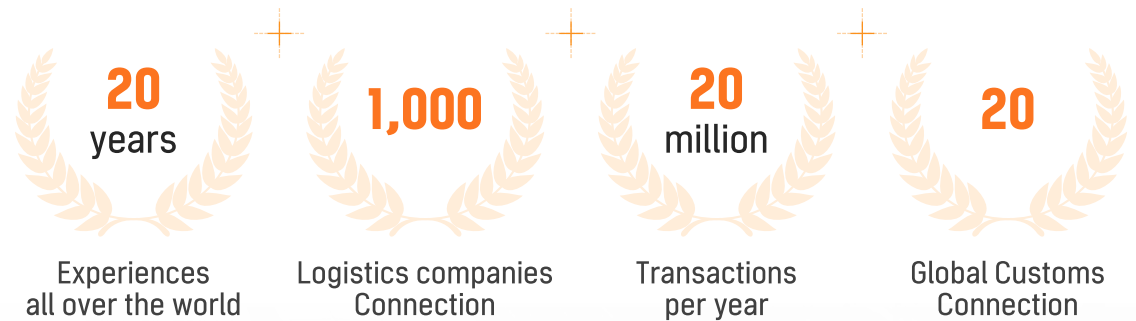
# Solution Overview

## Cloud-based Logistics Data Integration Platform

**SMARTLINK** is a fully managed service designed for improving the efficiencies of logistics business, covering **data integration service, customs filing service, and visibility service.**

We manage customer projects with the ability to analyze and optimize all their logistics processes with multiple types of modern and trendy components.

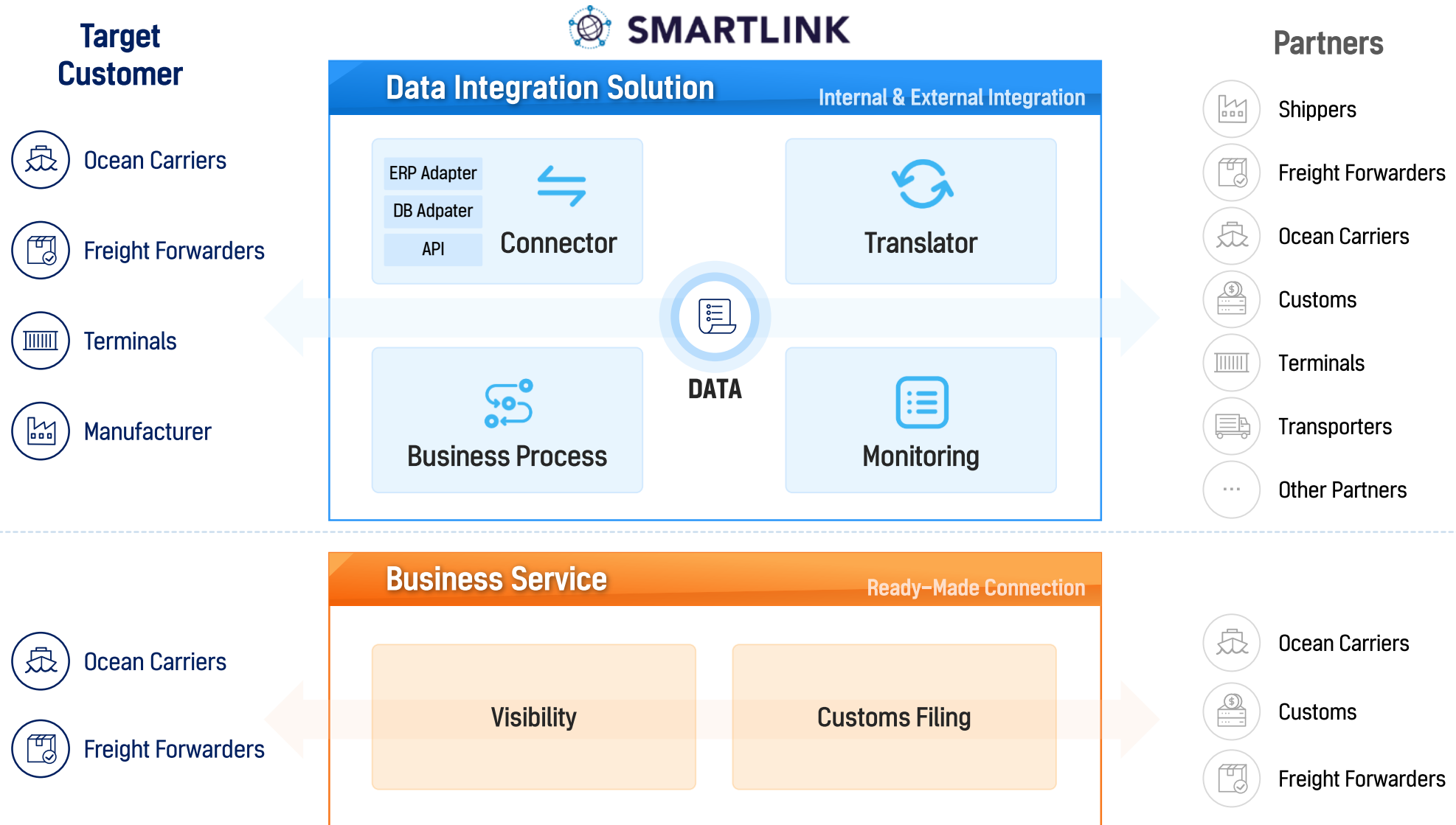
Logistics stakeholders can take advantage of the efficiency by the availability of data connectivity and process integration for logistics fields.





# Solution Overview

Logistics companies can access all types of systems and applications and share real-time data through the **SMARTLINK**, a cloud-based integration solution. With the powerful tools of the solution, logistics companies can easily share data with business partners.





# Solution Landscape

- SMARTLINK consists of Business Service and Data Integration Platform

## SMARTLINK Service and Architecture Landscape

### Data Integration Platform

Key Features		
Dashboard	Transaction Log	Code Management
Partner Management	Communications	Workflow
Mapper	Map Builder	Code Table
DB Broker	Integration SETs	Folders
Administrator	User Management	API Portal

### Data Learning Bot

EDI Repository	Repository Matching
Data Analysis	Interface List

### Core Engine

Interface Manager	Translation Engine	Transaction Writer/Finder
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### Business Services

Customs Filing		
AMS/ISF	AFR	ACI

Documentation		
Booking	S/I	Draft BL

Logistics Data Information
Ocean Schedule
Ocean/Rail Cargo Tracking
Vessel ETD, ATD, ETA, ATA Information

Collaboration		
Partner EDI	Document Sharing	Document Automation



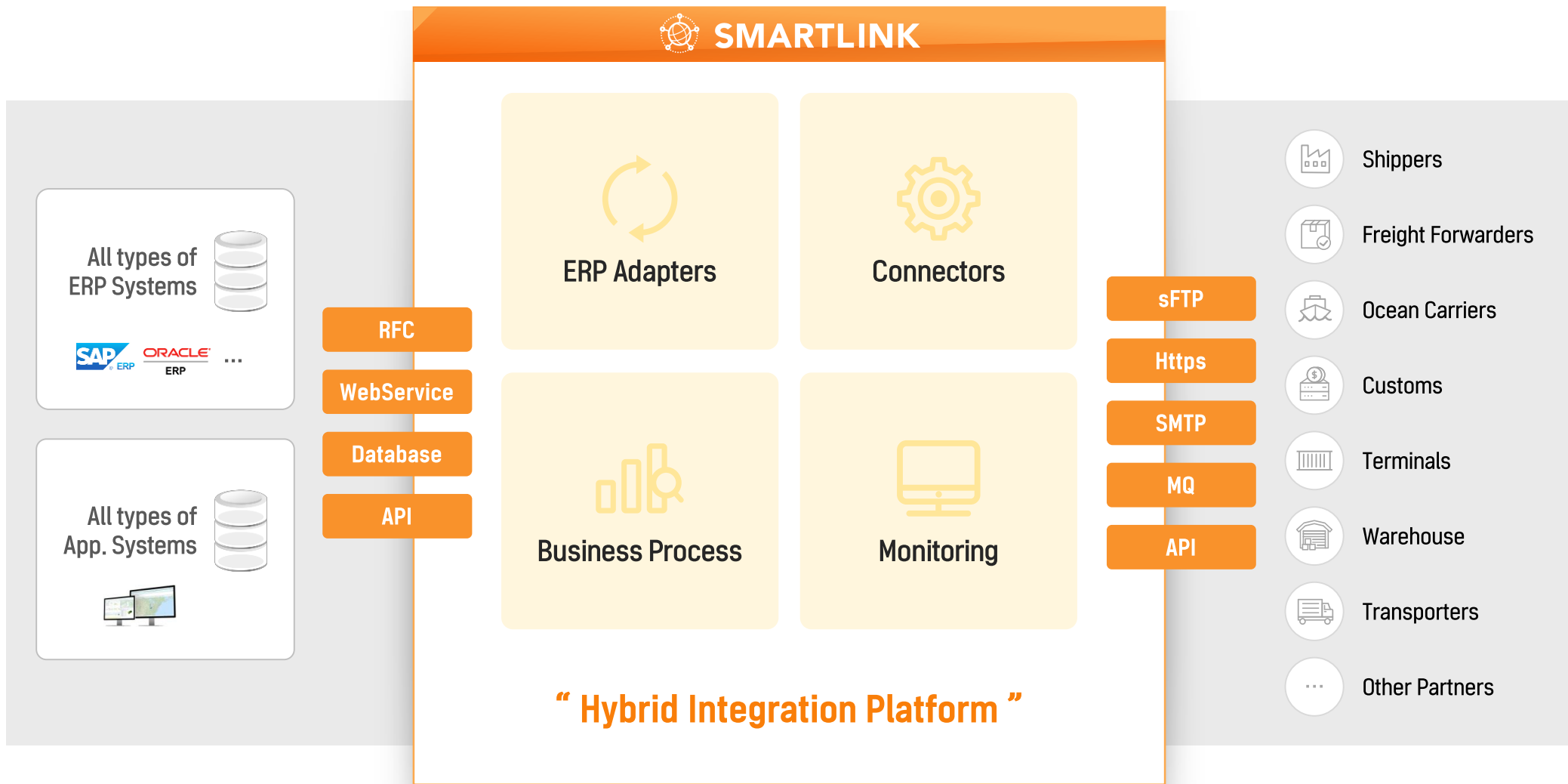
**SMARTLINK**

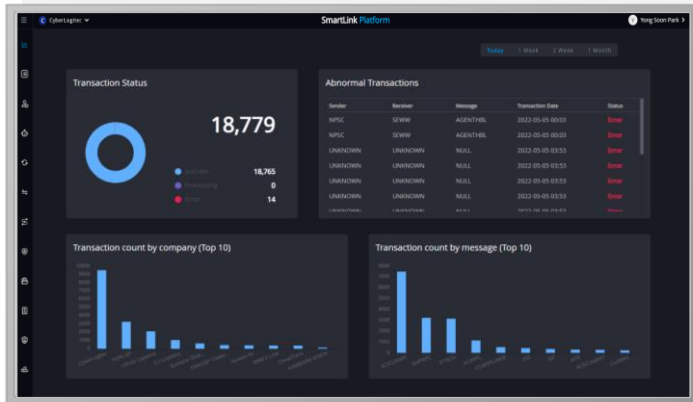
# Data Integration Platform



# Business to Business Integration

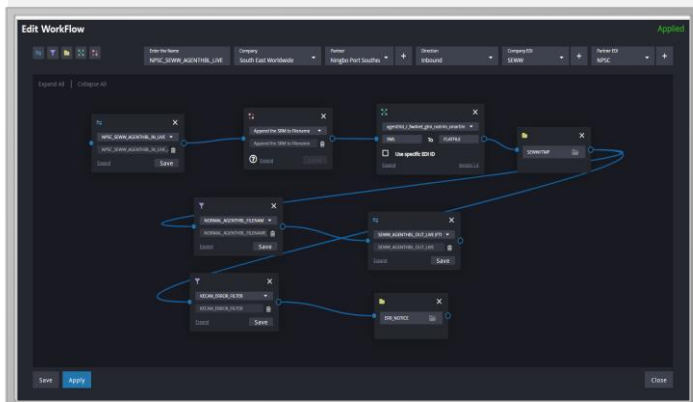
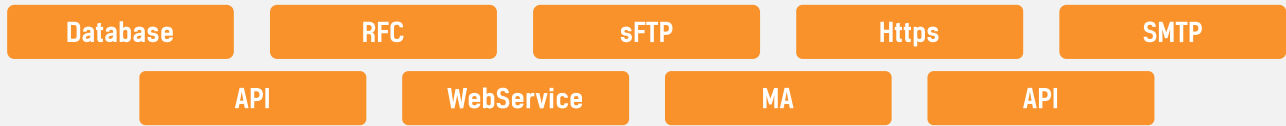
**SMARTLINK** provides a cloud-based integration solution that helps logistics stakeholders to connect any systems and applications for real-time data sharing. Logistics stakeholders can easily share the business data with their trading partners with powerful tools.





## ERP Adapters & Connectors

**SMARTLINK** provides multiple ways to connect the application of logistics stakeholders. We support pre-built connectors and universal adapters to control various protocols. In addition, we have adapters for integration with ERP or application systems.



## Business Process Builder

**SMARTLINK** provides business process automation technologies to automate the routine manual processes that take place in day to day business. The comprehensive features in the SmartLink Data Integration solution allow users to analyze the data structures and transform data into any format with our powerful Business Process Builder.

## Workspace & Monitoring

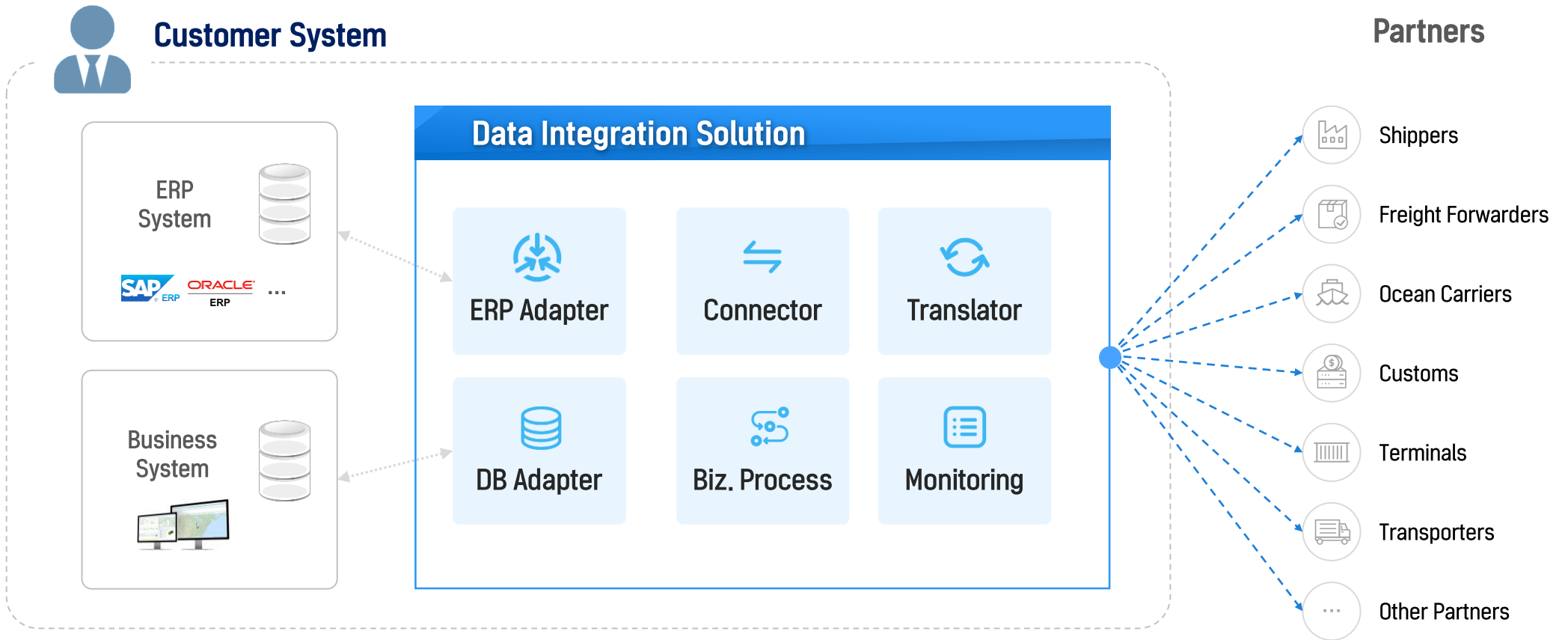
**SMARTLINK** provides a workspace that enables users to develop and configure the adapters and conversion components. In addition, users can check data integration transactions and detects system abnormalities in a monitoring tool.





# Application Model : Delivery

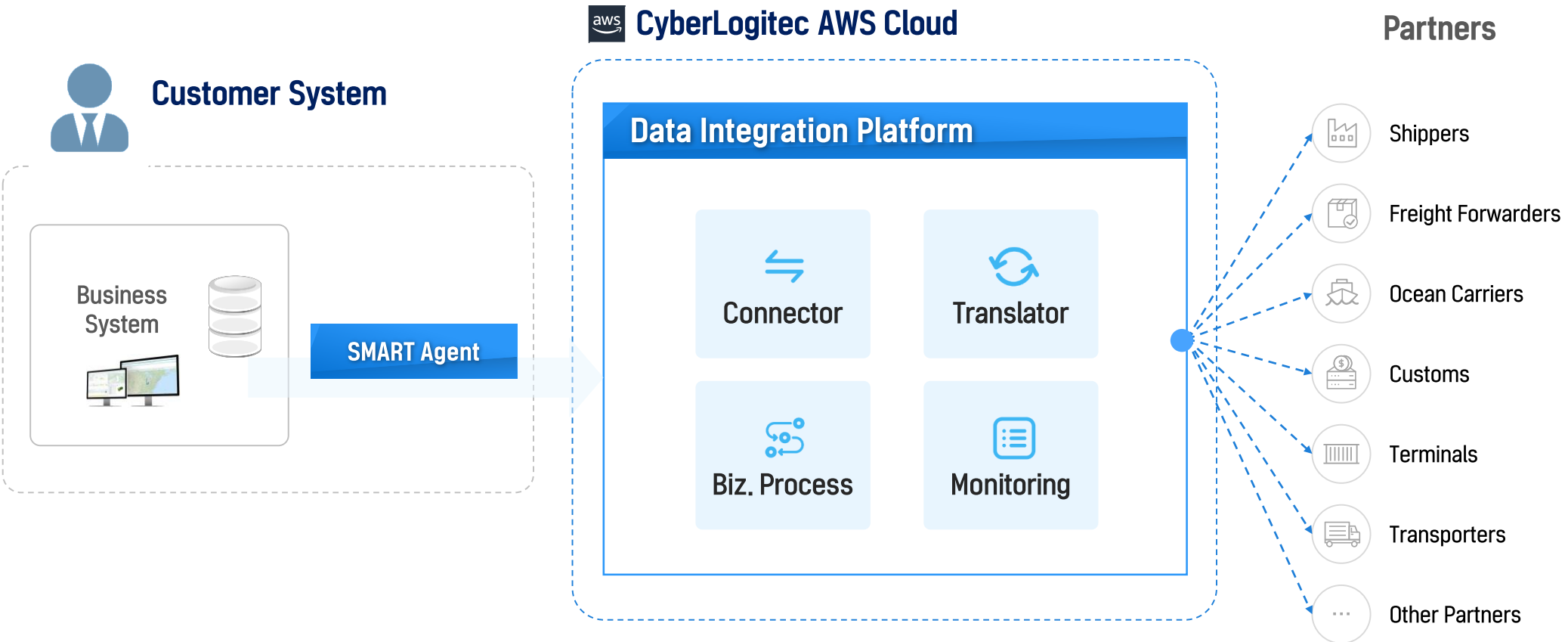
By installing **SMARTLINK** on the customer's system, external data integration with partners can be achieved, as well as data integration between internal systems such as the ERP and Biz. System that the customer uses. **SMARTLINK** is composed of MSA architecture, which allows customers to select the desired functions for installation, and can be installed without customization based on the customer's server environment.





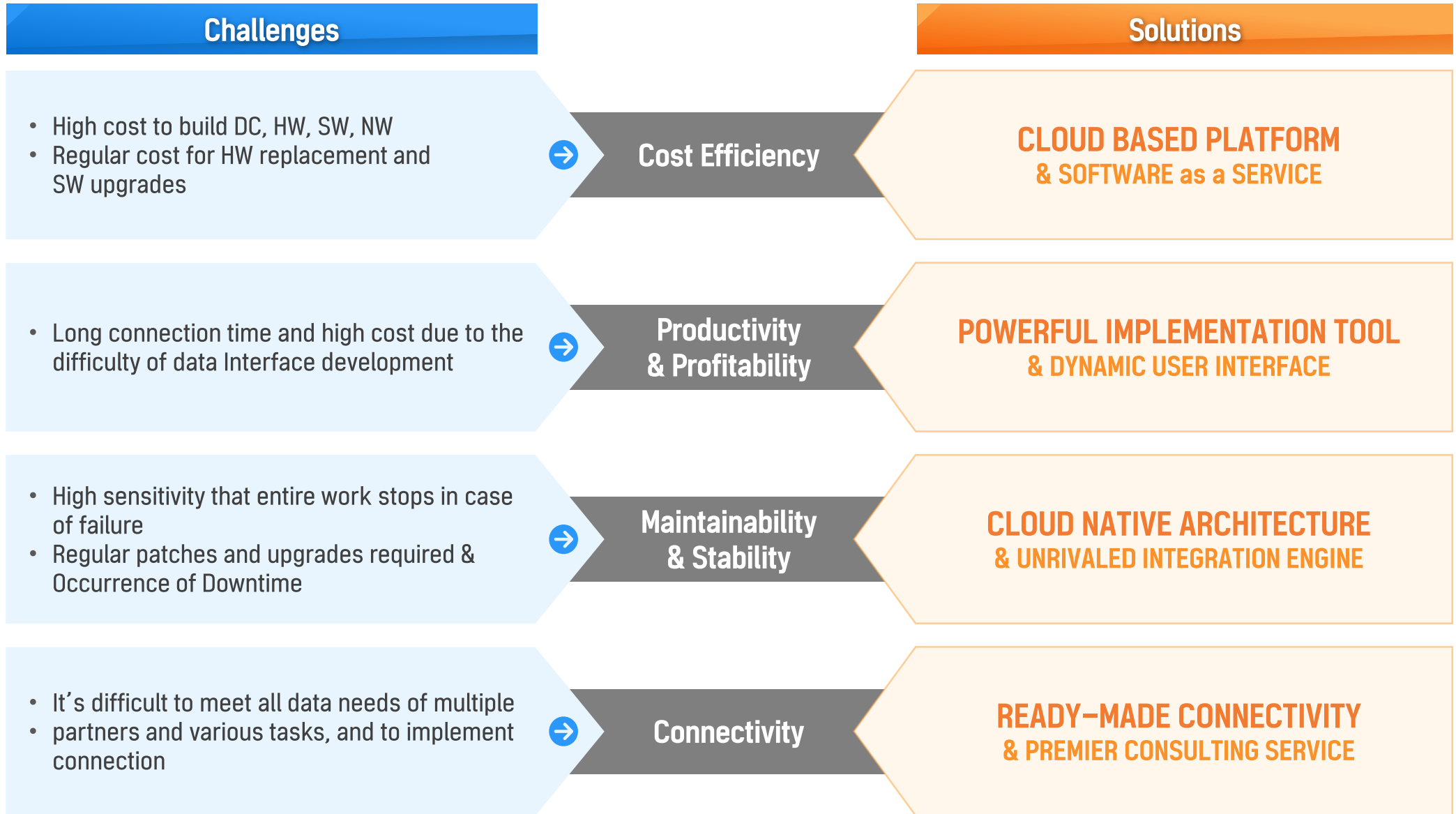
# Application Model : SaaS

We can provide the **SMARTLINK** Data Integration Solution as a service without separate construction or installation. Customers can utilize all functions of **SMARTLINK** that are upgraded based on the transaction volume they use, without construction costs and maintenance costs. If it is difficult to develop data transmission and reception on the customer's system, SMART Agent enables connection without system changes.





# Challenges & Solutions





# Values of Solution

## ① CLOUD BASED PLATFORM & SOFTWARE as a SERVICE

“ SmartLink realizes the following 4 benefits of the latest trend cloud based platform and SaaS. ”

### ▶ Software as a Service

SmartLink removes the requirement to build a system. It provides a full system solution on pay-as-you-go basis so that significant cost savings can be achieved.

### ▶ Accessibility

Since it's a Cloud-based platform, businesses can check their operations on the go from anywhere, anytime, any device.

## Data Integration Platform

### ▶ Scalability

SmartLink allows increasing its workload using current committed system resources. Elasticity enables the platform to add more system resources when the need occurs, drawing on capacity in the cloud.

### ▶ Flexibility

SmartLink is not only an easy-to-use platform but also a flexible one. You can expand your business without worrying about setting up a time consuming, data integration.



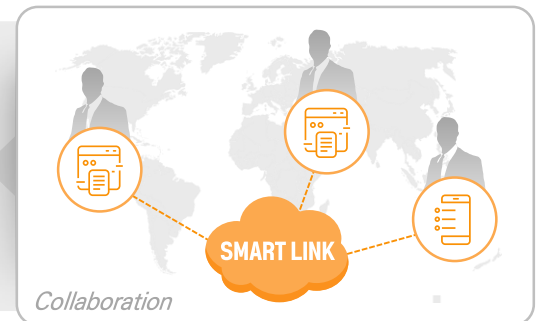
# Values of Solution

## ② POWERFUL IMPLEMENTATION TOOL & DYNAMIC USER INTERFACE

“ SMARTLINK provides a powerful data integration tool to increase productivity.”

### ▶ WEB Embedded Tool

Web embedded integration tool is provided so that it can be used anytime, anywhere, and development/application/monitoring can be done in one integrated site.



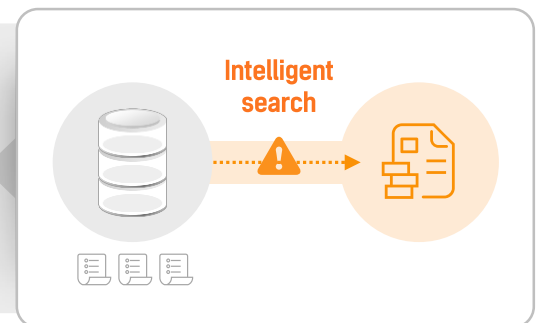
### ▶ Simple & Easy Configuration Tool

Anyone can set it without struggle using direct drawing method by component drag and drop, and the Data Flow can be grasped at a glance.



### ▶ EDI Asset Management Tool

The applied EDI layout and mapping script can be saved/managed in the Repository by version, and automatically finds similar assets to improve reusability when developing new data.





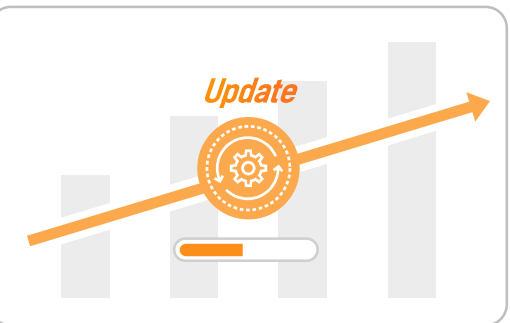
## Values of Solution

### ③ CLOUD NATIVE ARCHITECTURE & UNRIVALED INTEGRATION ENGINE

“ SmartLink comprises an Architecture with excellent maintainability and stability.”

#### ▶ DevOps + CI/CD + Container + MSA

It comprises Micro Service Architecture & Rolling Update method, which enables continuous upgrades of customer requirements without service interruption.



#### ▶ Zero Downtime Service

It provides uninterrupted service by deploying servers in multiple zones and distributing traffic through load balancing. In addition, a DR system has been built so that services can be restored in a short time even in the event of a disaster.



#### ▶ High Quality & Performance

A large number of customer services have a proven built-in interface engine to handle large volumes of transactions promptly and accurately.

**1M** Transaction in **1HR**



“ Zero Error Rate ”



# Values of Solution

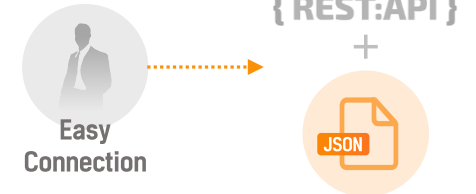
## ④ READY-MADE CONNECTIVITY & PREMIER CONSULTING SERVICE

“ SmartLink has a features that considers the difficulty of data connection. ”

### ▶ Logistics Data Integration SETs

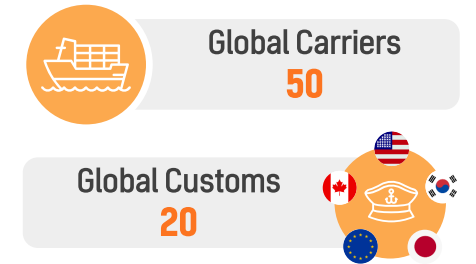
SmartLink provides about 100 frequently used logistics EDI integration JSON data and configuration set. It can easily integrate data with logistics partners using the easy-to-develop JSON Data + REST API.

#### “ SMARTLINK JSON SETs ”



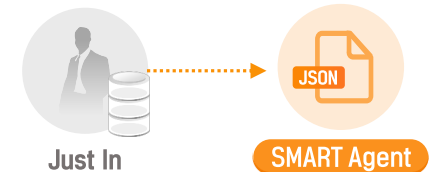
### ▶ Ready-Made Connection Service

SmartLink has already connected to about 20 global customs and 50 global ocean carriers, which in turn enables to connect customs pre-declaration (AMS / ISF / AFR / ACI) and BKG / SI / Tracking Data without any additional work.



### ▶ Data Migration Tool

By providing a tool that can extract and transmit data from the customer's system, it helps to connect easily without unnecessary additional work.










# 05 Data Integration Platform

## Key Features

### Key Features of the Data Integration Platform

Feature	Description
 <b>Map Builder</b>	<ul style="list-style-type: none"> <li>• Develop / apply mapper without using a local PC by providing user-specific directory space allocation and file management tools.</li> <li>• Validate to apply mapper which compiles and executes successfully only.</li> </ul>
 <b>Workflow Setup</b>	<ul style="list-style-type: none"> <li>• After creating communication, mapper, filter, converter and folder as components, interface flow can be designed by dragging, dropping and linking.</li> <li>• Interface process can be easily checked by each partner and message.</li> </ul>
 <b>Transaction Log</b>	<ul style="list-style-type: none"> <li>• Allow checking status of data transaction and searching with business key</li> <li>• Able to check status of each workflow and setup of transaction at a glance</li> <li>• Efficiently initiate each step of re-processing when handling error transactions or executing re-transmission</li> </ul>
 <b>EDI Repository</b>	<ul style="list-style-type: none"> <li>• Utilizable like MIG as layout of EDIFACT and X12 Message is visually identifiable</li> <li>• Automatically finds the most similar Map by turning EDI Layout into repository when developing message</li> </ul>
 <b>User Component</b>	<ul style="list-style-type: none"> <li>• When designing the data interface, we provide a component that allows users to directly insert script code.</li> <li>• Capable of developing a custom code and calling its functionality from the code in the script component.</li> </ul>





**Benefits of Getting SmartLink Platform**

**Manager**

- Infrastructure cost saving
- Increase resources efficiency

**Cost Efficiency**



**Developer**

- Shortened development time and easy implementation of demanding connection
- Simple management of EDI resource
- Minimized errors caused by infra and network

**Integration Productivity**



**Architect**

- Efficient resource utilization and increased scalability
- No need to worry about HW and SW Upgrades

**Maintainability**





**SMARTLINK**

# API Platform



# API Integration Platform

“ **Share information with partners through API** ”

The SmartLink API Platform is a powerful open-source API management platform that helps customers easily and securely share and manage their systems and services with external developers, partners, and customers.



## API Management

API creation, publishing, version management, monitoring capabilities, allowing for efficient lifecycle management of APIs.



## Developer Portal

Developers can explore the API catalog and review documented API usage instructions, and easily and quickly participate in application development.



## Security & Authentication

Uses security protocols such as OAuth and JWT to manage user authentication and authorization, enhancing security for API requests.



## Monitoring & Analytics

By analyzing real-time API usage, performance, and traffic, it allows for gaining insights into API operations and improving user satisfaction.

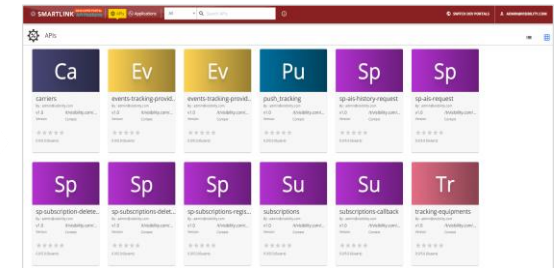


# Key Features

SmartLink API Platform consists of Developer/Publisher, Management Console, and Monitoring components.

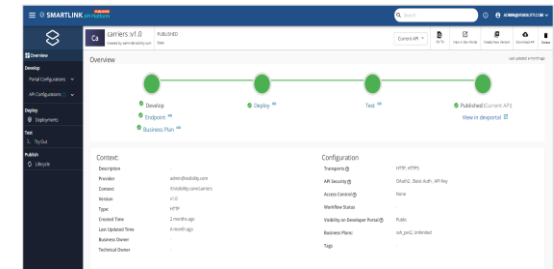
## Developer Portal

- A web-based portal for developers using the API.
- Access to API documentation, code samples, and other information provided by the API administrator.



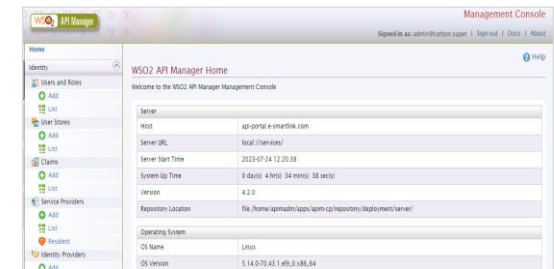
## Publisher Portal

- A portal used by administrator to create, publish, and manage the API.
- Performing all tasks necessary to create, publish, and document the API.



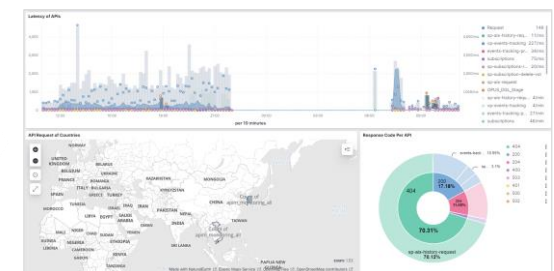
## Management Console

- API administrator to configure and manage the API Manager instance.
- Performing API management tasks such as API gateway, user management, logging and monitoring, and security and access control.



## Monitoring & Analytics

- Providing analysis and visualization tools for utilizing log data.
- Analyzing data and representing it in real-time through various charts and visualization web tools.
- Error monitoring, as well as the ability to check API usage, performance, and traffic statistics.





# Use Case – API Portal

Using the SmartLink API Platform, you can create your business as an API Product Catalog and share it with customers and partners.

The API Product Catalog interface displays a grid of API endpoints. Each endpoint is represented by a card with a 'Customer' label, a title, a brief description, and a 'View' button. The endpoints include:

- Schedules** (Customer): Retrieves Schedules for Point-to-Point and Vessels.
- Quotations** (Customer): Retrieves quotations and public tariff.
- Booking** (Customer): Request space for your Containerized cargo to be transported.
- Documentation** (Customer): Submit shipping instruction and retrieve draft B/L.
- Invoices** (Customer, Premium): Retrieve ocean invoice details.
- Visibility** (Customer, Premium): Retrieve Track & Trace Events based on DCSA Interface standard.

API Product Catalog

The Developer Portal interface for the Booking API shows the following details:

- Booking API**: Create a Spot or Contract booking request for cargo space and equipment on carrier's ocean vessel/voyage with optional inland transportation. Current functionality includes both carrier and merchant haulage requests and is limited to DRY & REEFER CARGO bookings.
- Servers**: A dropdown menu showing the server URL: `https://api-gw.e-smartlink.com/t/visibility.com/subscriptions/v1.0`. An 'Authorize' button is present next to it.
- Bookings** (Bookings Operations): A section containing two API endpoints:
  - POST** `/external-bookings`: Create Booking request.
  - PATCH** `/external-bookings/{bookingReference}`: Cancel Existing Booking Request.
- Bookings Status** (Retrieve Bookings Status): A section containing one API endpoint:
  - GET** `/bookings-status/creation`: Retrieve Booking Creation Status.

Developer Portal

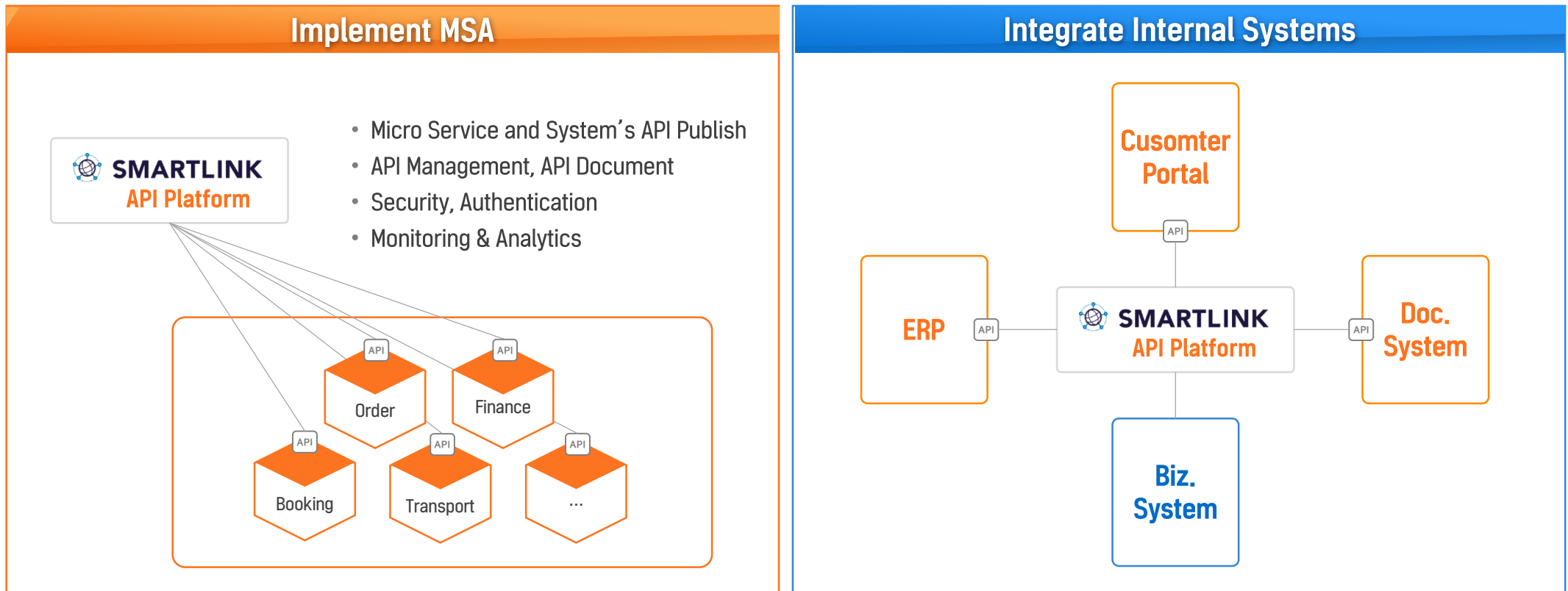
## Benefit

- Through APIs, you can easily share data with customers and partners, leading to improved business efficiency.
- Having an API Portal with minimal effort can enhance your business competitiveness.
- The integration of customer and partner data becomes less challenging, enabling increased accessibility.



## Use Case – API Gateway

Using the SmartLink API Platform as an API Gateway, you can facilitate the transition of your system to a Micro Services Architecture (MSA) structure and use it when integrating various internal systems through APIs.



### Benefit

- By not having to worry about API management, security, authentication, monitoring, and more, you can focus solely on implementing your business applications, making API integration easier.
- Accessing API documentation for each module and system becomes effortless, leading to enhanced development productivity.
- The ease of API integration also improves operational efficiency in system management.



**SMARTLINK**

# Visibility Service



# Real-Time Cargo & Vessel Tracking

“ Experience the power of real-time cargo visibility! ”

SmartLink integrates tracking data from over 70 shipping companies and real-time/historical AIS data from vessels worldwide. You can monitor real-time information about the current location of containers, estimated arrival times, and the current positions of vessels you are interested in their system directly.

**70+**  
Carrier's  
Event

**98%**  
COVERAGE of  
Carrier

Real-Time &  
Historical  
**AIS Data**

Data  
Integration  
**Specialist**

## ► Benefit

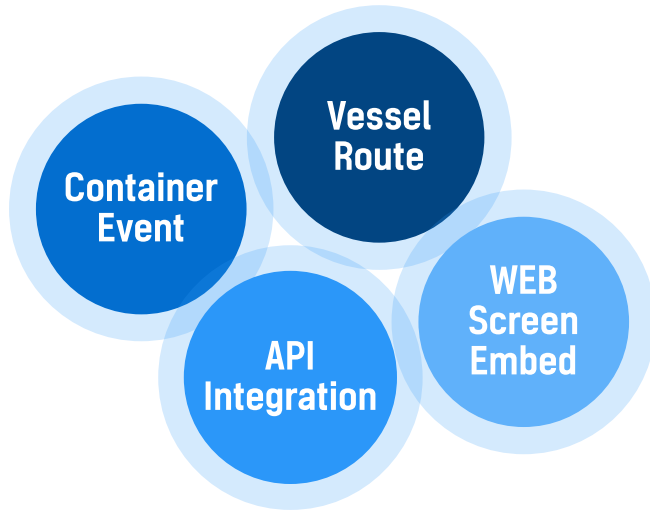
- You can see real-time vessel location of my cargo and all events of container.
- Ensuring cargo visibility enables you to develop more accurate logistics plans.
- Easy integration tracking data into your system via the SmartLink API.
- You can easily provide visibility screen to your customers by embedding it in your system.
- It's possible to send tracking data to third parties in the desired data format.





# Container Tracking

You simply need to register the containers wish to track with SmartLink to instantly monitor the real-time current location and event status of the containers. You can integrate through API or embed SmartLink web screen into your system, enabling directly access Container Events, estimated arrival times, and vessel routes.



EGHU8200440 40 HIGH CUBE

Carrier EGLV MBL# 142301545492

- SHANGHAI | Other**  
 Empty pick-up by merchant haulage  
 2023-07-08 09:00 (GMT +09:00)
- SHANGHAI | Other**  
 Received (FCL)  
 2023-07-10 09:00 (GMT +09:00)
- SHANGHAI | Departure**  
 ATD 2023-07-13 09:00 (GMT +09:00)
- SHANGHAI | Load**  
 2023-07-13 09:00 (GMT +09:00)
- CHARLESTON | Arrival**  
 ETA 2023-08-15 09:00 (GMT +09:00)

- Easily register containers and BLs for tracking via copy & paste from an excel file
- See container events, estimated arrival times, and vessel route/position/speed.
- Our APIs allow you to integrate our solution seamlessly into your system.
- Providing web screen embedding for container events and vessel routes.

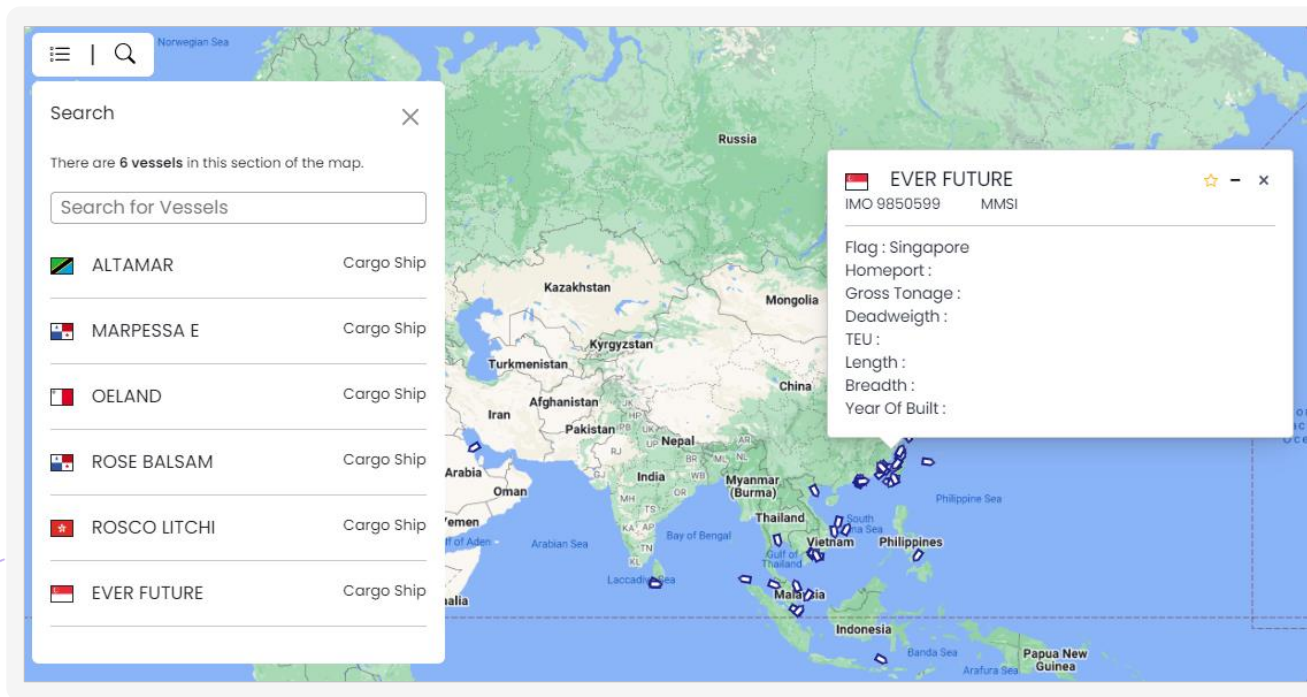




# Vessel Tracking

You can view every vessel worldwide on your screen.

Register your preferred vessels and get detailed information, including tonnage, dimensions, breadth, maximum draught, average speed, maximum speed, year built, homeport, activity status, and real-time AIS updates.



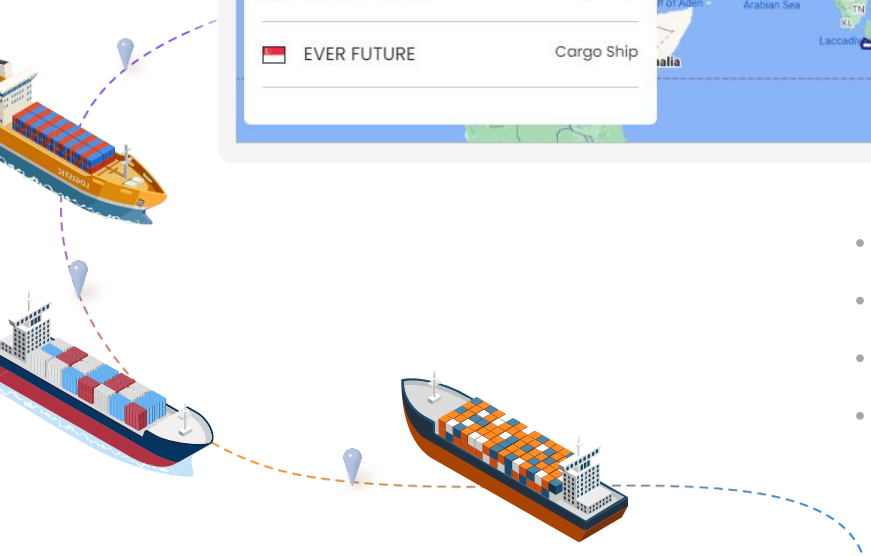
Real-Time  
AIS Data

Route  
ETA & ATD

Ship  
information

Manage  
My Fleet

- Track the current location and status of the vessel on the map.
- See estimated departure and arrival times for vessel departure and arrival ports.
- Get vessel navigational status and activities.
- Easily manage and track vessels of your interest by registering in my fleet.





## Key Features



Providing a modern UI that allows **intuitive** container & vessel position **visibility**.



**Seamless integration** with customer systems through an **API**.



**Real-time vessel tracking** based on **AIS data**



**Easy configuration** for **sharing** the visibility data with **partners**





**SMARTLINK**

# Customs Filing Service



# Professional Customs Declaration

## “Confident Global Customs Self-Filing Service”

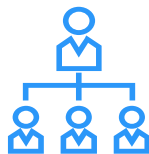
**Global Customs Security Filing without potential fines for each infraction.**

In a cloud-based single platform, we help improve the efficiency of the customs responsibilities covering global customs filing such as Automated Manifest System (AMS), Importer Security Filing (ISF), EU ENS, Japan AFR, and Canada eManifest.



### Reliable Self-Filing

We comply with local rules and customs procedures in multiple countries, with a deep understanding of customs requirements.



### Professional Services

Our customs rule experts take care of the customs process, so you don't face the potential fines for each infraction.



### Easy-to-use

We help increase filing productivity with Userfriendly UI and Template functions.






### Document Automation

Our data extraction system fills in the selffiling form according to your unstructured PDF data.



# Service Coverage

Tapped into at least 20 years of global customs services, and we're equipped with the skill set and ability to handle advanced filing services for most of the global customs authorities as follows:

Country	Customs Rule	Filer
 <b>U.S.A</b>	<b>ACE</b> (Automated Commercial Environment)	Ocean Carrier / Freight Forwarder
 <b>Canada</b>	<b>ISF</b> (Import Security Filing)	Ocean Carrier / Importer (Freight Forwarder)
 <b>Japan</b>	<b>ACI</b> (Advance Commercial Information)	Ocean Carrier / Freight Forwarder
 <b>Europe</b>	<b>AFR</b> (Advance Filing Rules)	Ocean Carrier / Freight Forwarder
 <b>Korea</b>	<b>ENS</b> (Entry Summary Declaration)	Ocean Carrier
 <b>Korea</b>	<b>KAMS</b> (Korea Air Manifest System)	Freight Forwarder



**SMARTLINK**

# Document Automation



# Automatic Information Processing

## “ Document Auto Processing Service ”

### Process your document automatically with SmartLink

Stop spending hours on manual paperwork. SmartLink document automation service will help you to save precious time in document processing. Simply upload your PDF file such as House BL, Invoice, Shipping Instruction to SmartLink Platform, and the data will all be set to be transferred to other formats you choose.

#### ■ Capture data with high accuracy

Implemented fast and accurate data capture from all documents, received from different channels.

#### ■ Cost Reduction

Cost in document processing will be reduced due to the decreased manual work.

#### ■ Integrate various business Logic

Integrate with various business logic, specially experienced in Logistics, Forwarding and Shipping.

#### ■ No More Room for Human Error

Manual document processing is vulnerable to human errors. Document automation will get rid of the risk.

#### ■ Convenient to compare

Double check the important information between original and extracted data.

#### ■ Any Document in Any Format

Any document such as Air Waybill, Bill of Lading, Commercial Invoice, Packing List can be transformed easily.

### Where to use it?

- Import invoice document received from Logistics Service Provider into your system, and interface with your ERP system.
- Import Master/House B/L received from your partners into your system.
- Share data that is transformed from document in your system with your partners.
- Use Global Customs Filing such as AMS/ISF/AFR/ACI by simply uploading your document.

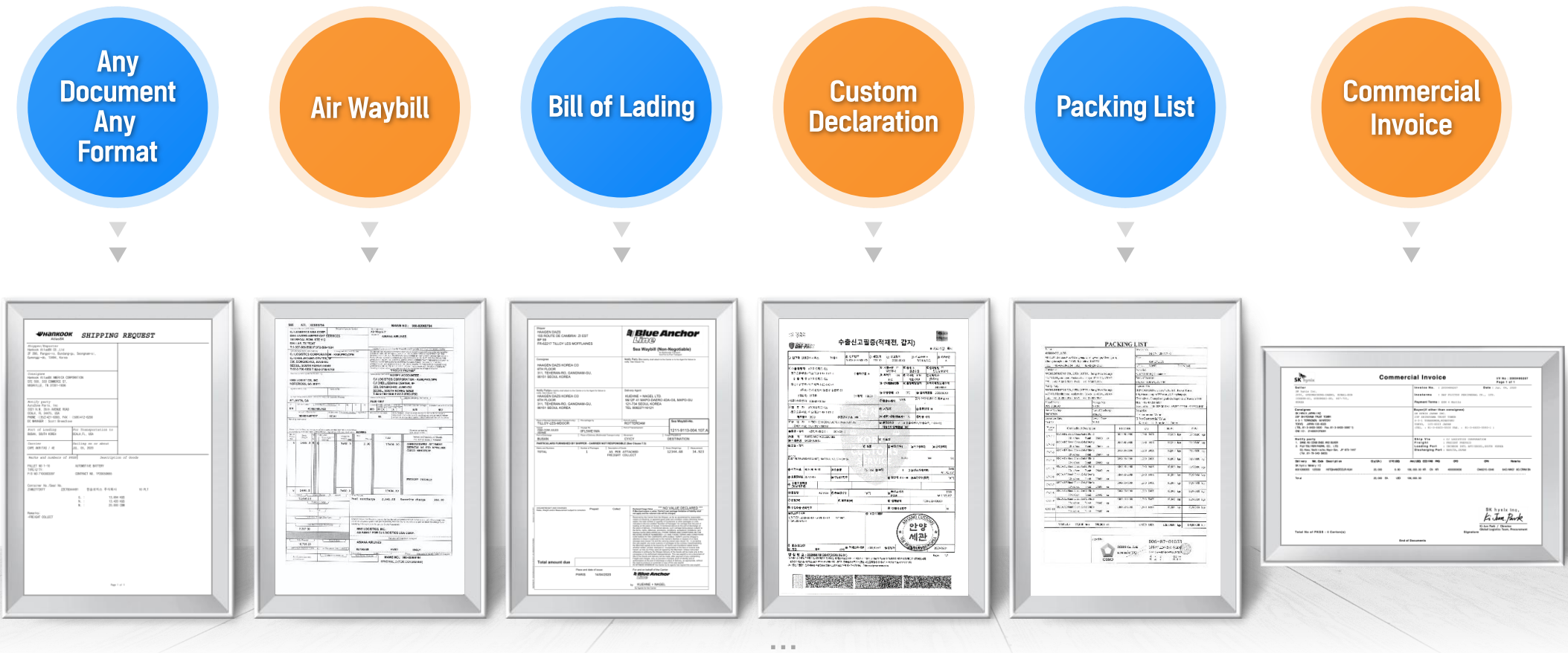




# 02 Document Automation Service Coverage

## Support documents

- Many documents in various business need to be handled daily.



“ SmartLink can apply for Any document in Any business with high flexibility. ”



# Customer References

- Over 300 Global Logistics Companies are using the SmartLink service all over the world.

## Carriers



## Port Terminals



## Freight Forwarders

