



Simplify Integration, Accelerate Transformation: Unlock Your Data with DataSpider

DataSpider 
Data Integration Middleware

“Data is Gold”

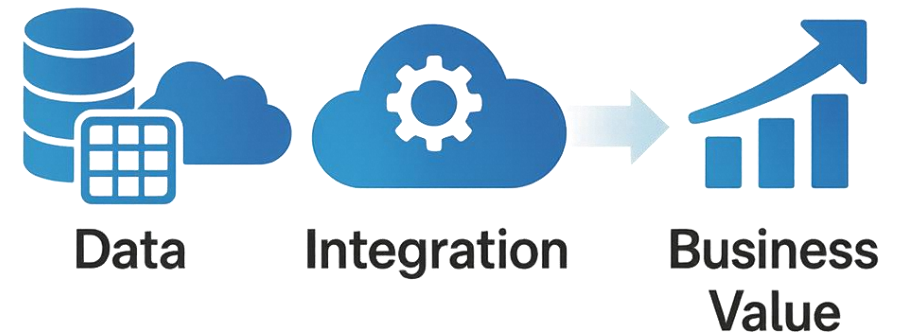
Data is a resource as valuable as gold. When collected, managed, and analyzed properly, it transforms into a strategic asset that drives growth and innovation.







“Data integration isn’t just about connecting systems. It also includes connecting insights , opportunities and actions.”

What is Data Integration?

- Data integration is the process of combining data from different sources into a unified, consistent, and accessible format to provide a complete view of information across an organization.
- Extracting data from various systems (e.g., ERP, CRM, machines, IoT, spreadsheets)
- Transforming it into a common structure or format
- Loading into a central system (e.g., datawarehouse, data lake, or real-time dashboard)



Why Industries Need Data Integration?

- **Break Down Silos** : Connect data across ERP, CRM, IoT, Cloud, and legacy systems into one unified view.
- **Enable Real-Time Decisions** : Access accurate, up-to-date data to drive faster, smarter business decisions.
- **Boost Efficiency & Reduce Costs** : Automate data flows, eliminate duplication, and reduce manual processing.
- **Drive Innovation Across Industries** :
 -  **Manufacturing**: Predictive maintenance, supply chain optimization
 -  **Healthcare**: Patient-centric insights, improved care delivery
 -  **Financial Services**: Fraud detection, personalized products
 -  **Retail & E-commerce**: Customer analytics, dynamic marketing

Challenge of Data Integration

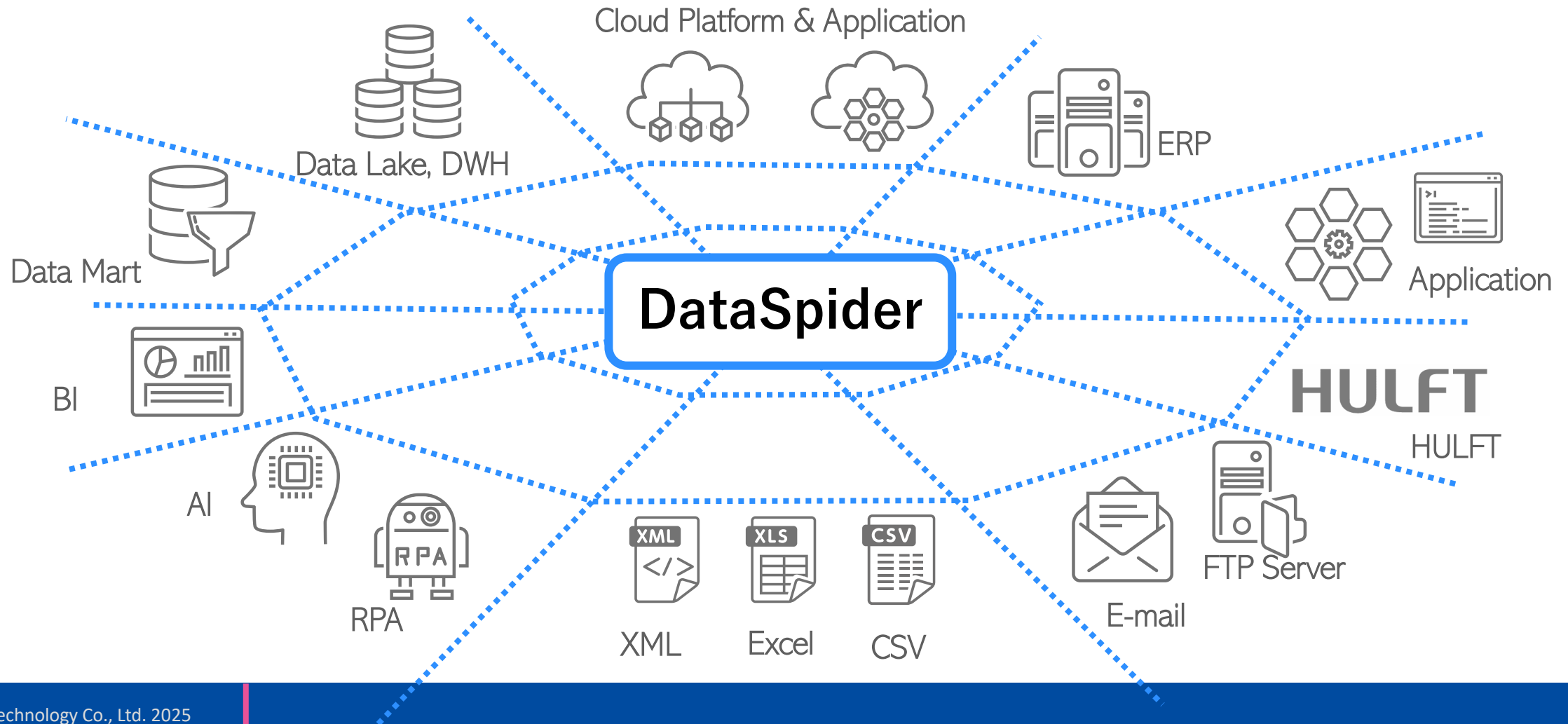


- **Data Silos**
Information scattered across Modern and legacy systems makes it difficult to gain a unified view
- **High Complexity**
Traditional integration requires heavy coding, long project timelines, and expensive maintenance.
- **Inconsistent**
Duplicated, outdated, or incomplete data creates inaccuracies and undermines trust in analytics.
- **Real-Time**
Delays in data synchronization prevent timely decisions and reduce agility.
- **Scalability**
Existing integration methods often struggle to keep up with business growth and new technologies.

DataSpider Servista

Overview & Use Cases

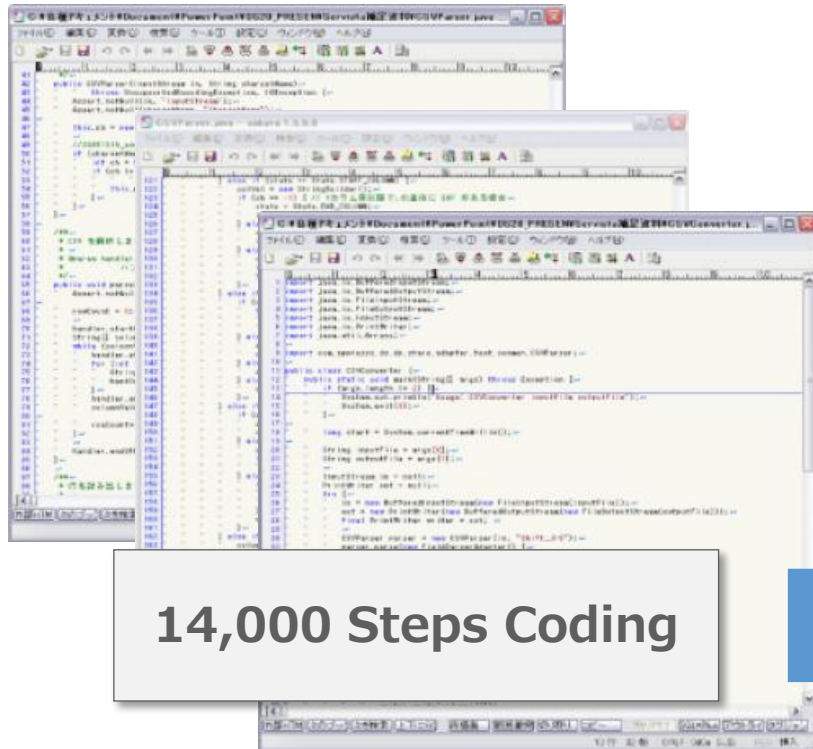
System Integration, Data Conversion and System Automation **without programming**



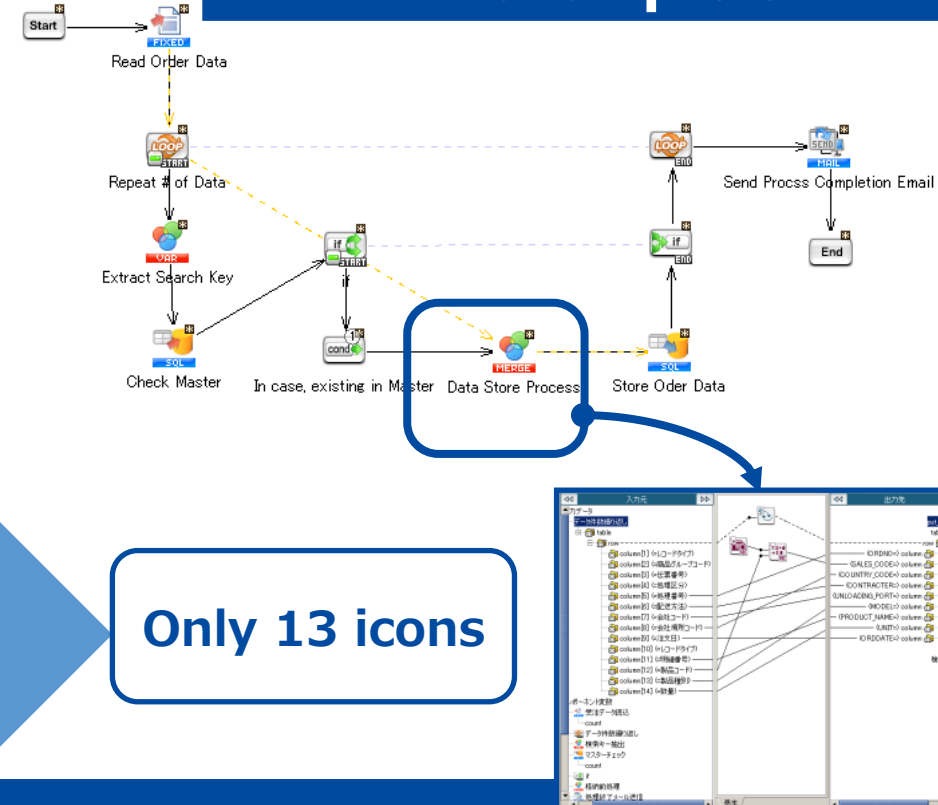
Intuitive Development by Drag & Drop / Non-Programming

Example: Receive fixed-length order files, match with product master DB, save them in SQL server, and then send completion reports by email

Java scratch Coding



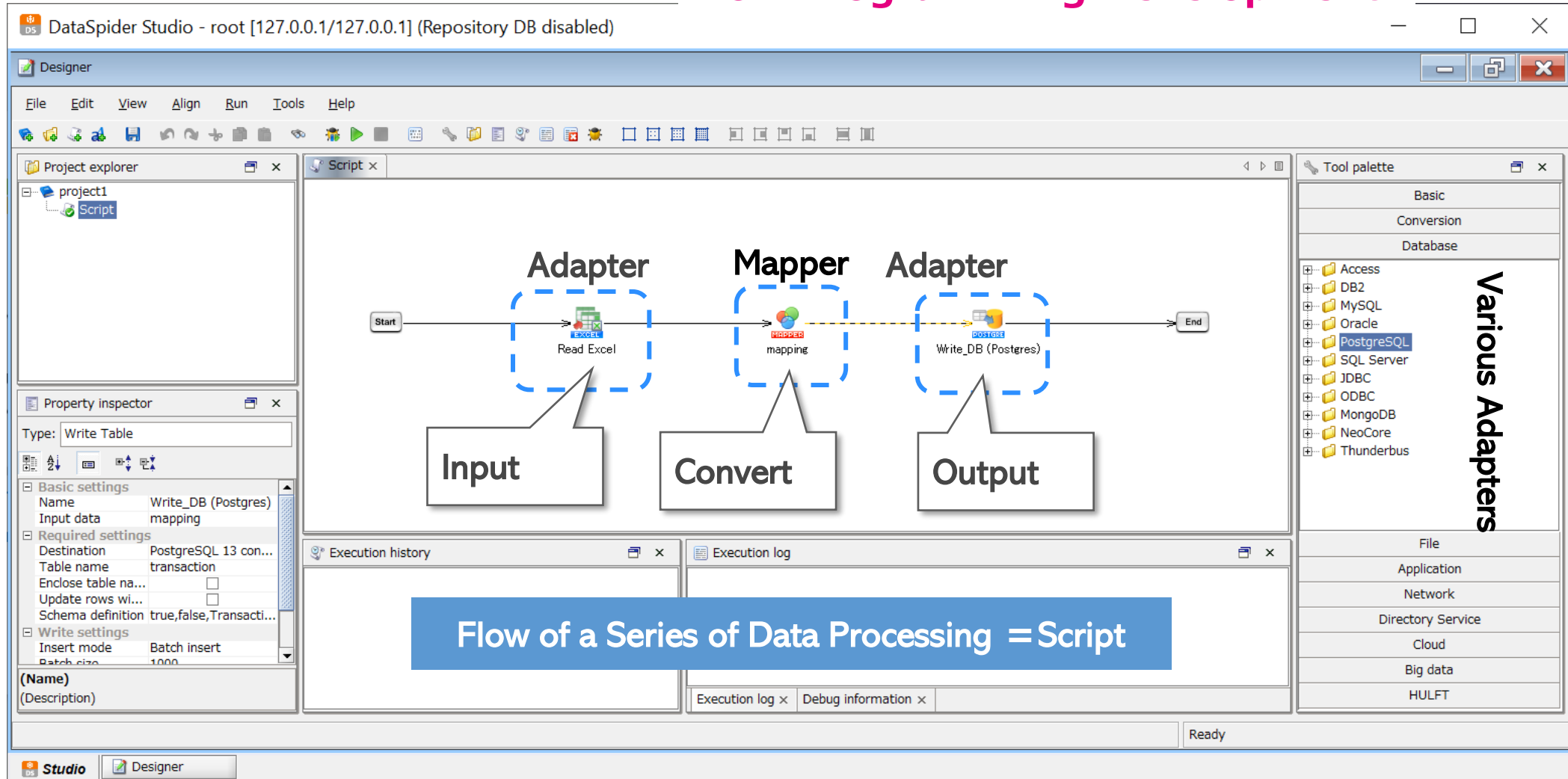
Development with DataSpider



DataSpider GUI of DataSpider and Development Image

DataSpider Studio

Easy, Simple and Efficient
Non-Programming Development





DataSpider ensures easy connections with various data sources

Database

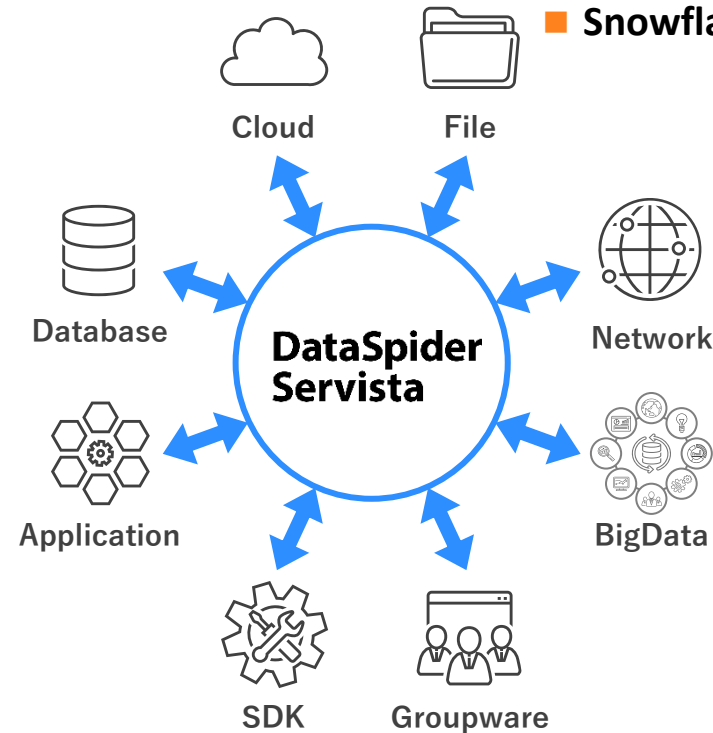
- Access
- DB2
- DB2 for i
- MySQL
- Oracle
- PostgreSQL
- SQL Server
- JDBC
- NeoCore
- Shunsaku

Application

- SAP
 - SAP
 - SAP Table Query
- Dynamics 365 for Customer Engagement
- Tableau
- Dr.Sum EA
- Sedue
- SVF (Super Visual Formade)
- DataRobot
- HULFT

Cloud

- Amazon Web Services
- Microsoft Azure
- G Suite (Gmail, Drive, Sheet)
- Google Cloud Platform
- kintone
- Box
- Snowflake



Groupware

- IBM Domino
- IBM Notes

Big Data

- Apache Hadoop

File

- CSV
- Excel
- HTML
- XML
- Fixed format of text
- Variable format of text
- File operation
- FileSystem(Base64)

Network

- FTP
- JMS
- Web
- WebServices
- Mail (POP/IMAP4/SMTP)
- REST

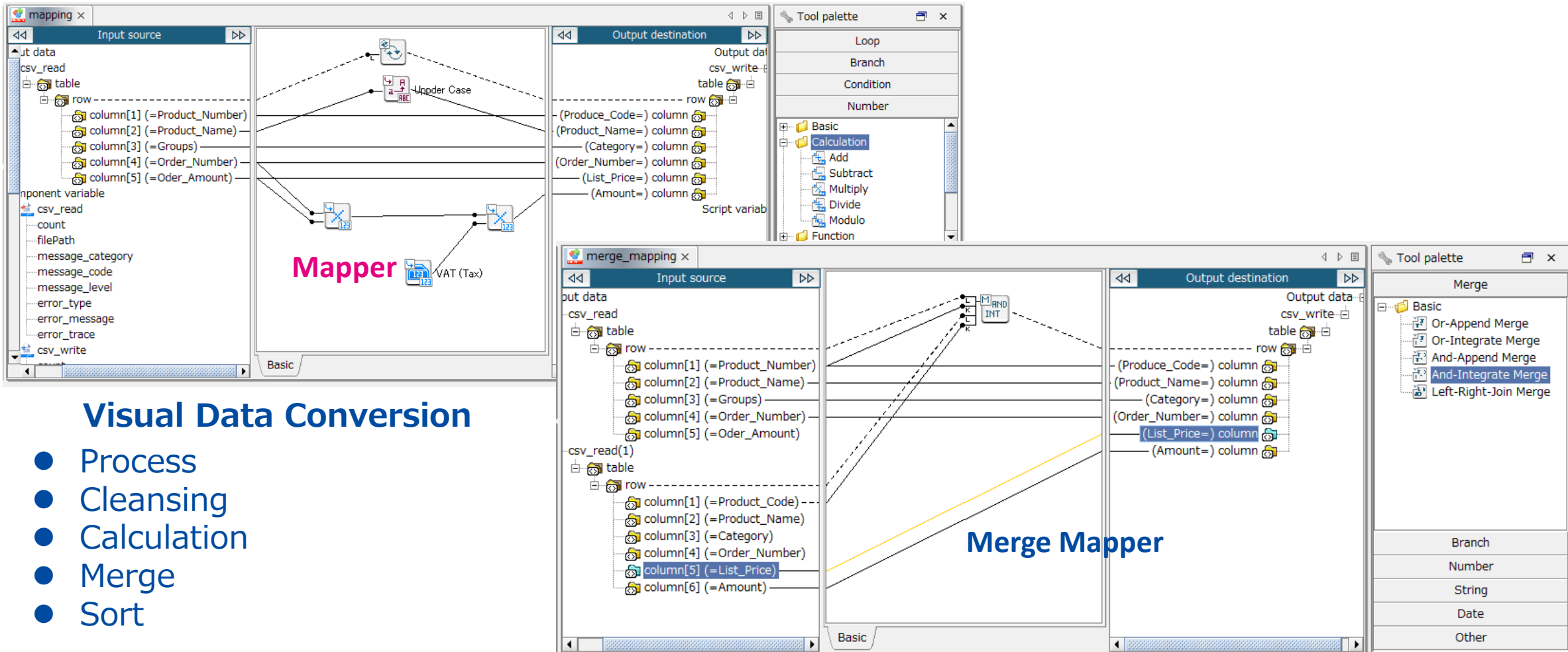
Directory Service

- Active Directory

SDK

- Java based SDK (Software Development Kit)

Convert an input data to an expected output format by “Mapper”



The image displays two screenshots of the DataSpider Mapper interface. The top screenshot shows the 'mapping' window with an 'Input source' (csv_read) and an 'Output destination' (csv_write). The 'Mapper' window is open, showing a visual flowchart with a 'VAT (Tax)' component. The 'Tool palette' on the right lists various components like Loop, Branch, Condition, Number, Basic, Calculation, Add, Subtract, Multiply, Divide, Modulo, and Function. The bottom screenshot shows the 'merge_mapping' window with an 'Input source' (csv_read) and an 'Output destination' (csv_write). The 'Merge Mapper' window is open, showing a visual flowchart with a 'Merge' component. The 'Tool palette' on the right lists various components like Merge, Or-Append Merge, Or-Integrate Merge, And-Append Merge, And-Integrate Merge, Left-Right-Join Merge, Branch, Number, String, Date, and Other.

Visual Data Conversion

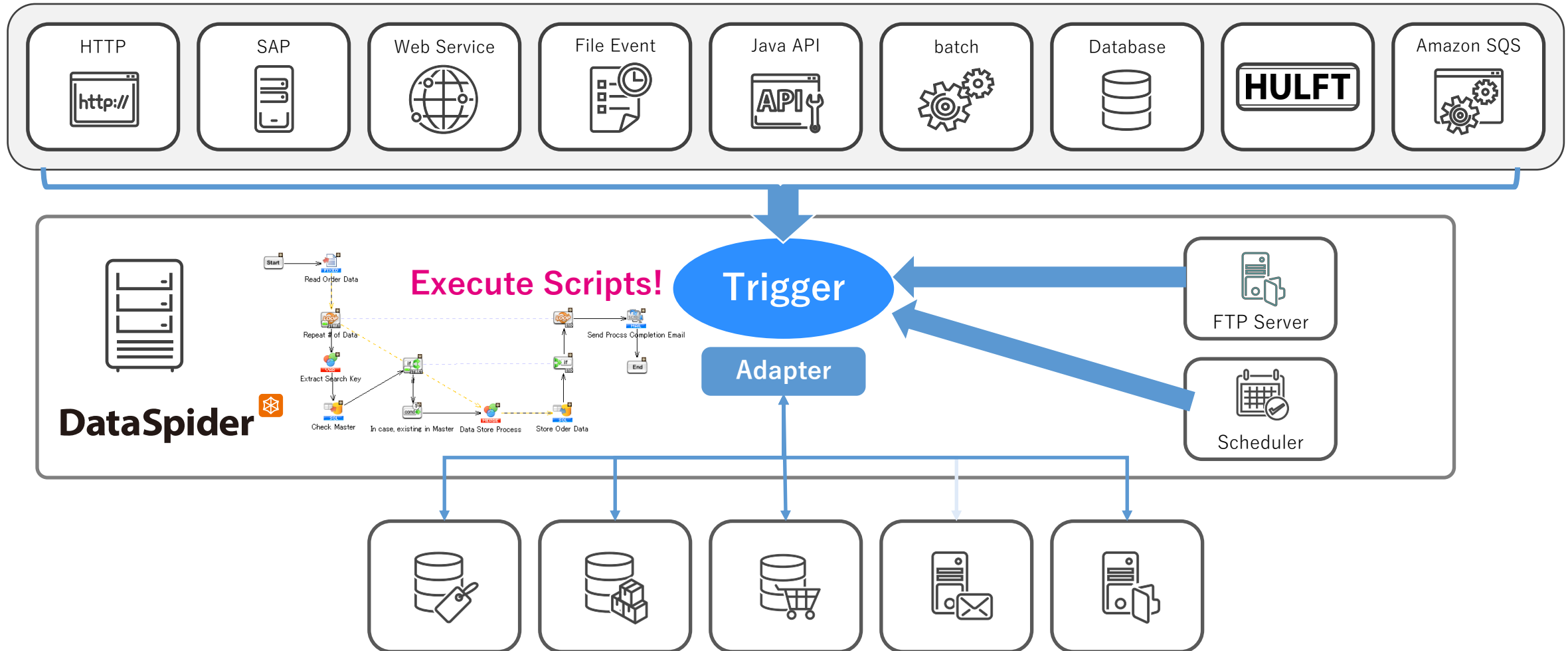
- Process
- Cleansing
- Calculation
- Merge
- Sort

Mapper

Merge Mapper

DataSpider DataSpider Triggers (=Automation)

The process flows (=scripts) are automatically executed by various triggers.



Users can output specification documents for the created processes by a single click

Possible to output specification documents in HTML format

- ✓ The documents can be used as deliverables from development, information materials of settings for maintenance, and handover documents
- ✓ Users can output a report that compares two different versions of processes and allows users to check the differences between them

Specification Document

The screenshot shows a 'Script Specifications' document for a process named 'http-triger-db'. It includes a 'Summary' section with the name and a 'Detail' section showing the version (9), date modified (2023/10/31 12:4), and script variables. A 'Screenshots' section displays a flowchart of the process logic, and a 'Logic icon list' table at the bottom provides details for each step.

No.	Icon	Input	Output
1	[Icon]	(Numeric: Constant)	None
2	[Icon]	[Iterate specified node]	exec_select:row
3	[Icon]	[Replace by CSV Table]	exec_select:Transaction_Type

Version Comparison Report

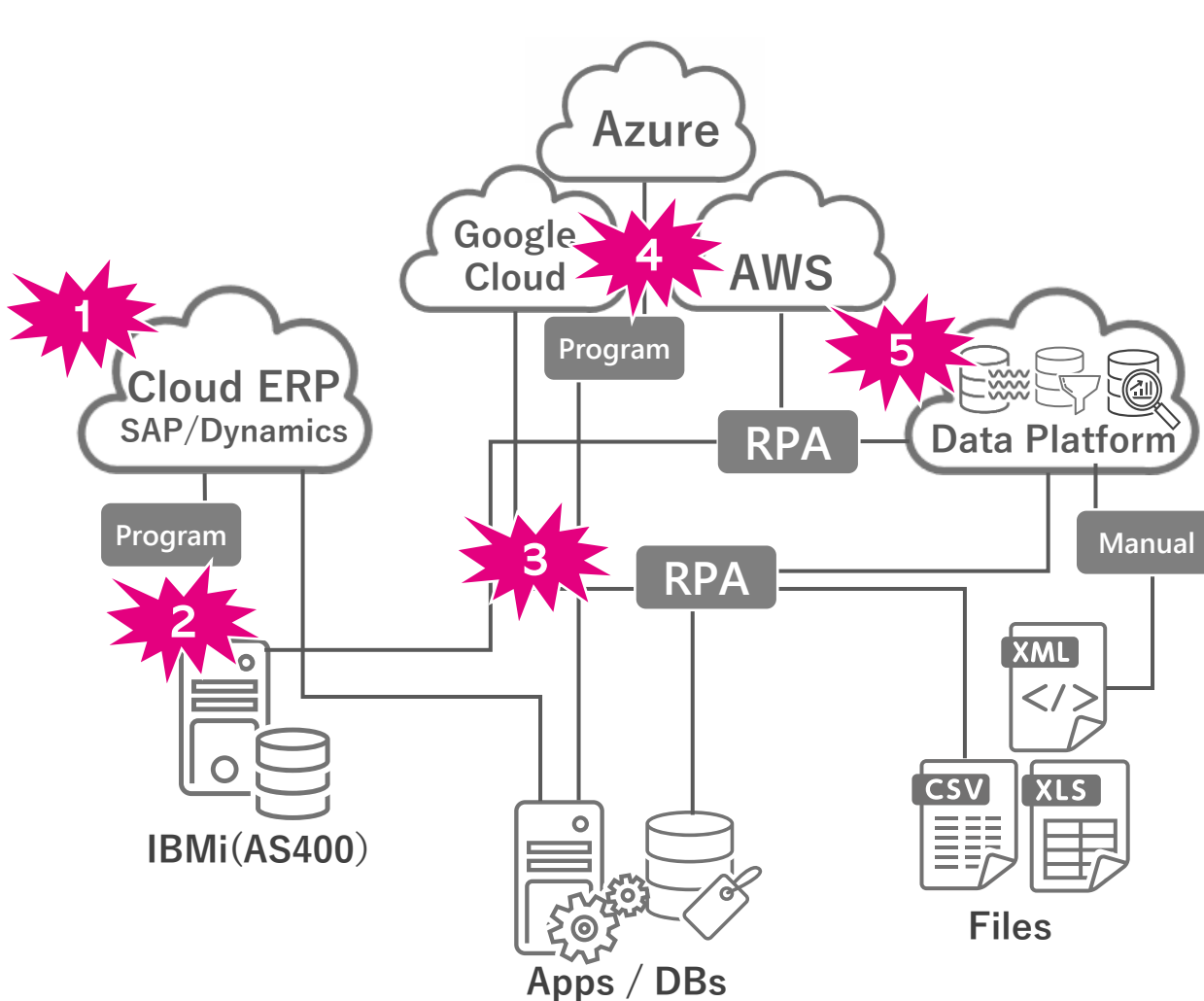
The screenshot shows a 'Script Version Comparison Report' comparing two versions of a process. It includes a 'Basic Information' section with a 'Script picture' showing the flowcharts for both versions. A 'Component' table lists the components and their states, with new additions in green, changes in orange, and deletions in gray. A 'Details' section provides further information about the process flows.

No.	Name	Types	State
1	start	start	Update
2	Delete file from FTP Server	Delete File/Directory	Update
3	Delete 2 records from Transaction tables	Execute Update SQL	Update
4	get table data	Read Table	Add
5	end	end	Update

- ✓ New additions displayed in **green**
- ✓ Changes displayed in **orange**
- ✓ Deletions displayed in **gray**

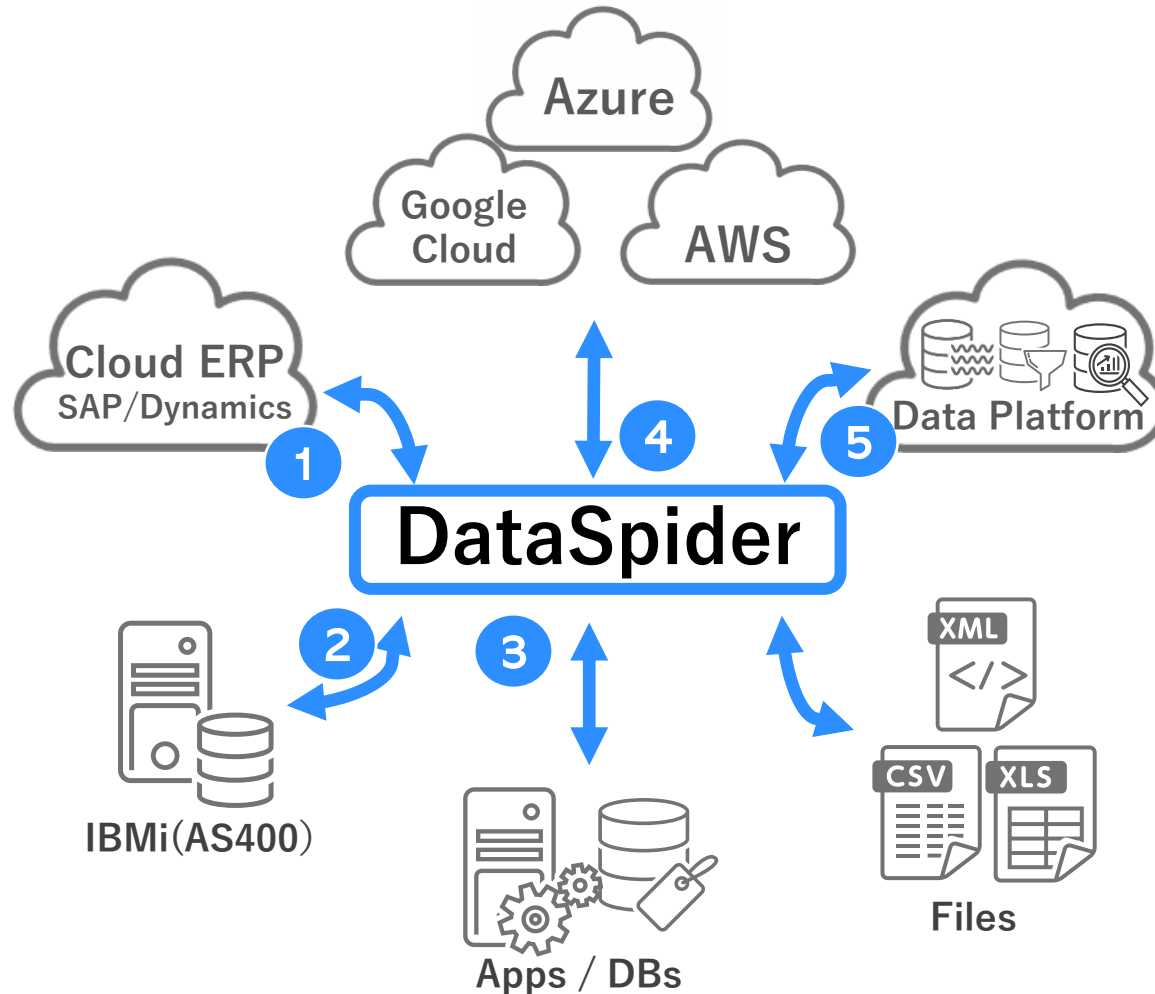
Issues and Solutions for System and Data Integration in ASEAN over the next 3 years

Issues for system and data integration in ASEAN over the next 3 years



- 1** **Difficult to integrate Cloud ERP and sub-systems**
Integration to SAP HANA and Dynamics requires knowledge and experience
- 2** **No IBMi engineer available to get data**
Lack of engineers makes it difficult to migrate from IBMi to other systems and utilize data
- 3** **Struggle with System Integration with RPA**
System integration & data conversion is difficult with RPA. Also, the performance is not as expected.
- 4** **Hard to connect between On-premise and Cloud**
System is being migrated to the cloud, but it is difficult to operate in coordination with on-premise systems.
- 5** **Scattered data & mixed format for Data Utilization**
DataPlatform construction is difficult due to scattered data and disparate data formats.

Solutions for system and data integration in ASEAN over the next 3 years



- 1 Easy and reliable integration with cloud ERP**
Non-programming integration with cloud ERP using SAP adapters and REST adapters
- 2 Simple connection to IBMi without knowledge**
DataSpider has a dedicated data read and write adapter for IBMi without using any computer language
- 3 Dedicated tools for system integration & automation**
RPA is good at automating human operations, not SYSTEM. DataSpider is good at SYSTEM Integration & automation
- 4 Flexible integration between on-premise and cloud**
Wide range of dedicated adapters for Azure, AWS, Google Cloud and many on-premise systems.
- 5 Build Data Analysis / Utilization Platform easily**
Develop data collection, data cleansing, and data storage without programming, and execute automatic operation.

1 Easy and reliable integration with cloud ERP

Non-programmable MS Dynamics & SAP S/4 HANA System Integration

MS Dynamics 365 Integration

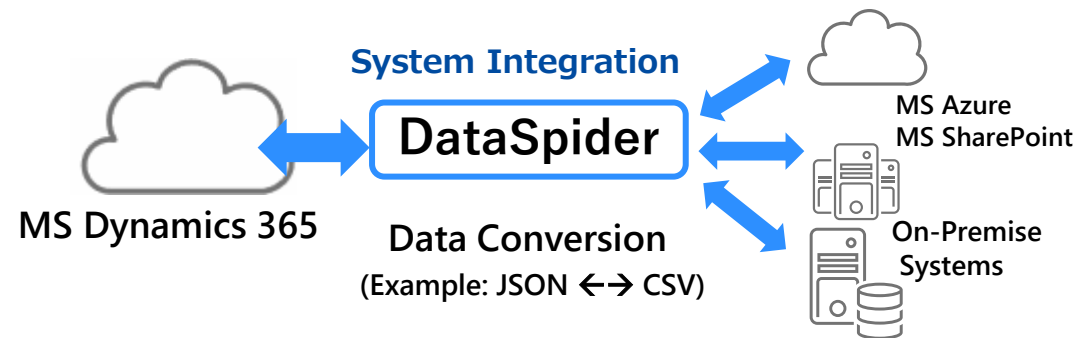
(MS Dynamics 365 & Sub-System)

Issues

- Difficulties in integrating Dynamics and on-premise systems.
- Large efforts required to develop data conversion

Solution

- Non-programming Dynamics system integration and data Conversion using DataSpider.



SAP S/4 HANA Integration

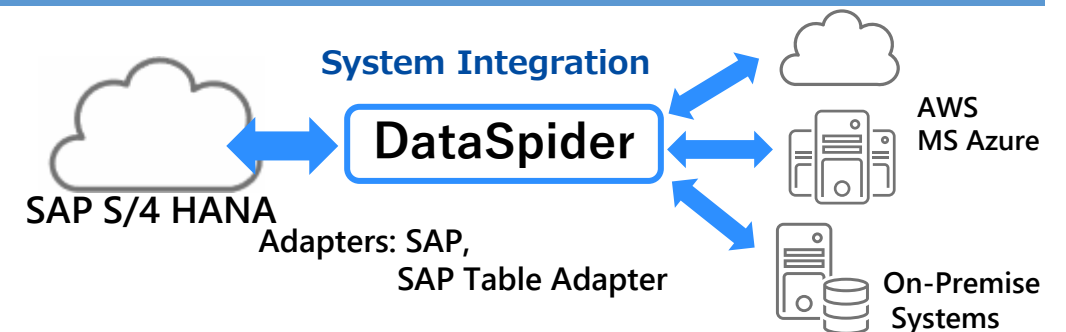
(SAP S/4 HANA & Sub-System)

Issues

- Add-ons are difficult to modify for SAP renewal
- ABAP engineers to develop add-ons are expensive, development costs soar.

Solution

- Only the standard BAPI interface is used, while the integration with subsystems is developed and operated by DataSpider.



No more SAP Add-on for SAP HANA system integration with Sub-Systems

DataSpider  Significant development and operating costs are reduced by using DataSpider to achieve other system integration using only standard SAP modules.

Customer
Issues

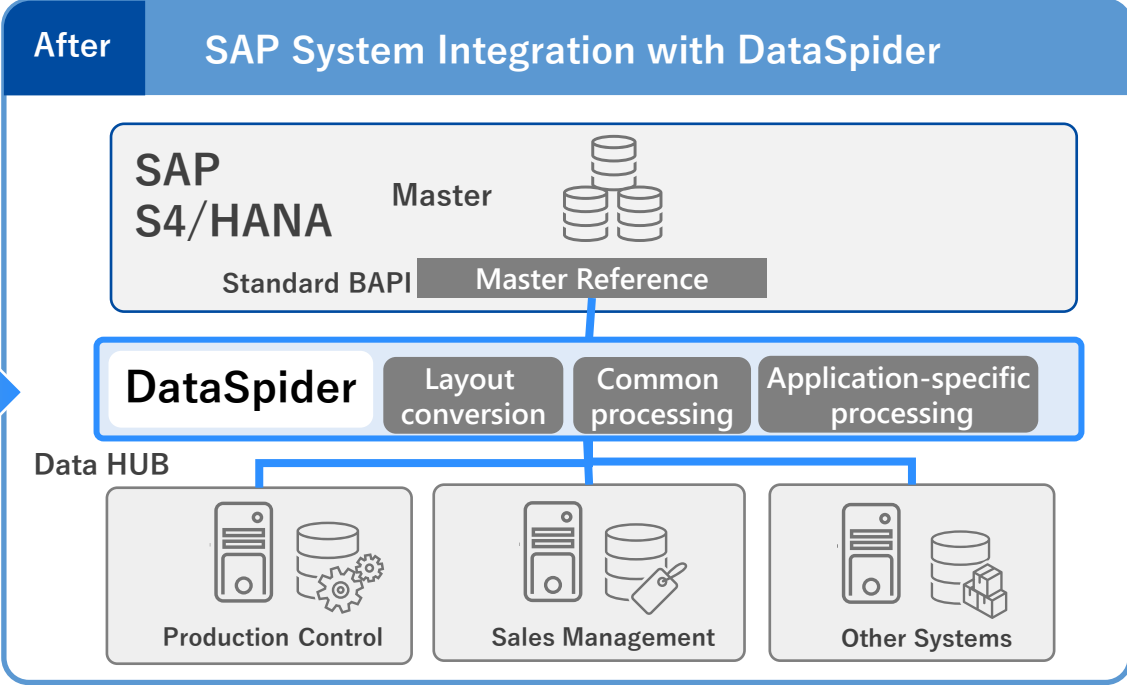
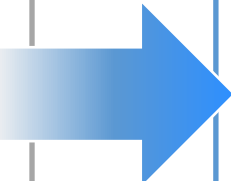
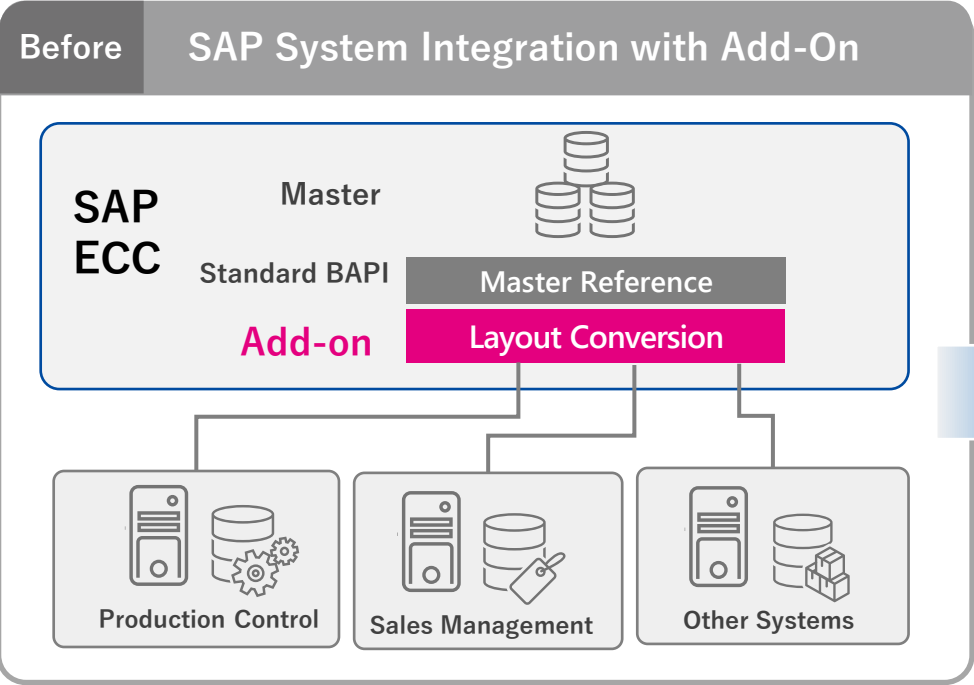
- ❶ **Bloated costs and man-hours due to SAP add-on development**
- ❷ Need for use data governance and utilization with DX in mind
- ❸ Need for a basic infrastructure to support global management

Effects of
DataSpider

- ❶ Cost reduction by SAP standard modules
- ❷ Data HUB construction and standardization formulation
- ❸ Ensure ease of integration with non-programing technology

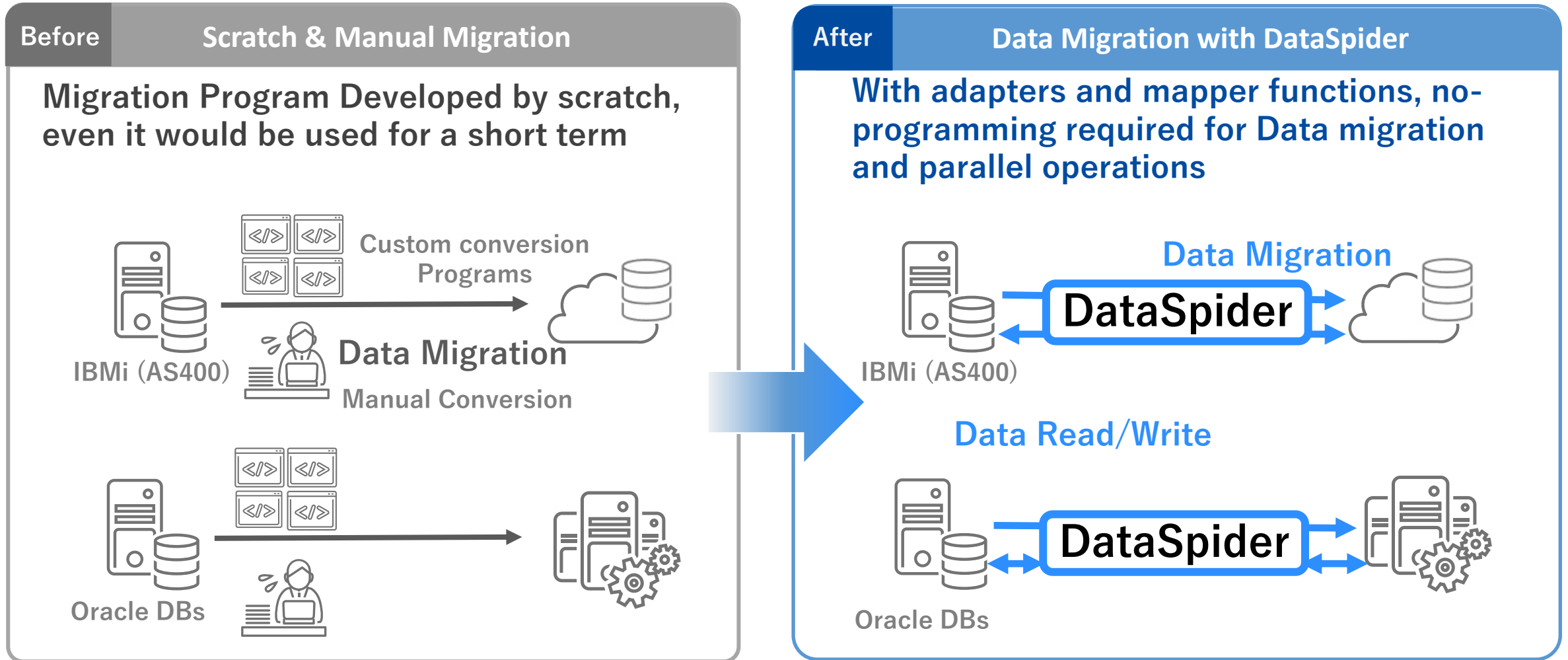


- ❶ Improvement of development productivity and maintenance
- ❷ Universalization and commonality of interfaces
- ❸ Overall optimization including group companies



2 Simple connection to IBMi without knowledge

You can easily read and write data form legacy systems for migrations



Integrate Legacy IBMi System and Kintone(Cloud Applications)

DataSpider 

Modernize the legacy IBMi (AS/400) system to develop a platform with capabilities to rapidly adapt to business needs

Customer
Issues

- ① Difficulty in maintaining and adjusting **30 years old core system**
- ② **Heavy manual workload** due to various Excel based systems created by each workplace.

Effects of
DataSpider

- ① Easier integration between back-end systems and front-end systems
- ② Automation of data integration that was previously done manually



POINT

- ① Easily utilize data stored in legacy system systems for front-end applications
- ② Automate manual work, reduce maintenance workload by 1/10.

Employees
(Users)



Front-End
User Applications



Kintone

Driver management ledger

Training record

Lost and found management

etc.

over 150 applications

System Integration

Between Front & Back-end System

DataSpider

Back-end Systems

Core system

Driver data

Vehicle data



IBMi
(AS/400)

Business system

Accident data

Operational Information



DBs

Bus

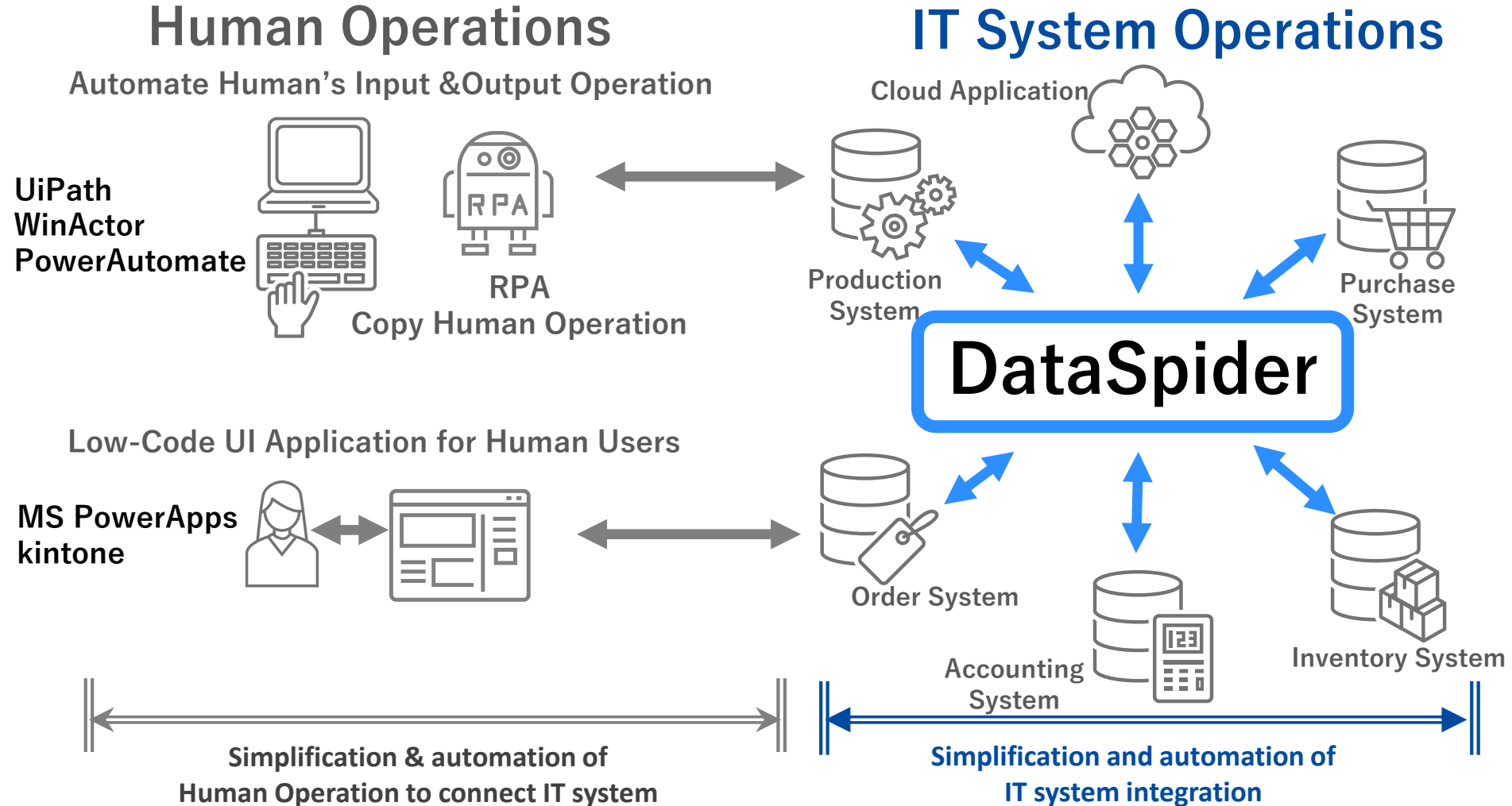
Drive recorder

Digital tachograph



3 Dedicated tools for system integration & automation

DataSpider is Specialized in Integration & Automation for IT systems



DataSpider solves issues of system integration, which is difficult for RPA

DataSpider System integration platform with SAP HANA, IBMi, and other systems

Issues

❶ System integration between SAP HANA and existing legacy systems is required.

❷ Started development using RPA but encountered various challenges

Steps

❶ Session to understand differences between DataSpider & RPA

❷ Conducted POC for verification in customer environment

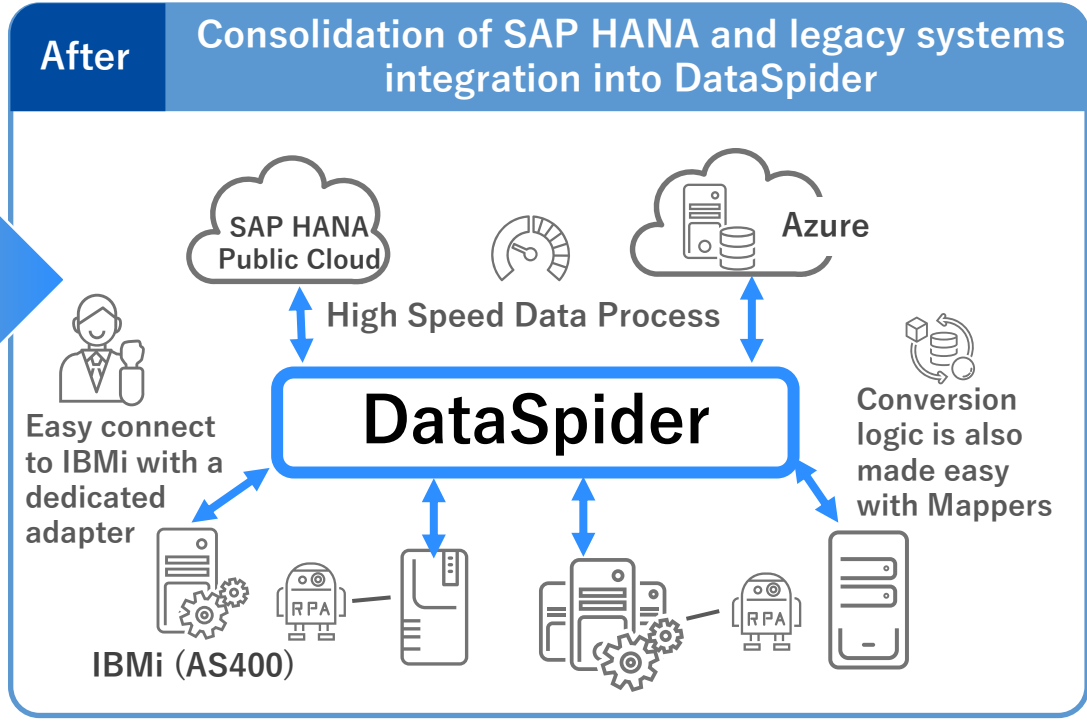
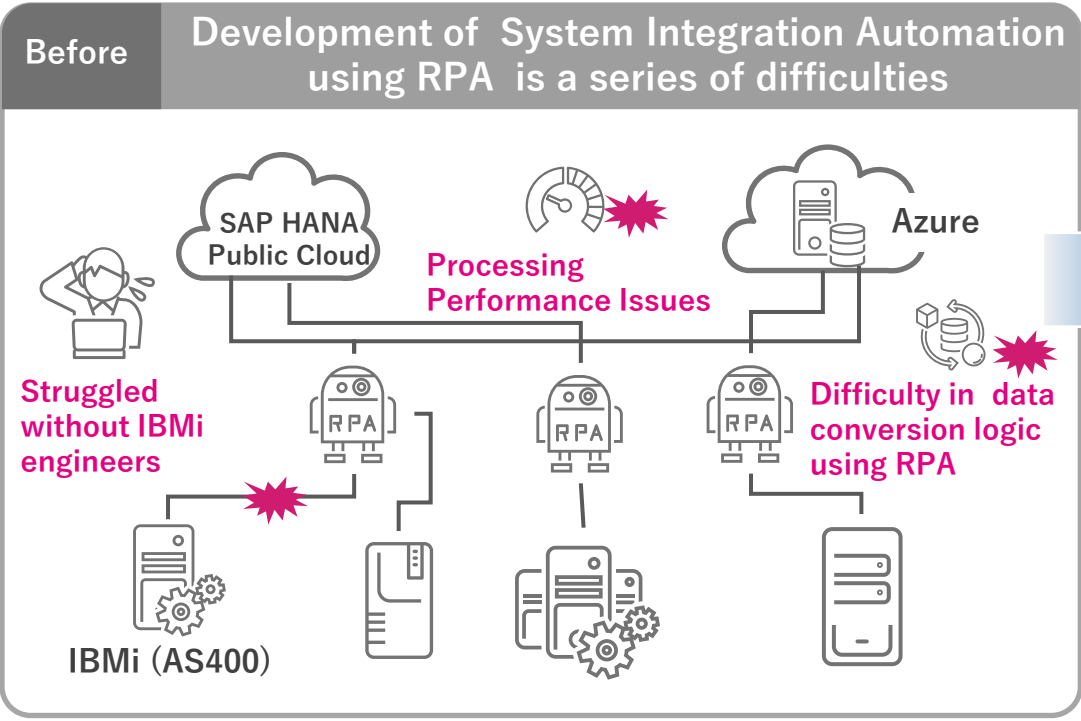
❸ Hands-on training in Thai and

Point

❶ Clarification of the scope of application of DataSpider and RPA

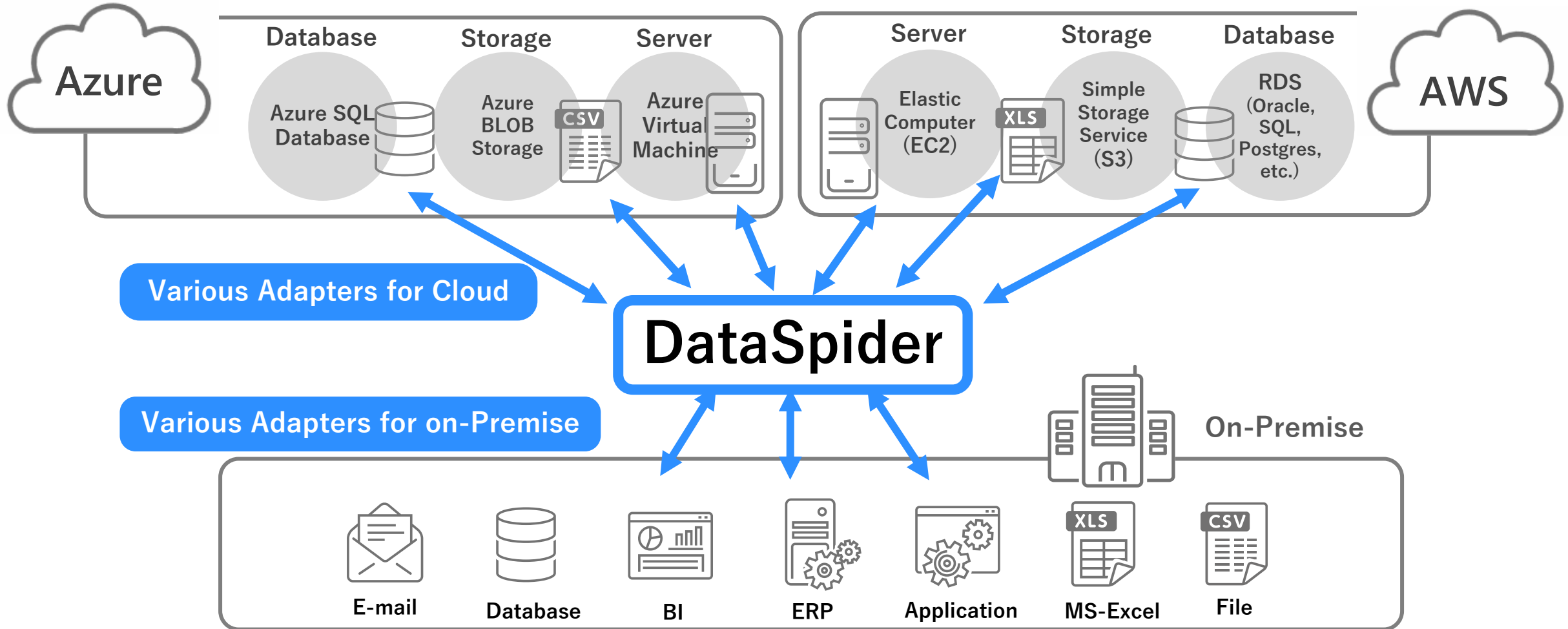
❷ Integration systems with No code

❸ System integration between SAP HANA, legacy systems, and the cloud



4 Flexible integration between on-premise and cloud

Specialized Adapters available for many Cloud and On-premise Systems



Data integration between on-premises and cloud

DataSpider Easy integration and operation with the cloud using a wide range of adapters

Issues

- ① Systems are scattered across on-premises and cloud, and the amount of data is increasing.
- ② Development and operation are performed manually, and different tools are used for each system.

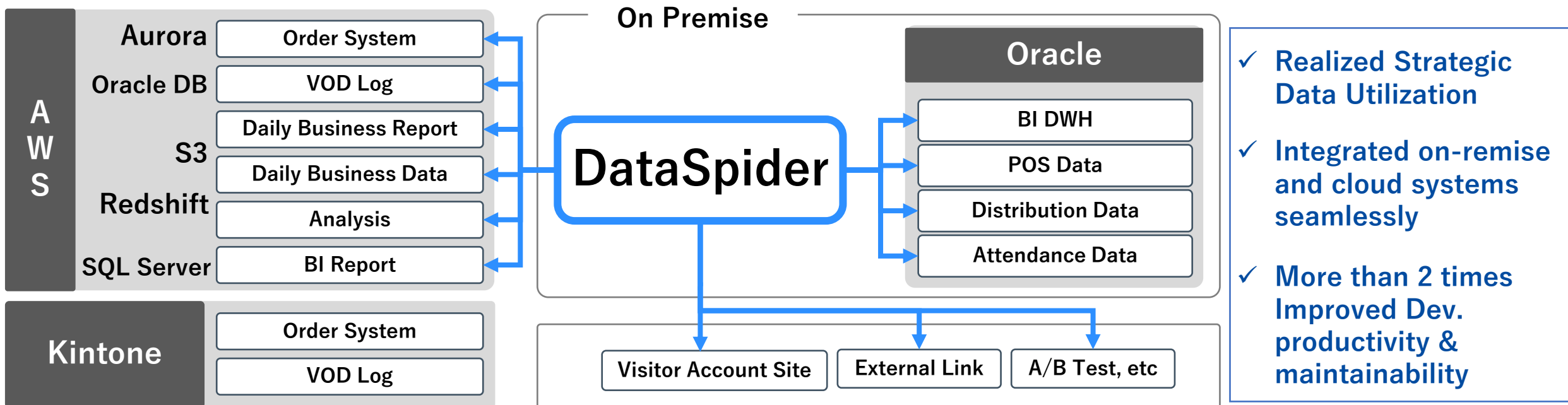
Effects of
DataSpider

- ① Enable data integration between cloud and on-premise systems by leveraging a wide range of adapters
- ② Standardize data integration development work with DataSpider



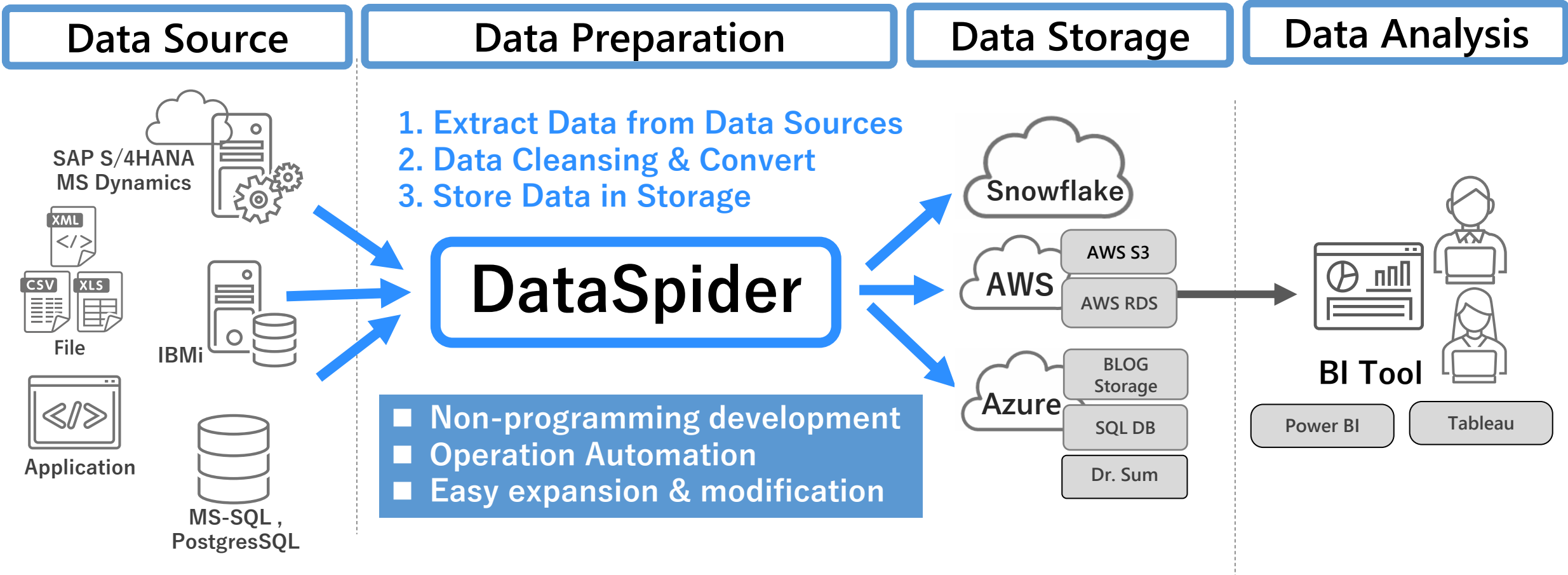
Point

- ① Quickly responding to the management mission of “strategic data utilization”
- ② Improved development productivity and maintainability



5 Build Data Analysis platform easily without programming

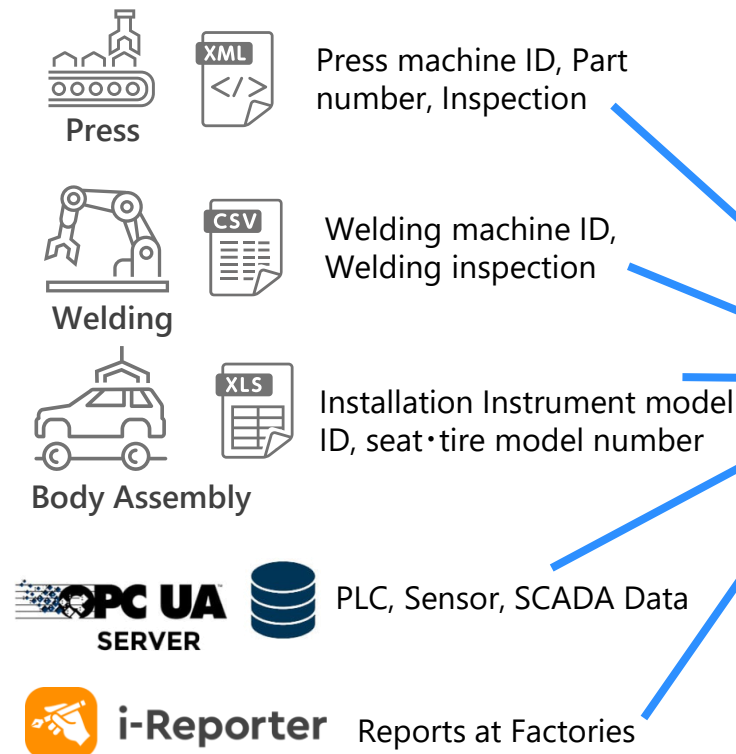
Automate data collection, conversion, and aggregation effortlessly



5 Support Data Utilization at Manufacturing Factories

Supporting the utilization of data at factory sites without programming

Data Source



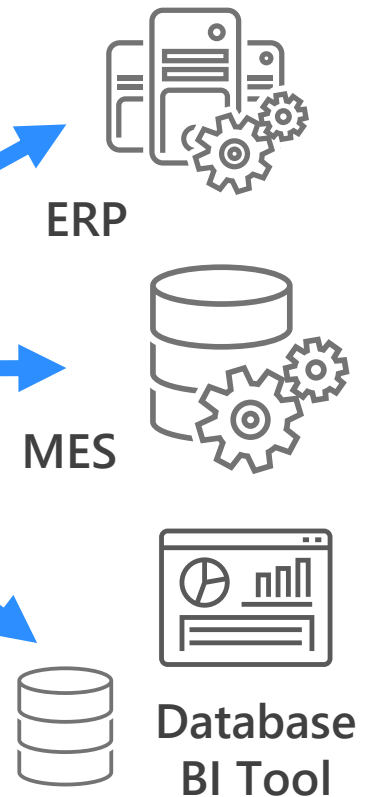
Data Connector

1. Extract Data from Data Sources
2. Data Cleansing & Convert
3. Store / ConnectUpper System

DataSpider

- Non-programming development
- Operation Automation
- Easy expansion & modification

Data Utilization



Data Analytics Platform to enable data-driven decision-making

DataSpider

Automated data visualization and analysis enable operational efficiency and rapid management decision-making.

Issues

- 1 Data was scattered across systems
- 2 Manual data collection and report creation
- 3 Management decisions were based on outdated & error contained reports

Effects of
DataSpider

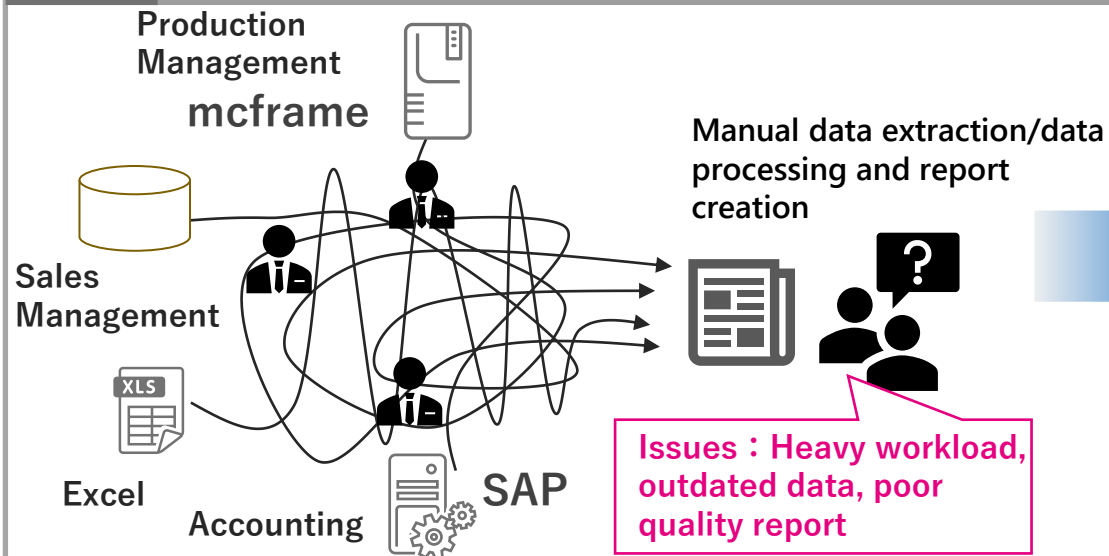
- 1 Collect, convert, and store scattered data with No-coding
- 2 Automatically generate reports
- 3 Managers make decisions quickly based on error-free, up-to-date data



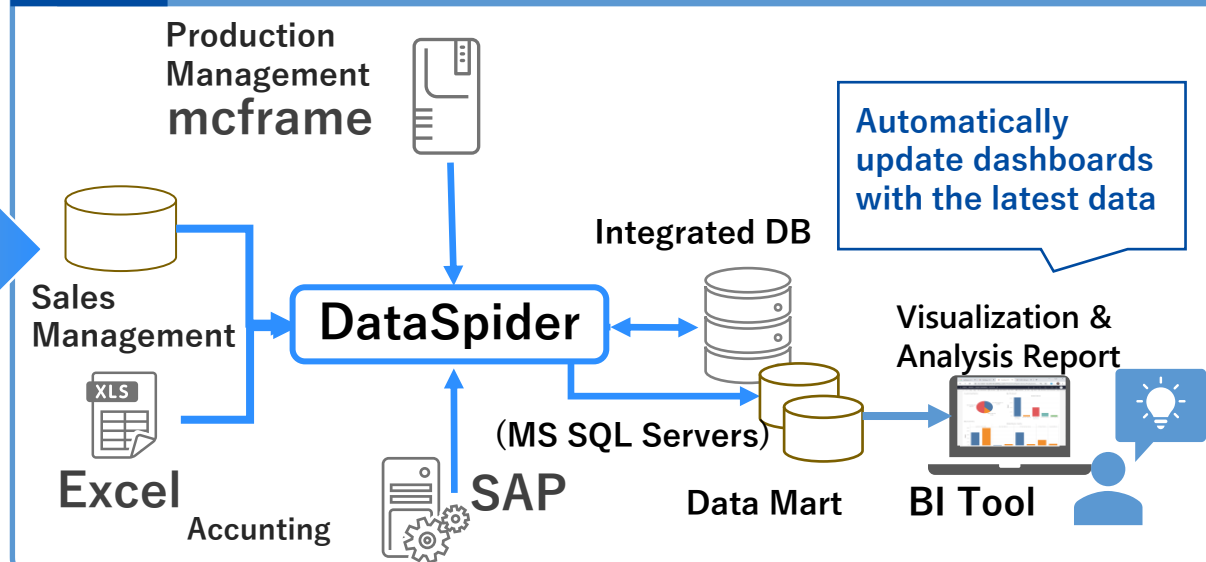
Point

- 1 Significant reduction in report creation and analysis workloads
- 2 Use the latest, accurate reports for management decision-making
- 3 Easy maintenance for modifications

Before Manual Data Extraction and Report Creation



After Data visualization and automatic report creation





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