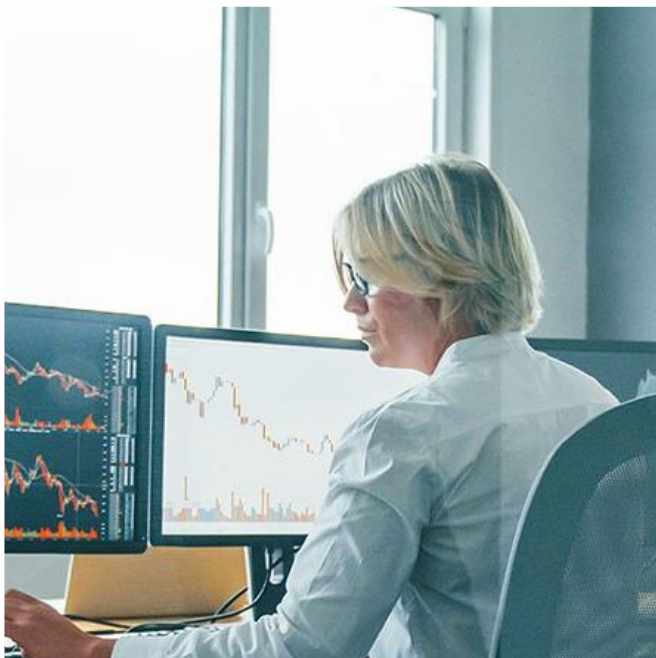


STEP 솔루션 소개



1. Stibo Systems 제공 가치
 2. STEP 솔루션 주요 기능
 3. 회사소개
-

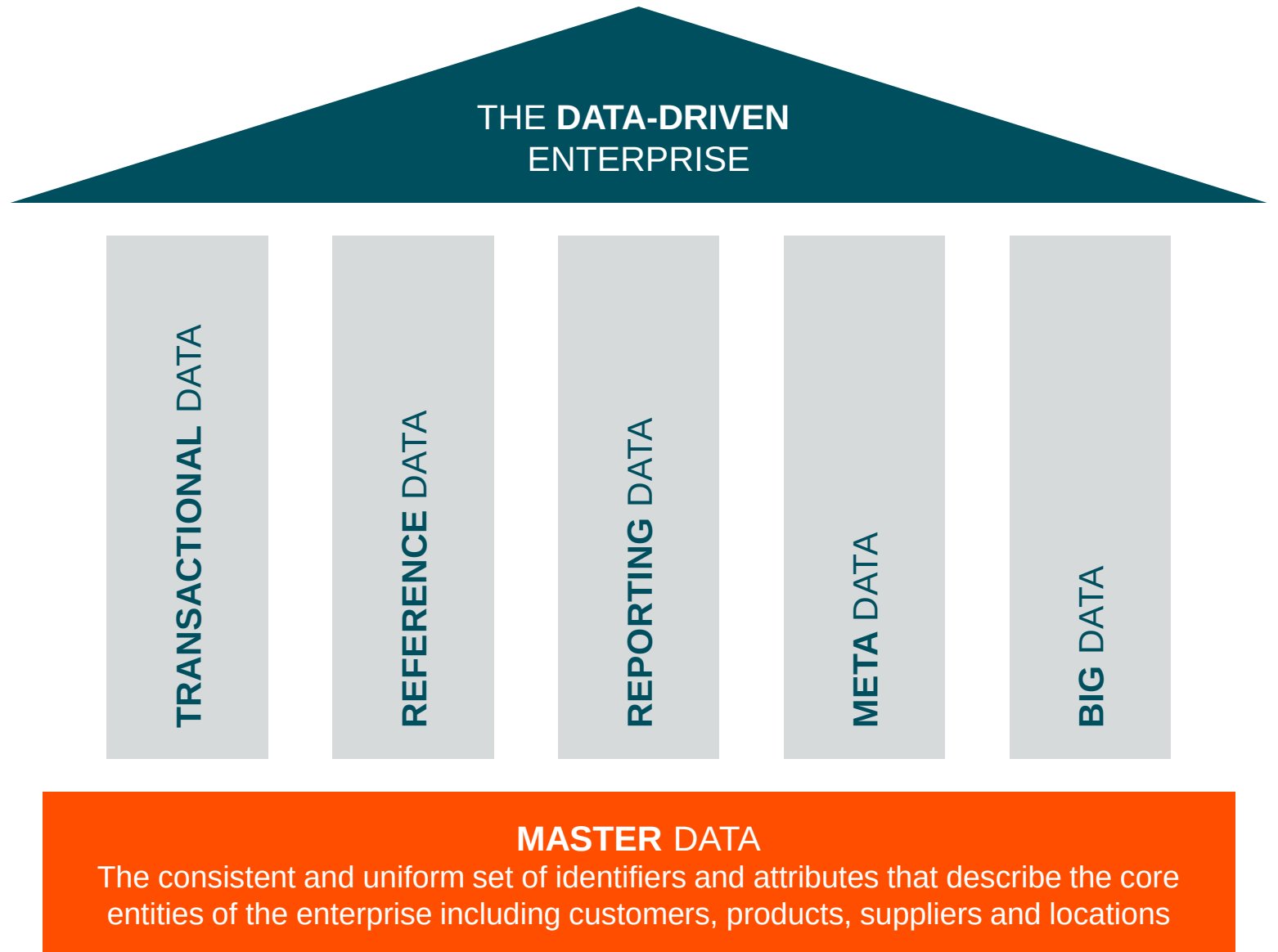
1. Stibo Systems 제공 가치



Window of Transparency

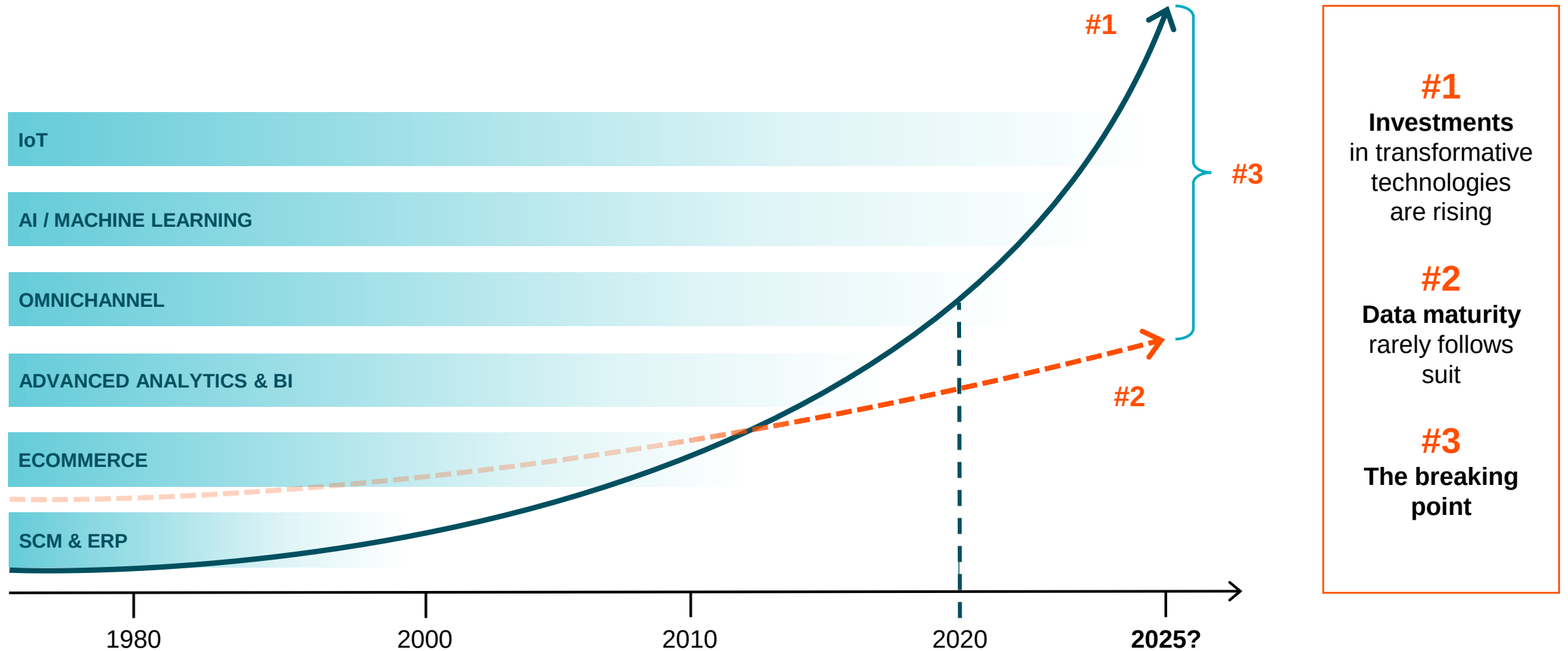
Stibo Systems MDM provides a window of transparency into business, unlocking the value of data to drive innovation, differentiation, profitability and growth

Accelerating data maturity depends on the ability to build a foundation of high-quality master data



Transparency – 신기술 기반 혁신활동의 기반, 그러나...

Global 기업들은 신기술 기반 혁신에 투자를 늘리고 있으나, Data 성숙도 이슈로 많은 어려움을 겪고 있습니다.



Digital Transformation 최대 장애 요소 – Bad Data!

>69%

대기업 임원의 69%가
Data 중심 조직을
(Data-Driven Org.)
만들 수 없다고 답변함

Source: Harvard Business Review

75%

CEO의 75%가 Digital
Transformation 계획 중
Data Infrastructure에
대한 문제를 경험하고
있음

Source: McKinsey & Co

50%

기업 내 Data 분석을 위한
Man Power의 50%는
Data 전처리 및 정제에
투입되고 있어, Data 분석
영역의 확장이 제한되고
직원 만족도가 떨어짐

Source: McKinsey & Co

15-20%

대부분의 기업에서 Data
품질저하로 15~20%
정도의 매출 감소를
경험하고 있음

Source: MIT Sloan Management Review

Stibo Systems STEP 솔루션 제공 가치

견고한 표준을 준수하는 Master Data를 기반으로 **업무별 최적화된 데이터 View** 를 제공합니다.



STEP MDM 솔루션 주요 기능

디지털 비즈니스 HUB을 통한 Transparency를 제공하기 위해 STEP 솔루션은 핵심적인 기능들을 제공합니다.



STIBO SYSTEMS
디지털
비즈니스 HUB

단일 플랫폼 – 멀티 데이터 도메인 수용

데이터 도메인 간 통합 가시성 제공

데이터 배포 / 통합 – Data Silo 제거

업무 별 최적화 Master Data View 제공

전사 표준 준수 – 강력한 Data Governance

1 멀티도메인 플랫폼 기반 유연한 데이터 모델



2 다양한 Component를 활용한 Configurable WEB UI



3 내장 Workflow Builder를 활용한 Workflow



4 다양한 Rule Template 기반 유연한 Business Rule 설정



5 Data 유사성에 기반한 Match & Merge



6 Data 품질 모니터링 및 Profiling



7 Data Integration

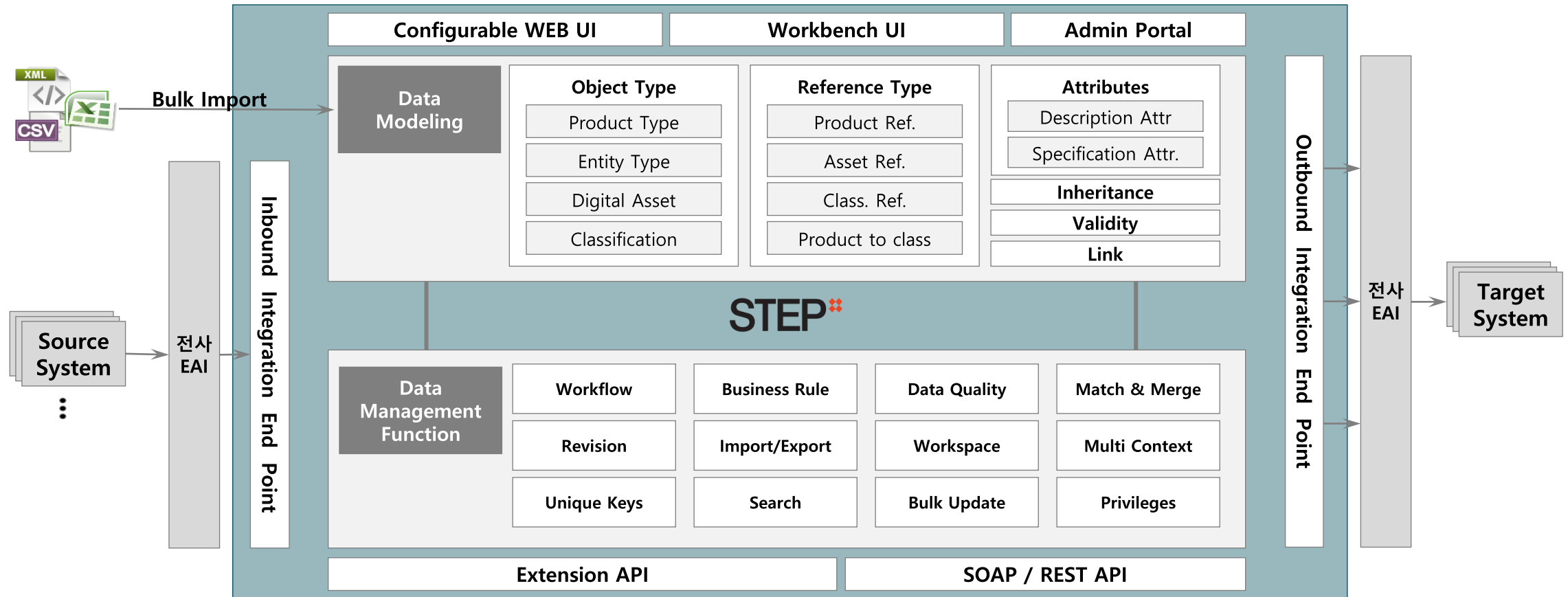


2. STEP 솔루션 주요 기능

STEP 솔루션 Functional Architecture

유연한 데이터 모델링을 기반으로 기준정보 관리를 위한 완벽한 기능을 제공합니다.

STEP 솔루션 Functional Architecture



MULTI DOMAN MDM – 확장 가능한 비즈니스 Core Data

Unlimited Data Types and Sources

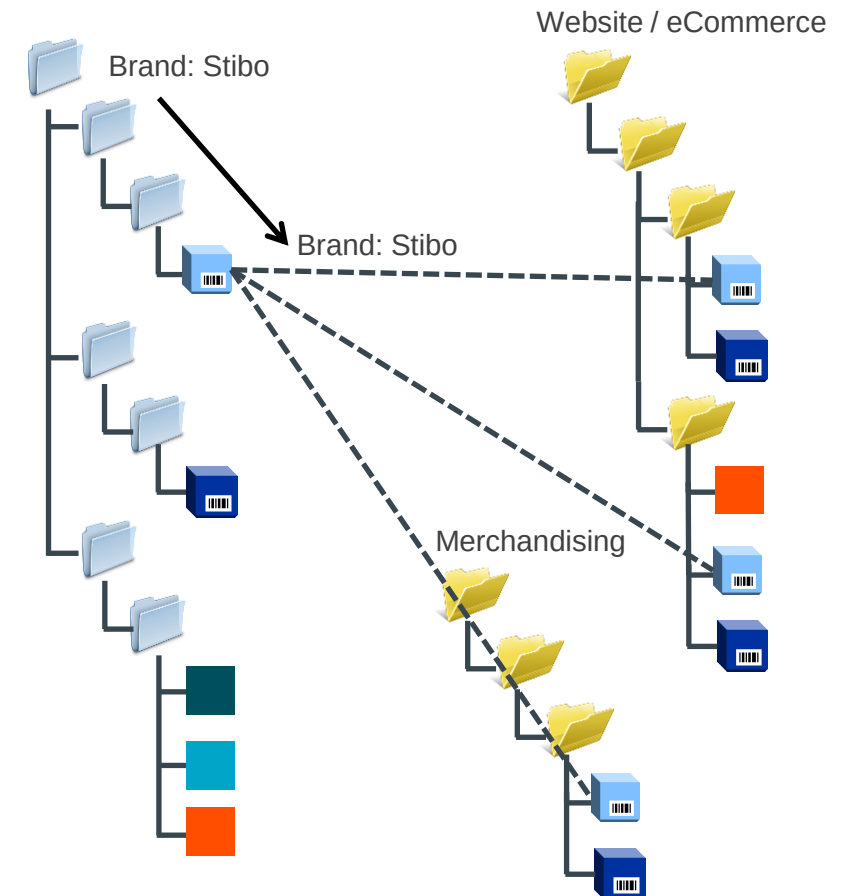


데이터 모델링 요소

Hierarchy 중심으로 전사 표준을 관리하고 Classification 등의 요소를 통해 각 업무별 최적화된 View를 제공합니다.

데이터 모델링 개요

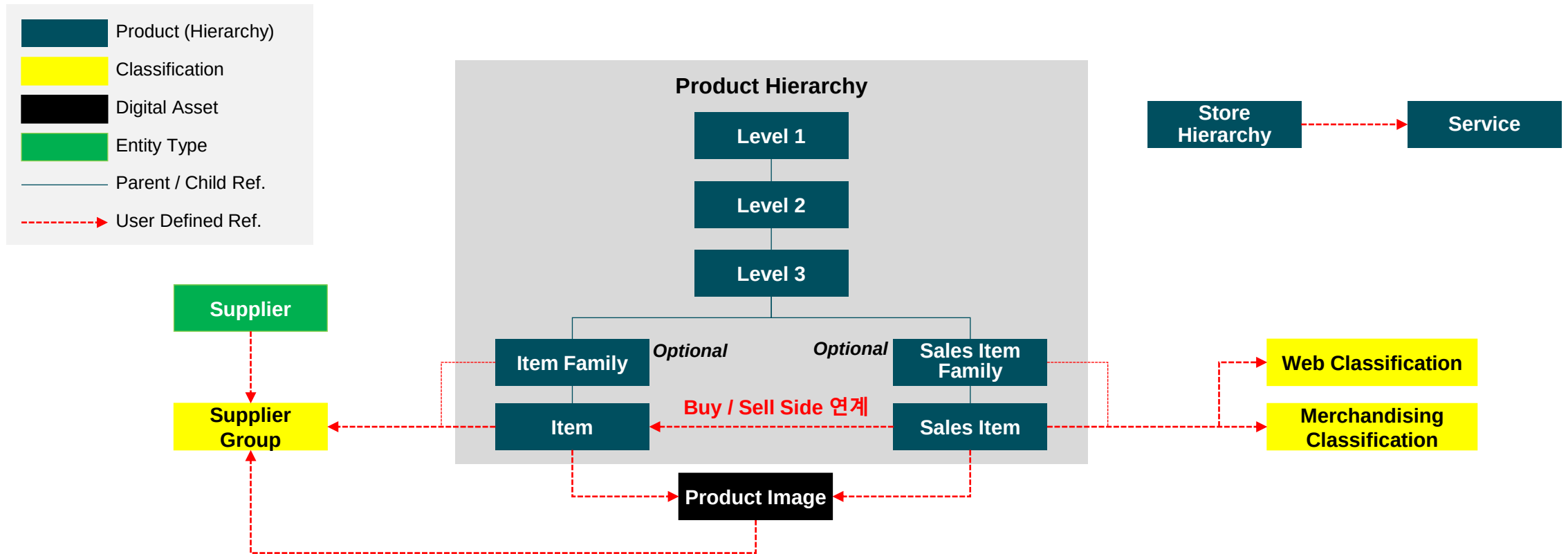
- **Primary Hierarchy** : 속성 상속, Unique Membership
- **Attribute** – 데이터 Type, LOV 지정, 개별/공통 속성 설정
- (분류 별) 필수 입력 속성 지정
- **Alternative Classification** : Non-Unique Membership, 목적 별 View
- **Auto Classification Rule** 구성 / 관리
- **Unlimited User Defined Object Type** 지원
- **DAM (Digital Asset = 파일)** 데이터 모델 지원
- **Pre-Built Component Model** : Product Variant, Address Component 등



레퍼런스 모델

기준정보 구조를 정의하고, 각 도메인간 필요한 Reference를 정의하여 보다 입체적인 데이터 모델을 구성합니다.

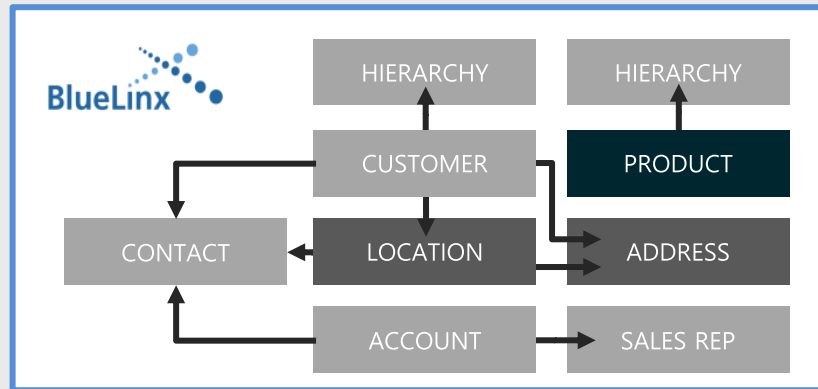
RETAIL 데이터 모델 예시



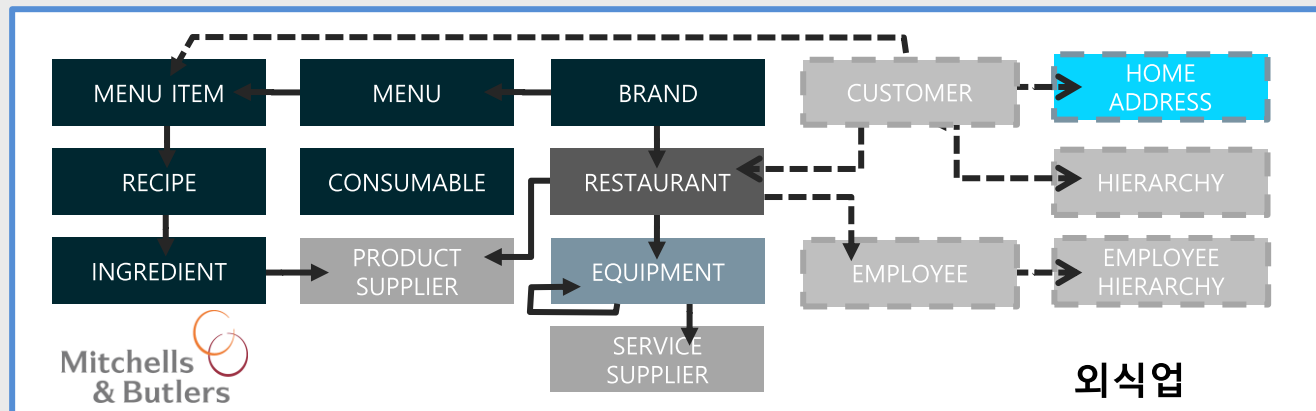
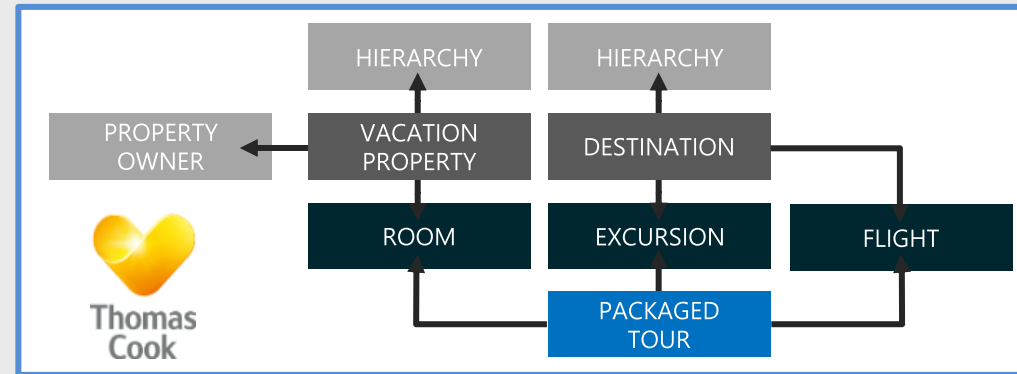
Industry 별 모델링 사례

산업 별 비즈니스 특성에 최적화된 마스터 데이터 모델을 매우 손쉽게 구성할 수 있습니다.

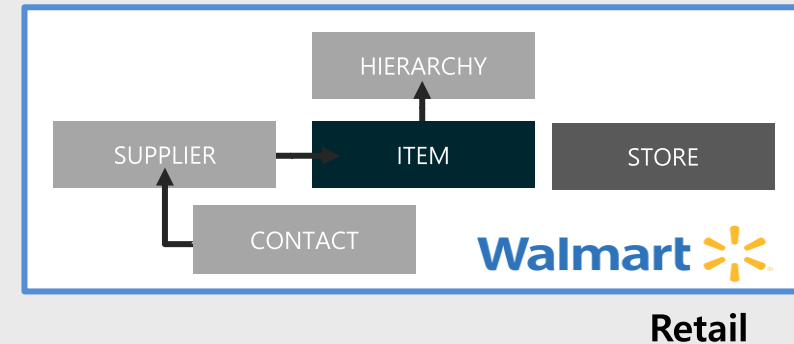
유통산업



여행 및 호텔업



외식업



Retail

Configurable WEB UI 예시 (1/2)

WEB UI는 데이터 모델링 요소들을 다양한 WEB UI Component를 화면에 배치하여 구성합니다.

STIBO SYSTEMS MASTER DATA MANAGEMENT

Main English US  

Item Family

• **Tab Page Component**

Basic Information and references Category Information Additional Information Items (Product Variant List) Items (Product Variant Matrix) Status

Product Category: Products | Apparel | Upper Body Wear | T-shirts | T-shirts Items

Name: Hanes T-shirts

Primary Product Image:  • **Digital Asset (Ref)**

Approved: Last approved 9/20/19 5:28 PM

Product Name: Hanes Beefy-T Short-Sleeve T-Shirt

Family Description: The Hanes Beefy-T T-Shirt For over 35 years, it has set the standard for T-shirt comfort and quality. Today it's better than ever, offering greater durability and less shrinkage than you'll get with ordinary tees.

EAN:

Brand Name: Hanes

Brand Owner: HanesBrands

Supplier Name:

• **Multi Reference Component**

	Hanes Family	Hanes Family	Products
ID	20585	20585	ProductsGaloreProducts
Reference type	PrimaryProductImage	Product Image	Supplier Link
Icon			
Type	Product Image	Product Image	Suppliers Products

• **Attribute Group Component**

Number of items: 3; Selected items: 0

Asset basket (0)

Save Reset

• **Tree Component**

- Products
 - Apparel
 - Head Wear
 - Upper Body Wear
 - T-shirts
 - T-shirts Items
 - Hanes T-shirts
 - T-Shirts Sales Items
 - Automotive
 - Building Products
 - Displays
 - Electrical & Electronics
 - Food and Beverage
 - Footwear
 - Furniture
 - Hardware
 - Kitchen
 - Safety
- Discontinued Products
- Packaging
- Assets
- Suppliers
- Web Sites
- Merchandising Hierarchy
- Collections
- Recycle Bin

Configurable WEB UI 예시 (2/2)

WEB UI는 데이터 모델링 요소들을 다양한 WEB UI Component를 화면에 배치하여 구성합니다.

STIBO SYSTEMS MASTER DATA MANAGEMENT

Item Family

Basic Information and references | Category Information | Additional Information | Items (Product Variant List) | Items (Product Variant Matrix)

Product Category: Products | Apparel | Upper Body Wear | T-shirts | T-shirts Items

Name: Hanes T-shirts

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EAN:

Brand Name: Hanes

Brand Owner: HanesBrands

Supplier Name:

Web UI Configuration

Configuration | Web UI style

Item family detail | Save | Close | New... | Delete | Rename | Save as...

Node Editor Properties

Component Description: The Node Editor can be configured with a range of components for displaying different information and details about a selected object.

Context Help Display Mode: <Select a value>

Child Components

Rows: Attribute Value Component (Product Category), Name Value (Name), Asset Thumbnail (Primary Product Image), Approval Status (Approved), Attribute Value Group Component (Item Description), Attribute Value Group Component (Unique Identifier), Add..., Remove, Up/Down

Asset basket (0)

Save | Reset

별도의 UI 개발 없이 WEB UI 설정

Configurable WEB UI 예시 – List

List Component는 Excel 과 유사한 필터링, 정렬, Export 등을 설정할 수 있어 Data 관리에 편의성을 제공합니다.

• 검색 결과 Screen

Generic Search

Select all

Clear filter

Apply view

Clear view

Freeze panes

Custom Export

Export

Bulk update action

다양한 Header Component 들

ID	Name	적용용도	제품 특징	Description	UOM	X Plant Status	Gross Weight	Net Weight	Net Weight (lb)	Vicat 연화점	비중
106973	303	병마개 라이너, 마스터 배치	우수한 가공 뒤틀림 적음			Concept	100 kg	98.7 kg	217.6 lb	88 °C	0.97 - 0.98
107072	724	용기뚜껑, 분말피복, Add BASE수지	유동성, 투명 적음			Concept	98.1 kg	98 kg	216.05 lb	88.2 °C	0.97 - 0.98
107073	737	소형 용기 뚜껑, 병마개, 가정용기	우수한 호환 투명성, 수축			Engineering Model	99.1 kg	99 kg	218.26 lb	90.5 °C	0.97 - 0.98
107172	749	병마개 라이너, 마스터 배치	우수한 가공 뒤틀림 적음			Concept	98.15 kg	98 lb	98 lb	102.1 °C	0.97 - 0.98
107272	950	연포장, 종이코팅	고속가공성, 네크인 특성			Concept	12.01 kg	12 kg	26.46 lb		0.82 - 0.89
107372	951	연포장, 종이코팅	초고속가공			Concept	12.01 kg	12 kg	26.46 lb		0.82 - 0.89
107472	955	연포장, 종이코팅	낮은 네크인 접합성 우수			Concept	12.01 kg	12 kg	26.46 lb		0.82 - 0.89
107473	961	연포장	네크인 특성			Concept	12.01 kg	12 kg	26.46 lb		0.82 - 0.89
107572	963	종이코팅	저온고속가공성, 접착성 우수			Concept	12.01 kg	12 kg	26.46 lb		0.82 - 0.89
107573	830	전력 케이블 절연용 베이스레진, 보호 필름	기계적 물성, 전기적 특성 우수			Concept	40.1 kg	40 kg	88.18 lb		
107672	5301	중공성형용(의료용기), 공업용 필름	고속축, 인열강도, 내충격강도 우수	LPDE - 필름 발포 중공성형 - 5301	PACK	Concept	40.1 kg	40 kg	88.18 lb		
107772	5302	중포대, 수축포장,	인열강도, 고강도,	LPDE - 필름 발포 중공성형 - 5302	PACK	Concept	40.1 kg	40 kg	88.18 lb		

Tree

Tasks

Sort by

Ascending

Descending

Contains

☒ (Select all)
 ☒ (No content)
 ☒ 고속가공성, 열융합성, 낮은 네크인 특성
 ☒ 고속축, 인열강도, 내충격강도 우수
 ☒ 기계적 물성, 전기적 특성 우수

21 / 21

Apply filter

Reset filter

• Excel과 유사한 Filtering, Sorting 기능

18

STIBO SYSTEMS

내장 Workflow Builder 기반 Workflow 구성

내장 Workflow Builder를 활용하여 데이터 Type 별로 생성, 변경, 폐기 Workflow를 손쉽게 만들 수 있습니다.

Workflow Builder & WEB UI

- Workflow Builder를 활용하여 Drag & Drop 방식으로 Workflow 구성
- 병렬 처리 및 Business Rule 기반 자동화
- 다양한 State에 대한 분기 처리

- 각 Step 별로 특화된 기능을 수행하기 위한 WEBUI 화면 Design / Mapping

유연한 Business Rule

재사용 가능한 Business Rule을 설정하여 데이터 품질 점검 및 데이터 관리 자동화를 지원합니다.

Business Rule 예시

The screenshot displays the 'Edit Operation' dialog box for configuring a Business Rule. The left pane shows a list of available actions, with 'Execute JavaScript' selected. The right pane shows the configuration for this action, including variable bindings and the JavaScript code to be executed.

Left Pane (Edit Operation):

- Send Email
- Attribute values
- Data Quality
- Hybris
- References and Links
- Workflow
- Execute Action Conditionally
- Execute JavaScript** (Selected)
- JDYO Test Action
- Overlap Analysis
- Reference other Business Action
- Send Email
- Send Republish Event
- Set Allergen Warning
- Set Attribute Value
- Set Name
- Set Object Type
- Set Workflow Variable
- Trigger Event in Current Workflow

Right Pane (Edit Operation):

Execute JavaScript

Binds:

Variable name	Binds to
manager	STEP Manager
logger	Logger
node	Current Object

Messages:

Variable name	Message	Translations

JavaScript:

```

1  /*
2  * Current object의 Approved Space node를 가져오기
3  */
4  var approvedNode = manager.executeInWorkspace("Approved", function(appManager){
5      var approvedNode = appManager.getProductHome().getProductByID(node.getID());
6      return approvedNode;
7  });
8
9  //if (approvedNode == null) return;
10
11 /*
12 * Attribute Value 복제
13 */
14 var partObjIt = node.getNonApprovedObjects().iterator(); /* current product node에서 approve
15 var dataContainerTemplate = new java.util.ArrayList();
  
```

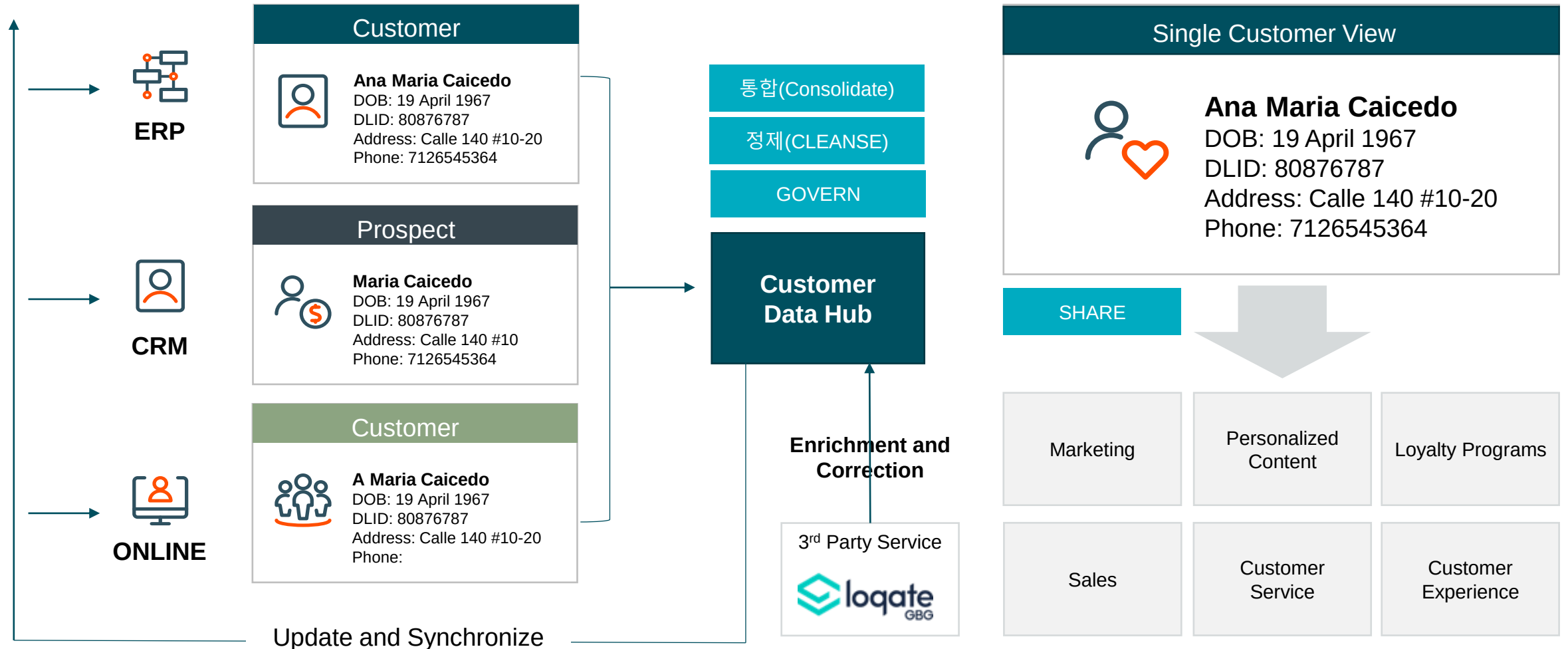
Annotations:

- Bind Variable을 지정할 수 있어 솔루션 내부 API 활용** (Refers to the Binds table)
- Javascript를 활용한 Rule 설정 → 보다 복잡한 Rule 처리 가능** (Refers to the JavaScript code)
- 속성 값 설정, 메일 보내기, Reference 연결 등 다양한 Rule 설정** (Refers to the left pane list)

Buttons: Save, Test JavaScript, Cancel

Match & Merge 개요 – B2C Customer 예시

CRM, WEB 채널 등 다양한 소스로부터 정보를 획득하고 유사성을 기반으로 하나의 Golden Record를 구성합니다.



Match & Merge 화면 예시

다양한 소스로부터 획득된 데이터를 Rule에 따라 통합하여 Golden Record를 생성합니다.

B2C Customer 중복 후보 리스트 및 Merge 화면 예시

Golden Record Clerical Review Task List

• 중복 의심 데이터 리스트

Clear all
Advanced Merge
Merge
Reassign
Reject
High priority:

ID	Source Information	First Name
☐ 101101	X 16150202-7756	Ted
☐ 101119	Y 16700803-0210	Ted
☐ 101208	Y 16360301-2836	Jennifer
☐ 101310	Y 16500721-2870	Jenifer
☐ 101041	X 16170509-2102	Shelly
☐ 101047	Y 16590120-0104	Shelley
☐ 101053	X 16760626-4583	Sheley
☐ 100765	X 16310605-4293	Irene
☐ 100771	Y 16470126-2653	Irine
☐ 100747	Y 16540622-8246	Hayden
☐ 100753	X 16210717-8721	Haydan
☐ 100831	Y 16640328-0131	Cathy
☐ 100837	X 16940322-5619	Kathy
☐ 100795	Y 16951228-6668	Darrel
☐ 100801	X 16761227-0756	Darryl
☐ 101196	X 16670705-8878	Jen
☐ 101298	X 16210424-2330	Jenny
☐ 101083	Y 16950708-4821	Aaron
☐ 101089	X 16820904-2194	Aron
☐ 101095	Y 16320807-2367	Aarone
☐ 100735	Y 16470824-0801	Colbie
☐ 100741	X 16860809-5785	Colby
☒ 100711	Y 16330828-6297	Jim
☒ 100717	Y 16260501-0590	Jim
☐ 101161	X 16921114-7724	Jeff
☐ 101167	Y 16070916-8744	Geoff
☐ 101216	Y 16941025-7720	Nicole
☐ 101300	X 16290213-3152	Nichole

Advanced Merge

• Merge 수행 화면

Exclude Record
Include Record
Set as Survivor

ID	Source Information	Score	First Name	Last Name	Main Address	Emails	Phones	Credit Limit	Good Person Flag	Income	Income Update Date	Paid Dues	Past Due Days	Past Due Dollars
100711 (Survivor)	Y 16330828-6297	-	Jim	Cristen	100712	100713 100714	100715 100716	51325	Y	391006	2017-06-03		1	6003
100717	Y 16260501-0590	84.8	Jim	Kristen	100718	100719 100720	100721 100722	88719	Y	375590	2017-04-26		53	6891

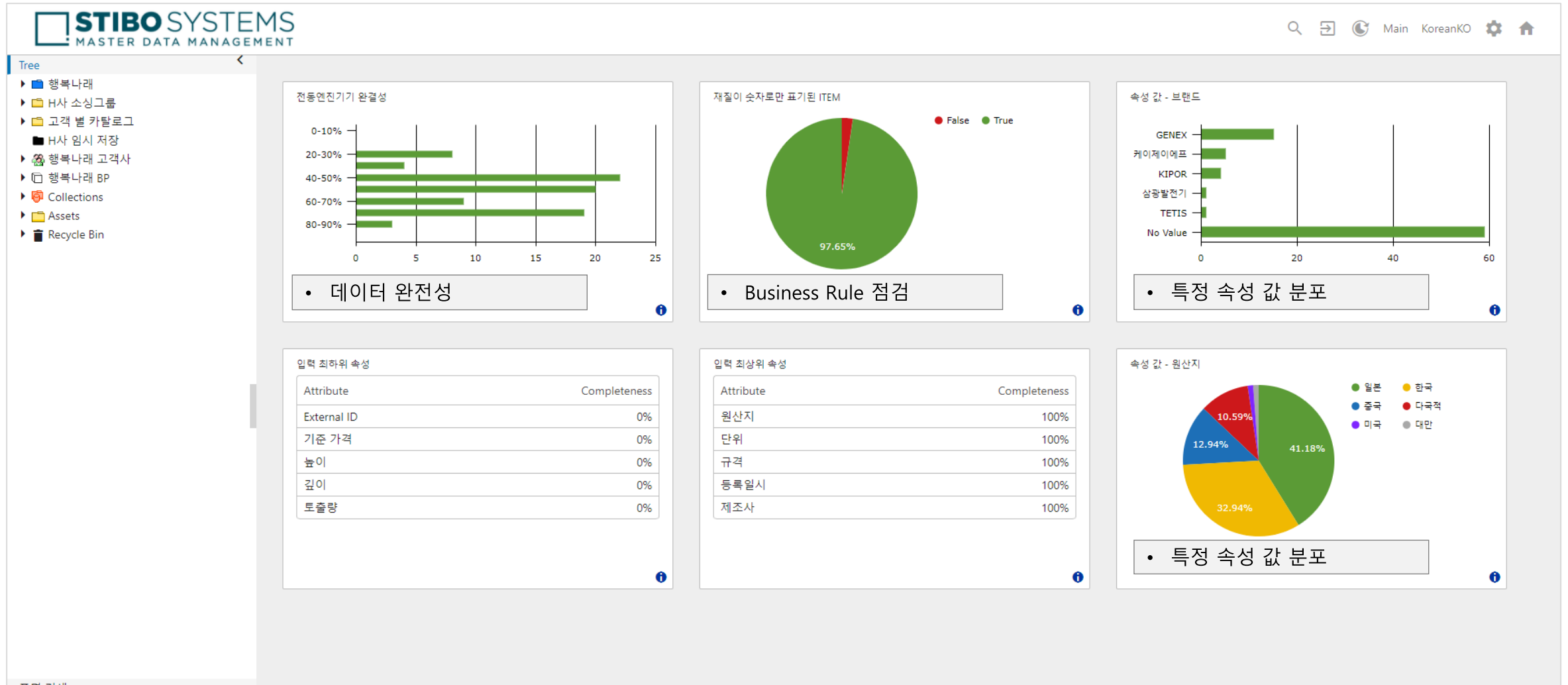
Merge Preview

100711	Golden Record
-	
Jim	
Kristen	
100718	
100719 100720	
100721 100722	
88719	
Y	
375590	
2017-04-26	
53	
6891	

Cancel
Reject
Reassign
Merge

Data Quality Dashboard

내장 Dashboard를 활용하여 데이터 품질 모니터링을 수행할 수 있습니다.



속성 값 Profiling 예시

속성 값에 대한 Profiling 기능이 제공되어 해당 속성 값에 대한 통계치를 활용할 수 있습니다.

jdoyo-train - STEPworkbench

File Edit View Navigate Format Maintain Window Help

Context English US

Search

Search Below = All Individuals

Data Containers

Reset Search

Displaying 4 of 4 results Show Details

Name

(100541) ID = 100541

(100967) ID = 100967

(101044) ID = 101044

(101056) ID = 101056

Collection Data Profile Log

Generated: Sun Apr 25 2021 01:08 using Individuals [Update Profile](#)

☐ Dashboard ☒ Value Details ☐ Reference Details

Type ☒ Main Address (100) Attribute Group

Attribute	Completeness	Count	Frequent Values	Rare Values	Used Units	Value Range	Frequent Patterns	Rare Patterns
City	100%	100/100	Sharon, Oroville, Owensboro, ...	Ash land, Ashlaand, Brooklyn, B...	Units not supported		AAAAAAAA, AAAAAA, AAAAAA...	A'AAAAA, AAA AAAA, AAAAA ...
Country	100%	100/100	US	US	Units not supported		AA	AA
State	100%	100/100	CA, MA, NY, GA, KY, PA, FL, I...	OH, UT, AZ, LA, NJ, TX, IN, MI...	Units not supported		AA	AA
Street	100%	100/100	12 Mohawk St, 1056 Bever Dam...	101 Main St, 101 Main St NW A...	Units not supported		99 AAAAAA AA, 99 AAAAAA AA...	99 A AAAAA AA # 99, 99 A AAA...
Zip	100%	100/100	2067, 17921, 2151, 32904, 42301, ...	41014, 44827, 46723, 46724, 4672...	Units not supported		99999, 9999	9999, 99999

Overview Frequent Values Rare Values Frequent Patterns Rare Patterns

Attribute Overview

Attribute: Street (InputStreet)

Validation Type: text

Max length: 100

Text Value Lengths: 10 - 29

Average Value Length: 17.1

Objects where attribute is valid: 100

Objects with no value: 0

Used Characters: #,-[0-9]ABCDEFGHIJKLMNPRSTUVWYabcdefghijklmnopqrstuvwxyz

Frequent Values

12 Mohawk St	3
1056 Bever Dam Road	2
12712 Browning Avenue	2
134 Trace Ln	2
1595 Old Norcross Ro...	2
161 Edinboro St	2
164 Saint George Rd	2
348 S Lexington Av	2
36 Garden St Apt 5	2
36 Garden St Apt 5A	2

Rare Values

101 Main St	1
101 Main St NW Apt 5	1
101 Main St, Apt 5	1
1056 Beaver Dam Rd	1
1056 Beaver Rd	1
1056 Beaver Road	1
1056 Beever Dam Rd	1
1107 2nd Ave	1
12 Mo-hawk St	1
125 summer st	1

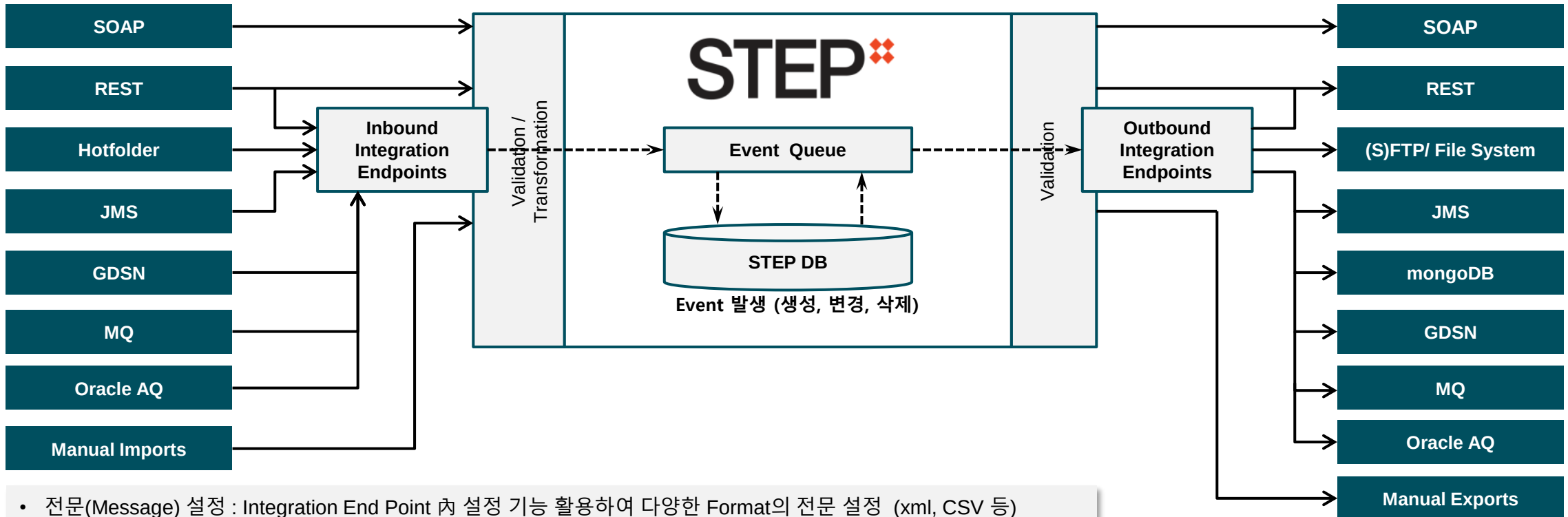
- 속성 값 별 상세 통계
 - 속성값 별 빈도, 속성값 patten 별 빈도
 - 통계치 기준 Data Object 검색 (Drill Down)

Operations on Entire Result

Ready

Source 및 Target 시스템과 Interface

내장 Integration End Point를 활용하여 손쉽게 Source / Target 시스템과 Interface를 구성합니다.



- 전문(Message) 설정 : Integration End Point 內 설정 기능 활용하여 다양한 Format의 전문 설정 (xml, CSV 등)
- REST, JMS, (S)FTP, Oracle AQ, MQ 등 Industry 표준적인 Interface 방식에 대한 설정 기능 포함
- 데이터의 생성, 변경, 삭제 등에 대한 Event를 관리할 수 있는 Event Queue를 통해 Interface 구성
- 필요 시 Integration Endpoint를 Customization하여 확장할 수 있음 (Event 메커니즘은 그대로 활용)

3. 회사소개

Built on a strong foundation



MISSION

To create **the world's most versatile master data management solution**, enabling companies and organizations to optimize their business, environmental and social performance



PURPOSE

To make data transparency a **catalyst for better business for a better world**

Leader in multidomain master data management



+725

Employees



20

Offices Worldwide



+500

Customers

Part of the Stibo group

that also operates two other market leading data & information management companies

Our values

PASSION
for our clients



**PEOPLE-CENTRIC
AND HONEST**

WINNING
through collaboration
and teamwork



EMPOWERED
to take responsibility
and make a difference

**HUMBLE
CONFIDENCE**



Position in the Market

Forrester Research MDM 부문 LARGE Group 에 속해 있는 유일한 MDM 전문 Vendor 입니다

Forrester's Overview Of Master Data Management, Q4 2020

FIGURE 1 Now Tech Market Presence Segments: Master Data Management, Q4 2020

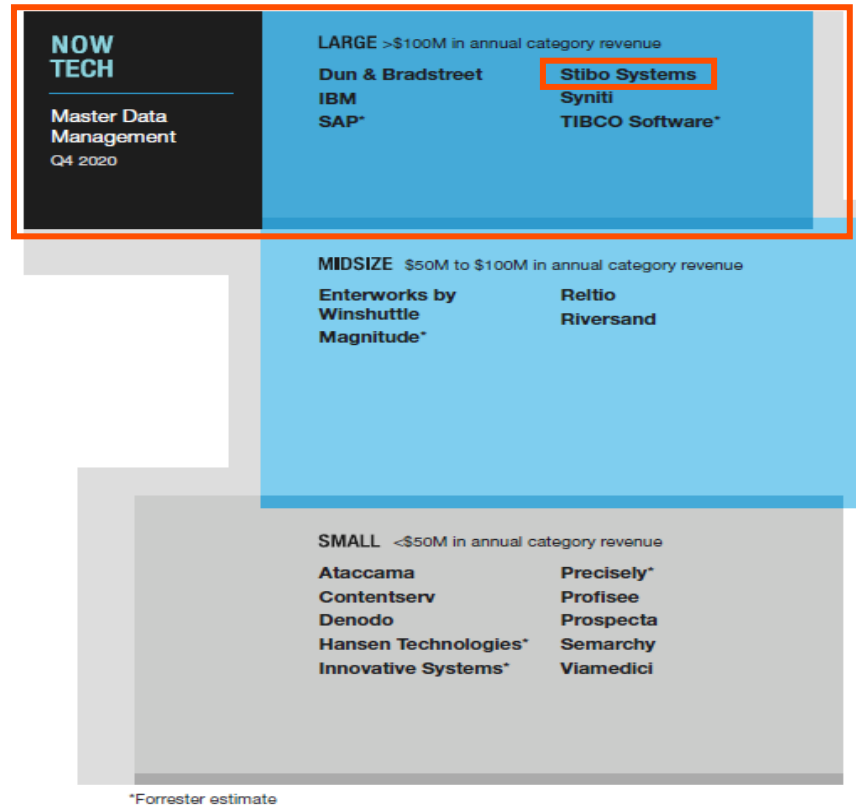


FIGURE 4 Now Tech Large Vendors: Master Data Management, Q4 2020

LARGE >\$100M in annual category revenue

	Primary functionality segments	Geographic presence (by revenue %)	Vertical market focus (by revenue)	Sample customers
Dun & Bradstreet	On-premises; public cloud; multicloud; SaaS	NA 95%; other 5%	Technology; manufacturing; financial services	Getty Images; Red Hat; Umicore
IBM	On-premises; public cloud; multicloud	NA 69%; LATAM 1%; EMEA 21%; APAC 9%	Government; banking; healthcare	The Health Collaborative; L'Oréal; National Instruments
SAP	On-premises; public cloud; multicloud	NA 23%; LATAM 7%; EMEA 52%; APAC 18%	Consumer products; high-tech; life sciences	Colgate-Palmolive; Nestlé; VMware
Stibo Systems	On-premises; public cloud; multicloud; SaaS	NA 34%; LATAM 4%; EMEA 55%; APAC 7%	Manufacturing; retail; wholesale trade	Adidas; Rituals; Siemens
Syniti	On-premises; public cloud; multicloud; SaaS	NA 47%; EMEA 32%; APAC 21%	Pharma and life sciences; professional services; consumer products	AbbVie; Johnson & Johnson; Royal FrieslandCampina
TIBCO Software	On-premises; public cloud; multicloud	NA 45%; LATAM 5%; EMEA 35%; APAC 15%*	Financial services; manufacturing; healthcare and life sciences	Netpend; Ontario Power Generation; Panera Bread

*The vendor did not provide information for this cell; this is Forrester's estimate.

Leader in Forrester PIM Wave 2021

“Stibo Systems is a **trusted leader in multidomain data management**. Denmark-based Stibo Systems is one of the largest players in the PIM market with its Product MDM offering

Stibo Systems is a good fit for companies with complex, multidomain data management needs that want the flexibility of a modern PIM **without sacrificing robust data modeling and governance**

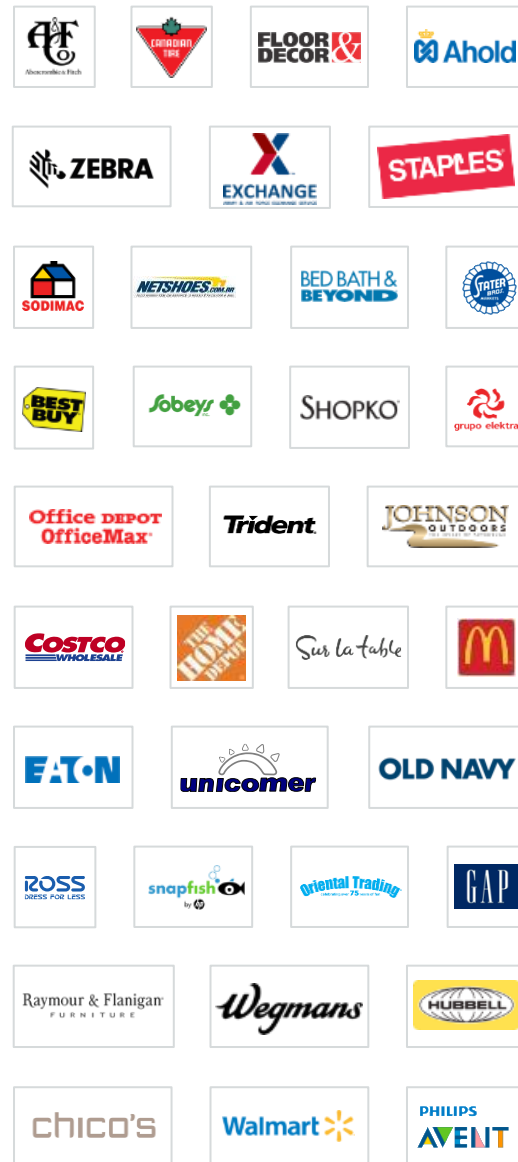
Reference customers called out **the ease of working with Stibo Systems**, including the opportunity to influence the product roadmap itself.”



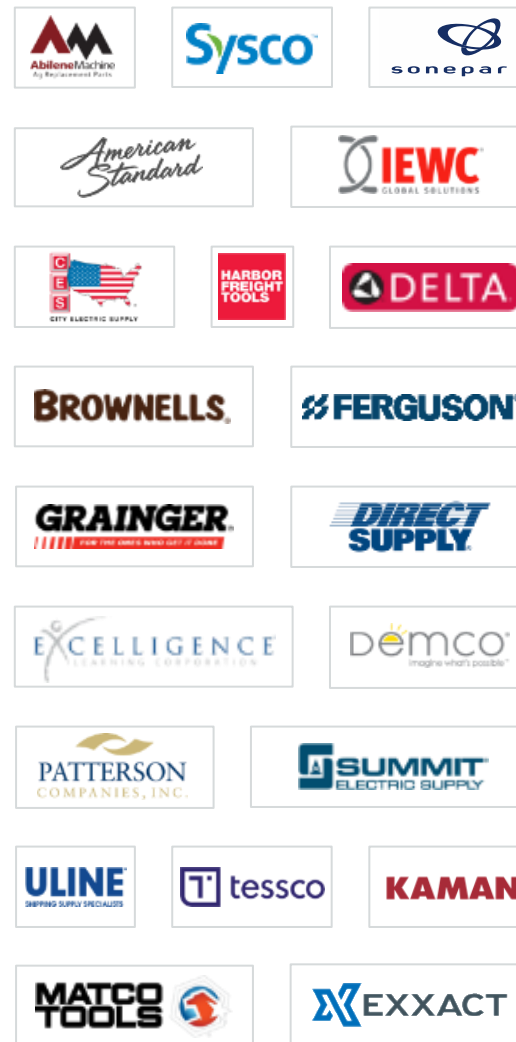
MANUFACTURING



RETAIL



DISTRIBUTION



OTHERS



MANUFACTURING



RETAIL



DISTRIBUTION



OTHERS





BETTER DATA.
BETTER BUSINESS.
BETTER WORLD.