

**PharmaSUG SDE Japan 2022**

# **Building Business Intelligence Using Sales and Marketing Data and its Utilization**

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Ryuichi Katsuragi, Shinichi Fukunaga,

Yoshitake Kitanishi

Data Science Department,

Shionogi & Co., Ltd.



**SHIONOGI**

# Agenda

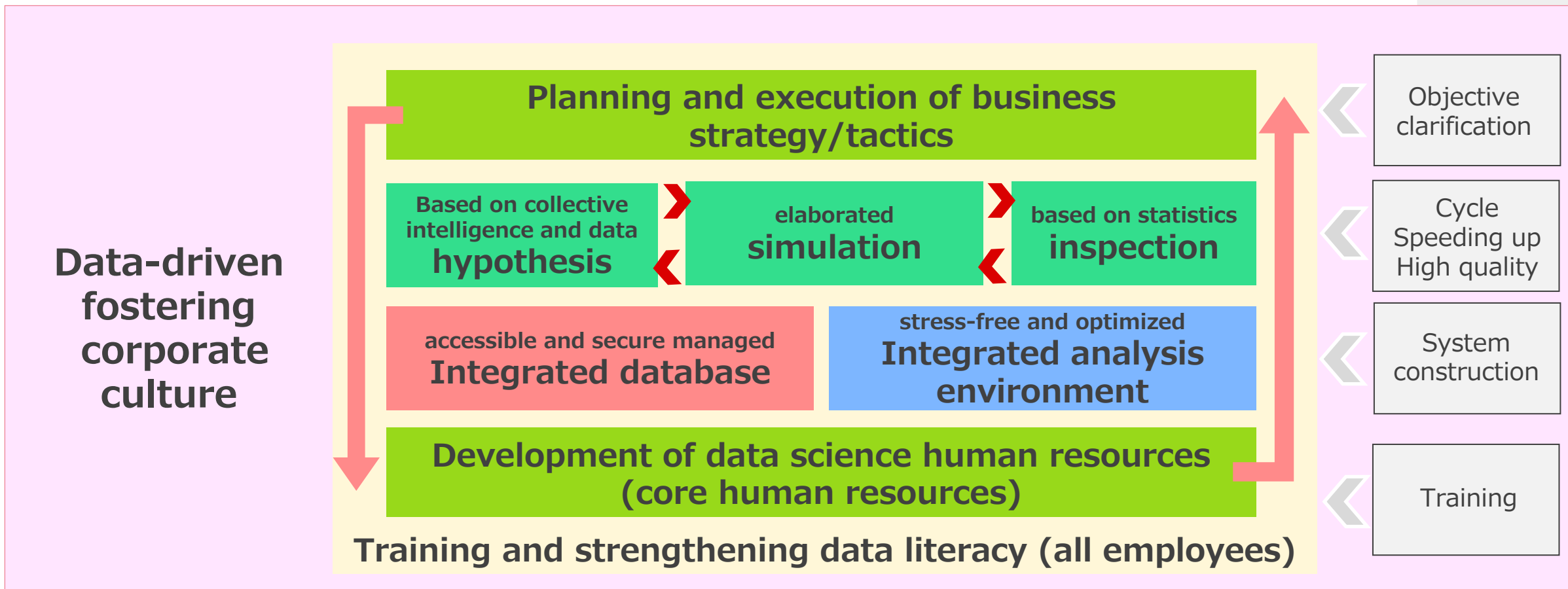
- Introduction
- Issues and solutions for visualization of decision-making data in the sales and marketing field
- Visualization data content
- Effects of data visualization
- Future prospects
- summary

# SHIONOGI Data Utilization Status

- Until now, decisions have been made based on intuition, experience, and courage, that is, KKD, in many companies, and SHIONOGI is no exception. However, as digitalization accelerates, the amount of information inside and outside the company increases, and the needs of stakeholders diversified. In the current diversifying situation, decision-making by KKD alone may lead to misjudgments.
- On the other hand, **if we can use data to make objective judgments, we can always consider actions that are in line with the actual situation. In an ever-changing society, decision-making based on real-time, transparent, and reliable data is required.**



# For data-driven business

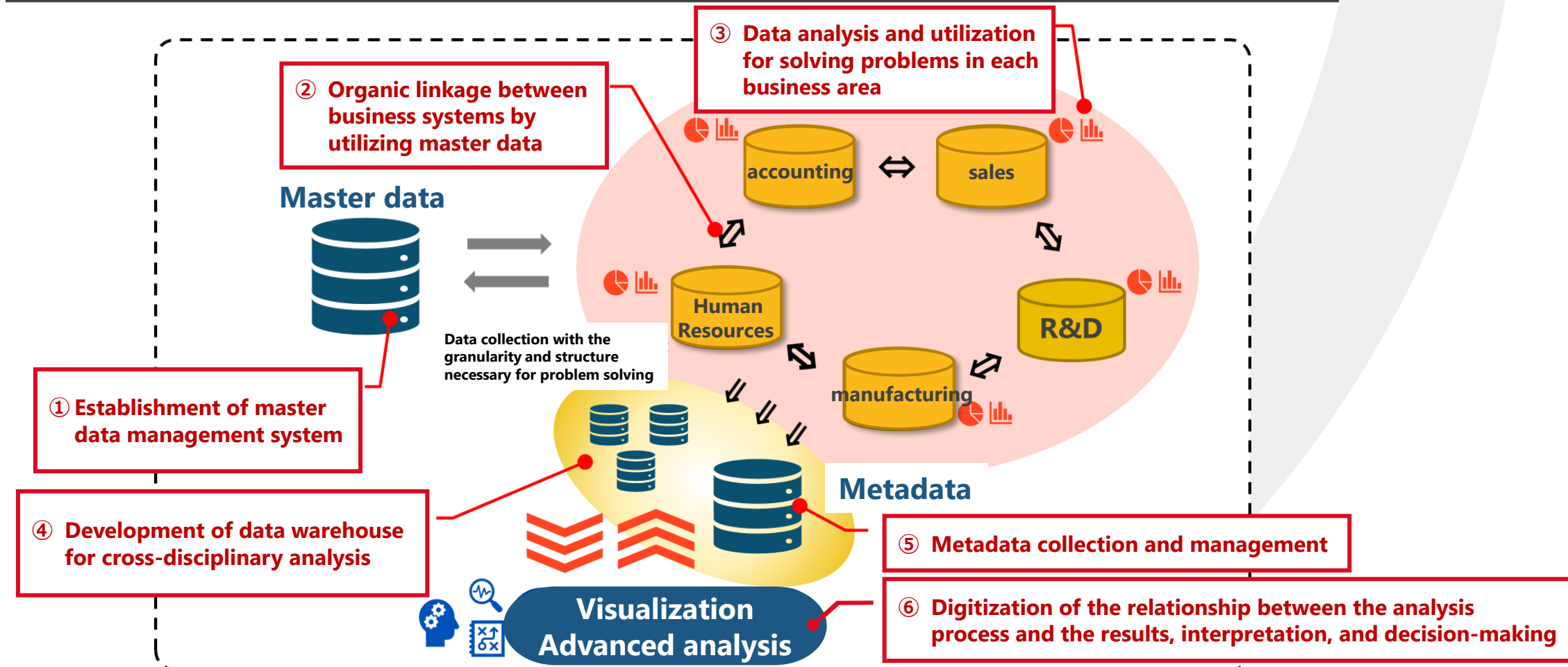


In order to run a data-driven business, **it is important to quickly understand the execution status of strategies and tactics based on analysis results, and to identify and respond to issues (data visualization).**

# Central Data Management (CDM)

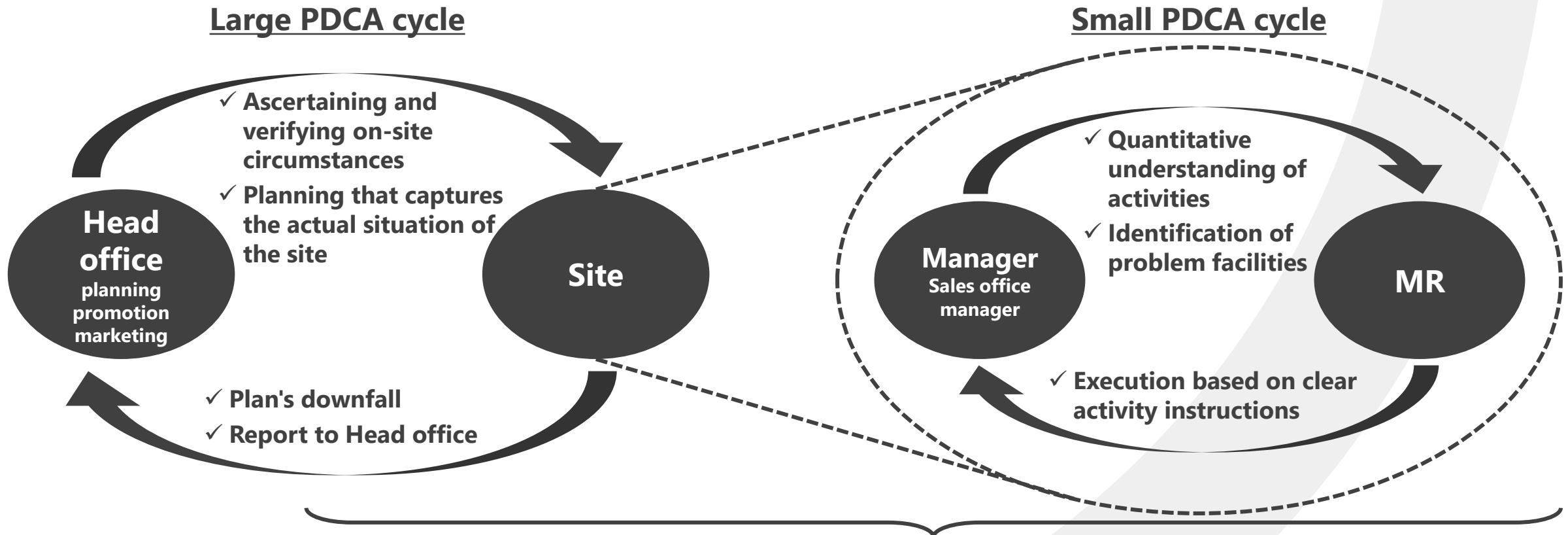
We are promoting the CDM with the aim of managing, linking, and analyzing internal and external data. Among them, today I will introduce data utilization and visualization (③ and ⑥) in the sales and marketing area.

## Conceptual diagram of the CDM concept



# Goals of the Sales and Marketing domain

Aiming to establish a high-quality and high-speed decision-making system through a large PDCA cycle at the site and head office and a small PDCA cycle within the site, we worked on the visualization of the data necessary for decision-making (BI construction).



**We will introduce the importance of data visualization and the know-how of providing value, starting with the BI built for the realization of the on-site PDCA cycle**

# Responding to decision-making data visualization issues

# Problems in establishing a decision-making system

In establishing a high-quality and high-speed decision-making system, there were problems in terms of both speed and information quality.

Problems in establishing a high-quality and high-speed decision-making system

## Scattered data

- ✓ Data is scattered in various systems and databases, and it takes time to collect and prepare data for utilization.
- ✓ Data linkage design is difficult due to lack of data organization

## Manual data update

- ✓ Relying on manual updates to quickly respond to changing business requirements
- ✓ Due to manual updating, the update frequency is not daily, and users cannot see the latest data.

## Multiple forms exist

- ✓ There are multiple forms and the same data is not used for decision making

## Providing data based on intuition and experience

- ✓ Users refer only to reports that are easy to use (that meet their own usage requirements)
- ✓ Data and information contained in forms are based on experience and intuition

speed aspect

quality of information



# Approach to establishing a decision-making system

We worked to solve problems in terms of speed and information quality from the perspective of data science and data management.

## Approach to establishing a high-quality and high-speed decision-making system

### Centralize and organize data

- ✓ Build a data management platform (DMP) to centrally manage scattered data
- ✓ Organize master data and transaction data into a state that is easy to use

### Mastering business requirements

- ✓ Identify data whose acquisition conditions change due to changes in business requirements, and build a master that manages requirements
- ✓ Create an environment where you can always refer to the latest data

### Establishment of governance system

- ✓ Aggregate and visualize the data to be deployed in a single form
- ✓ Establishment of repair flow to improve user satisfaction

### based on analytical results data visualization

- ✓ Visualize data based on analysis results by data scientists and contribute to action plan formulation and issue identification

speed aspect

quality of information