Material Issues for Future Value Creation

## Bolster Competitiveness Leveraging DX

For the materials and chemicals industries where it is an opportunity to provide products and solutions towards the global sustainability, we are required to enhance the business competitiveness through DX activities responding to shorter product lifecycle. Through our activities, we hope to contribute to delivering new value to our customers, by increasing more innovative personnel and creating an organizational culture adopting agility.

### Overall DX Strategy in FY2022-2024 Corporate Business Plan

Keeping efforts to implement DX Strategy 1.0 for high-productivity in four focus areas of research and development, plants, supply chain management, and offices, our business units take initiatives to focus on DX Strategy 2.0 for stronger competitiveness and DX Strategy 3.0 to aim to create new business models.



#### Two policies to succeed in DX Strategy 2.0

# 01 Realization of optimal business operations through data utilization

Proactively utilize digital tools and build digital environments for high-level data utilization to solve issues directly related to strengthening business competitiveness

#### **Collection of data**

Strategically and effectively collect data generated inside and outside the company.

- Production data
- R&D data
- Business data, etc.

#### Aggregation of data

Aggregate the data which are processed to be used quickly at any time.

 Data capitalization and data linkage

#### Utilization of data

Use of the visualized and analyzed data to make decision

 Value creation by analyzing and visualizing the data High-quality decision-making in real time

## 02 Training Digital Human Resources

We have set definitions of digital human resources engaged in Plant/R&D/SCM and trained them through our own programs that cover the basics through practical applications. Assigning trained digital human resources to all departments, we will promote company-wide DX challenges.

Increase personnel capable of analyzing and leveraging data in R&D and produ	iction activities	5.
Who has ability to analyze advanced data and support for each research theme activity to spread and establish company-wide data science	target by FY2024	<b>30</b> <sub>people</sub>
Who applies the best analytical method to each theme in R&D and/or production sites, solves problems by combining domain knowledge and data science	target by FY2024	300people
	(100 in R&D, 20	U in production)
Begin to train DX personnel to be assigned across all sectors.		
Who leads to select and implement appropriate digital technologies to solve overall business issues	target by FY2024	150people
	<ul> <li>Who has ability to analyze advanced data and support for each research theme activity to spread and establish company-wide data science</li> <li>Who applies the best analytical method to each theme in R&amp;D and/or production sites, solves problems by combining domain knowledge and data science</li> <li>Begin to train DX personnel to be assigned across all sectors.</li> <li>Who leads to select and implement appropriate digital technologies to solve overall</li> </ul>	activity to spread and establish company-wide data science       FY2024         Who applies the best analytical method to each theme in R&D and/or production sites, solves problems by combining domain knowledge and data science       target by FY2024         Begin to train DX personnel to be assigned across all sectors.       target by by target by

#### Specific initiatives to build a company-wide DX promotion system

- · Conduct DX literacy training for all executives and employees
- Since 2020, we have been annually holding an event, "DX Repository", to share our DX initiatives and to further accelerate digital innovation (in FY2022, approximately 1,200 people joined, including domestic and overseas group companies).
- Since 2019, we have been presenting annual awards for outstanding DX initiatives with the aim of encouraging employees and departments to promote DX activities.

#### Establishment of Digital & Data Value Creation Team

In January 2023, we established a new team to accelerate DX Strategy 3.0 in the Digital and Data Science Innovation Department. The team is comprised members who have a wealth of experiences in business and enhancing customer experience(CX) service as well as data scientists. The mission of the team is to create new value by transforming our conventional business models. To achieve this mission, this team will continuously launch new businesses - from searching for new business ideas by data utilization, planning and designing digital product. Additionally, we cultivate human resources capable of advancing DX Strategy 3.0. We will take on the challenge of providing unique value with a mindset unafraid of failure and a high level of agility.



Team Value-nauts Members

\*Team's nickname. They coined it to mean pursuers of value to express their determination to never give up in the pursuit of value, no matter what difficulties may come their way.