

# Innovation Management

## Digital Transformation (DX)

### Our Basic Approach and Strategy

Unicharm aims to create new value centered on the processing and molding technology for nonwoven fabric and absorbent materials that it has cultivated since its founding. This new value is the type of value truly sought by customers and defines our commitment to improving quality of life across the globe. However, as values continue to diversify, fulfilling the specific needs of each customer is no easy task.

In response, we visualize the vast array of data accumulated through our research and development activities over the years to develop insights into hidden desires of which customers themselves may be unaware. In addition to the specific needs of each customer, we strive to identify and grasp precise needs that subtly change according to situation, allowing us to provide the best possible products and services in the most suitable time and manner, and so endear ourselves to customers that they “could not imagine a world without Unicharm.”

These are the kinds of measures we take to closely connect with people at all stages of life, from newborns to the elderly, and continue to provide incremental value so that they, as well as their pets, who are beloved members of the family, continue to use our products and services throughout their lifetime.

### Management Structure

In January 2021, the Company established the DX Promotion Division and launched an initiative to centrally manage and systematize measures related to digital transformation. Specifically, the DX Promotion Division plays a central role in forming a digital transformation alliance that organizes the DX representatives of Group companies. The alliance oversees the promotion of DX throughout the Company, such as managing the progress of various DX initiatives and developing employees into DX specialists.

Moreover, in July 2023 we established the Marketing by DX (MDX) Division. Aiming to maximize lifetime value, the MDX Division will develop a system that draws on digital technology to continue strengthening customer relations over the long term and accelerate the diversification of our products and services.

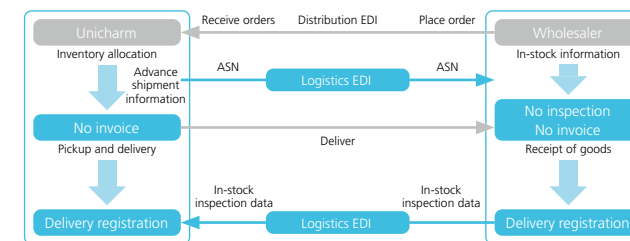
### Initiatives and Results

#### Streamlining Logistics Operations Using Logistics EDI

In August 2023, Unicharm began distributing Advanced Shipping Notices (ASN)<sup>\*1</sup> to wholesalers using the Logistics Electronic Data Interchange (EDI)<sup>\*2</sup> provided by PLANET, INC., to improve productivity by digitalizing logistics operations. The distribution of ASN to wholesalers will simplify inspections at time of delivery and digitalize the invoicing process (reduce paper use), thereby improving productivity by reducing time spend on receiving goods and enhancing the efficiency of logistics resources. In addition, the digitalization of individual logistics transaction information, such as ASN, is expected to optimize transportation and delivery efficiency and inventory throughout the supply chain.

We will continue to improve the efficiency of logistics operations throughout the daily commodity goods industry in cooperation with wholesalers and logistics operators.

#### Workflow Using ASN



#### Benefits of Using ASN

1. Digitalization of invoices reduces the use of paper  
As the manufacturer can distribute delivery statement information to the wholesaler using ASN data and the wholesaler can distribute inspection data to the manufacturer via the logistics EDI upon receipt of goods, neither manufacturers nor wholesalers need to print, store, or input invoice information, thereby improving operating efficiency.
2. Simplifies inspections at time of delivery between manufacturer and wholesaler  
As the manufacturer can distribute ASN via the logistics EDI and the wholesaler can perform warehousing and storage tasks based on delivery statement information obtained in advance, the inspection process for incoming goods is simplified, thereby reducing throughput time<sup>\*3</sup> for delivery vehicles.

<sup>\*1</sup> Advance shipment information provided by the shipper to the receiver, consisting of ship-from and ship-to codes, order number, product code, delivery quantity, and other information

<sup>\*2</sup> EDI for logistics standards between manufacturers and wholesalers in the daily commodity goods industry; allows the manufacturer to distribute ASN to the wholesaler and the wholesaler to distribute in-stock inspection data—which provides information on receipt of goods—to the manufacturer

<sup>\*3</sup> The time it takes for a product to enter and exit the delivery site

## Development of Smart Factories

The Kyushu Factory, completed in March 2019, is the Group's first smart factory. With the aim of streamlining tasks to be performed by anyone, realizing a safe working environment, and developing safe and reliable products, the Kyushu Factory has introduced IoT technology to provide timely access to on-site information, automated\*<sup>1</sup> the movement and supply-related tasks of heavy items through the adoption of driverless vehicles and robots, and implemented AI-based data diagnostics to detect irregularities and predict malfunctions along production lines, thereby reducing labor and increasing efficiency.

We are also steadily proceeding with efforts to develop smart factories at our other locations through the introduction of collaborative robots and SCADA.\*<sup>2</sup>



\*<sup>1</sup> A form of automation that aims to integrate human craftsmanship and knowledge with digital technology

\*<sup>2</sup> Supervisory Control and Data Acquisition: A supervisory control system that controls processes and centralizes monitoring in manufacturing and industrial settings

## UniChat AI Text Generation Service

In August 2023, Unicharm began using UniChat, an AI text generation service that utilizes Large Language Models (LLM) for employees in Japan. UniChat is provided in a safe and secure environment exclusively for the use of our employees, and is mainly used for summarizing, correcting, and translating text, and generating ideas for copywriting. We will continue to apply AI in the use of internal information to expand the scope of functionality for AI assistance services.



## Providing Apps and Information That Help Women Address Concerns and Changes in Physical Condition and Menstruation

Unicharm is working to develop and provide informative content that helps women address concerns and changes in their physical condition and menstruation. Specifically, we offer Sofy First Body Navi, a website featuring useful content on menarche, as well as the Sofy Girl app and Sofy app, which help users of various age address menstruation-related concerns. As of December 31, 2023, these apps have a total of approximately two million registered users.

The Sofy app, which is designed mainly for adult women, can be readily used by anyone seeking advice on cramping, premenstrual syndrome (PMS),\*<sup>3</sup> and other menstruation-related concerns based on a diagnosis of 24 types of physical condition under the supervision of a physician. In November 2023, we launched a "Pregnancy Planning Mode" function for the Sofy app, which provides useful information for those trying to conceive\*<sup>4</sup>

and offers a product-linked function to track the use of *Sofy Active Pregnancy Monitorable Pantyliners*.



In April 2023, we also launched official TikTok account "Sofy Sarakeda-so (Let's talk it out)" to help young people gain proper knowledge and promote mutual understanding of menstruation. TikTok users can learn various information through conversations held between characters Tsukiko, an expert on menstruation, and Nanoka, a first-year university student. The account has received more than 21 million views as of December 31, 2023, and will continue to regularly provide content that helps users address their menstruation-related concerns without having to deal with them on their own.



\*<sup>3</sup> Emotional and physical symptoms such as irritation, stomach pains, and headaches that are experienced before a period

\*<sup>4</sup> Refers to acquiring knowledge, discussing with family members, monitoring one's physical condition, and receiving fertility treatment, among other activities people often engage in when trying to conceive a child

**P070** Sofy Active Pregnancy Monitorable Pantyliners (Japan)

**web** Sofy First Body Navi (in Japanese only)  
<https://jp.sofygirls.com/ja/girls.html>

**web** Sofy Girls app (in Japanese only)  
<https://www.sofy.jp/ja/app/sofygirl.html>

**web** Sofy app (in Japanese only)  
<https://www.sofy.jp/ja/app/sofy.html>

**web** Sofy "Sarakeda-so" TikTok account (in Japanese only)  
[https://www.tiktok.com/@sofy\\_official\\_7days/](https://www.tiktok.com/@sofy_official_7days/)

## Joint Research to Help Ensure the Well-Being of Cats

In April 2022, Unicharm formed a capital and business alliance with RABO, Inc. The purpose of this alliance is to speed up the development of products and services to help bring happiness to cats on a daily basis by merging RABO's cat activity data, which is one of the largest in the world spanning over 15.0 billion cases, and Unicharm's long-cultivated technologies for cat food and care products. Combining Unicharm's *Deo-Toilet* litter box for cats and RABO's Catlog Series devices, we will continue to engage in joint research and development to help ensure the well-being of cats and improve their quality of life.



## DOQAT Pet-Related Q&A Service

DOQAT is an online Q&A service platform where dog and cat owners can share information and advice on any matter related to their beloved pets, with approximately 44,000 registered users as of December 31, 2023. Through the sharing of experiences and ideas between people with dogs and cats of similar breeds and ages, the service enables owners to gain insights from one another and lead happier and more peaceful lives with their pets. We also utilize Q&A data to develop even better products and communications with our customers.



web DOQAT Partner Animal (Pet)-Related Q&A Service (in Japanese only)  
<https://doqat.jp/>

## Online Moony-Chan Classroom

To offer support for mothers and fathers with concerns about childbirth and childcare, Unicharm introduced its online Moony-Chan Classroom in fiscal 2020, which has been livestreamed on 10 occasions as of the end of fiscal 2021. In fiscal 2022, we created and provided video content on five themes that were particularly well received, such as changing baby diapers for the first time. In 2023, we continued to provide informative content by drawing on the advantages of video, which can be viewed with family members and partners at any place and any time.



Moony-Chan Classroom

web Moony-Chan Classroom (in Japanese only)  
<https://jp.moony.com/ja/campaign/school.html>

## Hands-Free Commute: A Subscription-Based Model for Disposable Diapers

A subscription-based model for disposable diapers to alleviate the burden on both parents and childcare workers, Hands-Free Commute has been introduced at several childcare facilities throughout Japan. Under Hands-Free Commute, we developed a system that monitors data on the number of disposable diapers and baby wipes at nursery schools and automatically calculates the order quantities of new stock when inventories run low. Also, together with BABY JOB Inc., our business partner, we have acquired several business model patents in relation to the Hands-Free Commute system. This system has been adopted at approximately 4,500 childcare facilities as of December 31, 2023.



## Recognized as a DX-Certified Operator

The DX certification system is a national system recognizing companies that meet the basic requirements specified in the Digital Governance Code based on the Act on Facilitation of Information Processing. Certified operators are deemed to be DX-Ready—that is, ready to transform their businesses using digital technology. Unicharm was recognized as a DX-Certified Operator in fiscal 2022.



## Selected as a Noteworthy DX Company 2023

Unicharm was selected as a Noteworthy DX Company 2023 under the Digital Transformation Stocks (DX Stocks) 2023 program jointly administered by the Ministry of Economy, Trade and Industry (METI), Tokyo Stock Exchange (TSE), and Information-technology Promotion Agency, Japan (IPA). We position DX as one of our most important management strategies and utilize it to the fullest to explore and develop insight into the potential desires of customers and to innovate technology that adds new value to product functions.



DX注目企業2023  
Digital Transformation