

# Innovation Management

## Digital Transformation (DX)

### Our Basic Approach and Strategy

Centered on its processing and molding technology for non-woven fabrics and absorbent materials, Unicharm is aiming to provide new value from the perspective of “NOLA & DOLA” (Necessity of Life with Activities and Dreams of Life with Activities). Providing this new value means pursuing value that is truly sought after by customers, contributing to better quality of life for customers around the world. However, as values continue to diversify, fulfilling the individual needs of each customer is no easy task. By visualizing the data generated from the various information accumulated over the years to identify consumer insights, we strive to develop products and services that capture the hearts of customers. We aspire to provide customers with the best possible product at the most suitable time and location and deepen their interest in our products by understanding not only the customer's situation but also the circumstances of when and where these products are needed. At Unicharm, these are the kinds of measures we take to continue to provide incremental value so that our products and services continue to be used at all stages of life by everyone, from newborns to the elderly, and partner animals (pets).

### Management Structure

In January 2021, the DX Promotion Division was established, enabling us to systematize DX-related projects by centrally managing their progress. Also, a DX alliance has been formed by the representatives of Group companies, with the DX Promotion Division at the helm, to promote DX through a concerted Groupwide effort, including managing the progress of their respective initiatives and developing employees into DX specialists.

### Initiatives and Results

#### Kyushu Factory: Unicharm's First Smart Factory

Based on the concept of integrating wisdom and technology, the Kyushu Factory, the Group's first-ever smart factory, began operations in 2019. Established with the aims of enabling all employees to work by streamlining tasks, providing a safe workplace environment, and developing safe and reliable products, the Kyushu Factory features state-of-the-art IoT technology that relays on-site data in a timely manner, ensuring high levels of safety and productivity. In addition, we have “autonomated”<sup>\*</sup> the movement and supply-related tasks of materials and other heavy items by adopting driverless vehicles and robots and implemented operational data diagnostics that draw on artificial intelligence (AI) to detect irregularities and predict malfunctions along the production line, thereby reducing workload and enhancing work efficiency.

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

### Adult Diaper Counseling Service

To continue to improve the quality of responses to customer inquiries for selecting the most appropriate disposable adult diaper, in 2017 Unicharm unveiled its Adult Diaper Navi service employing chatbot\* AI technology. Furthermore, in 2021 we launched the Adult Diaper Counseling Service, which combines LINE's chat-based diagnostic feature and Bodygram, an AI technology that enables measurements to be made automatically through data read by smartphones, as a means to ensure that customers choose the right product and size when it comes to disposable adult diapers. By enabling caregivers to select the appropriate product and size of disposable adult diapers at the touch of a button on their smart screen, Unicharm is contributing to a better nursing care setting overall.

\* A computer program that can have human-like interactions (or a system incorporating this function)



Unicharm's Adult Diaper Counseling Service enables customers to select the right product in the best-suited size

## A Smartphone App That Helps Women Overcome Concerns over Changes in Physical Conditions and Menstruation

Unicharm is working to develop and provide informative content that helps women overcome their concerns over changes in their physical condition and menstruation. In 2021, Sofy smartphone app was launched to complement our preexisting Sofy First Body Navi, a website offering useful information that helps educate users on menarche, and the Sofy Girl app, which helps users deal with their worries over their first menstruation experience and puberty. The Sofy app is designed for use by anyone, including adults who are dealing with menstruation disorders, as it offers advice on concerns over menstrual cramps, premenstrual syndrome (PMS),\* and other causes of discomfort based on a diagnosis of 24 types of physical conditions under the supervision of a physician. The Sofy Girl and Sofy apps have been downloaded by approximately 1.5 million users as of December 31, 2022.

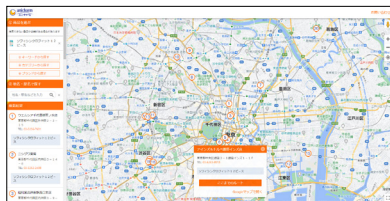
\* Emotional and physical symptoms such as irritation, stomach pains, and headaches that are experienced before a period

**web Sofy Girl 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>

## Launch of the Store Locator System Service

In August 2022, Unicharm introduced the Store Locator System as a means for customers to, at any place and any time using their location information, immediately look up stores in their vicinity that sell Unicharm products.



Store Locator System Service

## Online Moony-Chan Classroom

To offer support for mothers and fathers with concerns over childbirth and childcare, Unicharm introduced its online Moony-Chan Classroom in 2020, which has been live streamed on 10 occasions as of the end of 2021. In 2022, we provided video content on five themes that were particularly well received. In this way, we continue to provide informative content by drawing on the advantages of video, which can be viewed with friends and family members at any place and any time.



Moony-Chan Classroom

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

## Supporting Childcare through a Focus on Babies' Sleep Rhythms

Sleep is essential to maintaining the health and ensuring the development of babies. Recognizing this fact, Unicharm conducted joint research on sleep with Professor Mitsuo Hayashi of the Graduate School of Humanities and Social Sciences at Hiroshima University and Professor Masako Ohira of the Faculty of Education at Shiga University. Through this research, we found that establishing an environment conducive to lifestyle patterns and sleep is paramount to nurturing babies' ability to fall sleep on their own, and this result was presented at the 47th Annual Meeting of the Japanese Society of Sleep Research held from June to July 2022.

Based on these results, we developed content to support childcare based on a unique algorithm that keeps track of babies' daily sleep patterns. This content, which helps improve childcare by identifying babies' sleep patterns, was also used in the Team Moony Point Program app.



## 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 that 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 8.0 billion cases, and Unicharm's long-cultivated technologies for cat food and care products. Combining Unicharm's *Deo-Toilet* cat litter box 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 enhance their quality of life.



## DOQAT Partner Animal (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 partner animals (pets). Approximately 33,000 users have registered for this service as of December 31, 2022. Through the sharing of experiences and ideas between people with dogs and cats of similar breeds and ages, the service enables dog and cat owners to gain insights from each other and helps them lead happier and more peaceful lives with their partner animals (pets).



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