



Feature
Human Resources

Accelerating Our Business Transformation through the Development of Human Resources in DX

Why is it important?

We Require Human Resources to Accelerate DX as a Management Issue

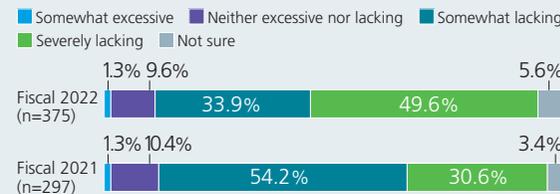
With revolutionary advances in digital technology, digital transformation (DX) has become today's key challenge. DX refers not only to the adoption of information systems or utilization of data, but also transformation of business models and work processes using digital technology, including AI and IoT, as well as the enhancement of an organization's value and competitiveness. The Government of Japan is also promoting DX among businesses and local governments. With plentiful talent capable of delivering DX, there is fierce competition for personnel hiring among Japanese companies. Many businesses recognize this challenge. In fiscal 2022, 83.5% of companies surveyed by the Ministry of Economy, Trade and Industry responded that they face a shortage of human resources in DX. Daikin also strives for business transformation; thus, the acquisition of talent to lead this change is a critical issue.

Estimated Shortage of IT Human Resources in Japan



Note: Compiled by Daikin based on Survey on Demand for IT Human Resources (Upper Scenario) (April 2019) by Japan's Ministry of Economy, Trade and Industry

Sufficiency of Human Resources for Promoting DX in Japanese Companies



Source: White Paper on DX 2023, Information-technology Promotion Agency, Japan (IPA)

Daikin's Approach

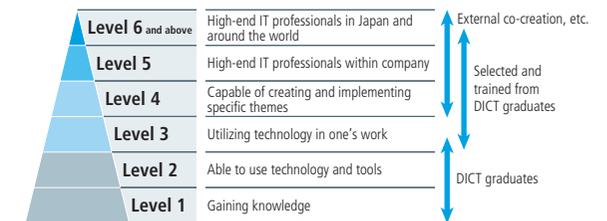
Fostering Human Resources in DX In-House with Collaboration from Osaka University

At Daikin, we believe that to utilize digital technology, it is not only important to have IT knowledge but also to pursue effectiveness by integrating knowledge with frontline experience. As such, Daikin launched the in-house Daikin Information and Communications Technology College (DICT) in December 2017. With the full cooperation of Osaka University, and under the guidance of expert instructors, Daikin is fostering human resources in DX in-house who can engage in business with an understanding and command of digital technology and can implement specific themes.

Over the course of two years, DICT trains personnel selected from new employees of all job types, as well as offers lectures for all job ranks including managers and executives, with a systematic plan to expand human resources in DX that are essential to the realization of the Fusion 25 strategic management plan.

As of the end of fiscal 2022, a total of 1,300 employees have completed courses at DICT. These graduates are now involved in creating new businesses and improving work process efficiency centered on digital technology.

Development Steps at Daikin for Human Resources in DX



Source: Compiled by Daikin based on skill standards of the Information-technology Promotion Agency, Japan (IPA)

See below for our development of human resources in AI
[079 Social Human Resources Fostering Human Resources](#)

Daikin's Performance

Promoting Digital Transformation by Adding DICT Graduates to Workplaces

Graduates who completed courses at DICT are placed in various departments, from sales to development, manufacturing, and corporate, to take on the challenge of resolving issues while gaining work experience in the field. They look for better solutions not only through working collaboratively within the workplace but also identifying the essence of issues through active dialogue with various stakeholders such as suppliers. With the active participation of talent with this specialized knowledge, we have gradually been overcoming various challenges and seeing the results of digital transformation that we were not able to obtain in the past. In addition to the direct results of utilizing tools and systems, this change also enabled mutual learning and improved motivation toward transformation among colleagues through projects.

Example 1: Development of a Tool That Can Easily Connect VRV to a Building Management System

The field of instrumentation* of multi-split air conditioners for buildings is critical for Daikin's solution business since we remain in contact with customers after product delivery. Geared toward our full-fledged entry to the market, Daikin developed a tool for easy connection between a BMS* of partner companies with our VRV (multi-split air conditioner for buildings) system. This tool eliminates manual labor for connections and makes it possible to reduce work hours by 30 to 50%. The addition of people capable of operating the latest digital technology also motivates younger employees, which also enhances our overall capabilities including the ability to propose technologies.

Through this development project, graduates deepened their appreciation of the cycle, sales channels and frontline knowledge of the solutions business, and acquired analytical skills, practical DX abilities and project promotional skills. The developed tool will be introduced in the Asia/Oceania region, particularly for medium-scale BMS in Singapore, where the market is expected to grow steadily. In addition, it will also be implemented to enhance service solutions globally.

* Instrumentation refers to the control and monitoring of building equipment operations, including air conditioners, lighting, and security devices. Building Management System (BMS) is a system of integrated management of instrumentation.

Example 2: Establishment of a Management System That Can Reduce Production Losses and Improve Processes

To standardize production processes, we use AI to analyze the detailed movement of workers on camera to visualize the work hours by model type under production and by each worker. We combine this data with equipment data and operate a production management system that allows us to review the process according to the situation. We are running a production management system capable of reviewing work processes according to the situation by integrating this data with equipment data. The combination of various digital technology, such as this and strong ability for improvement on-site, allowed us to implement measures even promptly and accurately when the supply of parts, production units and personnel fluctuated sharply due to the COVID-19 pandemic, and led to a reduction of work hours by about 3,700 hours a year. Seeing the results in real time also improves employee motivation and further stimulates improvement activities.

The key to this development was that we reflected the experience level of skilled workers, which was difficult to quantify, in the system. The success with the development of a high-quality tool based on research on the frontline going beyond tabletop learning contributed drastically to improving on-site productivity, and also elevated the skill level and adaptability of the graduates. Going forward, this system will be introduced in plants in Japan and overseas.

Next Challenge

Expanding the Range of Talent and Further Elevating Their Level

Daikin believes that human resources in DX will become even more important in the future. Therefore, we will continue to provide training and skill support.

Our target is to provide training to 1,500 employees, including both existing and new employees, by fiscal 2023. In order to expand advanced human resources in DX who can take the lead in creating and executing their own project theme, starting in fiscal 2023, Daikin plans to establish opportunities for regular communication with executives to foster management perspective as well as to improve business knowledge and understanding through cross-functional projects.

Through these efforts, we hope to not only improve internal job efficiency but also spur on innovations that will help to resolve energy and environmental issues and further develop industries and technologies.

Further Promotion of DX for Advanced Problem Solving

Yasushi Yagi

President of DICT, Professor of The Institute of Scientific and Industrial Research, Osaka University



DICT is a place to systematically learn how to apply knowledge for problem-solving. It provides training that emphasizes critical thinking, practical application, and execution. Daikin's human resources in DX will be responsible for addressing social issues and serve as the key to sustainable growth. I hope that they will adopt new and improved technology and evolve into someone who can contribute to society in the era of digital transformation.