

DDX (Denka Digital Transformation) Based on the Management Plan “Mission 2030”

Message from CTO

Masanobu Kosaka

Director
Managing
Executive Officer
Chief Technical
Officer

Each division and business site have independently pursued DX (digital transformation) and achieved certain results in business transformation, but these efforts had not yet been elevated to a company-wide initiative. DX becomes a powerful force only when the entire company works together in the same direction. Therefore, last fiscal year (FY2024), we formulated a management DX strategy based on the management plan “Mission 2030” (hereafter, M30) for each business division with profit and loss responsibility, including related business sites. In addition, each corporate department, which sets company-wide policies, also devised DX strategies including business sites, and these were consolidated to create Denka's DX Roadmap (DDX Roadmap). During this process, we engaged in repeated dialogue with management, including the president, to ensure management's commitment. The DX vision, DX strategy, and even the specific DX initiatives and the systems to realize them are described in detail, from broad direction to specific methodologies. I believe the DDX Roadmap has become something into which both management and employees have poured their passion. Starting this fiscal year, the first year of DX, implementation has begun in line with the DDX Roadmap. A DX Support Section was newly established in the Digital Strategy & Innovation Department to lead company-wide DX. In addition, through the “Digital Utilization and DX Talent Development Program” launched last fiscal year, 78 Digital Pilots (DP)* have been born, and we look forward to their active roles in the DDX arena.

* Personnel who lead digital utilization and DX promotion within the company

Basic Policy (Policy)

The Digital Strategy & Innovation Department's goals for FY2025 have been redefined to coincide with the start of DDX:

(1) Promoting DDX to realize M30, (2) Building and operating a robust IT infrastructure to support DDX, and (3) Developing and utilizing digital talent.

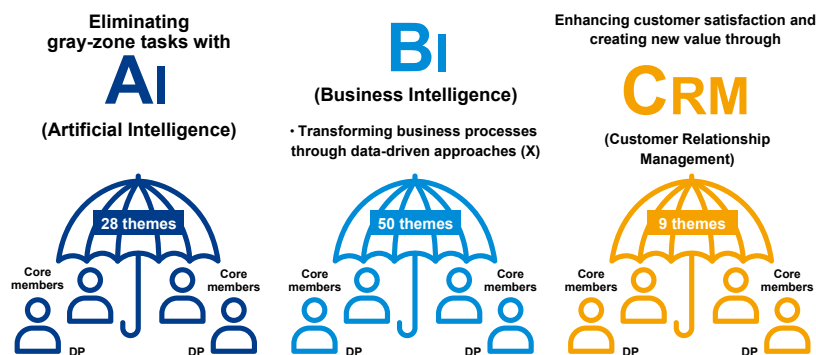
In “(1) Promoting DDX to realize M30,” DX is positioned as an effective means to achieve the management plan “Mission 2030,” ensuring that DX does not become an end in itself.



For DDX, 118 company-wide initiatives were identified and classified into three categories: AI (Artificial Intelligence), BI (Business Intelligence), and CRM (Customer Relationship Management). By turning these into projects, we are advancing initiatives across the entire company.

Through DDX, we aim to drive transformations in business models, operations, organizations, processes, and corporate culture and climate.

Three Projects for Promoting DDX



As of April, 2025

Regarding “(2) Building and operating a robust IT infrastructure to support DDX,” we are working to enhance our IT capabilities so that IT does not become a bottleneck for DX, securing communication capacity and strengthening security. In addition, by visualizing ICT assets and promoting awareness activities, we will fully utilize existing ICT assets company-wide to prevent redundant investments. This will maximize results while minimizing costs. Regarding “(3) Developing and utilizing digital talent,” we recognize that human capital is essential for realizing M30, and will continue the “Digital Utilization & DX Talent Development Program” that started in FY2024. Newly appointed DPs will participate in DDX's ABC projects and play a central role in DDX.

DDX Roadmap

“Make the World a Better Place as Specialists Fusing Digital and Chemistry”

DDX Vision Linked to Management Vision

DX will become an important means for achieving M30, but it is expected that the means (tactics) will change as we move forward. To clarify the direction and goals of what kind of transformation we aim to achieve using digital technology, we have formulated our DDX vision. This vision was drawn from DDX roadmap formulation members and selected by the president based on the following criteria.

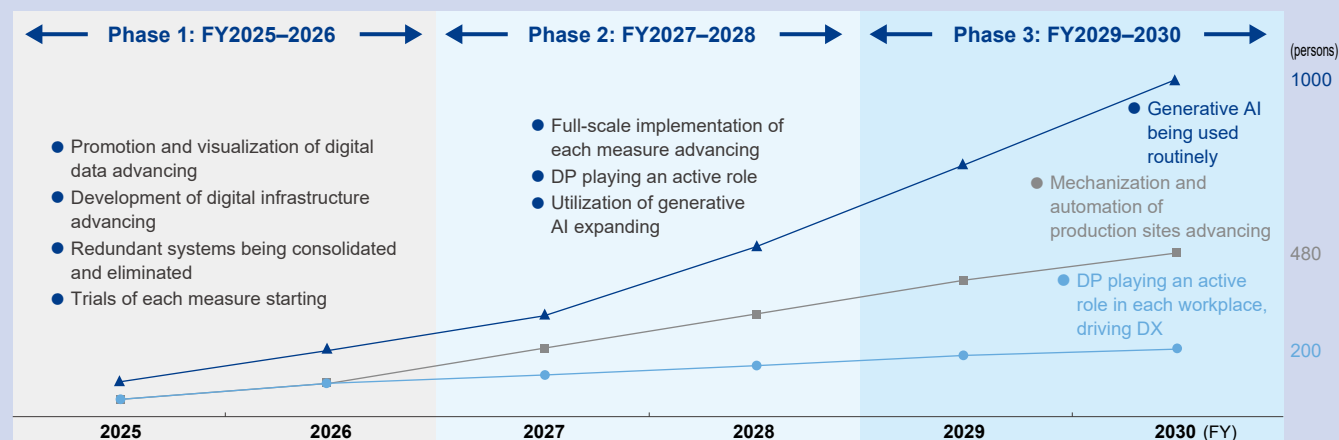
- (1) Linked to the Management Plan “Mission 2030”
- (2) All employees can feel it is their own
- (3) It is simple (easy to remember)

Progress of Initiatives

Participants in DDX themes from all business divisions/corporate divisions are defined as DX Producers (division heads: responsible for business including sites; corporate heads: indicate company-wide policy and oversee including sites); DX Promoters (site managers, section managers, etc.), DX Coordinators (appointed by DX Producers from among DX Promoters), and core members (practitioners including DPs), and together with members of the DX Support Section, we have started implementing DDX themes. We will promote this in a three-level structure so that the site staff, management and executive levels are each able to identify the status of progress.



DDX Roadmap



KPI Related to DX

KPIs to measure the progress of DDX were set in the second half of FY2024. We will use KPIs to confirm whether DDX themes are helping to resolve issues, make necessary revisions to DDX themes, and make decisions on the reallocation of management resources.

FY2030 Targets

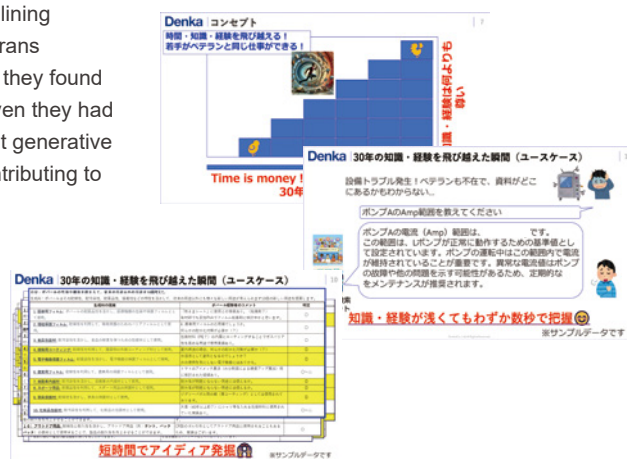
- Labor productivity (number of labor-saving personnel): 480 people
- Utilization of generative AI: 1,000 generative AI accounts
- Digital talent development DP: Training 200 people
- Basic education and skill-up education: 2,000 participants
- Sales departments utilizing CRM: 80%

DDX Case Studies

Leap Over 30 Years of Knowledge and Experience with Generative AI!

To address social issues such as labor shortages due to declining birthrates and aging populations, and delays in digitalization, we have introduced a system combining “cross-sectional search system” and “generative AI.” This aims to enable younger employees to perform at the same level as veterans by transcending barriers of time, knowledge, and experience.

For example, generative AI can be used for technology inheritance in manufacturing departments. By documenting and accumulating the expertise and on-site know-how of skilled workers, even less experienced employees can instantly refer to the knowledge and experience of veterans, leading to quicker problem resolution. In research departments, we are using it for new business ideation. Utilizing generative AI in the early stages of projects enables the generation of high-quality ideas in a short time. This method has reduced the idea generation process from several months to just a few minutes, speeding up and streamlining projects. Furthermore, when veterans evaluated ideas generated by AI, they found that about 20–30% were ideas even they had not come up with. This shows that generative AI can produce unique ideas, contributing to improved idea quality.



VOICE

The benefits of generative AI go beyond simple operational improvements. The time and creative space it creates become seeds for new value and business ideas, driving Denka's future. Please share your insights and ideas, and let's energize the DDX project together!

Maki Hayasaka Digital Strategy & Innovation Department



Eliminate Unreasonableness, Wastefulness, and Inconsistency to Boost Productivity and Aim for New Value Creation!

Most workplaces used to download data from core systems and create sales and inventory reports in Excel. While some automation was achieved with Excel macros, there were frequent issues such as “macros suddenly stopped working” or “processing failed when the PC was turned off.” To address this, we built a system to automatically extract data from core systems on a regular basis and combined it with BI tools*, allowing users to view the latest sales and inventory dashboards simply by opening files on a shared folder. This eliminated daily manual work and macro troubleshooting, reducing the time and stress involved in report creation. This system is already being used in multiple departments, and with further adoption, we expect even greater reductions in “work hours” and “dependency on individuals.”

Our ideal vision is “data-driven decision-making for all employees.” As data utilization becomes established from management to the front lines, we expect data-driven analysis to become the norm, leading to deeper customer understanding and the discovery of new management challenges.

* BI tools: Business Intelligence



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We started this initiative with the desire to make stressful tasks easier through systemization. DX requires analysis using a wide variety of data. We will work together with everyone to create outputs that contribute to the business.

Akiko Hasegawa Digital Strategy & Innovation Department



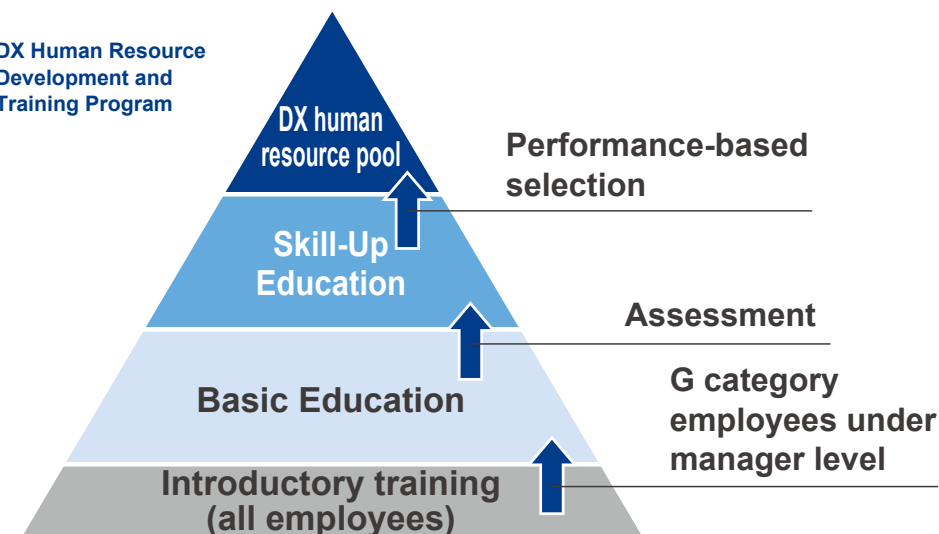
DX Talent Development Program and Digital Pilot Training

In order to carry out measures to achieve our Mission 2030 targets, we believe it is essential for all employees to acquire digital literacy and to utilize the available digital technology in their respective workplaces. Each department requires "DX human resources" with the knowledge and skills to actively promote DX. However, rather than recruiting these from within our current resource pool, we launched a pyramidal "DX human resources" development and education program in FY2023 to raise the level of digital literacy among all employees.

Through this educational program, the participants can feel their growth with improved works and quality, while their motivations will increase through incentives enabled by the corresponding human resource evaluation systems. For managers of these participants, the work processes in their workplace will improve, leading to an organizational and self-evaluation.

This program is a source of performance improvement and competitive force, while it leads to development of outstanding human resources, that are the company's treasures. We believe that providing excellent products and services through our DX achievement will lead to resolution of social issues.

DX Human Resource Development and Training Program



From "Knowing" to "Doing" through Practical DX Training

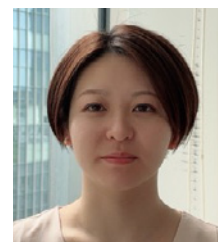
To become a DP, it is essential to gain knowledge through e-learning and clear a certain level in assessments, but that alone only means you "know." DPs must be people who achieve results through action, and must elevate themselves from "knowing" to "doing."

The key to this was practical training (dojo) conducted as part of skill-up education. Here, participants were asked to plan DX initiatives using Denka's existing ICT assets. New developments or new tool introductions were not allowed, they had to use what was already available. The intention was that while it is easy to consider DX with new tools, by intentionally using only existing ICT assets, we could truly assess the candidates' abilities and also provide an opportunity to learn about Denka's ICT assets. In the first round of planning, 85 candidates submitted 120 ideas. These proposals were scored with input from consultants (including external perspectives). Although the candidates already had a high level of digital literacy and had improved further through e-learning, the average score in the first round was 40, with the highest being 64. This highlighted the significant gap between "knowing" and "doing." As a result of conducting practical training (dojo) to overcome this barrier, the average score was significantly raised to 64, the previous highest score.

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Rena Sato

Electronics & Innovative Products
Functional Ceramics Department
(Digital Pilot)



Leveraging the insights gained through last fiscal year's skill-up training, I am now working as a core member of our company's DX initiatives. Moving forward, I will drive continuous improvement and challenges based on digital technology, with both "business transformation" and "creation of new value" as our dual engines. I will proactively engage to contribute to the growth of the entire organization.

Masahiro Touya

Quality Assurance Department,
Head Office
(Skill-Up Education
program participant)



After leveling up from last year's basic training, I am now participating in a skill-up training. The reason I decided to participate was not only to deepen my expertise in chemistry, but also because I felt the need to reskill in digital fields. This training is offered in an e-learning format, which allows me to take courses at my own pace, making it very appealing. I am using it as an opportunity to improve my skills. By applying what I have learned in this training, I aim to become a DP and give back to my department.