Possibility of Chemistry

Our work introduces new value for the future.
It makes tomorrow brighter for people and the planet.
Since our founding in 1915, we have challenged ourselves
to improve society and the world,
leveraging Denka's unique strengths unmatched by any other.

Fusing more than 110 years of expertise with cutting-edge technology
unlocks new possibilities in chemistry.
We anticipate the needs of the future and create new forms of prosperity.

Developing advanced materials for the environment and energy
and achieving breakthroughs in life science,
we respond to ever-diversifying challenges,
enriching society and lives through the power of chemistry.

Lyon, France

Denka

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The Denka Way
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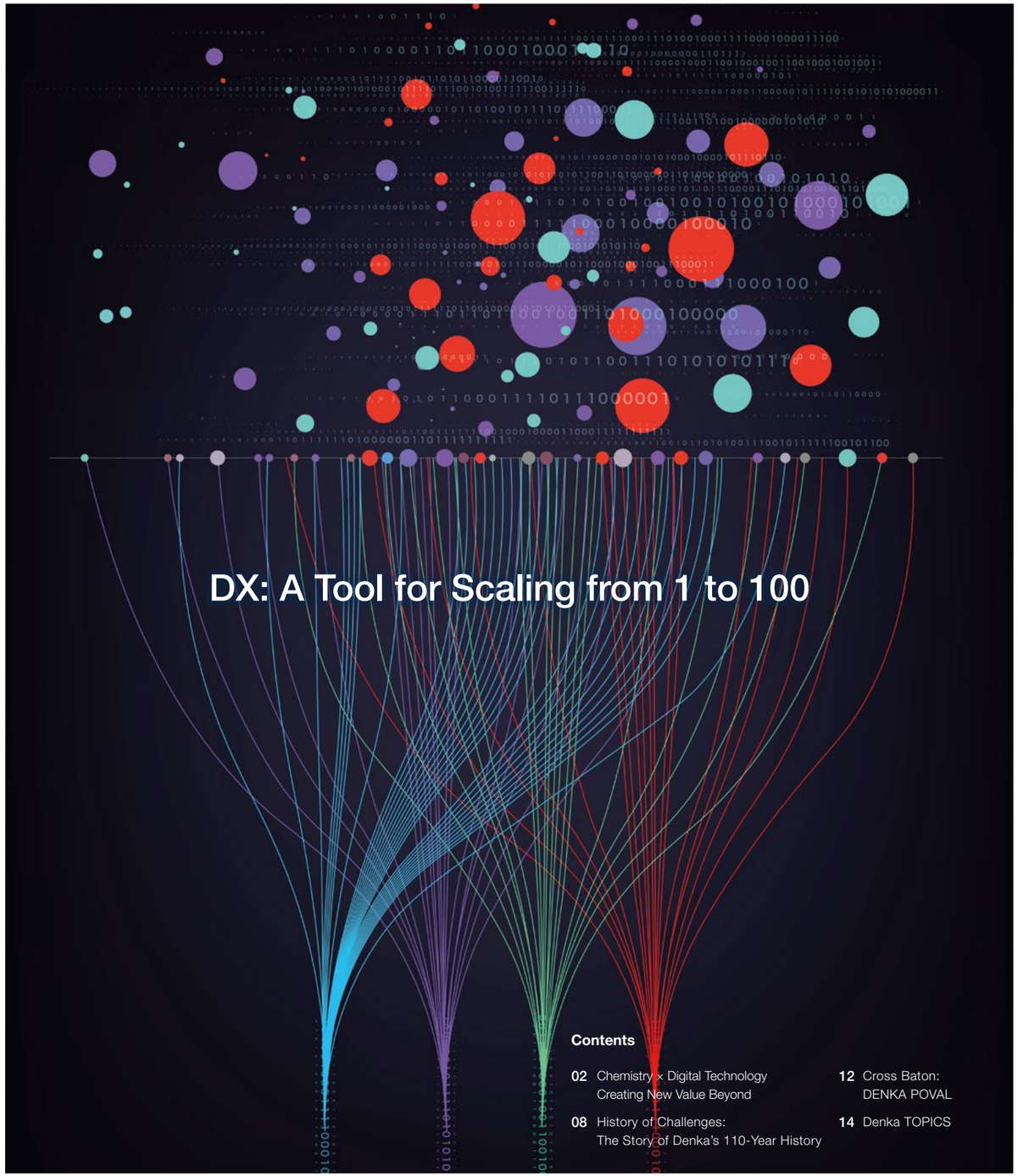
Denka

The Denka Way

Spring 2026 Vol.26



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- **»Concentrate resources on core operations**
- **»Improve ease of working**

Driving DX Across the Entire Company

In December 2025, Denka was certified as a "DX-Certified Business Operator" by the Ministry of Economy, Trade and Industry. The company is currently undergoing a company-wide transformation driven by DX. This feature provides a comprehensive overview of these initiatives.

What is DX?

DX (Digital Transformation) refers to leveraging digital technologies to fundamentally transform a company's business models, operational processes, and organizational culture, thereby driving new value creation and enhancing competitiveness.
Denka positions "Denka Digital Transformation (DDX)" as its company-wide DX strategy and a key initiative for achieving its management plan, Mission 2030. It is not limited to specific departments, but rather a coordinated effort across all divisions, including planning, production, administration, and sales. Rather than simply improving operational efficiency, it represents a transformation that enhances the company's overall value.

Key Features of DDX

At Denka, DX is positioned as a means of achieving the Mission 2030 management plan. It has three key features.

1 Company-Wide Involvement

Rather than being limited to the DX promotion departments, Denka has established a framework that enables its five business divisions and 16 corporate departments to take the initiative in driving DX.

DDX Promotion Structure

Head Office
- Executive Management
- DX Producers: Heads of business divisions and corporate departments
- DX Coordinators: Appointed by DX Producers from among DX Leaders

Head Office / Branch Offices
- DX Leaders: General managers and section managers
- Core Members: DPs* / Operational staff

Sites (Plants, etc.)
- DX Leaders: Plant executives, general managers, and section managers
- Core Members: DPs / Operational staff

The DX Support Section of the Digital Strategy & Innovation Department, which leads company-wide DX, works in collaboration with core members appointed from all business and corporate divisions to drive DDX initiatives.

*DP: Digital Pilot. Individuals who lead digital utilization and DX promotion within the company.

2 Minimal Investment, Maximum Impact

While making only the necessary minimum investments, such as in infrastructure, Denka maximizes the use of its existing ICT assets. It also standardizes systems and applications across the company to prevent duplicate investments and ensure company-wide optimization.

3 Driven by Dialogue and Governance

While a certain level of managerial oversight and the coordinating role of the Digital Strategy & Innovation Department are important, Denka places even greater emphasis on "empathy," one of its core values. The Digital Strategy & Innovation Department holds over 100 dialogues annually with on-site teams, steadily promoting adoption across all locations.

Projects

DDX's Three Major Projects

Specific DX initiatives across Denka's business divisions and corporate departments are broadly categorized into three major projects. This section introduces these projects, along with examples and insights from members of the DX Support Section who support them.

The number of themes under A, B, and C is as of April 2025.

Eliminating Gray-Area Tasks with AI

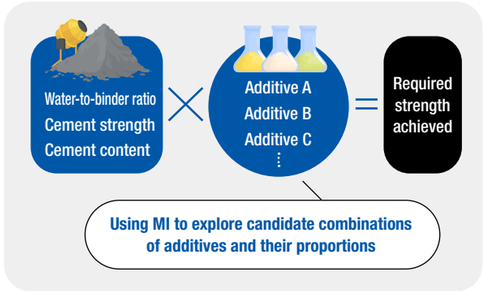
Targeting routine tasks in each workplace, Denka is promoting the simplification and automation of operations through the use of advanced AI technologies, including generative AI. The aim is to reduce working hours while creating an environment where employees can focus on more creative and strategic work.

Case Study

Efficient Exploration of Optimal Concrete Mixes

By introducing MI*, Denka has achieved significant acceleration and efficiency in new material discovery and development.

*MI: Materials Informatics. A method of using AI (machine learning and deep learning) and data science to predict and explore material properties based on large volumes of experimental and research data.



Before

Selecting multiple concrete additives and adjusting their proportions has traditionally relied heavily on the expertise of experienced developers, making it time-consuming to identify the optimal mix.

Action

Calculation conditions are set based on past experimental data, and Bayesian optimization (a method for efficiently identifying optimal mix designs) is used to generate recommended mix parameters, predicted strength values, and analysis results.

After

Compared with trial-and-error approaches based on experience, this enables convergence on optimal conditions with fewer iterations,

successfully reducing research time by approximately one to two months!

From a DX Support Section Member

AI as an everyday tool that makes work easier

Maki Hayasaka

By steadily eliminating inconvenient tasks, wasted time, and impractical work in daily operations, we aim to create an environment where employees can focus on more creative work and improve productivity. We believe there is great value in having AI serve as an everyday support tool, reducing the burden of decision-making and tasks so that everyone can work with greater ease of mind. By building on these incremental improvements, we hope to enhance the vitality of the organization as a whole. Rather than viewing DX and AI as something special, we want to make them everyday tools that make everyone's work easier.

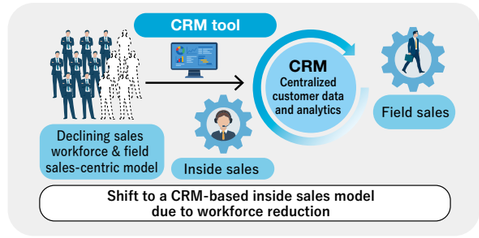
Enhancing Customer Satisfaction and Creating New Value Through CRM

To accelerate digitalization in sales and marketing, Denka is promoting operational reforms using digital technologies such as SFA (Sales Force Automation), CRM (Customer Relationship Management), and MA (Marketing Automation). By advancing sales and marketing activities and strengthening customer relationships, the company aims to improve customer satisfaction, create new value, and drive new customer acquisition.

Case Study

Establishing a Sales Model That Maximizes Results with Limited Members

Against the backdrop of a declining sales workforce, Denka introduced an inside sales structure built on a CRM foundation. A data-driven sales process was designed as a departmental standard, and a proof of concept (PoC) was implemented ahead of company-wide rollout. Within a short period, contributions to sales and the effectiveness of the model were confirmed.



Before

With fewer sales staff, maintaining traditional sales approaches became difficult. While a digital strategy existed, it had not been fully established.

Action

Leads are centrally managed in CRM, with targeting based on data analysis. Sales activities and opportunity management are standardized.

After

Within a few months of the PoC launch:

approx. +1% vs. departmental sales targets

approx. +2% in product sales*

Improved visibility and reproducibility of activities,

driving the adoption of data-driven decision-making

*Estimate based on figures from the PoC period.

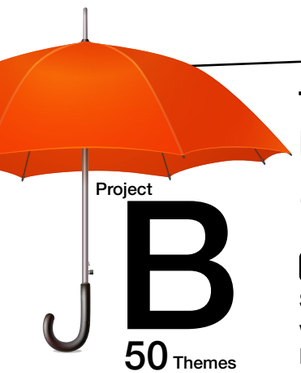
From a DX Support Section Member

Creating value on a company-wide CRM foundation

Teppei Urano

We are building a framework for customer-centric value creation by clarifying what should be standardized company-wide and what should remain flexible by department. Customer needs, sales activities, and quality data are captured end-to-end and shared across sales, marketing, development, and quality functions.

As the foundation for these efforts, we are leveraging a company-wide CRM to create an environment where teams can focus on understanding customers and developing proposals, enabling a continuous cycle of customer-driven value creation across the organization.



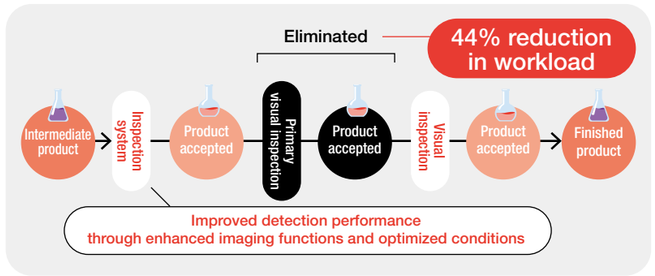
Transforming Business Processes Through BI and Data-Driven Approaches

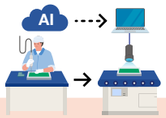
By building a data platform that connects data from various systems, along with BI (Business Intelligence), Denka aims to foster a culture of faster, data-driven decision-making. This will improve operational efficiency, deepen customer understanding, uncover new management challenges, and support the creation of new businesses.

Case Study

Streamlining Inspection with an Improved Foreign Material Detection System

In the inspection and quality assurance process for a certain product, improvements to the functionality of the foreign material inspection system have reduced the need for visual inspections, achieving significant labor savings.





Before

Due to the low detection performance of the automated inspection system, two rounds of visual inspection were required between the intermediate and final product stages.

Action

By improving the system's imaging capabilities and optimizing conditions, detection performance was enhanced to a level comparable to visual inspection.

After

As a result, only one round of visual inspection is now required,

achieving a 44% reduction in workload!

From a DX Support Section Member

Transforming work and deepening customer understanding

Akiko Hasegawa

Many B themes involve system implementation. Under the tagline "DDX driven by dialogue and governance," we worked closely with the proposing departments, exercising governance while engaging in ongoing dialogue and investing significant time and effort in understanding current operations and defining requirements. We also break down tasks and organize them into workflows, using sample screens to help stakeholders visualize operations even before the system is in place. Using data to "visualize" on-site operations and link them to better decisions and actions cannot be achieved by a single department alone. Beyond simply creating and viewing data, we aim to use it to transform operations and deepen customer understanding.

The Future DDX Aims to Create

Interview

Using DX to Accelerate Business from 1 to 100 Without Leaving Anyone Behind

Minoru Morioka
General Manager, Digital Strategy & Innovation Department

FY2025 marks Denka's "first year of DX"

Why is it necessary to focus on DX now?

The environment surrounding our manufacturing operations continues to evolve, and challenges are mounting. To address issues such as improving production efficiency, tackling labor shortages, strengthening global competitiveness, and creating new businesses, DX is essential. We are past the stage of debating whether to pursue it.
While digitalization has progressed in a piecemeal, locally optimized manner until now, DDX serves as a company-wide initiative to achieve the Mission 2030 management plan. In that sense, FY2025 can be considered Denka's "first year of DX."

The three key features of Denka's DX are "company-wide involvement," "maximum results with minimal investment," and "dialogue and governance."

The essence of DX is not technology, but communication. Past digitalization efforts did not always deliver strong results because they were often limited to specific departments or failed to gain genuine buy-in, preventing a sense of ownership. By emphasizing communication, we have been able to build a shared understanding across the company that DX is meant to make on-site operations easier and more efficient. It is also important to establish a structure with clearly defined roles, such as producers, coordinators, leaders, and DPs. This enables initiatives to be driven proactively and with accountability at the operational level.

Among the roles, particular emphasis is placed on the DP system.

DX must be advanced alongside human capital. Otherwise, it remains nothing more than a theoretical concept. At Denka, we launched a program to develop DX talent a year before formulating the roadmap.
In particular, developing DPs, who serve as on-site drivers of DX, is critical. The DP training program runs for one year, with a three-month practical training phase ("dojo") in the latter half. At the start of this phase, participants are tasked with designing DX initiatives using only existing ICT assets. Introducing new systems or applications is not allowed. It is like creating the best possible dish using only the ingredients already in your refrigerator, requiring both DX skill and creativity. That said, very few people meet the required standard at the initial stage. However, after the practical training, many are able to develop proposals that can be implemented. To use a driving analogy, even if you score 100 on the written test, it doesn't mean you can actually drive. This practical training corresponds to the on-road skills test, where you develop real driving ability. Another key difference between DPs and DX Leaders at other companies is that DPs are offered incentives. In addition to regular performance evaluations, bonuses are increased based on progress and results in DX initiatives. This incentive demonstrates the company's commitment, boosts DP motivation, and serves as a driving force for accelerating DX.

Extending the umbrella of DX to every employee

DDX promotes projects across three categories: A, B, and C.

For example, in the R&D division, generative AI is already being used for new business ideation. What once required significant manpower and time can now be done almost instantly, and is expected to significantly accelerate research and development. In manufacturing sites, work procedures and manuals are being shared as audio data using generative AI, helping to improve safety, quality, and operational reliability.
A total of 118 DDX initiatives have been proposed from different departments, and these are grouped into three categories. By organizing them under common frameworks, departments can leverage best practices within the same category and standardize the systems they use.
The umbrella motif represents the idea that DX should encompass all employees, ensuring that no one is left behind.

Are you seeing results from this "first year of DX"?

At Denka, generative AI accounts are provided to employees with strong utilization capability rather than being broadly distributed. As a result, the active user rate exceeds 95%, and AI-driven reductions in working hours average 7.5 hours per person per month, maintaining a high level of impact. However, this also indicates that a significant amount of non-core work still remains. The next challenge is how to redirect the time saved toward creating new value.
By 2030, Denka aims to develop 1,000 employees who can routinely and effectively use generative AI in their work, and to establish a structure with 400 DPs driving DX on the front lines.

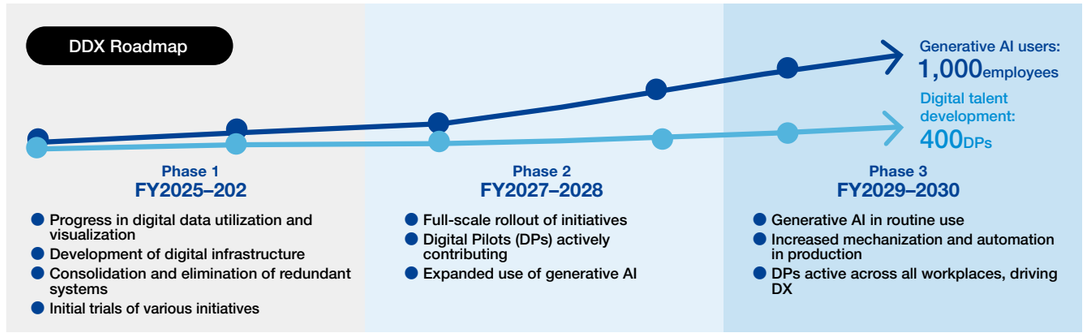
Denka's core values as the driving force behind DX

What do you think is the key to the success of DDX?

DX is not a tool for creating something from "0 to 1," but a set of behaviors for scaling from "1 to 100." Rather than chasing the latest technologies, it is important to keep asking what can be done with what we already have, as emphasized in the DP training program, and to continue engaging in dialogue so that everyone is aligned. As the Digital Strategy & Innovation Department, we are committed to consistently reinforcing this message.

Finally, do you have a message for employees and other stakeholders?

We believe Denka is well suited to DX. This is because we share the core values of empathy, initiative, and integrity, and have a culture in which everyone works earnestly toward shared goals. Going forward, we will continue to build up successful examples so that results can be clearly felt across the organization. We will continue to strongly support teams on the ground as we work together to advance these efforts.



From "knowing" to "doing" Developing DPs to Drive DDX

Launched in FY2024, the DP training program provides one year of practical training, including hands-on exercises in planning DX initiatives using the company's existing ICT assets. In its first year, 78 participants were certified, with over 100 expected to be certified in FY2025.

Feedback from DP Training Participants

Yudai Hononishi
Water & Agri-Products Department, Elastomers & Infrastructure Solutions

Driving the adoption of a well-balanced DX culture

My decision to join the program was driven by the overlap between my experience in digital marketing and a sense that the company was seriously committing to DX. What left the strongest impression during the training was the group work. Despite differences in departments, products, and business practices, everyone brought their ideas together and worked earnestly to develop better solutions, which I found inspiring.
Currently, I am leading initiatives centered on a CRM tool, creating a tangible sense of revenue generation through digital marketing-driven lead creation. I am also improving process visibility and efficiency, and centralizing sales information by standardizing record-keeping practices. These efforts have reduced the burden of onboarding and handovers, while supporting the establishment of a well-balanced DX culture. Through the DP training, I connected with colleagues who share a common mindset and ambition. By leveraging each other's strengths and perspectives, I hope we can continue to take on the challenge of achieving fast, impactful DX together.

History of Challenges

The Story of Denka's 110-Year History

vol. 03 1933-1945

The area surrounding Omuta Station, turned into a wasteland by an explosion

Expansion and Loss:
DENKI KAGAKU KOGYO's Struggle to Survive the War

Tetsuji Kondo's Fight to Protect Fertilizer

After overcoming a crisis that threatened its operations, DENKI KAGAKU KOGYO maintained its momentum and went on to expand its business internationally. However, the signs of war were looming over Japan. The company soon faced a series of challenges, including state control of electricity, mounting pressure to shift to military production, and the loss of overseas assets following Japan's defeat. In this issue, we look back on the company's struggle to survive from the perspective of Tetsuji Kondo, who led the company through these upheavals.

Tetsuji Kondo

Joined Mitsui & Co. in 1905. In 1920, he was appointed senior managing director of Waga Suiryoku Denki. Following its merger with DENKI KAGAKU KOGYO, he became general manager of the Sales Department in 1925. He later served as senior managing director and president, confronting wartime controls and preserving fertilizer production under pressure from the military.

DENKI KAGAKU KOGYO expands overseas

In the early 1930s, DENKI KAGAKU KOGYO emerged from a prolonged period of difficulties and resumed dividend payments for the first time in six years. After many years at the helm, Chairman Ginjiro Fujiwara stepped down, and Masanao Kobayashi took over leadership of the company. Kobayashi had also been my supervisor and mentor during my time at Mitsui & Co.

Under Kobayashi, the company's overseas expansion began in earnest, building on its operations at the Fushun Plant in China, which had begun in 1916. Particularly symbolic was the joint establishment of Taiwan Denka with Taiwan Power. Of the company's 2 million yen in capital, 1.15 million yen was contributed by DENKI KAGAKU KOGYO, and Kobayashi, as chairman, led the chemical business in Taiwan.

In 1937, former chairman Shintaro Ohashi returned to the post, and both he and I—then serving as senior managing director—were appointed representative directors. That same year, as wartime controls intensified in Japan following the outbreak of the Sino-Japanese War, DENKI KAGAKU KOGYO joined the management of Manchuria Denki Kagaku Kogyo, a company established by the Manchukuo government. Leveraging its carbide and nitrogen-based chemical technologies, the company moved forward with building a chemical production framework in Manchuria.

The main gate of Taiwan Denka's Keelung Plant

Stock certificate for Shandong Denka

"We will protect fertilizer above all else." Negotiations with the military authorities

Meanwhile, the wave of wartime regulations was also starting to hit full force in Japan. The government began regulating electricity and announced a policy that consolidated the power plants of private companies under the state-run Nippon Hassoden. DENKI KAGAKU KOGYO was no exception. The company's Oyodogawa Power Plants No. 1 and No. 2 and other important assets that supported the core of its production over the years were in effect forcibly transferred as capital contributions. Losing the company's dedicated power sources was not just a loss of assets but also a major turning point that would affect production plans and the business' survival.

In 1941, the outbreak of the Pacific War made conditions even more severe. The military pressed chemical companies to shift fully to the production of military-use chemicals, and DENKI KAGAKU KOGYO was no exception. As the war situation deteriorated, these demands grew more intense by the day.

However, even under a system of national mobilization, I never wavered in my belief that fertilizer was essential to increasing food production and supported citizens' lives. A nation cannot endure on weapons and supplies alone. As a supporter of food production, fertilizer was the foundation of Japan's long-term national strength. Holding on to this belief, I was persistent in negotiations with the military and was ultimately able to ensure our production facilities were not completely devoted to military production and could continue producing fertilizer.

Seized international assets and the hope that remained

In 1945, Japan was defeated. In the aftermath, Taiwan Denka was seized as a reparations plant, and DENKI KAGAKU KOGYO lost all control over it. Manchuria Denki Kagaku Kogyo was also seized by Soviet forces, and its Japanese engineers and employees were forced to repatriate. The production base the company had built overseas was lost virtually overnight.

And yet, not everything was lost. The fertilizer production system and technologies that had been preserved even under wartime conditions became a reliable foundation for rebuilding the business amid the postwar turmoil.

We had lost our overseas assets, but we had correctly identified what needed to be protected. This gave us hope that would carry us into the next era.

History of Denka

1933
Ginjiro Fujiwara steps down as chairman, and Masanao Kobayashi takes over leadership of the company.

1935
Taiwan Denka is established in collaboration with Mitsui & Co. and Taiwan Power. Masanao Kobayashi is appointed director and president of the new company.

President Kobayashi (front row, fifth from the left) and employees of Omuta Plant

1936
Founder Tsuneichi Fujiyama passes away.

Shintaro Ohashi

1937
Chairman Shintaro Ohashi and Senior Executive Director Tetsuji Kondo are appointed representative directors.

1938
- Manchuria Denki Kagaku Kogyo is established.
- Meguro Research Laboratory is established in Meguro Ward, Tokyo.

1939
Tetsuji Kondo is appointed director and president.

Meguro Research Center Groundbreaking Ceremony

1941
DENKI KAGAKU KOGYO, Mitsui & Co., and Kitashina Kaihatsu establish Shandong Denka.

1944
Indochina Denka is established with Indochina's government.

Bird's-eye view of Indochina Denka Kogyo's Trang Kenh Plant (Then: French Indochina, Now: Vietnam)

1945
An acetic acid synthesis plant is established and begins operations within Omi Plant.

Distillation unit for acetaldehyde, a material of acetic acid

Social milestones

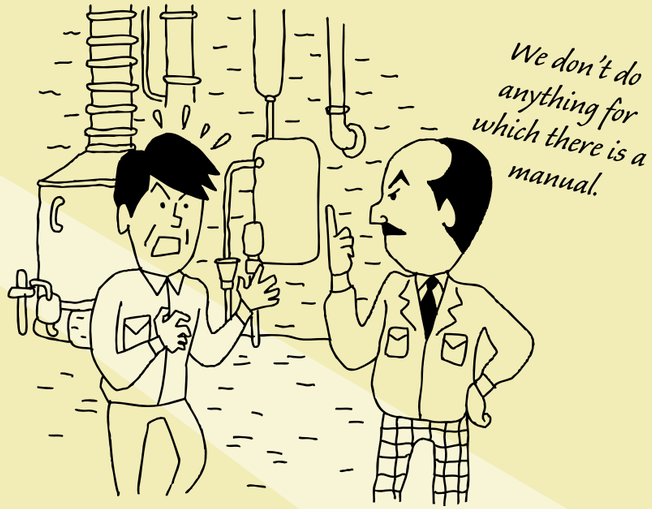
- Mukden incident (1931)
- February 26 incident (1936)
- Marco Polo Bridge incident and start of the Sino-Japanese War (1937)
- State General Mobilization Law announced (1938)
- World War II begins (1939)
- Attack on Pearl Harbor and start of the Pacific War (1941)
- Pacific War ends (1945)

Records of past challenges

Story 1

Tsuneichi Fujiyama, father of Japan's DENKI KAGAKU KOGYO, passes away

Tsuneichi Fujiyama, founder of Denka, passed away at the age of 65 on January 4, 1936. Having laid the foundation for Japan's electrochemical industry, he was a pioneer who continually ventured into uncharted territory. One anecdote captures this spirit: when the head of the engineering department asked if there was an easy-to-understand manual for a machine used in operations, Fujiyama replied, "We don't do anything for which there is a manual." His words reflected a determination to forge ahead without relying on existing answers. As the busts at Sankyozawa in Sendai and the Omi Plant attest, his achievements and spirit remain cornerstones of the company's culture.



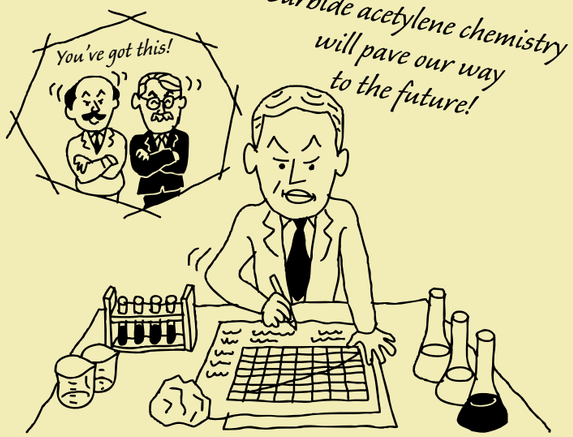
"There's no manual for anything I do.
We don't do anything that's been done before."

(From The 100-Year History of DENKI KAGAKU KOGYO KABUSHIKI KAISHA)

Story 2

Expanding into carbide acetylene chemistry: The key to opportunities for further growth

Kondo saw strong potential in synthetic chemistry using acetylene derived from carbide. In 1938, he established the Meguro Research Laboratory in Mita, Meguro Ward, Tokyo, and assumed the role of director, initiating research into carbide and its derivatives. In 1940, the company acquired and relocated acetic acid synthesis facilities from the Hiji Plant of Kyushu Electric Industries. It then installed pilot facilities for acetaldehyde, followed by acetic acid, at the Omi Plant, advancing its development of carbide acetylene chemistry. Building on the foundation of carbide established during the eras of Fujiyama and Fujiwara, Kondo cultivated the next driver of growth—carbide acetylene chemistry—and opened up a new path for the company's development.



"Fujiyama and Fujiwara laid a solid foundation for the company, and Kondo drove its next phase of expansion."

(From the Memoirs of Tetsuji Kondo)

Story 3

Kondo's persistent negotiations protected Denka's business and employees

During the war, as factories across Japan were pressed to shift to military production, DENKI KAGAKU KOGYO also received multiple requests. Kondo faced these requests head-on, insisting that securing food was paramount and that fertilizer production was the company's duty. Through persistent negotiations with the military, he maintained the supply of calcium cyanamide. At an extraordinary general meeting the year after the war, Kondo reflected that resisting these directives and protecting the company's core business enabled it to sustain operations and employment immediately after the war. Even in a time of crisis, his decision not to abandon fertilizer, the very origin of Denka, became a defining principle of management, one that remains embedded in the company's history.

"Securing food is a priority issue.
Our duty is to protect the production of fertilizer."

(From The 100-Year History of DENKI KAGAKU KOGYO KABUSHIKI KAISHA)

Story 4

A fresh start after the war

In August 1945, Japan's defeat brought the war to an end. The country lay in ruins from air raids, and its production facilities had been severely damaged. Prices soared, while agriculture declined due to cold-weather damage and labor shortages, leading to a nationwide food crisis. The fertilizer industry, too, remained mired in confusion, its recovery hindered by damaged facilities and shortages of materials. Amid these conditions, Kondo presented a new sense of purpose to all employees immediately after the war, calling on them to devote themselves to rebuilding both the company and the nation. While accepting the reality of defeat, he demonstrated a firm resolve to restore the country through patience and hard work, inspiring those around him. This resolve became the driving force behind Denka's postwar path.

"The war is over.
But our battle is just beginning.
We must never forget the humiliation of our defeat..."

(From the Memoirs of Tetsuji Kondo)

Cross Baton

Exploring the thoughts of the Denka employees behind our products from sales and development to manufacturing

Delivering a material with untapped potential to the world

Discovering new demand, expanding sales

My work with POVAL covers a wide range of responsibilities, including export sales, production planning, and inventory and logistics management. In export sales, I negotiate with overseas clients and collaborate with our global offices to expand sales and develop new applications. For production planning, I work closely with our plants to optimize scheduling and handle adjustments when issues arise.

POVAL is used in a wide range of applications, including adhesives and fibers. One of its key strengths is its ability to adapt to changing needs, leading to the ongoing development of new applications. In recent years, its water solubility and biodegradability have driven growing demand in semiconductor and other electronics-related fields, as well as in environmental applications. We are currently focusing on expanding sales for applications such as water-soluble fibers and films that meet these needs.

Developing my skills to grow the POVAL business

In my previous job at an automotive parts manufacturer, I was based in Germany and handled sales to both domestic and international automakers. As I considered my next career step, I became interested in chemical and materials manufacturers with products spanning a broader range of industries, which led me to join Denka. As I had hoped, I am now responsible for POVAL, a product with a wide range of applications. At the same time, demand for some of its existing uses, particularly in the domestic market, has been declining.

To respond flexibly to these shifts in demand, I aim to build on the overseas sales experience I developed in my previous role while continuing to deepen my knowledge and expertise in international business through my daily work. By further strengthening my English skills and ability to negotiate in global settings, I intend to contribute to market expansion and sustained profit growth, supporting the continued growth of the POVAL business.

Maintaining broad horizons in the search for new applications

Thinking outside the box

My primary role is in POVAL research and development, focused on exploring new applications and added value. I gain useful hints for this work through meetings with sales departments and trade shows, as well as patent applications and other sources. POVAL still has untapped uses, and my job is to examine which are most practical through experimentation and analysis.

Denka may not be the largest POVAL manufacturer, but this scale gives us the agility to pursue fields and applications that larger competitors may find difficult to enter, which I see as a key strength. The freedom to take initiative and try new ideas without being bound by precedent makes it a highly motivating environment for a researcher.

Fulfilling the duty of new discovery

POVAL maintains stable value as a general-purpose material, but it still has untapped potential. Discovering and realizing that potential is at the heart of our work as researchers. To do so, we must go beyond existing knowledge and past successes, continually updating our understanding and embracing new perspectives.

I aspire to be an engineer who not only accumulates knowledge, but can also integrate it to identify the best solutions. Alongside deepening my expertise in materials, I aim to broaden my perspective across other fields and continue taking on new challenges, enabling me to propose applications that have not previously been considered.

Research is not something that can be completed alone. New insights emerge through dialogue with colleagues across sales, manufacturing sites, the Innovation Center, and beyond. By valuing these connections, I hope to further unlock the potential of POVAL and other Denka materials.

Ryuta Takahashi

Styrene & Acetyl Chemicals Department, Polymer Solutions

Profile
Joined Denka in April 2023 after working in automotive part sales. Leveraging overseas experience from his previous job, he is engaged in POVAL export sales and logistics operations. On weekends, he enjoys attending live music events to relax and recharge.

Could you summarize the product in a few words?

A unique and ever-changing product

What kind of specialist do you aspire to be?

Someone who can deliver unique value by building on my strengths. I aim to become a specialist with deep expertise in a specific field, continually pursuing areas where I can uniquely contribute.

Tomoya Kimura

Organic Materials Research Department, Omi Plant

Profile
Joined Denka in 2023. Since then, has been part of the Organic Materials Research Department at the Omi Plant, primarily engaged in POVAL application development. Enjoys railway travel as a hobby, often exploring the Hokuriku region around the Omi Plant by train.

Could you summarize the product in a few words?

A material brimming with untapped potential

What kind of specialist do you aspire to be?

Someone who can continuously update their knowledge, identify the best choices, and act. I want to move closer to that ideal while building trust with those around me.

Product Spotlight

DENKA POVAL

Soluble, Stabilizing, Supporting

Denka's polyvinyl alcohol (PVA) resin is a white, water-soluble polymer available in powder or granular form. It features excellent water solubility, strong adhesion, resistance to oil, and outstanding film-forming properties, making it suitable for a wide range of applications, including paper processing, textile sizing agents, emulsifiers and dispersants, adhesives, and film materials.

Data
- **Lead production site:** Omi Plant
- **Sales:** Polymer Solutions

Pick Up

Dec.

3rd Denka Innovation Day Held

Denka Innovation Day, a business idea contest launched in FY2023, was held for the third time this year.
A total of 23 ideas were submitted, and after two rounds of screening,
three were selected as new business candidates and advanced to the final round.

The contest aims to embody Denka's core value of "Initiative," while uncovering new business ideas that will shape the company's future and drive innovation.
In the final round, the three finalists presented their proposals. The judging panel, including Chairman Imai, President Ishida, and other executives, then conducted a rigorous evaluation and determined the rankings from first to third place.

President Ishida delivering remarks at the final round

We spoke with the three finalists at Denka Innovation Day about their reasons for entering the contest and what they learned from the experience.

1st

Shinichi Yanagi
Infrastructure & Solutions Research Department

Given my position in a clerical role, it's easy to fall into a passive work approach, so I saw this contest as a valuable opportunity to take initiative. Through this initiative, I was reminded of the importance of understanding and responding to market needs. In particular, learning about startups while receiving professional mentoring had a significant impact on my perspective. At the same time, since this was a different field from my usual work, I struggled to prepare experimental materials and equipment, and refined my hypotheses through repeated discussions with AI and subject-matter experts. The theme also closely aligned with my personal interests, and my past experiences helped inspire the idea. Without becoming complacent about the results, I will continue to engage seriously with this theme, aiming to achieve both personal growth and tangible outcomes.

2nd

Machiko Takahashi
Development Section, Denka Azumin

The humic acid produced by Denka Azumin helps reduce environmental stress on crops, and ongoing research has also revealed its potential applications beyond agriculture. During the planning phase, I gained valuable insights by incorporating diverse perspectives, which exposed me to ideas and approaches I would not have developed on my own. At the same time, I found it difficult to build a solid case for profitability, develop a realistic implementation schedule, and substantiate projected market share through analysis. By interviewing experts and organizing the necessary data for each hypothesis, I advanced the validation process and shaped the concept into a concrete proposal. This experience strengthened both my creativity and the precision of my business model, and further deepened my desire to bring the potential of humic acid to a wider audience. Moving forward, I will continue to carefully examine each issue and propose the unique value of humic acid to society.

3rd

Naoki Takeshita
POCT Development Department, Life Innovation

After being assigned to the Gosen Site, I started a home garden, and conversations with my father, who also gardens, provided the inspiration for this idea. I wanted to test whether ideas from daily life could be developed into a viable business, and having participated in the contest before, I decided to take on the challenge again. Through the contest, I was exposed to materials and technologies I would not normally encounter, broadening my perspective and helping me build new connections with other sites. While creating surveys, I struggled to eliminate bias in the questions and to compile the results, but by drawing on my past experience, I was able to design research more aligned with my objectives. This experience helped me understand the process of bringing an idea to commercialization and provided many valuable lessons. Going forward, I aim to turn small everyday insights into practical proposals. I hope to build on this experience and apply again next time.

Jan.

Commemorative Event Held at Ofuna Plant: Thank You for 76 Years!

On January 22, a commemorative event was held at the Ofuna Plant, which is set to close at the end of March, to express appreciation to employees and wish them success in their next chapter. Chairman Imai, President Ishida, and many other stakeholders attended, offering words of gratitude while reflecting on the plant's history. In his remarks, Plant Manager Nishimura expressed his appreciation to the employees who supported the plant over its 76-year history and encouraged them to carry the "Ofuna pride" with them going forward. The event also included lighthearted activities such as a quiz, creating a warm atmosphere where participants could celebrate each other's efforts.

Jan.

Joint Development of an ESD Simulator Model for Early-Stage Gastrointestinal Cancer

As the third initiative of the Medical RisingSTAR® project, which focuses on developing simulators for invasive endoscopic procedures, Denka jointly developed a dry simulator for ESD* used in early-stage gastrointestinal cancer treatment in collaboration with Tohoku University and U-A Corporation. Made from a specialized soft material, the sheet features a multilayer structure similar to that of the human mucosa, submucosa, and muscle layer. It can simulate bleeding, hemostasis, and even perforations caused by operational errors, supporting everything from safe skill acquisition for beginners to advanced case training for experienced practitioners. It is expected to contribute to improving the quality of medical care and the development of medical professionals.

*ESD: Endoscopic Submucosal Dissection

Jan.

Denka Awarded "A-" for Climate Change and "A" for Water Security at CDP 2025

In CDP 2025, Denka received an "A-" in the Climate Change category and an "A" in Water Security for the second consecutive year. CDP is an international non-profit organization that evaluates and publishes information on corporate environmental performance, including transparency and management involvement. These results reflect continued recognition of Denka's environmental initiatives. To achieve its goal of carbon neutrality by 2050, Denka has set a target to reduce CO_2 emissions by 60% by 2030 compared to FY2013. Moving forward, the company will continue to enhance long-term corporate value and enhance ESG management through initiatives such as the use of in-house hydropower, adoption of renewable energy, process innovation, and emissions reduction across the entire product lifecycle.

Feb.

Denka Acquires Naming Rights to Omuta Cultural Hall

Denka has acquired the naming rights to Omuta Cultural Hall. Since beginning operations in Omuta City in 1916, the company has maintained a continuous presence in the region. This acquisition aims to further enhance brand recognition and strengthen Denka's contribution to the local community. Denka will support greater use of the hall as a hub for cultural and artistic activities and actively promote initiatives that contribute to regional revitalization.

Feb.

First-time Selection as an Environmentally Sustainable Company at the ESG Finance Awards Japan

Denka was selected for the first time as an Environmentally Sustainable Company at the ESG Finance Awards Japan, hosted by the Ministry of the Environment. These awards recognize companies that integrate environmental challenges into their management strategies and generate both enhanced corporate value and positive environmental impact. Denka's proactive disclosure of its initiatives to enhance long-term corporate value and advance ESG management was a key factor in this recognition.

Mar.

Official Sponsorship Agreement with the Fukuoka SoftBank Hawks Renewed

Denka has decided to renew its official sponsorship agreement with the Fukuoka SoftBank Hawks for the 2026 season. As part of its social contribution policy, Denka supports the promotion of sports. Since beginning operations at its Omuta Plant in 1916, the company has built strong ties with the local community. Through this initiative, Denka aims to further strengthen its regional connections while continuing to advance social contribution through sports.