

Strengths of the artience Group

STRENGTHS

1

Global Expansion
into Growing
Regions

Business strategy in India: current situation and future outlook

TOYO INK INDIA PVT. LTD.

2025 marks the 100th anniversary of the beginning of the artience Group's overseas expansion. One of the Group's strengths is its ability to expand globally and capture growing overseas markets, with overseas sales already accounting for over 60% of its total earnings.

The Indian market, with its particularly significant growth, is a key target for our existing high-profit businesses. Naotoshi Nakamura, Chair of Toyo Ink India Pvt. Ltd. (TIID,) and Anooj Abraham, Director, discussed the factors behind the Group's strong business performance in India and its future prospects.

Market environment

Nakamura: TIID was established in Delhi in July 2006, to meet the growing needs of the Indian market. We began with the import and sale of printing inks. In 2008, we completed our manufacturing plant in Delhi and began local production.

Although as a printing ink manufacturer we already had many competitors, we were able to rapidly improve our business results, and in 2014 we launched operations at our Gujarat plant, which is five times the size of the Delhi plant. As part of the artience Group of comprehensive chemical manufacturers, we have now expanded our business beyond printing inks to include pressure sensitive adhesives, other adhesives, plastic colorants, and more, and are raising our profile as a high-quality and competitive brand.

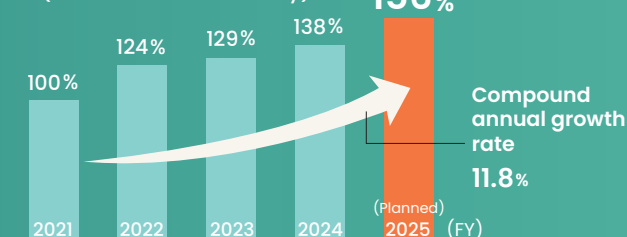
Anooj: We are taking various opportunities to explain to customers that, with the change of the company name, the artience Group will be focusing on a wide range of fields, particularly in green and sustainable areas, going forward. We have received many responses saying that artience—the fusion of art and science—is a very easy-to-understand and catchy name.

Competitive advantage

Building trust through total solutions

Anooj: We leverage the artience Group's wide range of advanced technologies to do more than just sell products. We collaborate with customers at their business sites, working together to refine products until they are ready for launch. Repeated visits help strengthen trust

Changes in net sales of Toyo Ink India
(Based on local currency)



Anooj Abraham

Director of Toyo Ink India Pvt. Ltd.

PROFILE

Joined the Group in 2010, after studying at a technical college in Japan. He was assigned to work overseas at Toyo Ink India in 2013 and currently serves as a Director overseeing all business operations.

Naotoshi Nakamura

Chair of Toyo Ink India Pvt. Ltd.

PROFILE

Joined the Group in 1996. After working in the R&D and Engineering departments, and overseas in the US, he was assigned to Toyo Ink India in 2022. As Chair, he serves as overall head of the Group's business operations in India.

and lead to the development of better relationships.

Nakamura: In India, too, there is growing interest in sustainability-enhancing products, and there is a need to incorporate them into business. In view of this, our sales and technical staff are working together to make proposals to customers and create products together, while providing technical support.

Anooj: We provide total solutions for our customers right up to product completion, and we believe this is why customers choose our products, even when our prices are higher than those of competitors.

We offer these consulting services as a unique, fee-based initiative in India. Having customers pay for our services increases the level of seriousness on both sides, leading to growth for both the customer's business and our own. This approach allows us to build win-win relationships and increase recognition of our

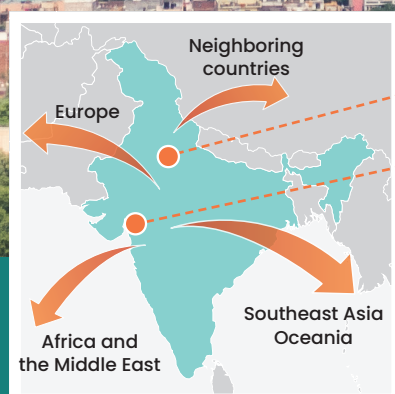
position as a total solutions provider.

Human resources development with a focus on empowerment

Nakamura: Our concept is to focus on empowerment. As an organization, we have transitioned from a work style in which employees worked alone to one in which they work together as teams. We have also established a system in which leaders actively make their own decisions and move things forward.

Anooj: Our employees clearly define their missions by setting their own goals at the beginning of the year, reviewing them every six months, and incorporating them into their personnel evaluations. Employee motivation has increased visibly, as they see clear results from their own decisions and actions.

No. 1 in population (1.44 billion people)
 No. 5 in GDP (\$3.57 trillion, growth rate 5-7%)
 Expanding middle-income class (> x10 from 2010 to 2030)



Delhi Factory

Gujarat Factory

TIID's business strategy: Expanding both domestic share and export business

- In addition to expanding its domestic market share in India, TIID is also expanding its business as an export base to neighboring countries, the Middle East, and Africa.
- The company is expanding sales with a focus on gravure and offset inks, while sales of pressure sensitive adhesives and laminating adhesives are also growing in line with local industrialization.



At the same time, we encourage them to take on challenges without fear of failure. Even if we fail, we have a culture of acknowledging our failures and moving forward.

Nakamura: We actively provide opportunities to strengthen relationships among employees. For example, we hold dinner parties after meetings and events on special occasions that are open to employees and their families. As a result, it seems that the sense of unity among employees has been strengthened, leading to greater motivation.

Thanks to these efforts, we have managed to develop a highly motivated organization with employees who actively make proposals. We currently have employees with high-level skills in sales, technology, production, procurement, and human resources. Our very strong business performance is due to the exceptional people supporting our organization.

Developed independently by TIID to meet the needs of the Indian market

Nakamura: When we first started, we received technical support from Japan. Now, however, we have a very talented team of technical staff and have established technical departments for each business. This allows us to make improvements and develop new technologies on our own.

We have set a target of tripling our business performance in 2023 by 2030. Since we cannot achieve this with our existing products alone, we plan to achieve 30% of this target with new products.

Anooj: Business growth in India is remarkable, and life-style needs are also changing dramatically. To lay a solid foundation for the future, we will be conducting our own research tailored to local needs, in collaboration with local brand owners.

Creating value that resonates with the senses in India

Anooj: India is undoubtedly a challenging market.

But we have built a solid foundation by making forward-looking investments. I believe that building on this foundation and improving our customer service to respond to new themes put forward by customers is the key to creating “value that resonates with the senses” in India.

Nakamura: We want to be a company that people can consult with easily when they have a problem. Listening to our customers allows us to discover new business opportunities and expand needs. Being a company that customers can consult with easily to achieve success... I think that is what leads to value that resonates with the senses.

Long-term vision for the future

Recognizing future challenges and continuing to achieve sustainable growth

Anooj: As one challenge in India, we will be engaging in material research in anticipation of environmental regulations that are expected to be introduced in the future. This is also laying the foundation for 2050.

Nakamura: We pride ourselves on being a top-class organization, but maintaining this status is a very difficult challenge, and we need to take continuous measures to achieve this. While our business is performing steadily, we are taking proactive measures to achieve further growth, including addressing environmental cycles and organizational aspects. This will allow us to continue growing even during periods of slower growth.

In terms of our business, we believe that there is significant growth potential not only in gravure inks, which are currently enjoying the highest level of demand, but also in areas such as pressure sensitive adhesives and other adhesives, for which our market share is still small. We will focus our efforts on expanding these areas.

Anooj: Going forward, we will achieve sustainable growth by continuing to provide the value our customers require in the rapidly developing Indian market.



STRENGTHS

2

Open Innovation

Creating a place where people and information from around the world come together, driving collaboration and new business creation

Incubation Center

Creating new businesses that will support the next generation is one of artience's most important management issues.

At our Incubation Center, we foster a culture of challenge through unconventional approaches, and work to discover and nurture new business opportunities.

Hayato Takahashi, General Manager of Incubation Center, and Jun Kawashima, of the New Business Exploration Group, discussed their thoughts and motivations behind their activities.

Jun Kawashima

New Business Exploration Group, Incubation Center

Hayato Takahashi

General Manager of Incubation Center

PROFILE

After graduating from university, he gained experience at three companies, in areas such as construction of the building's energy management system, before joining the Company in 2019. He won the FY2023 Business Idea Contest. He is currently working on creating a new business using energy-saving solutions, which he has been working on for many years.

PROFILE

Joined the Company in 2003. In the R&D division, he was involved in the launch of a new business for functional coating agents using nano-dispersion technology. After subsequent roles in R&D, production technology, marketing, and sales, in 2023 he was appointed the first General Manager of Incubation Center.

An organization specialized in creating new businesses, established by the Future Discussion Task Force

Takahashi: The Incubation Center was launched in January 2023, with the mission of creating new businesses. The catalyst for its creation was a company-wide project called the Future Discussion Task Force the previous year, in which we shared a sense of crisis that the Company has not been very successful in developing new businesses in recent years. At that

time, sales and technical staff met once a month to discuss new themes, but there were limits to what we could do under a system where each employee had to perform their original duties in addition to these tasks. It led to the decision that a dedicated department was needed. There were three initial members, including myself, who launched the Incubation Center with the goal of creating new businesses seriously and quickly. We started as an organization working directly under the president.

Starting with the creation of a foundation for actualizing business ideas

Takahashi: In the beginning, everything was trial and error. We conducted interviews with leading companies and participated in external seminars on new businesses. It became clear that, before gathering innovative business ideas, we first needed to build a foundation of corporate culture and human resources to support them. So, we focused our efforts on planning and holding lectures by experts and human resources training programs for those who would lead this transformation.

Another new initiative was to open up the free space in our head office, free of charge, as a place for people and information to come together. We have invited startups, local governments, NGOs, and other organizations to participate in various events themed around science and innovation, with over 10,000 people participating to date. Starting this fiscal year, we are planning a full-scale launch of the Incubation CANVAS TOKYO, a global hub specializing in materials.

We have also restructured and renamed our Business Idea Contest, which we have been holding for many years, as "IPPO" (meaning "first step.") In the past, the application process was difficult, requiring the submission of a business plan, but we have now made it possible for people to apply with just a single A4 sheet of paper explaining their idea. Applicants will receive mentoring from an external consulting firm, and refine their proposals in stages through a stage-gate process.

The shoots of new businesses gradually grow and take shape

Takahashi: Two years have now passed since our establishment, and we have grown as an organization. By transferring promising themes that were previously buried in our business and R&D divisions to dedicated members, the size of our team has now grown to around 20 strong. From among these diverse initia-

■ Five initiatives for creating new businesses

- 1. Fostering a corporate culture and developing human resources**
Continuing to hold lectures by outside experts, operating an internal proposal system, holding transformative HR training programs involving outside participants, etc.
- 2. Developing systems and know-how**
Adopting a stage-gate approach to successfully launch a small number of promising new business ventures from among many proposals
- 3. Creating an environment**
Operating the Incubation CANVAS TOKYO: a place where people and information from around the world come together
- 4. Promoting open innovation**
Gradually starting collaborations with startup companies that have not had many opportunities to showcase their activities
- 5. Driving commercialization**
Separation and commercialization of as-yet uncommercialized themes from operating companies and R&D divisions

tives, we are now beginning to see some results, such as sales taking root in some areas.

We have also started collaborating with startup companies, which is something with which we have had only limited experience in the past. Through repeated participation in various matching events, we have built connections, and new forms of co-creation are now beginning to take shape, with joint contracts already established on multiple themes.

In "IPPO," the energy-saving solution that won the grand prize in FY2024 is nearing commercial readiness. Mr. Kawashima—who proposed the idea—has transferred to the Center, and is currently 100% committed to advancing this project. We have also started to conduct paid demonstration experiments with customers. The seeds that we have nurtured at our Incubation Center are now beginning to shoot.

Commercializing a long-time pet project, boosted by the grand prize award

Kawashima: After we received the Energy Conservation Grand Prize for our factory buildings and facilities, the president of the operating company I was working for at the time asked me to enter last year's IPPO contest. I have long considered energy conservation to be one of my personal missions, and I had always wanted to turn it into a business, but I never imagined that things would happen so quickly. Winning the grand prize was a major turning point. I am grateful for the strong support of those around me, and eager to live up to their expectations.

We are currently working on solutions that focus on equipment operation methods to significantly reduce energy consumption. I joined the Company as a mid-career hire, and this is the fourth company that I have worked at. Through my work in facility management for office buildings and commercial facilities, I came to realize that, even if we introduce the latest

equipment, it is the way in which we operate it after introduction that determines whether we can actually achieve energy savings. I have often seen issues where information obtained from on-site inspections is not shared effectively within the company, and this initiative aims to address that problem.

A mission to foster a positive corporate culture and develop human resources

Takahashi: At the Incubation Center, we consider it one of our key missions to enroot a culture of challenge throughout the entire Group while creating new businesses. The starting point for everything is the mindset of each individual. No matter how excellent the system or how innovative the theme, without the will of individuals to take the first step, things will not move forward.

Through initiatives such as IPPO and the Incubation CANVAS TOKYO, we are beginning to see tangible results in terms of a gradual change to the company's internal atmosphere and corporate culture. Employees who had always thought, "Hey, I'd really like to try doing something like this..." while going about their daily work are gradually starting to take action. Having an environment within the company that allows employees to actualize such aspirations is also important for improving engagement.

Towards creating value that resonates with the senses

Kawashima: First, I will focus all of my efforts on the early commercialization of our current energy-saving solutions project. We have already received inquiries from several customers, and I hope that we can contribute to reducing overall energy consumption in society through the realization of this business. I would also like to use the experience I have gained to take on new challenges in the future. This project has deepened cooperation within the organization with a focus

Another approach to fostering a culture of innovation

Promoting individual thinking among employees through roundtable discussions with the CEO

As part of efforts to instill its corporate identity and drive internal transformation, artience continues to hold CEO roundtable discussions, in which President Takashima visits Group locations to speak directly with young and mid-career employees about the future of the Group, its philosophy, and issues to be addressed. Since these talks began in 2023, we have held discussions with a total of 290 employees at 28 locations on various themes relating to innovation within the Group, on topics such as "Ideal Visions for the Company" and "Our Own Ideas of Value that Resonates with the Senses."

This fiscal year, we are focusing on the theme of "Core Competencies Within Our Division." Drawing on core technologies, manufacturing expertise, and the trust we have built with customers over the course of many years, we are discussing the need to deliver new value to society through co-creation with partners both within and outside the Group, in order to realize our vision of "A Future Where All People Can Live Enriched Lives." These talks offer valuable opportunities for the president and employees to work together to create the future of the Group.



on energy conservation, and I think the same should be possible in other business areas. As someone who joined the Company from a different industry, midway through my career, I believe that launching a new business is significant in that it shows the possibilities for others who might follow in my footsteps.

Takahashi: Going forward, we will continue to nurture new business opportunities for the future while steadily expanding existing businesses. I feel the difficulties in this "ambidextrous" style of management every day. New businesses need to be approached from a long-term perspective, and do not immediately generate earnings like existing businesses. But in an environment where results are not achieved, employees will not develop a mindset of having a go for themselves. We believe that it is important to continue creating a culture and system that fosters new businesses, while increasing the number of success stories like Mr. Kawashima's. Through Incubation Center activities, we aim to create a culture of challenge, with a view to realizing our vision of "A Future Where All People Can Live Enriched Lives," and which will lead to significant changes in our business portfolio.



Kaori Nakamura
Corporate Planning Division

STRENGTHS

3

Business Development Based on Unique Core Technology

Moving forward with next-generation development with customers, leveraging proprietary dispersion technologies

Conductive CNT Dispersions Business for Lithium-ion Battery Cathode Materials



Koji Obata

General Manager of Functional Materials Sales Department, Toyocolor Co., Ltd.

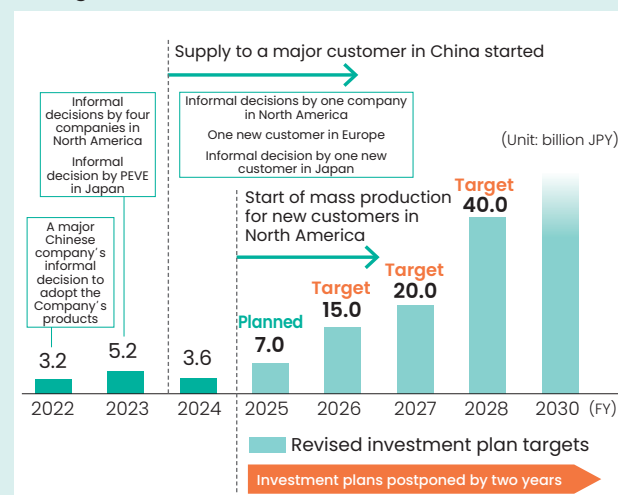
Conductive carbon nanotube (CNT) dispersions for cathode materials support high capacity and high output for lithium-ion batteries (LiBs,) which are essential for electric vehicles (EVs.) The artience Group has positioned CNT dispersions as a strategic priority business, and is accelerating efforts to secure new customers and develop new technologies by establishing a production system, with five bases in four regions in Japan and overseas.

Market environment

Medium- to long-term growth trends in the EV market

With countries around the world tightening their environmental regulations to reduce CO₂ emissions, the automotive industry is leaning heavily toward electrification. The artience Group has been actively engaged in the CNT dispersion business since 2019, supplying CNT dispersions for EV LiB electrodes. Because CNT offers higher conductivity than carbon black, a widely used conductive additive for LiBs, CNT has been attracting attention as a material that can contribute

Changes in sales of the business and forecast / target (as on November 2024)



ute to the production of high-capacity, high-output, long-lasting LiBs. This is significant because the capacity, output, and service life of LiBs can affect the driving range and charging performance of EVs.

FY2024 was a challenging year for the EV market as a whole, with policy changes in various countries, inflation, and rising interest rates all contributing to slower growth. Shipments to major existing customers in the US were sluggish. While sales of EVs and plug-in hybrid vehicles in China grew significantly year on year, sales of Japanese and European brands were sluggish, and orders from LiB manufacturers that primarily handle European vehicles remained flat.

Progress

The number of prospective client companies is also steadily increasing

In light of these circumstances, we have decided to postpone the net sales and market share targets set under our artience2027, Medium-term Management Plan by two years.

Meanwhile, full-scale production is now underway in Zhuhai, China, and progress has also been made in expanding production capacity for mass production at our bases in Kentucky, USA, and Hungary. In addition, the number of customers who have informally decided to adopt our products has grown from seven in 2023 to ten in 2024. Although we are experiencing temporary market stagnation, the medium- to long-term growth trend remains unchanged, and we will continue to strengthen our efforts in this area as a strategic priority.

Total investment planned in this business (FY2019—)



Competitive advantage

Global mass production system with five bases in four regions

Our CNT dispersions for LiBs originated from the dispersion technologies used to uniformly mix pigments in printing inks. Using core technologies accumulated over the course of more than 100 years, we carefully separate CNTs one by one without damaging them, then disperse them at the nano level to maximize their electrical conductivity. We have also developed our own dispersion agents and improved them over time. Another one of our key strengths is our customizable production process. For example, we can control the length of CNT fibers to meet customer requirements.

In addition, CNT dispersions are used in automotive LiBs, so quality requirements are strict. Based on thorough consultations with our customers, we design products that ensure safety, and carry out daily production activities under a strict quality control system. Our automotive LiBs have been commercially available for use in hybrid vehicle (HV) applications for over ten years, and we believe that they have earned a reputation for reliability in the market.

In our main markets (Europe, the US, China, and Japan,) we have established a supply system that enables stable localized procurement and production, and have built strong trust and networks with our customers based on our results. In the current unstable political climate, having a system that can quickly

The artience Group's advantages

- Dispersion technologies that maximize CNT performance
- Strict quality control system
- Mass production system with five bases in four regions

Five production bases in four regions



supply products locally is a significant advantage. We are also building a global patent network to deter new competitors from entering the market, which we believe will give us a competitive advantage.

Product development and investment optimization that anticipate next-generation needs

We have set the target of securing a 20% share of the global market for CNT dispersions for LiBs (as a percentage of total demand for automotive LiB capacity) by FY2032, and will stay ahead of the diversification of EVs and the corresponding changes in LiBs. In addition to our existing conductive additives for ternary systems, which are designed for high capacity and performance, we are also considering products that address cost-conscious needs, such as low-cost lithium iron phosphate (LFP) batteries. At the same time, it is important to build a development system that can respond to diverse needs while maintaining awareness of next-generation, high-end products, such as all-solid-state batteries.

Expanding our customer base is essential for business growth. As our customer base grows, we will be able to gather more information, which will allow us to understand market trends more accurately and incorporate them into our business strategy. In addition, building a solid track record of business results will make it easier to expand and cater to new customers.

We will continue to invest actively in increasing our supply capacity, while constantly reviewing and optimizing the timing and amount of our investments. A long-term perspective is essential in this business because the process from investment decision to equipment installation and start of mass production takes between two and two-and-a-half years. We will incorporate market needs into our business plans and take the necessary actions based on close sharing of information with customers and component manufacturers.

Long-term vision for the future

Taking on the challenges of solving issues to achieve carbon neutrality

The trend toward achieving carbon neutrality is growing stronger, and we believe that social demand for EVs will remain high in the future. While it is necessary to carefully monitor power generation methods for charging and CO₂ emissions throughout LiB life cycles, the fact remains that electrification is an essential element for the automotive industry as it moves toward decarbonization. Our focus should be on contributing to the improvement of price, driving range, and charging times—key issues hindering the widespread adoption of EVs—through the provision of CNT dispersions for LiBs. We believe that encouraging consumers to choose EVs and contributing to the realization of carbon neutrality in this way will also help us to achieve one of the artience Group's material issues: providing value that resonates with the senses through our products and services.