

Exploring the ultimate drawing and writing
– and beyond, pioneering the broader inking experience

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Wacom Story Book

Issue 2

Living Together Within Communities



Cover Art_ktym, "Ordinary Days"

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The Power of Community – Why Wacom Believes in It

“ A community is a group loosely connected by common goals and interests, and Wacom firmly believes in its power. Our community concept can be expressed by the formula $[E + C] \times S \div T$. In this model, E stands for the principle of exchange, reflecting the pursuit of benefits for individual community members. C stands for commons, reflecting the pursuit of overall benefits for the community as a whole. S stands for specific expertise, reflecting specialization in core business. T stands for trust, the outcome of this formula. Multiplying the pen-and-ink technologies by benefits for both individual members and the whole community yields a product called trust and a positive cycle of seamlessly connecting to Wacom's corporate activities. This concept is now bearing fruit through initiatives such as Connected Ink, a collaboration with the National Institute of Information and Communications Technology (NICT) and Wacom Pioneers, which are featured in this edition.

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$$\begin{array}{c}
 \left[\begin{array}{c} \text{「E」} \\ \text{Principle of} \\ \text{Exchange} \\ \left(\begin{array}{c} \text{Benefits for} \\ \text{individual members} \end{array} \right) \end{array} \right] + \begin{array}{c} \text{「C」} \\ \text{Commons} \\ \left(\begin{array}{c} \text{Community-wide} \\ \text{benefits} \end{array} \right) \end{array} \\
 \times \begin{array}{c} \text{「S」} \\ \text{Specific} \\ \text{expertise} \\ \left(\begin{array}{c} \text{Specialization in} \\ \text{pen and ink} \end{array} \right) \end{array} \div \begin{array}{c} \text{「T」} \\ \text{Trust} \\ \left(\begin{array}{c} \text{Trust within} \\ \text{the community} \end{array} \right) \end{array}
 \end{array}$$

Living Lab for All Creatively Driven People

If there is one event that perfectly embodies Wacom's community concept and its role within communities, it is Connected Ink. This event serves as a platform for exploring new possibilities and emerging trends in art, human expression, learning, and the technologies that support them. At the same time, it fosters collaborative relationships between Wacom and diverse communities, not only in business, but across many other fields. In this section, we look back on Connected Ink 2024 Tokyo held in November 2024, to shed light on the vision that Wacom pursued with this event.

Creative Chaos Reflecting Wacom's Vision

This community event could be described as a cultural and technological platform for Wacom – but Connected Ink is more than that. Guided by the key concept of Creative Chaos, the event involves an extraordinary range of content. The dynamism, energy, and spillover effects born from the crossover of technology and creativity are so diverse that it would be hard to gain an overview just by looking at activities over the course of two days.

It all started back in 2016. Connected Ink was launched for the first time in Las Vegas, USA, as a low-key event with only a few dozen participants. Since then, it has grown over the years both in the number of participants and sponsoring companies. Connected Ink 2024 Tokyo was the ninth edition of the event and attracted more than 1,500 attendees over the course of two days. The program featured an eclectic mix of stage performances, presentations showcasing future technologies, talks exploring new ideas in

education and business opportunities, as well as hands-on booths and workshops led by Wacom and its partner companies. At its heart, Connected Ink is a gathering space for people united by a shared passion for expression. Here, no one is ranked above anyone else based on celebrity status or influence. There is no hierarchy. The binding element is creative passion.

Wacom is committed to the idea of life-long ink – the promise to support everyone who creates by drawing and writing throughout their entire lives. This conviction drives us to go beyond simply providing tools such as pen tablets and digital pens. As an instrument craftsperson seeking integrated pen-and-ink experiences, Wacom wants to keep upgrading its technologies. To this end, we need a stage where we can work hand in hand with various communities, while at the same time solving challenges and navigating the creative chaos together. This is what Connected Ink is all about.



Business Opportunities Opened Up by Connected Ink

As previously explained, it is difficult to provide a clear-cut definition of the event. And the same is true for its question-driven theme and time span. Since 2020, each Connected Ink has been built around a central theme, serving as a kind of shared "homework" given to participants each year. In 2024, the theme was: "Ordinary days = Creative Chaos?" A question like this does not yield immediate answers on the spot. Instead, participants are asked to contemplate the theme in their own way, with a full year to explore, reflect, and experiment until the next theme will be announced. Thus, while the event lasts only two days, it represents a much longer journey. It is a year-long cycle of questioning, discovery, and trial and error.

Of course, we also welcome the positive spillover effects from Connected Ink. The event gives Wacom the chance to experience the rich diversity of humanity and fuels inspiration for future-oriented action. Among audiences who share Wacom's core values, we more often than not discover new partners for ventures and investments. This is a prime example of the positive commercial side effects of Connected Ink. Here, new business

opportunities are not created by paperwork and theory alone, but by the dynamism generated by the event.

Connected Ink is a term coined from Wacom's desire to connect the imagination and ideas of creatively driven individuals through digital ink technology, and to forge new pathways together. Curious about the exciting theme awaiting us this fall? Dive into the inspiring stories Wacom presents at Connected Ink – available in our blogging platform *note* and archived videos on our YouTube channel.

About Connected Ink Village

There is no Connected Ink without Connected Ink Village ("the Village"). Founded in 2021, the Village leads a variety of projects aimed at bringing new cultural perspectives and value to society. As a co-host of Connected Ink, its primary role is to support the event's creative dimension.



Unexpected Correlation Between Drawing / Writing and Brainwaves

Collaborative Study Then and Now – A Perspective for the Future

The National Institute of Information and Communications Technology (NICT) and Wacom have been conducting joint research on how brainwaves can be used to measure the effectiveness of human learning. To find out more, we spoke with Dr. Yasushi NARUSE, Lab director & PI at the Brain Function Analysis and Imaging Laboratory, Center for Information and Neural Networks, Advanced ICT Research Institute.

How our Teamwork Began

Our collaboration dates back to 2016. One day, Akiyuki KAKE, Wacom's R&D expert in Technology & Experience, raised an intriguing question: Why do we need to write Kanji characters over and over again to master them? He had a vague idea that brainwaves might hold the key to the answer. It prompted him to ask Dr. NARUSE, one of the foremost researchers in brain function analysis, to embark on a joint research project exploring the relationship between drawing / writing and brainwaves.

Looking back, Dr. NARUSE remembered a sense of pleasant surprise by the proposal to conduct

fundamental research together. He has received numerous offers from companies keen to benefit from brain function analysis. However, many of these companies tend to seek short-term results, which poses a challenge for a research institute like NICT. In the academic world, researchers must first follow established paths for conducting studies and publishing papers before thinking about commercial applications. In this regard, Wacom's proposal came as a welcome surprise, says Dr. NARUSE. KAKE's aspiration for in-depth research without time constraints aligns perfectly with NICT's needs. Thus began their joint research.

Joint Research: A Journey of Patience and Persistence

After a promising start, the research did not bear immediate fruit. We wanted to find out which method is most effective in terms of memory retention –writing with an ink pen, a digital pen, or typing on a keyboard and reading aloud? At first, however, no clear difference could be identified.

The turning point came in 2018. It occurred to us that familiarity with digital pens might play a role. Therefore, we compared participants with varying levels of mastery across the three writing methods in question. And this is where we experienced a breakthrough. The same experiment was then performed to assess the effectiveness of learning through writing, but this time with two different

groups –those who were familiar with digital pens and those who weren't. The data revealed a distinct trend supporting a specific assumption about memory retention. In this comparative study, memory retention was not evaluated by whether or not a word was written correctly but was instead measured by the brainwaves of participants who felt uneasy at the sight of incorrect characters. The study demonstrated that participants accustomed to using digital pens yielded better results of memory detection with them, compared to when they used traditional ink pens. The results were published in a paper in 2019. The study scope was then extended from Kanji characters to Indonesian scripts, and similar findings were published in 2021.

Decoding and Leveraging Data Gain from Brainwaves

"We are experts in technology for measuring brainwaves, while Wacom is an expert in digital pens" says Dr. NARUSE. The joint research, where each party complements the other, is indeed mutually beneficial. Currently, the research focuses on technology to accurately measure brain activity when drawing / writing. While the research is still underway, we have detected brainwaves that reflect the sense of comfort that pen users feel when their pens come into contact

with the medium (paper or display) when drawing / writing. KAKE says: What amazes me about NICT is its synchronization technology. The ability to synchronize brainwave devices with a digital pen with millisecond precision is something only NICT can offer in Japan. The experimental data from the joint research together with Dr. NARUSE's expertise will surely benefit Wacom's craftsmanship and elevate the user experience of its products to the next level.

Wacom's Unique Corporate Culture and Future Perspective

Dr. NARUSE believes that Wacom's unique corporate culture is something special. "I got the impression that Wacom's reporting line is flat. Once we complete an experiment, the results are forwarded directly to the CEO. Few companies pay attention to the details of painstaking experiments or are willing to discuss their potential applications on an equal footing". The joint research thrives on Wacom's speed and flexibility when it comes to decision-making.

evaluating drawing / writing comfort. The next step is to detect brain activity specific to individuals who draw / write. Here, we are focused on the brainwaves of professional creators. There is an ongoing debate about whether the brainwaves observed during the act of drawing are unique to each individual creator or common to creators in general. Our goal is to decode these brainwaves by combining the technologies of NICT and Wacom."

According to Dr. NARUSE, a new research project is already underway with an eye on future development. "Thanks to our fundamental research, we can now use measured brainwaves as a parameter for

Just imagine, brainwaves may offer a clue as to how the minds of professional creators' work. How exciting! We can't wait to see what future vision will emerge from the work of NICT and Wacom.



Yasushi NARUSE

Ph.D. Graduate School of Frontier Sciences, The University of Tokyo. After graduating, Dr. NARUSE joined the National Institute of Information and Communications Technology (NICT). He has been involved for many years in the development of a novel wearable EEG system that can easily measure brainwaves in naturalistic environments, and in the development of applications using wearable EEG system.



Who are Wacom Pioneers?

Valuable Companions in our Search for Use Cases and in Technical Development

Wacom Pioneers is a group of external creators who have made their creative life with Wacom. Wacom believes that the Pioneers can generate mutually beneficial synergies by exploring a broad range of use cases together. As part of this initiative launched at Wacom Europe in 2025, we work with "companions" who stand with us and share their candid opinions—even if they may sound harsh at times. We asked Heidi WANG, Senior Vice President at Wacom, to share her views on the Pioneers and the invaluable relationships that have been formed.

"Most of the Wacom Pioneers have been creating their work with Wacom products for many years. They are specialists in their creative fields, such as VFX design (visual effects using computer graphics), 3D content creation, 3D design, storyboarding, advanced photo art, and game design". WANG explains this with a sense of pride, recognizing the value of these frontrunners in their respective creative domains. What personality traits are common among Wacom Pioneers? "They are characterized by a deep passion for what they do and what they believe in. They are also community-minded and eager to share their knowledge and

excitement with the next generation and the community. Not all of them have polished careers. They encounter ups and downs, uncertainties, and new paths. Nevertheless, they remain curious and open to trying new things, and that's what we value most about them." Their inquiring spirit and vibrant energy have also helped boost the visibility of the Wacom brand. As true believers in the value offered by Wacom's technology to their creative lives, Pioneers are the best messengers we could ask for. In them, we find an authentically supportive voice for Wacom.

Learning from Each Other as Companions Bound by a Special Bond

What does Wacom aim to achieve with this initiative? This question was raised out of curiosity about the process and criteria for selecting Wacom Pioneers. "One thing we can say for sure is that this initiative isn't primarily driven by business or direct sales. It stems from our desire to collaborate with pioneers in their respective fields – people who can push use cases beyond the status quo." The members were chosen based on our engagement in recent months. The selection criteria, if any, would be the special sense of connection we feel with them. We

hope to collaborate with them on joint projects to develop ourselves and support Wacom in expanding a wide array of use cases and technologies. By learning from each other, we can continue to grow together. This is why we see them as companions who accompany us on our corporate journey."

WANG emphasizes the far-reaching benefits that Wacom will gain from working with the Pioneers. "Among other things, we aim to engage with Pioneers who are experts in their fields and workflows. They

help us explore and develop use cases, showing us how our technologies can help to create value. Most of the Pioneers are leaders in areas such as 3D production workflow, VFX and video editing, live video editing and broadcasting, photo retouching, and modeling based on 3D scans. There's so much for us to learn from them about how Wacom's technologies are linked to specific use cases, applications, and workflows."

By combining each other's expertise and inspiration, we hope to grow together across a wide range of creative domains. This is easier said than done—her careful choice of words reflects how challenging this undertaking is. "Wacom is not interested in engaging with the creative community merely for the sake of having many contacts. What matters most to us are personal and quality connections. For this reason, we strive to build and strengthen trust within communities worldwide through personal relationships."

Seen from the other side, what is a motive for becoming a Wacom Pioneer? "The desire to grow with Wacom. And they are happy to see their feedback reflected in Wacom's product development." This is not just wishful thinking. A solid foundation for her answer lies in the way we relate to each other. Our relationship is non-hierarchical and free from employment ties, which allows us to interact openly in a supportive atmosphere. This kind of carefree and animated environment is where true creativity can flourish. "When Pioneers support us on projects or specific missions, we naturally compensate them for their time and costs. However, in principle, they do not receive payment for being Wacom Pioneers. Only through this approach are we able to earn their respect for Wacom's beliefs. We will therefore continue building projects rather than providing

sponsorships."

The Wacom Pioneer initiative runs purely on a voluntary basis. Whether and how they choose to participate is entirely up to them, and they are free to decide which activities they wish to engage in. In this way, the initiative aligns with Wacom's concept of community as a loosely connected group with common goals and interests. And how does WANG expect the initiative to develop in the future? Is there any possibility of expanding or scaling up activities? In answer to these questions, she replies: "We are just at the beginning of building Wacom Pioneers, and our priority is to first deepen our relationship with them. There is a good chance that they will become future contributors to product development or even co-creators. We also want to engage more with professionals not only in Europe but also across different countries and creative fields. Rather than defining a final stage or predetermined outcome, we prefer to let these friendships evolve naturally – the value for both sides grows with continued engagement over time. That's the ideal scenario."

Heidi WANG
Senior Vice President
Wacom



WANG is one of the leading figures at Wacom, dedicated to enhancing the value of drawing / writing experience with digital inking through Wacom's solution portfolio. Based on her motto that value is created by connections, she focuses on a close collaboration with communities.

Entering a New Door – With Communities



Photo: Sho Kato (Timeties)

Wacom Story Book Issue 2



Chapter 4: Side Story

Cover Art_Bunta, "Douguya"

Exploring the ultimate drawing and writing – and beyond, pioneering the broader inking experience. By asking CEO, Nobutaka IDE, about the company's aspirations for the future, the booklet invites you to explore Wacom's journey so far and its future vision. It also features a dialogue with a strategic partner.

Living Together Within Communities

Cover Art_ktym, "Ordinary Days"

Wacom strives for collaborative creation with communities, groups of loosely connected by common goals and interests. This edition illustrates how we pursue this vision by explaining it using the formula $[E+C] \times S \approx T$ and by providing concrete examples such as Connected Ink.



Our Sustainability

Cover Art_Shigeki Hibino (Wacom), "404 Not Found"

How can Wacom help address the challenges faced by people and communities through digital inking? From the perspective of living together with communities, Wacom reflects on its current and future sustainability initiatives.

Our Governance

Cover Photo_Shō Kato (timeties)

The board of directors at Wacom serves as a forum for fully committed debates on challenging issues. This edition presents the perspectives of outside directors, who make up two-thirds of the board. It also provides insight into the effective functioning of various committees, including the Nominating, the Compensation, and the Audit Committees.



Wacom Story Book Issue 2 was published in the four editions listed above, to accompany Wacom Chapter 4, the medium-term business plan. This issue will be followed by two more sections – People and Use Cases. The second edition is designed to evoke the feel of a private magazine as a means of personal creative expression. In this way, we aim to give Wacom Story Book a fresh look, while still preserving its essence.

Wacom Story Book Issue 2
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Names of organizational units and job titles quoted in the booklet are as of May 2025.