

Feature: Expert talk



Ryutaro Kotaki
President and CEO

Hiroyuki Morikawa

Professor, Graduate School of Engineering, The University of Tokyo
Chairperson, Communications and Information Network Association of Japan

“Tagging for Sustainability” for a better tomorrow

Looking forward to SATO’s ‘story’

Tagging for Sustainability is the future business model SATO pursues to realize a better and more sustainable world. Our CEO Ryutaro Kotaki sat down with Hiroyuki Morikawa of The University of Tokyo to discuss the future of data collection. Morikawa is an advocate of data-driven economy, which he envisages as the next digital revolution.

Real data drives the next digital revolution

Morikawa The modern digital revolution sparked by the dawn of the internet over 20 years ago is now led by major digital platform providers who help consumer-targeting businesses collect, analyze and make use of data on how consumers search and shop online. But I’m seeing that it’s

entering a new phase where the real data of physical things, such as their ID and temperature, comes to play a central role. In this data-driven economy,^{*1} so much real data that was difficult to collect before can now be utilized to create new value and change the very notion of what’s “normal” for companies, industries and society.

It will be an economy that gets all industry sectors including B2B involved, with every industry needing to

collect and make use of real, on-site data concerning production, distribution and sales from across their entire supply chain. I foresee a challenge when major digital platform providers today aren’t able to fulfill all their data demands. Each industry has its own things to track, logistics infrastructure to transport them and pain points to solve. That’s why I believe companies like SATO that understand business worksites can put their data collection and utilization capabilities to good use in the data-driven economy and contribute more than ever to the growth of society in terms of ensuring safety, offering assurance and reducing environmental burden.

*1 An economic system where data collected from the real world creates new value and revolutionizes companies, industries and society.

Kotaki Solving pain points with our customers’ real data is what we’ve been doing since our founding. Starting with the invention of the hand labeler that labeled price onto products, we have continuously innovated our tagging business of attaching (or associating) information to things as the world shifted to barcodes and RFID technologies. Today, we have customers in a wide range of industries. We’ve learned over the years that what customers and industries in any time and age want is real data associated to each and every thing at their worksites. As you mentioned, different industries have different things to track and different pain points to solve. The transportation industry, for example, wants to track the temperature of each item seamlessly to improve safety and reassurance. Hearing out and understanding these on-site pain points to provide solutions with our tagging expertise is where the true value of our business lies.

We say that we help customers “tag,” “feed” and “make use” of data. How do we tag identifiers or other information to something? How, and at what point do we feed that real data to a company’s IT systems? And how do we ensure the data converts into insights that the customer can make use of back at their worksites to solve their pain points? Finding answers to these questions with

the customer is what we do, and our strength is in putting together solutions specific to each market, industry and application in each country and region. I’m extremely encouraged to learn that what we do has a lot in common with the data-driven economy you advocate.

Talent to bridge the physical and digital

Morikawa I, too, think there is a lot in common. Every industry will come to need tagging in this digital age. IoT and the latest 5G technology, for example, concern all industries and have the potential to change everything, but they can’t unless everything has data attached to it. Your tagging specialty could power this transformation.

I also think that the people who pave the way to the next digital age are not the ones who merely have knowledge of digital technology but rather those who can bridge the real and digital worlds. Bridging won’t be such an easy know-how to acquire; it will come from a lot of trial and error and failures. An organization that can seek such knowledge needs to be agile and open to taking risks — almost like the US Marines — and search for answers tenaciously with a broad vision. But it also needs to make continuous improvements and keep deepening its knowledge as well. Am I correct in assuming SATO is full of employees who seek knowledge on site?

Kotaki You’re very correct. We have a lot of talent who live by our corporate motto of Ceaseless Creativity and treat customers’ problems like their own to come up with the best solutions for their worksites using tagging technology.

We are developing a new business model for long-term growth called Tagging for Sustainability. It involves taking our brand statement, “We give every ‘thing’ its own ID so it connects with the world” further, for us to

Feature: Expert talk

tag, feed and make use of data at an even higher level to deliver broader customer value. We are building a new team that will lead our transition to this business model with the mobility of a marine.

A good story is what we want to hear

Kotaki In shifting toward Tagging for Sustainability, we are particularly interested in source tagging: tagging upstream in the supply chain, at the manufacturing stage. Source tagging would allow real data to be collected throughout a circular supply chain, over both forward and reverse logistics processes. And real data here includes those that are not so easy to digitize today, such as where a consumer used a product, how frequently and by how much. Imagine if a medicine bottle we've tagged picks up data about when and how it was ingested. The manufacturer could make use of this data to plan production or sourcing of raw materials, or in product development or marketing activities, which would advance its business and contribute to the world in ways not possible before. And when other players in the supply chain such as logistics providers and retailers use that data, their businesses could deliver greater value and make the world better for everyone. That's why I insist that we seek tagging opportunities upstream in the supply chain.

I believe that, in time, we will be seeing so many different players forming partnership ecosystems where they collect, share and make use of a variety of value-creating real data beyond just the ones we would provide. I'm hoping they would learn of the value of tagging that we propose and include us in their ecosystems to make the world better. We aim to be an essential partner for them.

Morikawa I'm fully with you on that. The most important point in building an ecosystem is to have a proper cause; without it, you won't find any partners. The data-driven economy I envision is like a whirlwind of so many players providing their respective expertise — be it communication infrastructure, data platforms, BI tools,*² consulting, or tagging that you do — and coming together to form a huge societal momentum. Players need a cause to come together, and hearing from you today, I think Tagging for Sustainability offers that cause.

And then every business success requires resources, one of which is a convincing story, of how you would create social value. A good story, more than great technologies, is what matters when it comes to bringing employees, business partners and investors on board. I look forward to SATO adding its story to the next chapter of the digital age.

*² Business intelligence tools; software to store and analyze the many different data a company owns, aimed to help management and operations.

Hiroyuki Morikawa

Professor, Graduate School of Engineering, The University of Tokyo
Chairman, Communications and Information Network Association of Japan

BE in electrical engineering from The University of Tokyo in 1987; PhD in 1992. Professor at Graduate School of Engineering, The University of Tokyo since 2006.

Research interests include IoT/big data/digital transformation, wireless communication systems, cloud robotics and information society design. Vice Chair of OECD Committee on Digital Economy Policy (CDEP), Head of Beyond 5G New Business Strategy Center, Committee Chair of Information and Communications Council at Ministry of Internal Affairs and Communications, President-elect of The Institute of Electronics, Information and Communication Engineers (IEICE), among other titles.



COLUMN

Actions toward Tagging for Sustainability: Consumer Business Development Dept.



The SATO Group has a number of actions underway toward Tagging for Sustainability, some notably driven by the Consumer Business Development Department launched in 2021. It works with customers and with new tagging technologies to create solution services that were previously considered unachievable.

Today, SATO teams up with Israel-based Wiliot as its alliance partner*¹ to create solutions for the retail market, using Wiliot IoT Pixel tags. These tags can not only carry the identifier data of whatever they are attached to but also pick up the real-time status of it, such as its location or temperature.*² They also run battery-free by harvesting energy from ambient radio waves, and do not require dedicated scanners, as they continuously transmit data via Bluetooth*³ to be read by smartphones and other Bluetooth-enabled devices. These features allow retailers and manufacturers to collect data of their products inside the store as well as after sales, automatically obtaining exhaustive information on their status and how they are used.

In a world where consumer preferences and purchase behavior are more diverse than ever, businesses today share the need to know the greater details of individual consumer behavior to enhance marketing, or fine-tune demand forecasts in response to supply chain disruptions and climate change. Wiliot tags can potentially meet these needs. SATO conducted tests with these tags in FY 2021, staging proof-of-concept trials in retail stores to track real-time inventory and running a demo in its exhibition booth visualizing real-time data of how product samples there were used. We plan to commercialize these solutions in FY 2022.

We create new value for and with our customers in the supply chain as we develop new tagging technologies and solutions and make use of the data they collect.

*¹ Wiliot is the company that develops the IoT Pixel sensing tags and their accompanying cloud service. SATO has signed a three-year strategic partnership with Wiliot to establish leadership in spreading the use of IoT in the retail industry. SATO is one of Wiliot's three focal companies to which it supplies tags.

*² Includes technology under development.

*³ Bluetooth® is a trademark of Bluetooth SIG, Inc.

From the front lines

Entering a new field of tagging for a sustainable world

I have always believed in SATO's potential to venture into new fields, with our legacy tagging expertise over an array of markets and supply chains and our unique know-how in consumer marketing (e.g., Design Promotion [Page 4](#)), which are two resources we could bring together. Advancements in tagging technology as we see in Wiliot have propelled us into that future. Our team works toward delivering new value to consumers and using the data obtained from such offerings to optimize supply chains and fulfill our mission to contribute toward a sustainable world. Do look forward to SATO's new endeavors.



Kazuya Hirata
Senior Manager,
Consumer Business
Development
SATO Corporation

From our partner

For solutions that benefit people, planet and profit

The world is facing crises on multiple fronts. We face climate change and the impact of unsustainable production, plus the stress on supply chains that is driving shortages that threaten our economic well-being, which always impacts our poorest citizens first.

Wiliot and its partner SATO are in the privileged position of being able to provide solutions that can mitigate both crises, by bringing real-time visibility to product usage and supply chains that can massively reduce waste of food, clothing, medicine and many other resources, while moving businesses to economic models based on a more sustainable circular economy. In the past, environmental progress was often seen to be at the expense of profits; we can enjoy some optimism about the future since our progress can benefit people, planet and profit.



Steve Statler
Senior Vice President,
Marketing & ESG
Wiliot Ltd.