

## Special Feature 1 —Employee Roundtable Discussion—



Kashiwa Sales Department  
LOGISTEED Metropolitan

Daisuke Arakawa

Smart Logistics Development Department

Kenji Mogi

Smart Logistics Development Department

Koki Fujiwara

Industrial Digital Business  
Collaboration Department

Satoshi Arai

Integration Office

Sohei Suzuki

## LOGISTEED Group's “Future Vision of Logistics Center”

The LOGISTEED Group has set up the “Future Vision of Logistics Center” concept as advanced and sustainable safety/quality activities to be implemented in the Mid-term Management Plan “LOGISTEED2024” and intends to visualize “safety/quality/productivity/fire prevention/crime prevention” and further improve the sites mainly through the “Centralized Safety and Quality Control Center” which makes full use of digital technologies such as video management systems and AI, with an aim to realize logistics centers that continue to earn the confidence of our stakeholders.

We held a roundtable discussion with five members who are working on the front line by leveraging their abundant on-site experience to discuss what kind of value creation is underway at “Gemba” (site), which is the source of our strengths, toward the realization of the “Future Vision of Logistics Center” concept and sustainable logistics services amid ongoing labor shortages due to declining birthrate and aging population in Japan.

### Attendees in the discussion

Deputy General Manager, Industrial  
Digital Business Collaboration  
Department, DX Strategy  
Department

| Satoshi Arai

Manager, Smart Logistics  
Development Department,  
Logistics Solution Business  
Development Headquarters

| Koki Fujiwara

Manager, Smart Logistics  
Development Department,  
Logistics Solution Business  
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| Kenji Mogi

Manager, Integration Office,  
Corporate Strategy Office

| Sohei Suzuki

Manager, Noda Sales Office,  
Kashiwa Sales Department,  
LOGISTEED Metropolitan

| Daisuke Arakawa

\*Names of organizations and positions are as of the date of the discussion

**First, please tell us about your background and areas of expertise and roles.**

**■ Fujiwara:** After I joined the Company, I worked at a sales office stationed at a customer's factory for three years and was engaged in sales and corporate management at a Philippine subsidiary for about seven years, and then engaged in global sales development using the experience from such overseas assignments. I believe I can leverage my strengths in launching a business from scratch. Recently, I have been engaged in the development of solutions in new domains, such as Kasukabe EC Platform Center, the decarbonization project, and the enhancement project for the medical business.

**■ Mogi:** Since joining the Company, I have been engaged in warehouse operations, mainly managing and operating logistics centers for distribution-related customer, drugstores, and groceries-related customers. Currently, I am seconded from LOGISTEED Kanto, one of the group companies, to the Smart Logistics Development Department of the Company and engaged in initiatives to realize the “Future Vision of Logistics Center.” I believe my strength is my long on-site experience.

**■ Arai:** For the first three years after I joined the Company, I was engaged in plant logistics work such as relocation of offices and factories and installation of equipment, and then engaged in 3PL business development in Japan and overseas. Since 2018, I have been engaged in research and development with various collaborative innovation partners for the adaptation and installation of the latest technologies and solutions in the logistics domain.

**■ Arakawa:** I joined the Company to work on one of the largest projects of the Group at that time to launch a new 3PL business to handle products of a major brand and have been engaged in 3PL on-site operation until now. I believe my greatest strength is that I have accumulated a lot of on-site experience including the relocation of logistics centers and cooperation with other sites. Since 2016, I'm working as on-site operation manager for the 3PL business.

**■ Suzuki:** I had long engaged in package design, work system construction, layout change, etc. at sales offices inside customers' factories. And then, after engaging in on-site support operation, I worked on safety technology for forklifts as well as on the project for the “Future Vision of Logistics Center” concept as a staff in charge

of the operation of the “Centralized Safety and Quality Control Center” until March 2023. I focus on daily operations by leveraging my strength, which is a wide range of on-site experience including warehouse management and customer service.

**Now that we understand the area of expertise and current role of everyone. Please explain the background and overview of the “Future Vision of Logistics Center” concept which the Group is currently promoting to enhance warehouses.**

**■ Arai:** The environment surrounding the logistics industry is rapidly changing, and there are quite a few issues that threaten the global supply chain such as logistics disruptions and labor shortages. Under such circumstances, the Group focuses on “Smart Logistics” using the latest digital technologies such as IoT and AI under the mission of providing sustainable logistics services to customers. In the previous Mid-term Management Plan “LOGISTEED2021,” we promoted DX strategies including labor saving and automation in each domain of warehouse, transport, and supply chain, and also developed solutions such as the transport digital platform “SSCV” and the supply chain optimization service “SCDOS” under the concept of “Supporting transport. Improving society.” In the Mid-term Management Plan “LOGISTEED2024,” we set the “Future Vision of Logistics Center” concept and focus on initiatives to improve efficiency of on-site operation as well as add new functions such as safety/security/crime prevention. While we had already developed and introduced solutions for “visualization” to individual sites through filming warehouse operation status and monitoring data logs, they were only individual initiatives at each site, and site managers were too busy with their daily work to make full use of them. To address such issue, we built the “Centralized Safety and Quality Control Center” in 2023 as a new means for “visualization” that centrally consolidate them to manage and use remotely.

**■ Suzuki:** The reason why the Group has worked on such “visualization” is to eliminate accidents in warehouses, such as collisions between people and forklifts and falling from loading docks. While we had been providing guidance to eradicate accidents as needed through site patrols and fixed-point observations, we worked to compensate for the limitations of such activities and “visualize” safety, and as a result, the “Safety Cockpit” system using a dedicated line was completed in 2017. This system, through cameras installed in areas with high accident risks, automatically monitors unsafe behaviors and rule violations, such as a stop sign violation by forklifts, and ensures timely management of such behaviors, advancing our preventive maintenance activities to prevent accidents. In addition, we define “Success Drivers,” one of the components of the “LOGISTEED WAY,” as “Gemba” Power, multiplied by Visualization, which means we aim to enhance on-site capabilities through visualization. “Gemba” Power is specific results and achievements required as a logistics company, and visualization is an extremely important action to have a clear overview of the supply chain.





The "Success Drivers" consist of "3 Key Goal Indicators," "3 Disciplines," and "3 Attributes," and "3 Key Goal Indicators" include "Safety, Quality, and Productivity," so, I believe the "Safety Cockpit" is an embodiment of the "Success Drivers."

**Arakawa:** As the "Safety Cockpit" can now automatically monitor whether forklifts stop at stop signs, it allows us to monitor areas where managers previously overlooked. Also, because the system can issue an alert to the forklift which did not stop at a stop sign on a timely basis, it is contributing to increasing safety awareness of forklift operators. In addition, after we installed dashboard cameras in forklifts and started holding meetings on a regular basis with forklift operators using footage from these cameras, the number of unsafe behaviors started to gradually decrease. As a result of our efforts on safety education using footage, the number of accidents in LOGISTEED Metropolitan decreased in FY2022, and we aim to further reduce by 30% in FY2023. The number of accidents in the Group as a whole is also decreasing every year.

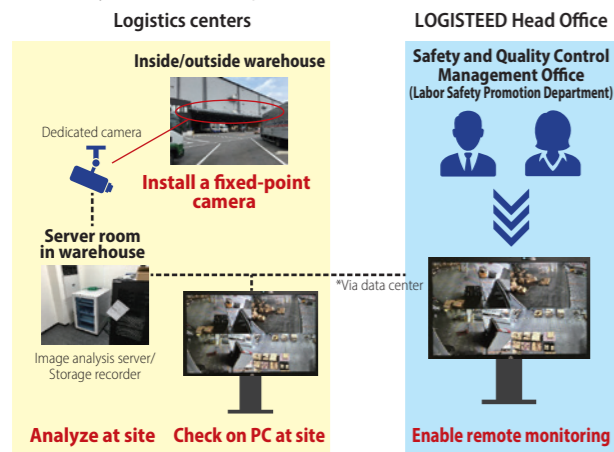
**Fujiwara:** I feel that the safety awareness of on-site employees is increasing by pursuing "visualization" at all times. Staff from Safety and Quality Control Management Office in Japan has visited sites in overseas, for example, the Philippines to provide safety guidance. But in the future, we can easily expand our safety initiatives globally by combining video evidence and DX and further spread safety awareness in overseas sites in a speedy manner.

**Arai:** At one site, the number of stop sign violations by forklifts declined to about one-tenth of the number in the previous year as a result of continued improvement activities, such as warnings by the "Safety Cockpit." I believe the key factor for this success is that the guidance based on the evidence is easy for forklifts operators to understand.

**Camera footage of logistics centers contains a lot of confidential information. Please explain how you are preventing leakage and using the data.**

**Mogi:** In the "Safety Cockpit" system using a dedicated line, we install dedicated cameras and servers in the forklift aisles at our sites to automatically monitor unsafe behaviors. So, while it

**Safety Cockpit using a dedicated line**



is very useful in automatically monitoring unsafe behaviors, the camera coverage is limited to specific areas. To remotely monitor and promote "visualization" of on-site situations, we studied whether it would be possible to store footage of security cameras installed at sites in the cloud. Since the video data of existing cameras is stored on the recorder via the internal network of the site, there is no risk of a data leak. On the other hand, in the newly introduced system, we adopted the VMS (➔P76) (Video Management System) capable of remotely monitoring footage of the existing security cameras covering areas that the "Safety Cockpit" system using a dedicated line cannot cover. Since video data is stored in the cloud via the internet, there is a potential risk of leakage. Therefore, we considered what we should introduce with our collaborative innovation partners from the three perspectives of "thorough security," "ease of introduction," and "functional expandability" and decided to use a "closed network." In a closed network, data is stored in an isolated state from the regular internet connections, enabling maintenance of a high level of security and also enhance usability as it offers cloud migration by simply connecting to existing cameras. In the future, we will use the accumulated video data and set rules such as time and place, and when a person is detected, it will be recorded and added to the video data as additional information.

**Arai:** Another advantage of using the cloud is that we can avoid a risk of losing video data when the server is damaged due to a disaster such as an earthquake. Although introducing such system involves costs, we made the investment as we decided that it would be worth it after weighing these benefits against the amount of investment.

**Fujiwara:** Footage of cloud-based cameras at sites is currently monitored daily by members of the Labor Safety Promotion Department in the "Centralized Safety and Quality Control Center" at the head office. In addition, the cloud migration enabled site managers to view the footage on their mobile devices. For example, if an earthquake occurs near a warehouse on a holiday or at night, site managers, wherever they are, can view the footage on their smartphones to see if there is any damage at site, which dramatically speeds up an initial response such as contacting customers and requesting assistance from the Company. In addition, the new system enabled integrated safety management by using camera footage in combination with various sensors and sharing such data with site managers in real time, which is another advantage.

**What kind of challenges and hurdles did you face in safety management using video data, and how did you resolve them?**

**Arakawa:** Regarding stop sign violations by forklifts, when the video management was first introduced, three out of ten forklifts did not stop at stop signs. The result of the video analysis with the Labor Safety Promotion Department showed that there were issues such that some operators tried to stop but could not stop completely, or there were no definition

or rules of stop signs. So, we established the definition and rules, which increased the stop rate to the 90% level. We also introduced a system to notify forklift operators with a warning lamp if they did not stop at stop signs, in order to spread the rules. As a result, the stop rate is now close to 100%.

**Arai:** On the other hand, when introducing security cameras, we also strived to mitigate resistance by employees at sites to "being constantly monitored." Because the term "monitoring" inevitably gives a negative impression, we work on to make sure that they feel safe as we introduce the cameras by clearly explaining that the purpose of introduction is to maintain a safe environment where they can work with a sense of security and to "watch over" them.

**Mogi:** As they now understand more about the benefit, there are some site managers who are willing to introduce security cameras. For example, a manager of a site which has implemented the VMS as a model center told us that he wants to introduce the VMS which allows him to remotely check the status of a nearby satellite site in real time. I think this is a good example that people tend to shy away from it at first because they are alarmed or they want to save the trouble, but they come to appreciate the benefit that it can protect their safety and security once they actually use it.

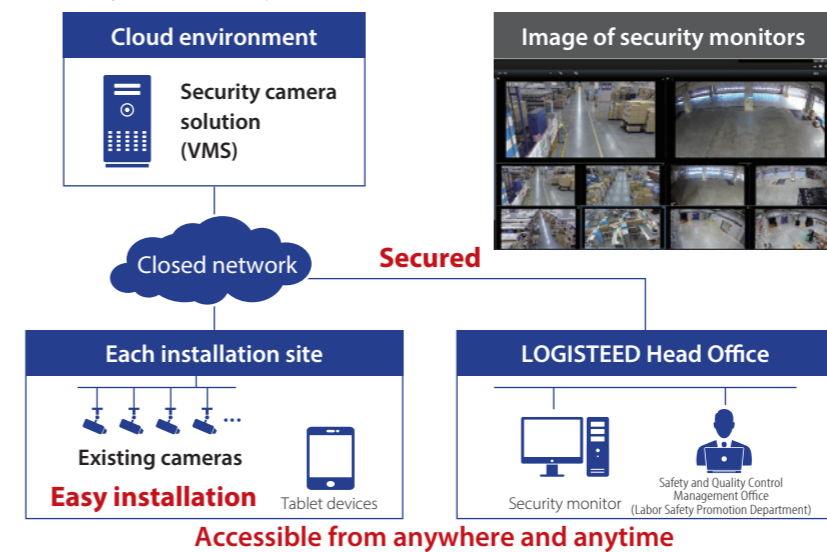
**Suzuki:** When we expand the functions of the "Centralized Safety and Quality Control Center" and increase the number of target sites in the future, we will make use of this experience to deepen understanding of employees at relevant sites about the purpose of the introduction and activities after the introduction at an early stage to ensure smooth operation.

**Please tell us about any measures under discussion and issues we need to address to further enhance logistics centers, and also how they will bring a future advantage to the Group.**

**Fujiwara:** In March 2023, we introduced a security robot at our site in Kansai. The main task of the security robot is

self-propelled security patrols in the warehouse. We will use the system which makes full use of various sensors and information technologies to detect abnormal temperatures, etc. during patrols, issue an alert, and send such data to managers in real time, which I believe will bring a future advantage. However, warehouses are usually not located in office districts or residential areas and communication infrastructure is insufficient, so our issue is to develop a communication infrastructure capable of real-time linkage and high-speed processing of a large volume of data. In addition, we will continue to deepen cooperation with our collaborative innovation partners in addressing such issues related to communication environment as well as in introducing IoT devices which are essential for the "Future Vision of Logistics Center" that the Group aims to build. For example, the security robot introduced this time is based on a robot developed by a leading security company, and this is the first time that the device has been used in the logistics industry. As cargoes are constantly moved and the layout changes frequently in logistics centers, there is a risk that a robot may lose the sense of direction. Therefore, we repeatedly conducted practical verification with our collaborative innovation partners, used on-site insights to solve issues, patiently fine-tuned them one by one, and finally created the LOGISTEED's unique specifications before we were able to successfully introduce the robot. While manned security, which has been implemented at each logistics center for a long time, has a limit to the number of patrols, security robots constantly watch over the site without rest, which is very well received by employees at sites as "they feel very safe." Drawing on the experience and insights we have obtained from this case, we plan to introduce solutions to reinforce security at logistics sites to customers' manufacturing sites in the future. In addition, the willingness to actively incorporate new technologies into our sites is one of the advantages of the Group, and I believe that the insights accumulated by introducing new technologies ahead

**Safety Cockpit using a closed network**



**Expected effects of using a closed network**

- Only a remote possibility of losing video data even in the event of a disaster
- Enable to centrally manage video data of multiple sites in the cloud
- Enable to check the situation of sites from anywhere and anytime
- Enable to detect dangerous situations and notify managers in real time

of our competitors will contribute not only to further quality improvement but also to business continuity in the event of an emergency such as the COVID-19 pandemic.

**Arai:** Since the fact that the Group has many physical sites is attractive to our various collaborative innovation partners, we hope to work with them to further enhance our solutions at sites to turn them into intellectual property and ultimately develop them into a licensing business.

**Mogi:** The Group has offered individual solutions such as Good Distribution Practice (GDP) compliant temperature monitoring for the proper distribution of pharmaceutical products, visualization of forklifts' stop sign compliance, and SSCV, etc. And we introduced the "Centralized Safety and Quality Control Center" to comprehensively manage them for the first time. In FY2023, we are considering the development of a system to centrally manage alerts issued by each solution and the introduction of a system which automatically detects unsafe behaviors and factors that may lead to accidents from camera footage and issue an alert at an early stage. We also aim to improve the safety and quality of the entire Group and increase corporate value from a new perspective by setting up the "Centralized Safety and Quality Control Center" at each regional site in addition to the head office.

**Arai:** Our efforts to automatically detect various unsafe behaviors using the AI-based video analysis may lead us to a next phase in which we will expand into the domain of preventive maintenance by building an analysis platform based on the aggregated data and using it to analyze causes and trends of accidents. In addition, while we have focused on human-related areas such as safety, the Group as a whole is currently promoting automation and labor saving. Going forward, we will need to install functions to remotely monitor the operating status of various equipment. If we can eventually control such areas at the "Centralized Safety and Quality Control Center," it will truly be a one-of-a-kind operation.

**Arakawa:** As a person in charge of the site, I listen to various opinions and proposals from operators and come across a stream of issues that cannot be solved by the site alone. I hope we can solve such issues promptly by increasing opportunities to share them with the head office. In addition, labor shortages are still a major issue at present, and because the head office and sites must work together to realize the site operation not dependent on human labor, we will further deepen cooperation and promote improvement activities.

**Suzuki:** As mentioned earlier, DX to prevent unsafe behaviors has made a considerable progress, so we will now provide further support to on-site workers and expand/enhance functions to nip danger in the bud. No matter how much safety awareness increases, accidents still occur in an instant due to a minor factor. So, we hope to enhance support functions to prevent accidents more directly and allow on-site workers to work with a sense of security. Also, we currently have a system in place to simulate and evaluate warehouse layouts in terms of productivity, but I believe we will need a system to simulate and evaluate in terms of safety. By building a system to automatically design layouts that combine safety and productivity, we aim to further improve the efficiency of warehouse operation, improve sites, and add value to our proposals.

**Thank you. Now, please tell us what you think is essential for the realization of the "Future Vision of Logistics Center" concept.**

**Arakawa:** While DX is at the core of the "Future Vision of Logistics Center" concept, I believe that maintaining and enhancing "Gemba" Power and safety awareness is essential as a major premise, and especially we are focusing on education and information sharing on safety and quality. Specifically, we provide such education as experiential sessions, hazard prediction training and VR-based education, issue flash reports on accidents that occur within the Company to share it across

the Company, and transmit real-time information to prevent similar accidents from occurring. In terms of "Gemba" Power, for example, one sales office has built up trust with customers and experience for more than 20 years as well as share information with neighboring sites and move people and products flexibly. We plan to maintain and enhance such business practice toward the realization of the "Future Vision of Logistics Center."

**Suzuki:** I also think "Gemba" Power and a high level of safety awareness are essential for realizing the concept. It is important to make good use of "Gemba" Power that we have developed by providing services to various customers and a high level of safety awareness that each employee has cultivated over the years. I believe it is important to maintain a high level of safety awareness and continue to carry out activities to develop them into the next initiative.

**Arai:** This time, we built the "Centralized Safety and Quality Control Center" at the head office, but I think we should build similar sites near each site in the future. It would be ideal if it will allow us to take prompt and appropriate measures against dangerous and unsafe behaviors, and I also want to work on visualization of operational quality. Also, since the source of the Group's competitiveness lies in "Gemba" Power, it is extremely important to clearly understand requests from sites and Labor Safety Promotion Department and expand functions of solutions and systems to support them. In other words, it is important to further enhance "ability to accomplish operation," one of the Group's strengths, and I recognize that promoting these activities by involving various related parties is our mission as the head office members.

**Lastly, please tell us about your future plans.**

**Fujiwara:** I think we need to make a steady effort to fill a gap between "what we want to do" and "what we can do" in order to further refine one of the Group's strengths of "advanced logistics engineering capability" and continue to promote DX actively and quickly. We will continue to fill the gap by collecting "wants," "needs," and "seeds" from customers, sites, and collaborative innovation partners and analyzing and scrutinizing them, and will also work steadily to implement various initiatives swiftly, keeping in mind that there is no end to a safe and secure "Future Vision of Logistics Center" which the Group aims to build.

**Mogi:** One of the reasons why the Group focuses on the safety and quality initiatives is that we keep our customers' valuable assets such as products, merchandise, and raw materials in our logistics centers for them. The Group will continue to expand its DX-centered initiatives to realize the "Future Vision of Logistics Center" that stores, out-bound, and transports customers' valuable assets more safely and with high quality. In doing so, we will carefully select, install and expand functions that are truly needed at "Gemba" (site) which is a starting point of the Group's value creation. I believe promoting these initiatives by the Group as a whole will lead to an increase in corporate value and social value.

**Arai:** By maintaining and enhancing safety initiatives, we hope to demonstrate to people working in logistics centers in the world the "safe and secure working environment" that only the Group can offer. And we will solve the urgent issue of labor shortage by creating a work environment that makes people "want to work at LOGISTEED." Similarly, we will demonstrate to our customers that they can feel safe with their products by actively sharing information about the Group's various initiatives.

**Arakawa:** As a site manager and controller, I will continue to focus on creating a safe and secure work environment for on-site workers. In addition, I will actively introduce the latest technologies set forth in the "Future Vision of Logistics Center" and also focus on crime/disaster prevention, in order to ensure stable logistics center operation and business development. I will lead daily on-site operation, keeping in mind that a series of these initiatives will lead to value delivery and contribution to stakeholders of the entire Group.

**Suzuki:** I was transferred from the Labor Safety Promotion Department to the Integration Office in April 2023, and I am now promoting measures to expand revenues of the Group as a member of the "Topline Expansion Project." Under such circumstances, I realized once again that maintaining and enhancing the safety of logistics centers is one of the most important measures that form the foundations of our competitiveness. So, I will continue to demonstrate our safety initiatives to existing and potential customers with an aim to expand revenues and increase the Group's economic and social value.

**The LOGISTEED Group's future vision of logistics center**

