



PROJECT TITLE | **Creating Smart Daycares for the Future of Japan
How AI/IoT Technology Is Changing the Game of Raising Children**

COMPANY NAME | **Aigran Co.,Ltd.**

The Goal of a Smiles-for-All Daycare

For daycare teachers around the country, the responsibility of watching over their students is becoming an ever increasing burden. Because of this, the number of teachers who end up quitting is quite high, so this project wants to introduce the use of tablets and sensors to ease teacher's insecurities. Another aim of the project is to increase the number of individuals looking to become daycare teachers. Sharing experiences of veteran teachers will help improve the environment and quality of daycares. By using the project in Hiroshima as a sort of guinea pig, the program intends to use that data to spread its system across the country as an affordable and easy to use alternative.



image photo

A Smart System That Records Student's Vital Signs and Movements

Currently, daycare teachers are required to write data about their students in a daily journal, which only adds to their workload. Among the members of this consortium, a field study is being performed by Aigran Inc. Aigran's CEO, Taizo Shigemichi, said: **"If a child stops breathing for more than five minutes it is harder to resuscitate them compared to adults. By using AI and IoT to make sure that children don't lay face down or stop moving, it can help lessen the burden that caretakers face everyday. This will help improve overall care."** The new system automatically senses children's sleeping posture and breathing by sensors that are attached to their clothing and stores the data on tablets. It also has a system that alerts users if a child stops breathing.

At the moment, Aigran, Inc. leads the consortium, while the IT venture company, Unifa, develops the AI/IoT service and analyzes the data. Stress checks and the mental stability of the teachers will be managed by separate companies under the law after the system is introduced. Shigemichi continued, **"daycares and the teachers that work there will be responsible for the children who are an irreplaceable treasure in an aging society such as Japan. It is my intention to create an environment where teachers can focus on their basic duties, as well as on the children themselves. I envision a society where everyone does their part in helping raise the generation of tomorrow."**

During the first year of field testing, the goal is to collect data on the vital signs of all the children in the program by introducing a "napping sensor system" and to analyze the amount of tasks that teachers are asked to perform. In the second year, the hope is to develop a digital notebook to communicate with parents and share the data that was collected with them.

In the third year, which is the last year of the initial project, data concerning the stress levels of the teachers will be broken down and analyzed. Using all the collected data and feedback, the system will be improved into something that is easy to use and can be implemented across the country. Field tests are already set to run in companies connected to the food industry in Hiroshima, Higashi Hiroshima, Mihara, and Fukuyama.

Spreading the System to Other Daycares with Similar Problems

With the rise of women in the workplace, companies have started to offer daycare services to help ease the burden of working while raising children. Aigran also helps establish daycare programs for such companies. Their experience as one of the largest growing daycare providers in the country makes them hard to beat.

"I'd like all daycares throughout the country to be able to utilize this system, and its securities, regardless of the size of their company. Getting rid of the mental burden on teachers at daycares will hopefully increase the overall number of people who want to work in this profession. The lack of teachers is one of the biggest reasons for such long waiting lists at daycares."

In October 2019 the government made the decision to make preschool education free for all children between 3 and 5 years. The need for daycare services is increasing dramatically, and that means they need more teachers working for them. On the other hand, most of the daycare companies are small, and many of them are run by families. For these locally funded, small businesses, installing a smart security system would lessen teacher's tasks and give them more time to take care of the children. This project aims to provide teachers with the abilities and knowhow that would otherwise not be possible for a single person.

Aigran is an enterprise company consisting of various subgroups. Employees at these branches can access daycare services free of charge. To date, the company plans to increase such services to include up to 30 daycares in the Kyushu and Chugoku area. Providing in-house services such as these reduces the worries of the parents that work at their company and lets them focus better on their work.

Supporting Child Rearing

Prior to 2001, Aigran used to operate as a suitcase rental business in Japan. However, after 9/11 business was on the decline, and they slowly started to shift their focus to the daycare industry. Now they have over 400 clients to their name. With each passing decade the demand for such services increases, since the number of single mothers and one parent households are on the rise.

"We want to support working mothers. It's not right if mothers have to prioritize either money or their child's care over one another. When that situation arises, we can step in to give a helping hand, and take over the burden of watching their kids for them. I was often left home alone when I was younger. Coming to an empty house, that feeling of being alone, I will never forget that. We want to create a place where children want to come everyday, and parents can rest assured that leaving their children with us is a safe choice."

This Hiroshima system will be further developed to include the overall sleep, body temperature, and food consumption of the users. **"Our number one policy is customers first. Even though we are operating as a large company, we want to do our utmost to honor the role bestowed upon us by Hiroshima Sandbox. This opportunity has motivated us to focus on teachers' training too. We will improve our overall services and the lives of all the children in the program."**

Considering the challenges facing both day care teachers and their students' parents, initiating a smart daycare system in Japan is a major solution to the problems they face.



●Aigran Co.,Ltd./Taizo Shigemichi