

Innovate Food Industry with Robotics

Connected Robotics Co., Ltd.

2024.10

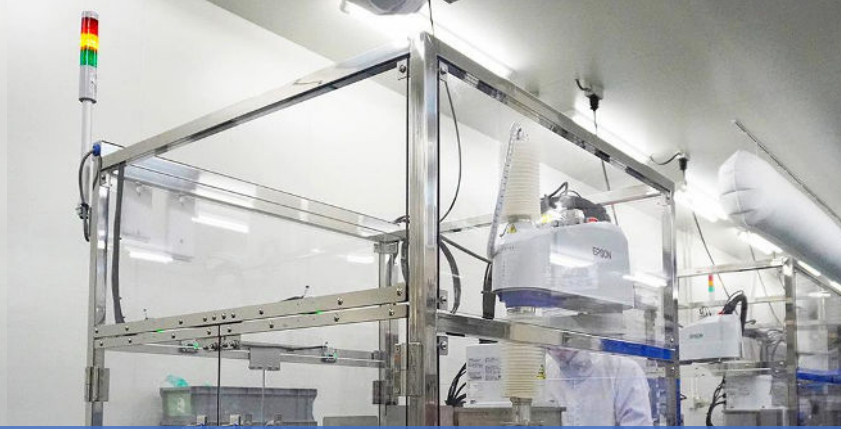


Company Profile



Ministry of Economy,
Trade and Industry
J-Startup selected
companies

Company name	Connected Robotics Co., Ltd.
Establishment	February 2014
CEO	Sawanobori Tetsuya
Business content	Development business of industrial robot controllers (~ 2017.3) <u>Research, development and sales of robot services for the food industry (current)</u>
Capital	100,000,000 yen
Employee	39 people * As of May 2024 (full -time employees only)
Head office address	5-4-1 Kajinocho, Koganei-shi, Tokyo Japan Postal Code: 184-0002
Development base	National University Corporation Tokyo University of Agriculture and Technology Koganei Campus



Vision

1. Liberate workers from physically demanding work
2. Achieve high productivity and solve labor shortage
3. Serve healthy and tasty food anywhere, anytime



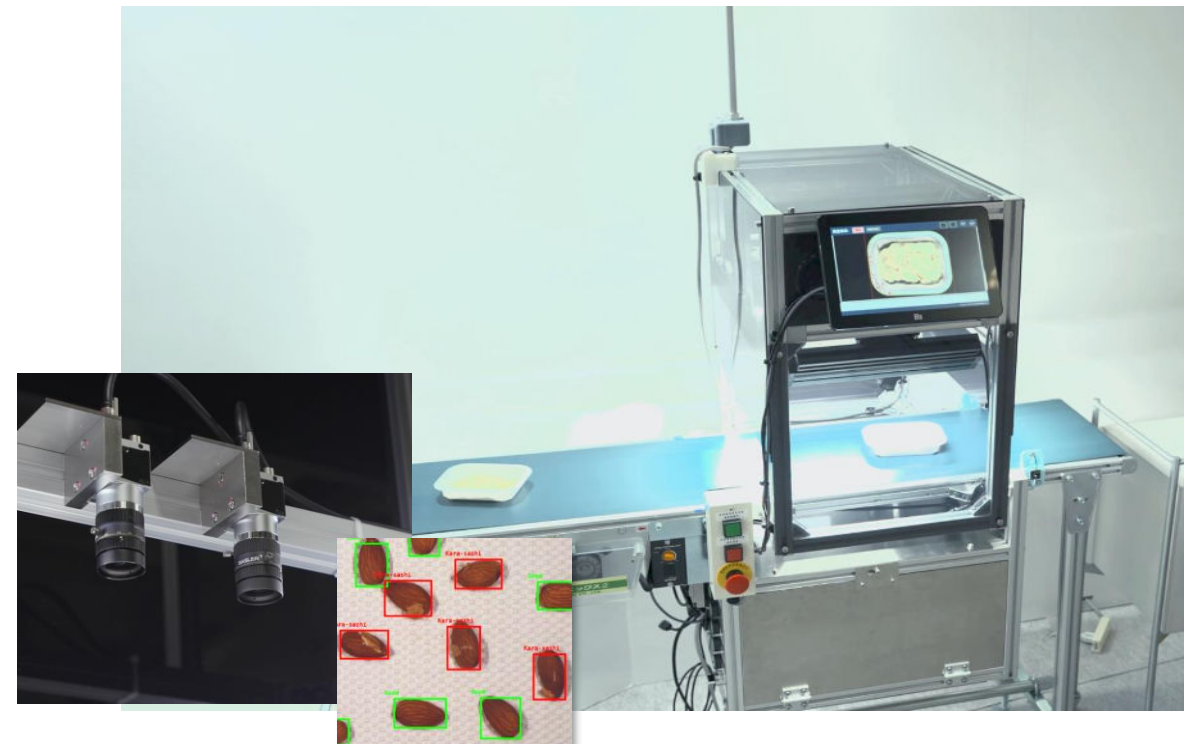
Product

Our product aims to achieve automation in food factories through specialized robotics control and AI technology focused on delivering various food products.

Delibot

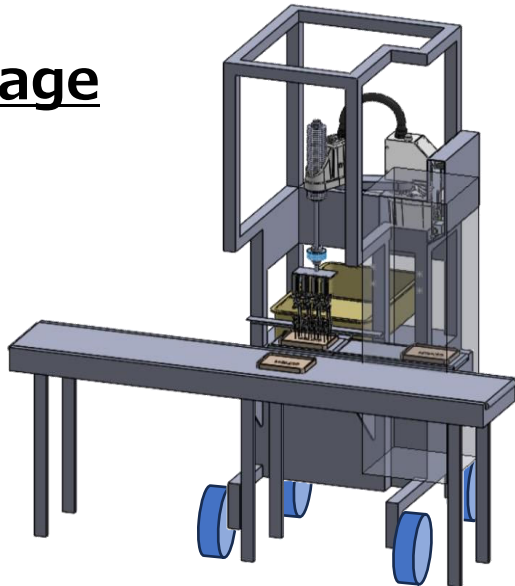


AI Inspection Software

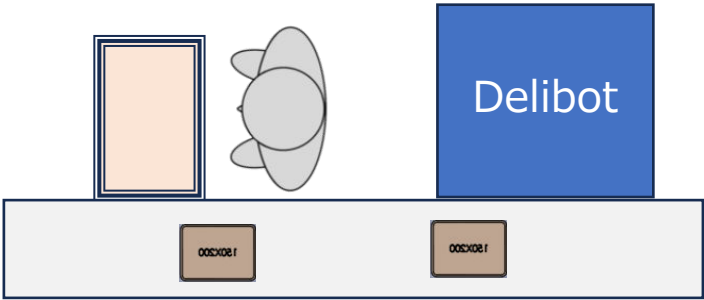


Product: DELIBOT (Side Dish Serving Robot)

3D Image



Top View Image



Main specifications

Model	Delibot-S
Compatible Ingredients	Potato Salad, Macaroni Salad, Simmered Hijiki (Black Seaweed), Spinach with Sesame Dressing, Broccoli, Fried Chicken, etc.
Productivity	1200pcs/h when using three units
Weight Tolerance	Standard Weight $\pm 3\%$
Dimensions	L930 W700 H1900
Weight	200kgf (Pressing Force 10 kgf)

1. High Mobility, Flexible Layout

Delibot-S series can be easily moved by a single person and installed directly into existing lines with a small footprint. Setup changes can be completed within short time.

2. Versatile Hand for Various Ingredients

Leveraging years of expertise in food gripping technology, our versatile hand can handle a wide range of ingredients with just three types of hands.

3. Predictive Weighing with Sensing and AI

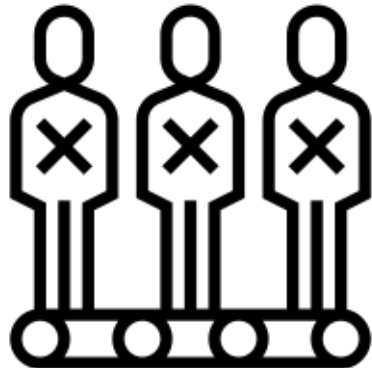
Using AI technology, we have achieved a high throughput of 400 pcs/h per unit.

Challenges in Food Industry

Currently, food industry is grappling with serious issues such as labor shortages, low productivity, and harsh working conditions.

Labor Shortage

Due to declining population, which has led to a decrease in working population, coupled with low average wages and challenging working environments, securing and retaining talent has become challenging.



Low Productivity

Due to a lack of streamlined production and standardization, as well as reliance on labor-intensive methods for manufacturing a variety of products in small quantities, productivity per person remains low.



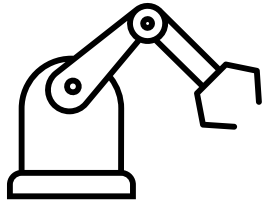
Harsh Working Conditions

Factors such as long working hours, continuous monotonous tasks, and excessively low or high temperature working environment to meet quality control standards lead to labor conditions that are perceived as "demanding," "dirty," and "dangerous."



Our Technology

Connected Robotics is the first in Japan to be put robotics to practical use in the actual food industry.



**High
technical ability**

Advanced motion control and machine learning technologies specialized for food industry make it possible to handle amorphous, flexible, and diverse ingredients that were previously difficult to handle.



**Software
specialized**

By specializing in software, we can support a wide variety of robot hardware and provide the best solution.



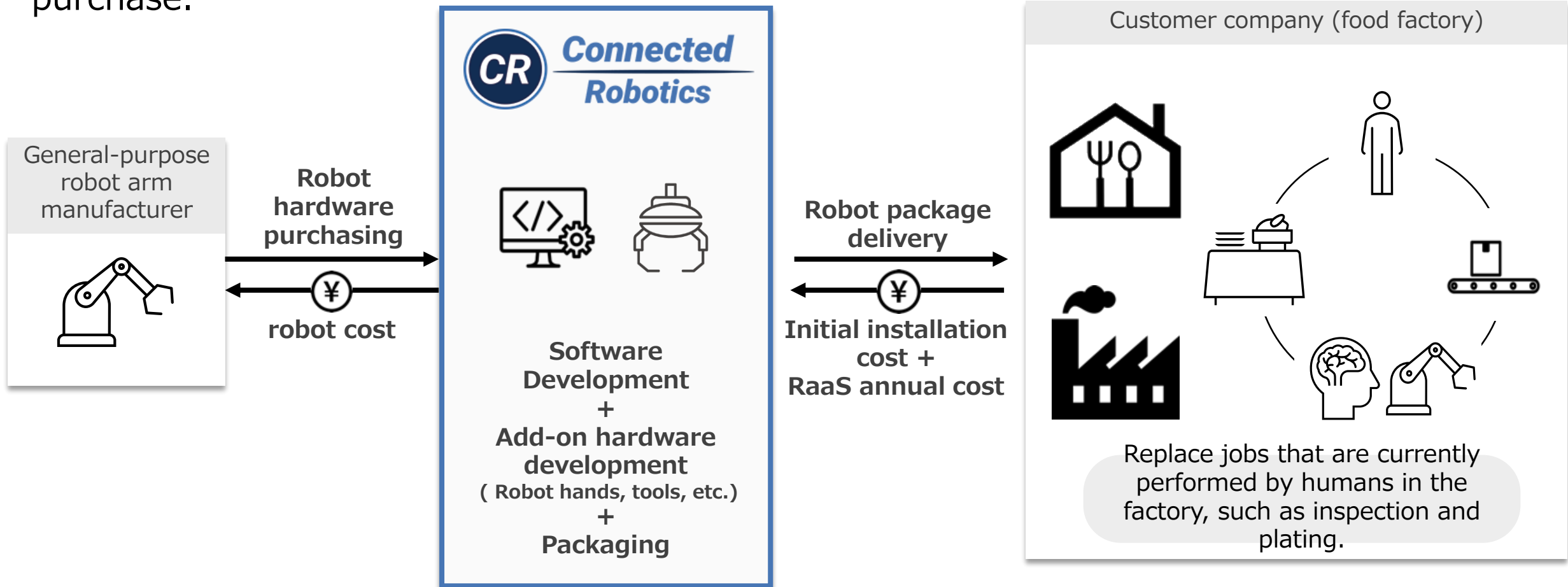
**Practical use of products
incorporated into existing
operations**

- Advanced robot control technology that can be integrated into the existing manufacturing line processes
- Automation of existing operations with robots

Business Model

We propose RaaS (Robotics-as-a-Service) model with initial installation cost + RaaS annual fee,.

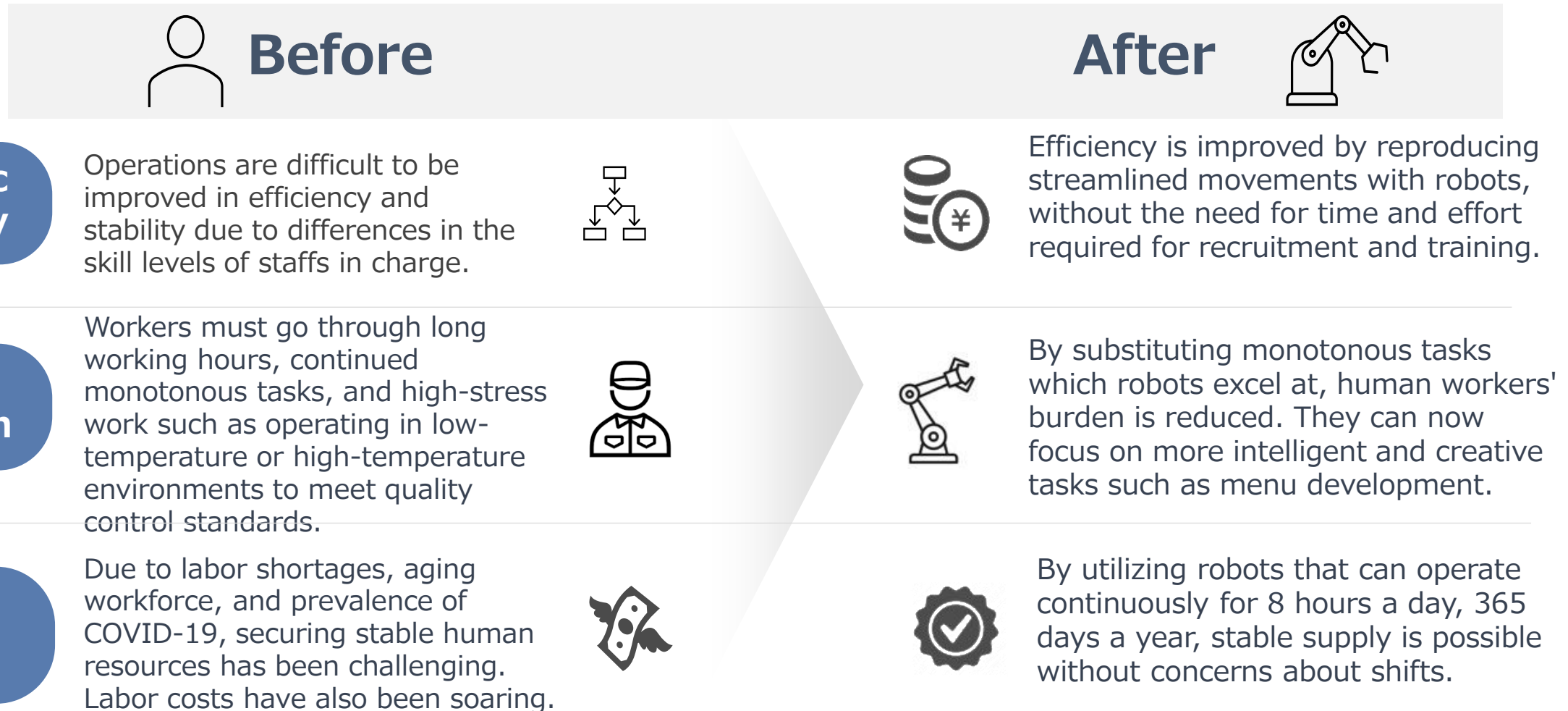
The focus is on software/add-on hardware development, packaging, and robot arm purchase.



Advantages of Introducing Robots

Our robots can operate daily in real food factories to handle jobs that were originally performed by humans.

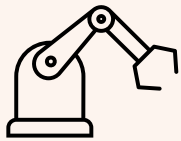
Various motions can be achieved by robots to replace the handling of irregularly shaped ingredients.



Advantages

Our strengths include robust technological foundation in competitive domain and strong collaborative framework with numerous companies in the cooperative domain.

Competitive



Robot Control

Precise robot control to safely and swiftly manage robots in narrow food factories.



AI

AI software that autonomously learns quality control standards for food, which often have ambiguous definitions.



End Effector (Robot Hand)

A versatile hand capable of adapting to various ingredients and containers for small-scale, multi-variety production.

Collaborative

Business Partnership Company



ホシザキ株式会社



株式会社 菊池製作所



アグリビジネス
投資育成株式会社



JR東日本スタートアップ株式会社
JR East Start UP Co., Ltd.

Food Technical Committee companies and organizations



一般社団法人
日本惣菜協会
Japan Ready-made Meal Association



Products



株式会社 エフピコ



経済産業省

Ministry of Economy, Trade and Industry

MAFF

Ministry of Agriculture,
Forestry and Fisheries
農林水産省

Our Team

Our company has numerous members who have previously worked at major Japanese manufacturing companies (automotive, semiconductors, robotics). We also have a team of talented engineers from around the world.



Founder/CEO

Tez



COO

Taiki



CRO

Tom



VP of Product

Koichi



VP of Engineering

Aki



Engineer

Gabriel

Brazil



Engineer

Jason

Singapore



Engineer

Kevin

Indonesia



AI Engineer

Ocean

New Zealand



AI Engineer

Lucrece

Canada

Awards



10th Robot Awards
Delibot, a side dish serving robot, wins Small and Medium Enterprise/Venture Company Award (Small and Medium Enterprise Agency Commissioner's Award)



Sponsored by the Japan Food Machinery Industry Association, Delibot wins Excellence Award.



Sponsored by Tokyo Metropolitan Government
"Tokyo Contents Solution Business Award 2022"
Soft Serve Ice Cream Robot wins Encouragement Award.



World Robot Summit 2018



Today to Texas 2019
Demoday award winning



StartupWeekend 2017 Winner