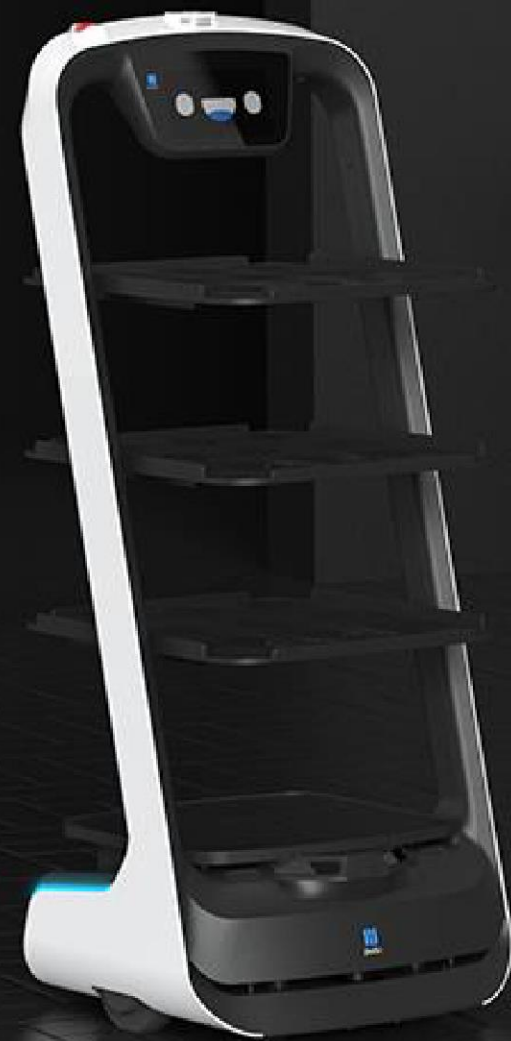




PuduBot

An Intelligent Delivery Robot

About PuduBot

Product Overview

Product Features

Product Advantages

Client Case

About Pudu

CONTENT



PuduBot

An Intelligent Delivery Robot

The PuduBot is Pudu Robotics' classic delivery robot, which launched the industry's first trackless delivery robot. PuduBot's simple and effective industrial design earned it German Red Dot Award for best design, and spearheaded a new trend of indoor delivery robot designs. Since its release, PuduBot has been sold in more than 50 countries and regions to serve local consumers in restaurants, hotels, office spaces, etc.





Product Overview · PuduBot

All-Aluminum Frame

Aviation-grade aluminum alloy that is structurally stable, antioxidant and corrosion resistant

Adjustable Trays

3* metal trays (42×50cm)
7 levels of adjustment

3D Obstacle Avoidance Sensor

2*RGBD depth cameras

Lidar

Customized lidar that doubles the accuracy of obstacle avoidance

Visual Camera

Top infrared camera for real-time positioning, set up the complete visual positioning solution

Dish Cover (Accessory)

Large enclosed space
Modular design and 3-minute quick disassembly

Independent Linkage Suspension

Auto-level independent linkage suspension system with self-adaptive road detection and highly effective shock filtering to avoid bumps





PuduBot Specification



Machine dimensions	516*500*1288mm
Robot weight	35kg
Machine material	ABS/Aviation-grade aluminum alloy
Charging time	4H
Battery life	10-24H
Battery capacity	15.6Ah
Cruise speed	0.5-1.2m/s (Adjustable)
Load capacity	13kg/tray, Max30kg
Tray size	3* Super-large metal trays (42×50cm) 7 levels of adjustment



Flexible Dish Cover



* Accessory

Cover material	Acrylic/Aviation-grade aluminum alloy
Cover weight	8kg
Cover dimensions	422*422*710mm
Door-opening method	Magnetic switch



About PuduBot

Product Overview

Product Features

Product Advantages

Client Case

About Pudu

CONTENT



Multifunctional Delivery

1

Delivery Mode

PuduBot delivers food to multiple tables at once.

2

Cruise Mode

PuduBot circulates along a predetermined path with self-service drinks and desserts and recommends them to customers by voice.

3

Direct Mode

The robot performs one-way delivery.

4

Birthday Mode

PuduBot delivers birthday cake or gifts to customers, accompanied by customized background music.

5

Dish-return Mode

PuduBot collects dishes to be cleaned and delivers them to the dish-return spot or the dish-washing room.

6

Special Mode

This mode is designed for special occasions such as marriage proposal and expression of blessings, in which the background music can be selected quickly.



Product Features · Safety

3D obstacle avoidance technology, is the safety performance guarantee



2*RGBD depth cameras

- 2* RGBD depth cameras endows PuduBot with the best 3D perception ability.
- Accurately detect obstacles and stop within **0.5 seconds** in case of any obstacle.
- A front detection angle up to **192.64°**.
- Over **10 meters** of front detection distance.

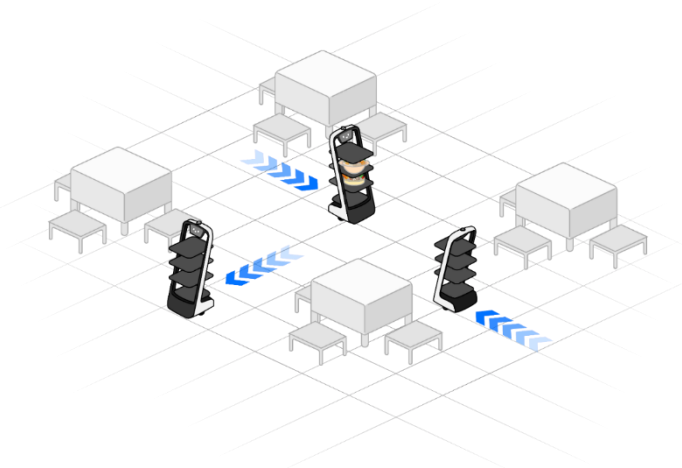
Auto-level independent linkage suspension for stable



- Auto-level adaptive variable suspension. Damping can be altered according to different floor conditions and driving requirements.
- The resonance frequency is maintained at an optimal state.
- Be capable of crossing **1cm** obstacles.
- Deliver dishes with **no-spill out**.
- Improve the moving steadiness ability by **50%**.



Efficient Delivery



Multi-robot Cooperation

Support collaborative delivery mode and allow 100 PuduBots to work together in a 10,000m² dining space at most.



Optimal Path Planning

High-precision mapping, optimal path planning and multiple delivery modes are combined for full scenario coverage.



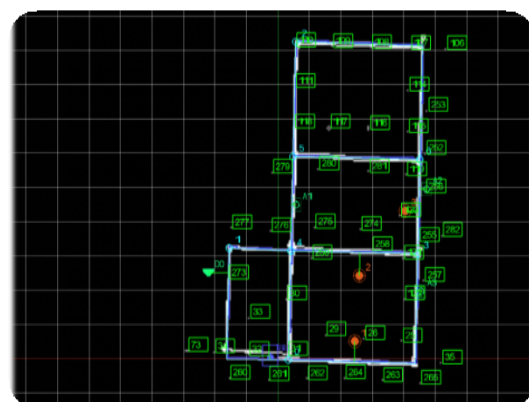
Long Battery life

Work for 24 hours after being fully charged in 4 hours.



Product Features · Accurate Positioning

Accurate Positioning



V-SLAM Positioning

PuduBot is powered by a visual SLAM positioning and navigation solution that requires pasting a positioning code. It allows for flexible deployment and reliable operation in indoor environments.

< 1CM

Centimeter-Level

Centimeter-level real-time positioning. Features a multi-sensor fusion solution with a minimum clearance as low as 80cm.

8M }

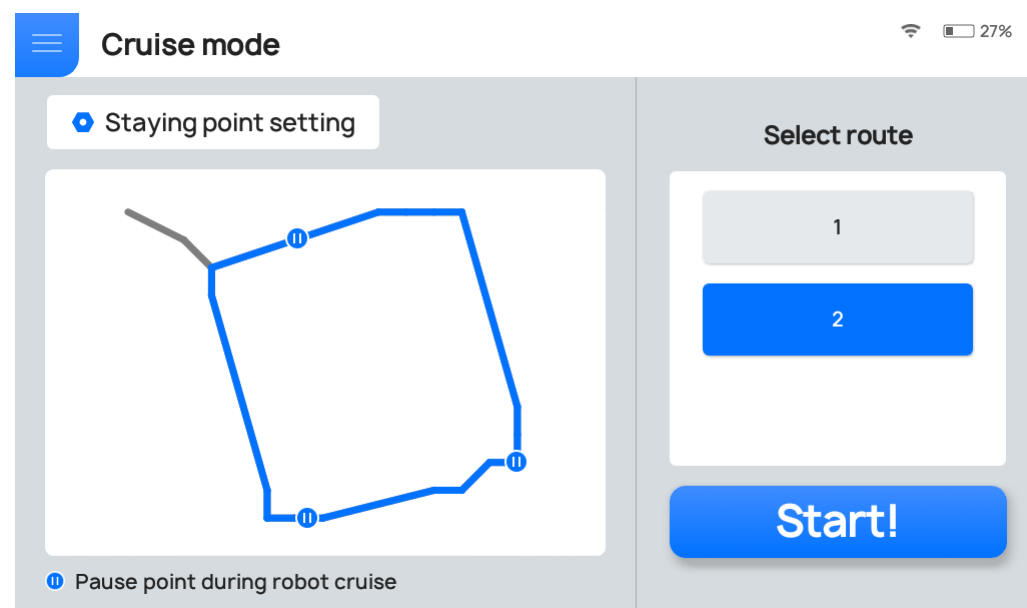
8 Meters Height

Able to work in the indoor space with a 8m height at most, such as the hotel lobby.



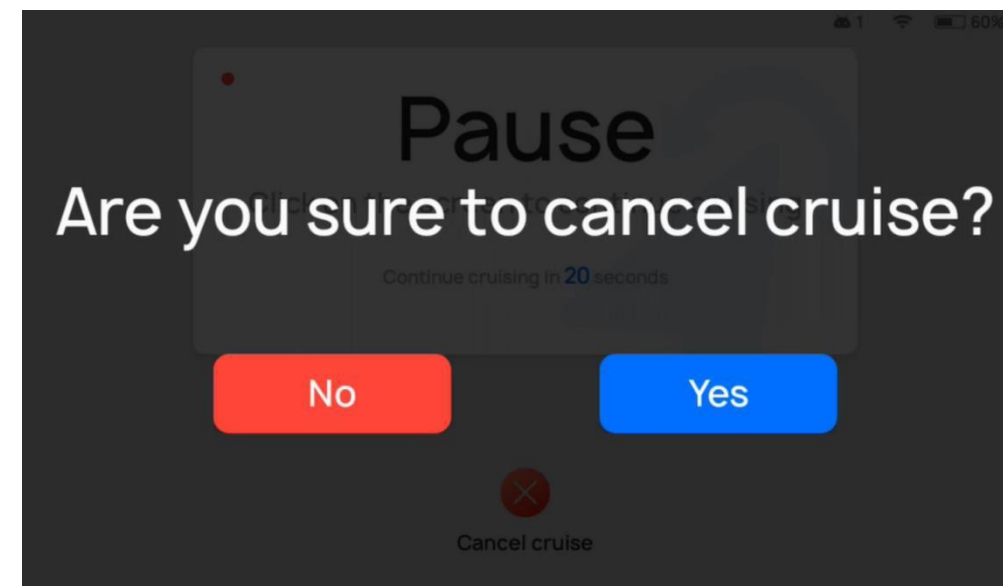
More Service Features

MIR system: free online upgrade



Pause Points in Cruise Mode

Support the pause points setting in cruise mode, and pause time and voice broadcast customized.



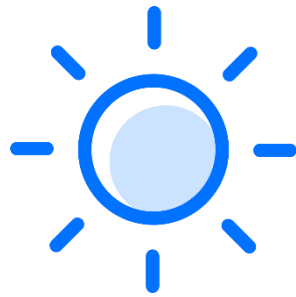
Double Confirmation Function

Double confirm when tasks cancel
reduce the chance of human mistake to cancel the tasks.



Personalized Services

MIR system: free online upgrade



Sunlight Resistance

Bright light resistant,
Adaptable to different
indoor light conditions.



APP Call

Mobile device call,
Real-time control and quick
response.



Private Room Notification

Punctual notification on robot arrival.
More efficient service for the private
rooms.



Customized Voice

Online upgrade and real-time
sync.



About PuduBot

Product Overview

Product Features

Product Advantages

Client Case

About Pudu

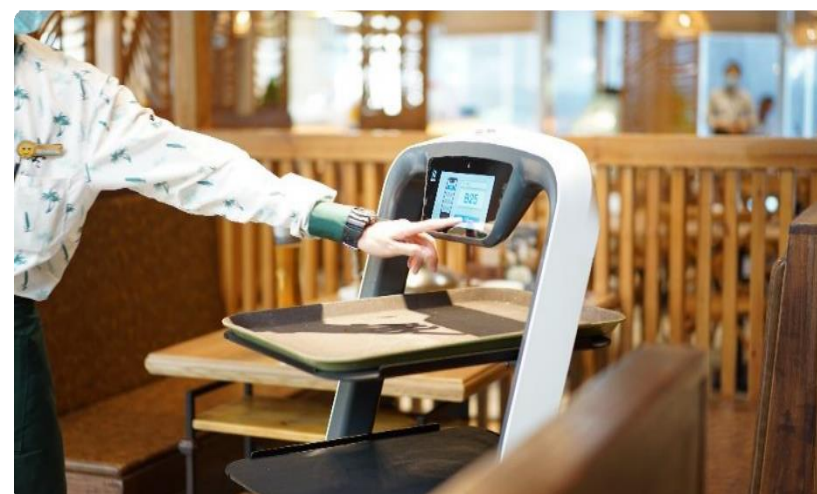
CONTENT



Cost-effective and Easy-to-Use



- PuduBot saves over 70% of costs compared to using entirely imported components, offering excellent cost effectiveness.
- Another plus to its cost-effectiveness is that it consumes less than 1 kWh of electricity per day.



- PuduBot has become the best choice for many well-known restaurants due to its ease of installation and deployment. It is available for use on the day of installation, without any store renovation required.
- Efficient delivery is possible by simply selecting the table number in the desired mode. It is easy to use for both the young and the elderly.



Safe and Efficient



- PuduBot can deliver food safely and efficiently even in environments with a high traffic of people. Because the 2* RGBD cameras and a custom lidar give it remarkable positioning and navigation and obstacle avoidance capabilities. Centimeter-level real-time positioning ensures precise delivery. With 0.5-second or less instant response for obstacle avoidance.
- PuduBot is able to adapt to different floor conditions and delivery requirements and move with 50% higher stability, due to auto-level independent linkage suspension, which effectively absorb shock and filter vibration.

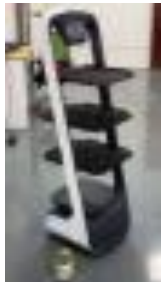


- The extra-large loading capacity ensures the shorter waiting time for customers and high table turnover rate for restaurants.
- PuduBot helps staffs to do the tedious and repetitive work, allowing waiters to focus more on serving customers.
- More time and faster response, brought in the better customer experience, and ultimately higher customer satisfaction.



Product Advantages · Safety Test from Third-party Testing Institution

Fixed Obstacle Avoidance Test

Obstacle	Chair	Backpack	Metal kettle	Plants	Toilet paper	8mm iron net
Test Process						
Test results	Success	Success	Success	Success	Success	Success

Steadiness Test

Speed	0.5m/s (No load)	0.9m/s (No load)	0.5m/s (Full load)	0.9m/s (Full load)
Test Process				
Test results	Move steadily. 100ml remains. No spill out	Move steadily. 82ml remains. 18% spill out	Move steadily. 100ml remains. No spill out	Move steadily. 100ml remains. No spill out

Testing institution World Test Time: November 26, 2019 to December 25, 2019 Test report No.: WD1911ST006

Hovering Obstacle Avoidance Test

Hovering Elevation	0.25 m	0.5 m	0.8 m
Test process			
Test results	Success	Success	Success

Passability Test

Test passage	Straight passage	S passage	Passage with right angle	Passage with obtuse angle	Dead end
Test process (Speed 0.5m/s)					
Test results	Pass in 6s	Pass in 8s	Pass in 8s	Pass in 8s	Fail and keep
Test process (Speed 0.9m/s)					
Test results	Pass in 3s	Pass in 3s	Pass in 3s	Pass in 3s	Fail and keep exploring



Product Advantages · All Scenarios Covered

All Scenarios Covered

Pudu has independently developed a robot positioning and navigation technology based on multi-sensor fusion, which allows PuduBot to be used in restaurants, hotels, Bar, cafés, office buildings, and other business scenarios.



Restaurants



Bar



Cafés



Hospitals



Hotels



Government buildings



Office buildings

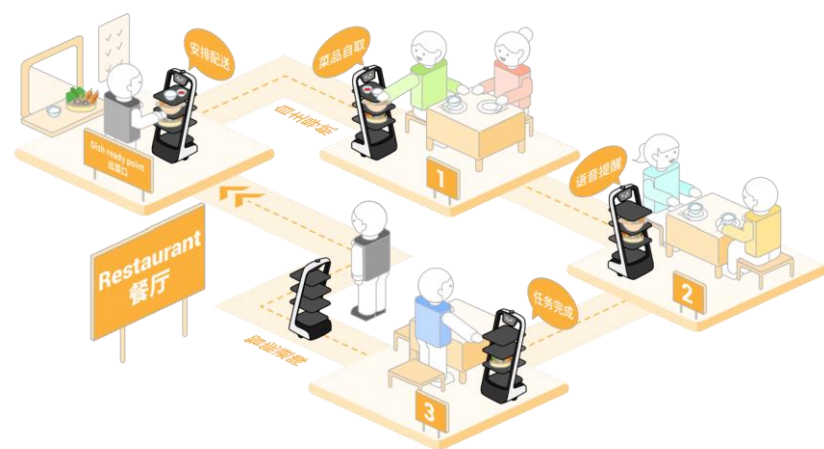


Shopping malls

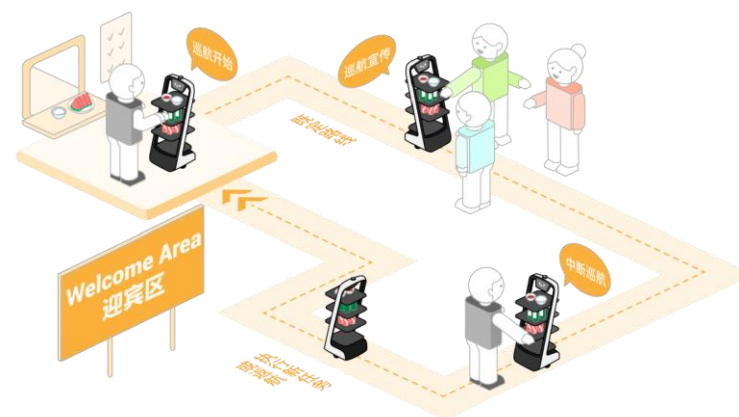


Product Advantages · All Scenarios Covered

All Scenarios Covered



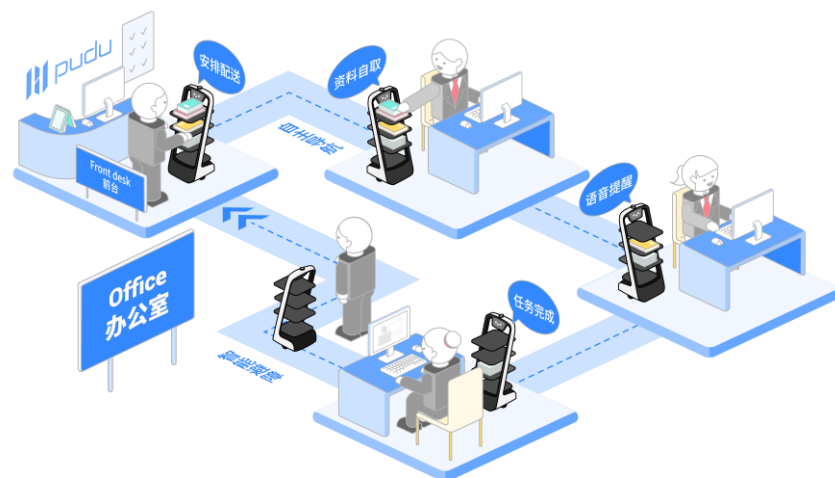
Restaurant



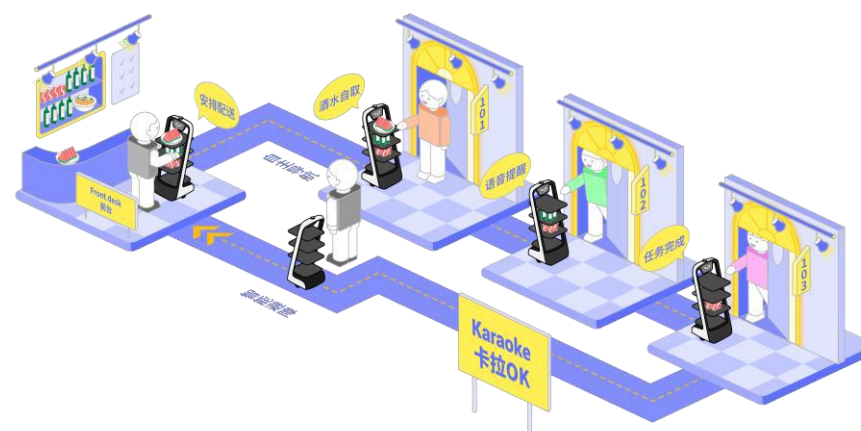
Hospitality



Contactless Delivery in Hospitals



Office



Karaoke

- During COVID-19, PuduBot provided full-process contactless delivery services for more than 100 hospitals and quarantine sites nationwide to avoid cross-infection between doctors and patients and save medical resources.
- For its efforts, it received commendations from CCTV and the Ministry of Industry and Information Technology.



About PuduBot

Product Overview

Product Features

Product Advantages

Client Case

About Pudu

CONTENT



Client Case · Key Clients





Client Case · Key Clients



Restaurant



Karaoke



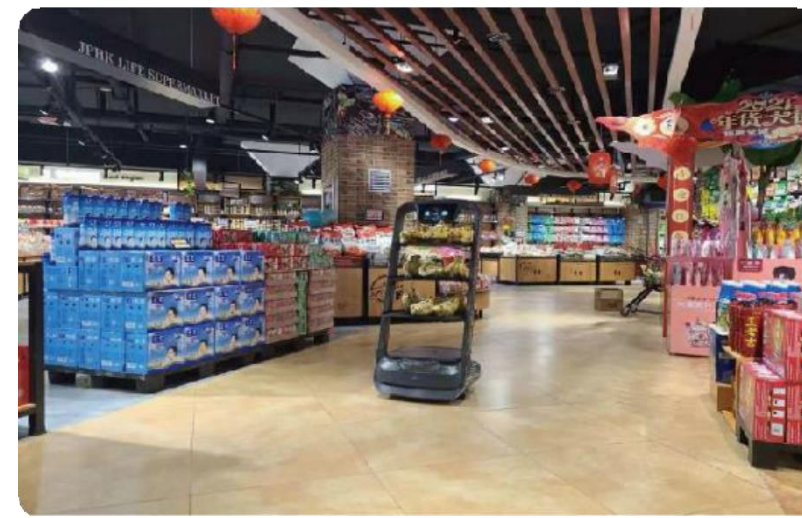
Factory



Dessert Shop



Entertainment Venues



Shopping Mall



Client Case · Success Stories



Real Data, More Convincing

A restaurant in Beijing

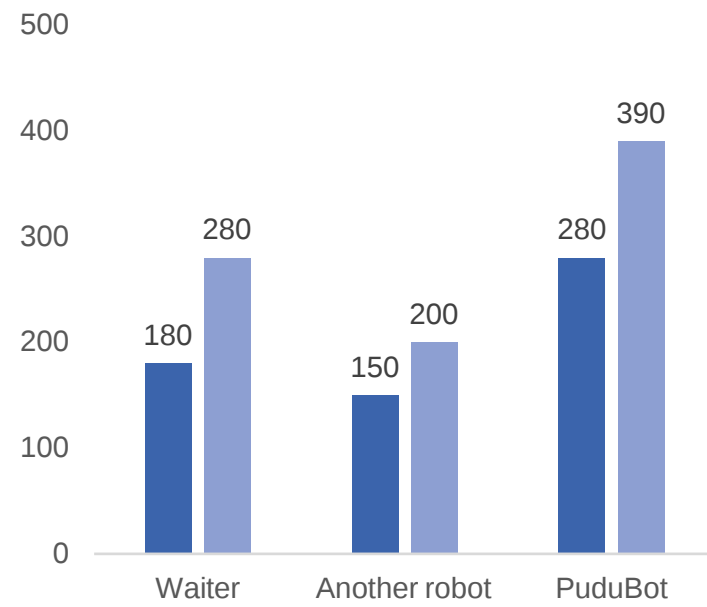
Total area: 1000m²; dinning area: 800m²

Daily deliveries: 280 trays (weekdays)

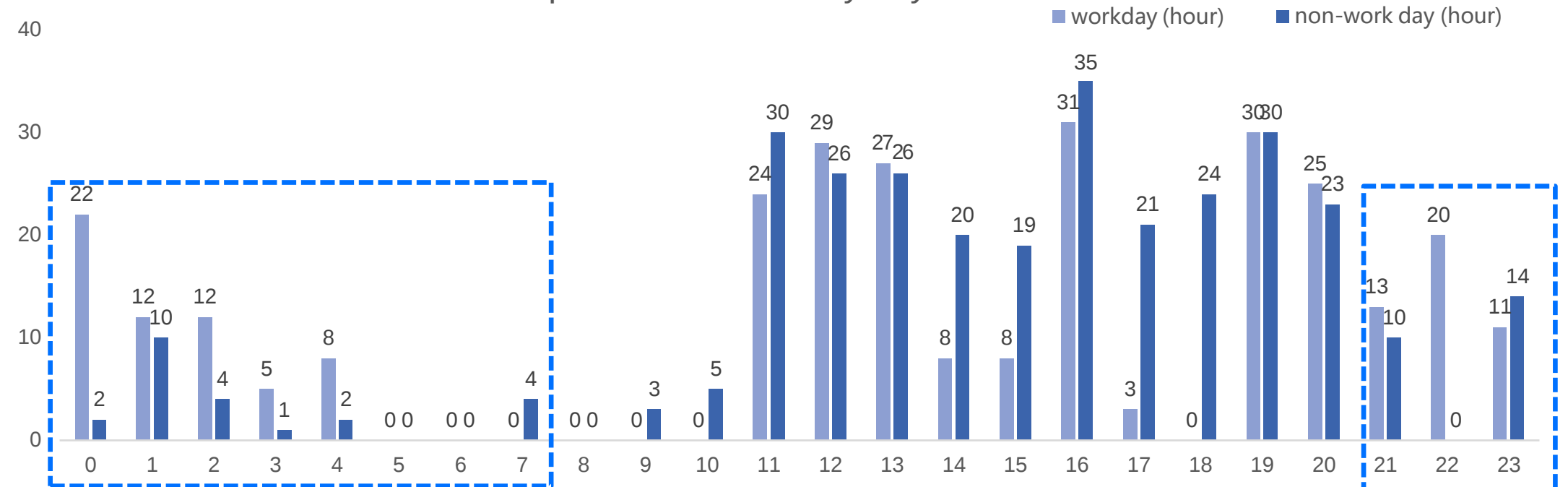
Tables: 99

Daily deliveries: 280 trays (weekdays)

Installed in 2 days



Comparison of the hourly trays delivered



PuduBot could replace the delivery staff from 21:00 to 07:00



Client Case · Success Stories

深圳市普渡科技有限公司
价值量化跟测确认单

客户名称		403070628158	
门店名称			
门店地址			
机器人情况	共投放两台机器人，用于传菜		
门店价值量化方式			
☐ 自提减少 1.5人			
☐ 配送减少 1人			
☐ 门店减少 1人			
☐			
☐			
☐			
门店量化指标			
日均送200以上新菜			
跟踪情况及确认 (日期范围: 2019.04.21 - 2019.04.24)			
日期	1. 人员优化后运行情况 2. 问题点 3. 结论	机器人运行 数据数据	门店确认
4.21	1. 使用机器人后人力优化情况	共配送新菜	
周中	(1) 是否使用机器人积极性高, 看对机器人用	380个, 共计	

Quantified report on the values of delivery robot:

- Highly motivation: The delivery robots are viewed as a part of the waiting staff's performance, encouraging the staff to use the robots as much as possible.
- Higher efficiency: Data suggests that two robots deliver about 400 dishes to 300 tables on weekends and during vacations, and 250 to 300 dishes on weekdays. According to the restaurant manager, a robot is as efficient as a waiter/waitress in dish delivery.
- Highly admitted: The managers think that the robots are awesome because they help reduce the labour cost by a large margin. There is no dedicated waiter/waitress during the day shift. But a robot is as efficient as a waiter/waitress to deliver the dishes. It can even replace the waiter/waitress on duty.



About PuduBot

Product Overview

Product Features

Product Advantages

Client Case

About Pudu

CONTENT



About Pudu · Company Profile



- National high-tech enterprise
- More than 600 patents, over 60% of which are patents for invention
- R&D staff accounts for over 50% of the total staff
- Products are sold to more than 60 countries and regions around the world
- Hundreds of after-sales service centers across the globe

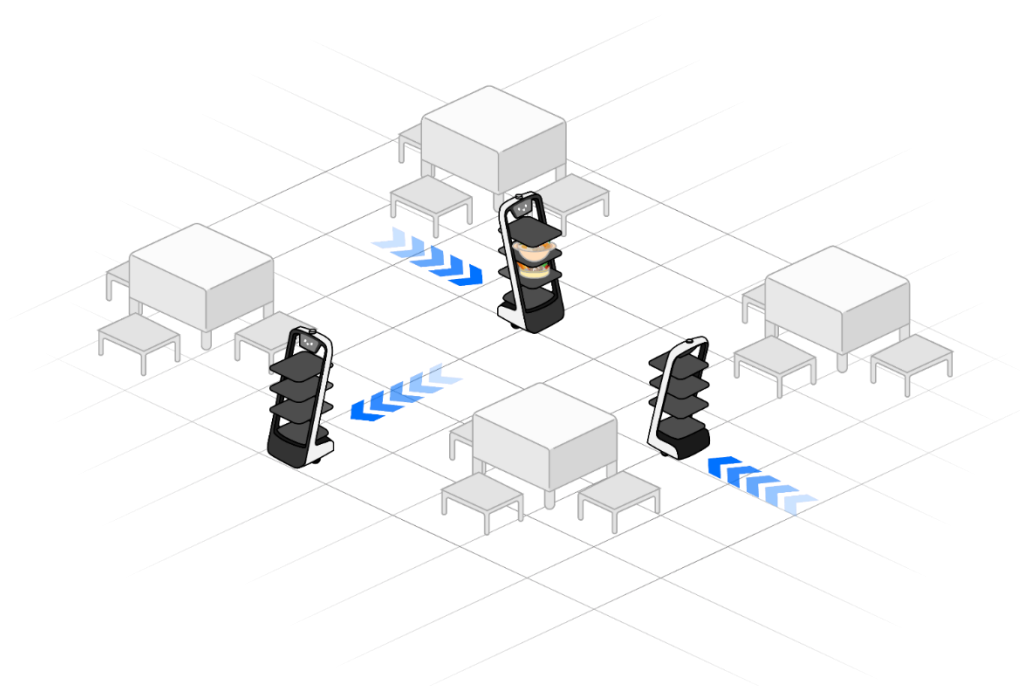
BrewVend and Pudu robotics partnered in GCC & MEA to provide unprecedented delivery experience, sales & services in the region. Pudu Robotics is a world-leading tech-focused enterprise dedicated to the design, R&D, production of commercial service robots on a mission to use robots to improve the efficiency of human production and living. Pudu robots are widely applied in restaurant, coffee shop, hospital, school, office building, shopping mall, hotel, factory and has a global presence.

Founded in 2016 and headquartered in Shenzhen, Pudu Robotics is a national high-tech enterprise dedicated to the design, R&D, production and sales of commercial service robots. The company has set up R&D centers in Shenzhen and Chengdu, and hundreds of after-sales service centers across the globe.

Powered by the core technologies of positioning and navigation, motion control, multiple-robot dispatching, obstacle detection and avoidance, NVH, intelligent interaction and automated simulation testing, Pudu Robotics has developed more than 600 patents and top-notch delivery robots, disinfection robots as well as delivery & reception robot with an Ad display. As a world-leading provider of commercial service robots, Pudu Robotics has sold tens of thousands of robots to more than 60 countries and regions around the world. The robots are widely used in restaurants, hospitals, schools, office buildings, government halls, subway stations, waiting rooms, etc.



About Pudu · Core Technologies



PUDU SCHEDULER

- Powerful ad hoc network
- Easy scheduling of up to 100 robots in the same working environment
- Flexibly adapted to dynamic environments
- From subway-level scheduling to road-level scheduling



PUDU MIR

PUDU MIR is the world's first robot development platform designed to improve the efficiency in robot development.

More features can be unlocked through remote OTA software update.



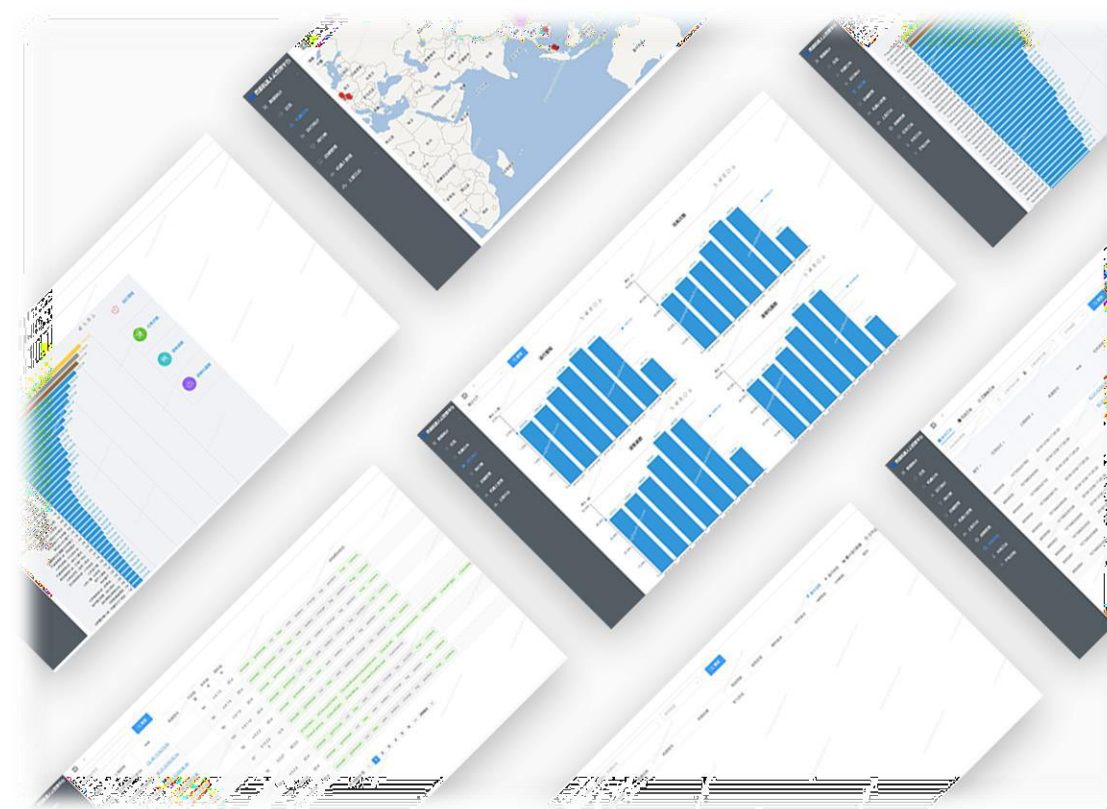
About Pudu · Core Technologies



PUDU SLAM

PUDU SLAM is a new SLAM solution that integrates Lidar, Camera, RGBD, IMU, Encoder and other sensors.

The high positioning accuracy (10cm) allows the robot to effectively recognize and avoid 3D obstacles.



PUDU CLOUD

- Cloud-based intelligent service platform
- Automated operation and maintenance platform
- Scenario data collection platform
- Business management platform

The delivery data of each robot is uploaded in real-time, enabling data-driven management of the restaurant.



Product Advantages · Safety Certifications

PuduBot robot has received KC certification from Korea, CE certification from the EU, FCC certification from USA, RCM certification from Australia, and NCC certification from Taiwan, China

IMDA certification from Singapore, MIC/TELEC certification from Japan, CR (China robot certification) and many other certifications both domestically and abroad to ensure the safety and compliance of our robots.



**INFOCOMM
MEDIA
DEVELOPMENT
AUTHORITY**





Create Your Exclusive PuduBot

Customized Appearance



Enhanced Promotion

- Go harmony with the vibe of the restaurant
- Greater brand and service exposure

Customized Voice Pack



Cute girls



Cute boys



Sweet girls



Active boys

Multicolor Marker



Notes: The colors are subject to the actual marker



Service & Care

Quality Services That You Can Rely On

Hundreds of after-sales service centers across the globe | 1-year free warranty | Free custom deployment | Free operation training | Fast service within 24 hours

IoT service: Over 90% of technical issues can be solved remotely

Contact Us: Channel Partner – GCC & MEA

Brewvend Middle East,

Dubai , United Arab Emirates

Mobile - +971 54 350 4877

Email - business@brewvendme.com



brewvendme.com



Quality Services That You Can Rely On

