

D.T.C. ENTERPRISE PUBLIC COMPANY LIMITED



No.1 GPS & IoT Solutions in Thailand











D.T.C. Enterprise

Public Company Limited

D.T.C. Enterprise PCL is a Thai company that has been providing comprehensive GPS Tracking solutions for more than 26 years. Today, our business has been expanded to cover specialized software for logistics, GPS digital maps, mobile business and design applications, and internet of things. We have been trusted by users around the world as Thailand's No. 1 GPS tracking solution provider. With over 400 employees, we are ready to help drive the country by developing smart solutions to enhance work efficiency and business modernization to ensure the competitiveness of local organizations at the international level.



DTC Introduction



Leading company in GPS tracking and IoT Solutions



Mission

- · High quality and various products
- · Innovation to fulfilling customer requirements
- · Quality service for the highest customer satisfaction
 - Market expansion throughout ASEAN
- · Qualified team and continuous Research & Development



Honesty, Ability, Harmony, Discipline



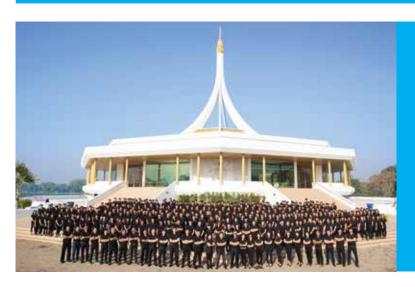
Executive Newsletter

I cannot thank you enough for your support over the past 27 years. Whether vehicle tracking devices or IoT solutions, we will relentlessly continue to develop and promote new innovations as part of the joint effort to prevent road accidents and promote driving safety as well as introduce Thai IoT innovations to the world.

Lastly, on behalf of the management and all D.T.C. employees, we thank you for your trust and continued support. You can rest assured that we will endeavor all our effort in developing more advanced products and services.

ทศพล คุณะเพิ่มศิริ ประธานเจ้าหน้าที่บริหาร และกรรมการผู้จัดการใหญ่ บริษัท ดี.ที.ซี. เอ็นเตอร์ไพรส์ จำกัด (มหาชน)

Providing one-stop service with a professional team



- Hardware And Software Development
- GIS Development
- After -sales Service
- Call Center 24 hours
- Nationwide distribution channels
- Network Team















D.T.C. Enterprise PCL has been Thailand's No. 1 GPS Tracking and IoT solutions provider since 1996. Currently, the company is developing many smart city solutions for local administrations to enhance their services and professional image by introducing advanced technologies to their operations.







































Certificates



Certified by ISO 9001: 2015



Certificates by Standard TGO Guidance of the Carbon Footprint for Organization



Certificates of GPS Tracking



Certificate of VMS model Talay



Rewarded for IP
Champion 2017 from the
Department of Intellectual
Properies, Ministry of Commerce.



Popular award for innovative product in 2015



Certified by ISO/IES 27001: 2013



Certified by ISO/IES 27701 : 2019



Certified by ISO/IES 29110-4-2: 2021



The reasons why D.T.C. is chosenby many leading organizations



Thailand's No. 1
GPS tracking
system provider



Trusted by more than 12,000 organizations



Logistics expert support team



Over 400 professional team members



Over 100 researchers and developers



GIS expert support team



24/7 Call Center 1176

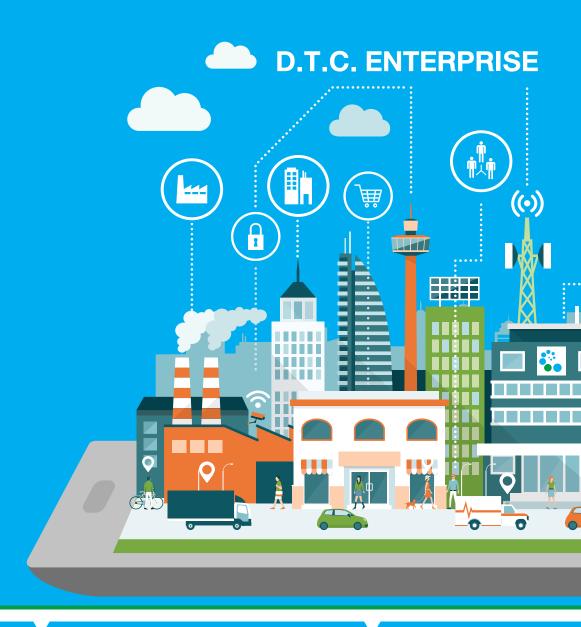


More than 20 onsite service units



GPS system co-developed by Yazaki Co., Ltd.









works with the GPS satellite to log the trip data of a vehicle on a memory unit where the data can be transferred to a processing computer for the controller to evaluate the behavior and improve it to ensure maximum efficiency of each vehicle.



Our Mobile DVR

records videos in sync with the satellite to display the current view and location on the map. The driver's behavior can be monitored live as if we are riding along with him.











come in various forms for users to choose from according to their needs such as the Transportation Management System, Business Activity Management System, mobile applications, and DeeMap (high-resolution digital map) that can be customized to cater to each requirement.



Our IoT solutions

connect devices on the internet to enable data transfers and control as cost-saving and management solutions as well as business upgrades.









GPS Tracking

works with the GPS satellite to log the trip data of a vehicle on a memory unit where the data can be transferred to a processing computer for the controller to evaluate the behavior and improve it to ensure maximum efficiency of each vehicle.

Benefits of the Vehicle Tracking Device



Reduce fuel costs from unauthorized use



Reduce maintenance costs and the chance of accidents



Enhance asset safety with the vehicle positioning system



Improve trip management



Improve customer service quality and business competitiveness



Reduce corruption with the detection systems



Already installed in more than 600,000 vehicles











Trusted by 12,000 organizations





Installed by a professional team







GPS TRACKING

products



SWR Pro

is the ultimate smart vehicle tracking device that meets all logistics demands. The GPS unit is certified by the Department of Land Transport to support second-by-second accident analysis and direct ECU data reading for real-time safety assurance.



SW Plus

is a smart vehicle tracking device certified by the Department of Land Transport to support second-by-second accident analysis, direct ECU data reading, and two-way communication for real-time safety assurance.



SWE 3G

is a smart vehicle tracking device certified by the Department of Land Transport for basic logistics needs. The device supports optional accessories to cater to different requirements of customers. The body is designed to be durable with a heavy-duty battery for extended trips. It is a system that goes all the way with you.



SWI-M

is a real-time motorcycle tracking device designed to be compact, light, water/dust resistant, and has low power consumption, ideal for any motorcycle.



AT35 4G MIFI

is a vehicle tracking device certified by the Department of Land Transportation capable of recording trip data and driver behavior accurately in detail combined with a WiFi camera connection to enhance logistics safety.



IQSAN

is a special GPS device co-developed by the company and Yazaki capable of connecting with the CANBUS to report the driving behavior in detail.



Container Tracking 2

tracks, notifies, and displays the status of a container to enhance logistics safety with a durable body, dust/water resistant design, heavy-duty battery for extended trips, and solar cell support.



Container Tracking 3

is our new device equipped with a magnetic container mount and IP65 dust/water resistant body for real-time container access monitoring.



Mobile DVR

acts as your eyes in a vehicle to detect unauthorized vehicle use, unscheduled trips, unplanned routes, and corruption with real-time camera surveillance both exterior and interior. You can also view the vehicle's current location and speed through a tablet or mobile phone to monitor the driver's behavior, prevent corruption, and evaluate the vehicle's condition.

Benefit of Mobile DVR Online



Know current location of vehicles, can be track more closely



Use as evidence when determining events that require witness



Monitor with image and audio like we are sitting in car



Provide immediate action and assistance as safely able to do so

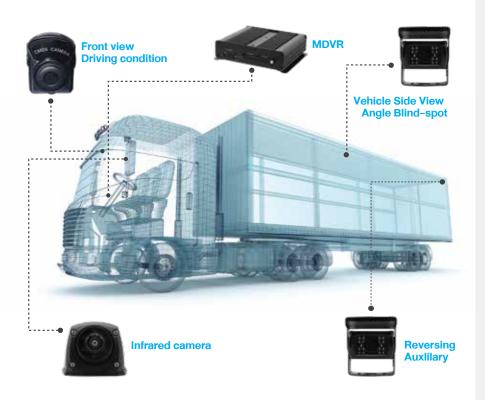


Communicate with driver without phone



Prevent fraud behavior such as steal fuel, exchange spare parts or steal stuffs in container

Installation diagram









Already installed in more than 600,000 vehicles









Installed by professional team

Mobile DVR

products



Smart Eye Plus

is a vehicle tracking device certified by the Department of Land Transportation capable of recording trip data and driver behavior accurately in detail combined with a WiFi camera connection to enhance logistics safety.



ADAS PLUS

is an accident behavior warning system that reduces the chance of accidents by notifying you when it detects risky driving before it causes an accident and injury to you and others. The unit consists of the Advanced Driver Assistant System (ADAS) and Driver Monitoring System (DMS) in detecting risky driving and uploading the pictures and videos on the server together with the location, date, time, speed, and type of events to enhance safety during the trip.



IVMS PRO

is a smart system that satisfies all of your logistics demands by combining the Smart Eye Plus system and ADAS Plus in one device enabling stable and accurate real-time trip monitoring, wireless intercom communication, risky driving alert to enhance safety, and vehicle access/fuel gauge sensor to prevent corruption along with many optional accessories.







DashCam WiFi 1 CH

is a dashcam that records videos and voice on an SD Card up to 128GB with real-time monitoring support through the WiFi of the AT35 GPS device and SW Plus.



DashCam WiFi 2 CH

is a dashcam device that records videos from 2 cameras simultaneously on an SD Card up to 256GB with customizable mounting positions and real-time monitoring support through WiFi of the AT35 GPS device and SW Plus.







DashCam WiFi Dual Camera 2 CH

is a dashcam device that records videos from 2 cameras simultaneously on a micro SD Card up to 128GB with real-time monitoring support through WiFi of the AT35 GPS device and SW Plus.

Basic Accessories for Smart Eye Plus



Infrared dome camera ideal for a low-lighting environment such as a vehicle cabin



Infrared dome camera 150 degrees wide angle ideal for capturing all activities in a large vehicle cabin with a low-lighting condition



Infrared camera ideal for a low-lighting environment both exterior and interior mounts are available and easy to install for security surveillance of all vehicle types





SOFTWARE

Computer technology has been rapidly evolving. Today, small portable computers enable us to work from anywhere. And users now may find software customized for their needs as the developers learn about the requirements of each business before designing their software.

Benefits from Software



Accurate data management and effective audit



Advanced technology



Enhance the work value and process



Save cost, extend the lifetime, and increase work efficiency

DTC Fleet Maintenance

DFM or DTC Fleet Maintenance is the system that helps you

for analysis and helps you to manage other parts.

to manage vehicle maintenance in own company and maintenance center. It shows that maintenance cost information

Specifications



Manage vehicle' information



Mileage alert and renewal contract



Manage customer's Fuel report data



Manage insurance, legislation, contracts and licenses



data



Manage vehicle maintenance



Manage employee's Budget information

Pre-Trip Application

DFM Pre-Trip is a logistics fleet maintenance application that helps the operator keep track of repair cycles, contract renewals, and pre-trip safety checks to ensure driving safety, maintenance cost saving, and extended mileage. The data is stored securely on a Cloud platform.

Pre-Trip Application







data collection reduce document. There is a check can browse history data



problems or lost data



list made check the condition of the car have a comprehensive even more



time resource (paper)

Pre-Trip Application









Vehicle Check



Vehicle Authorization



Repair Request



Inspection History

DTC BUS LINE

The platform brings the mass transportation system to the next level. Passengers can see the position, distance, and duration of a bus on a map in real time along with the plate number, driver's I.D., current speed, and expected time of arrival of each stop through the application. Planning a trip becomes very easy and in line with the smart logistics and city driven by technological innovations that will boost the economy, tourism, and international connections.

















Display the position and trip duration of a bus in real time



Display the plate number, driver I.D., and current speed



Display the expected time of arrival of each stop through the application



Planning a trip is easier than ever

Transport Management Solution

TMS technology can resolve transport control issues and increase profit. System is controlled by the center directly, which can provide real-time transport details and fleet locations. In addition, it can sort out the quickest and most trouble-free route for delivery.

System Advantages



Decrease human errors on System Applications and Product in Data Processing and GPS for every trademark/every transportation



Follow up corruption during shipment



Follow Safety



Increase customers' satisfaction and trustiness with logistic transportation, due to punctual delivery and



Increase customers' satisfaction and trustiness with logistic transportation, due to punctual delivery and real-time tracking.



Contractors' capability can be evaluated from data saved.







Electronics Proved Of Delivery [EPOD]

Provide signature/photo proof of delivery through EPOD

DeeMap Solution

is a smart online digital map network that caters to all geographic needs including land route navigation, utility locations, and other geographical data enabling comprehensive logistics planning.

How DeeMap enhances your efficiency















Geographic Information System (GIS) database service





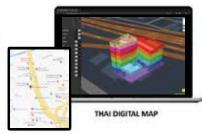


Geographic planning and analysis tools



Field survey tools





Business Activity Management System (BAMS)

manages your sales activities, events, and business processes through a mobile network in real-time allowing you to record the performance of your team in the automatic database for future evaluation and statistic report preparation.

How BAMS benefits you



Dashboard

Display sales revenues and performance in real-time



Evaluate performance



Tracking

Displays all sales and service processes in real-time



Quotation

Create quotations and opportunities in real-time



Customer detail

Manage customer data, monitor accurately



Various report formats





SMART CITY SOLUTIONS





Connect people and city development innovations with Smart Technology

Build opportunities

from tourism and tourist attractions by promoting road safety that will bring direct and indirect income to both local authorities and citizens.

Build a good government image

by administering the cities with transparency, encouraging the citizens to take part in observation, and promoting public facilities.

Reduce pollution

by promoting an environmentally friendly city campaign under the concept of renewable energy for transportation that aims to sustainably reduce air pollution.

Connect transportation networks

by providing the citizens with a seamless mass transportation system.

Provide a better life for the citizens

by providing them with an effective transportation system so that they can plan their trips, save travel t ime, access means of transportation conveniently, and reduce road accidents/deaths from using public transportation.

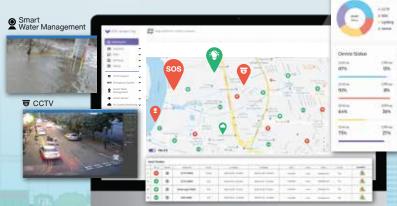
Increase economic value

by supporting new employment opportunities to ensure income, quality of life for the citizens, and increase Per Capita Income.

Smart City Platform

displays overall IoT information map online, supports all smart solution systems, and supports data history inquiries such as pictures, statistical data, and voice memos to enhance management.

 Complete and convenient all-in-one platform.



Smart City

Development







Promote energy efficiency or renewable energy such as electricity generation from biogas and other energy sources.



Promote efficient, safe, convenient, and environmentally friendly transportation systems.



Promote an efficient and convenient business environment, encourage business cooperation and connections, and adapt innovations to transform businesses such as smart agricultural cities or smart tourism cities.



resources.

Promote learning, use of technologies both in the economy and everyday life, environments that encourage creativities, real-world learning, and social differences.

ENVIRONMENT

Consider environmental impacts and climate change by using the help of technologies in water management, pollution management, waste management, and natural disaster management as well as encouraging

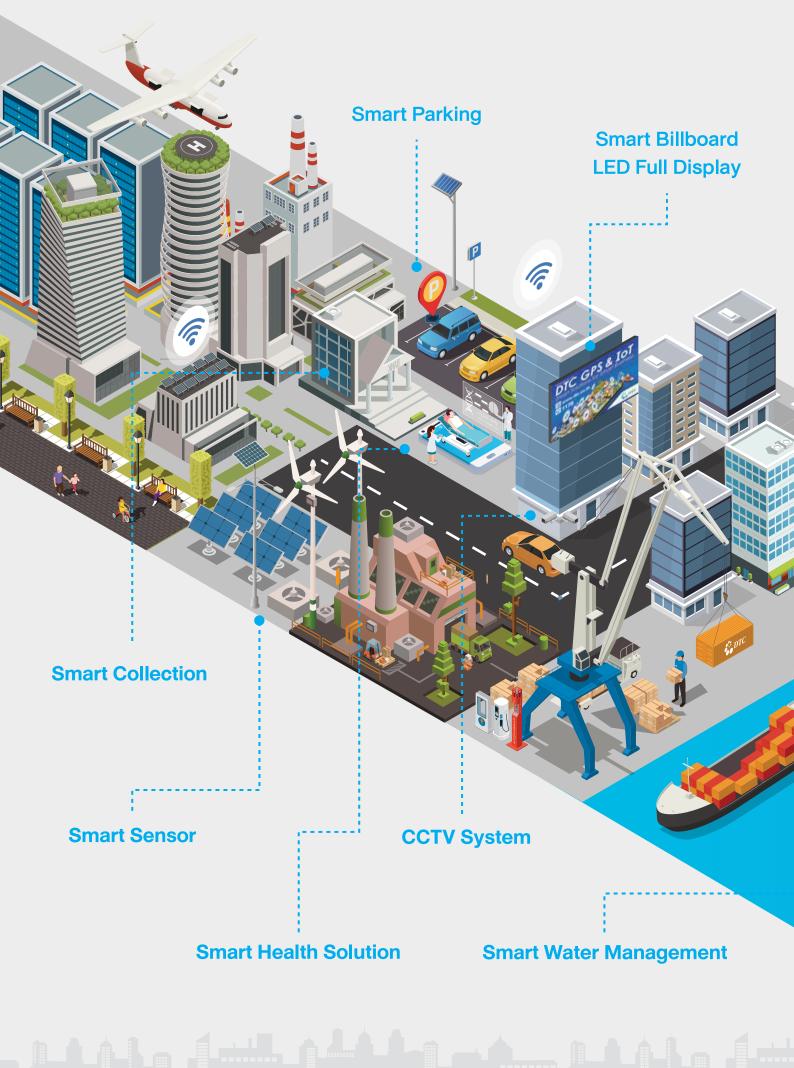
the participation of the citizens in preserving natural



Develop public services that the citizens can access conveniently, encourage the participation of the citizens, and provide access to information to ensure transparency.



Develop universal-design facilities to provide healthy, quality, safe, and happy living for the citizens.



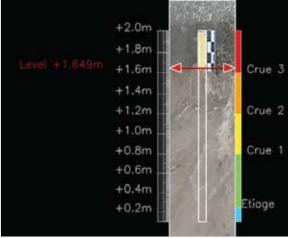




Smart Water Management

Employ an automatic management system for water draining, depth level indication, closing/opening water gates, water pumps, and pump station CCTV surveillance to allow remote control, data storage, and statistical display to ensure timely flood prevention and mitigation.







Air Quality Monitoring

Employ weather condition detection systems with analytical technology for meteorological observation to stay vigilance and prepared for possible natural disasters such as air pollution and harmful dust particle concentration to allow the citizens to plan their living and trips. The meteorological data can also be used to improve agricultural production despite climate change by shifting resources according to each area.

Fire Alert Detector

Employ a fire detection system with heat sensors, long-range cameras, and Al Positioning technology that detects heat in the environment 360 degrees. It analyzes the input to identify a spot where the temperature is higher than usual. When a fire is detected, the system alerts the control room or administrator in real time with the location for the emergency team to promptly plan and mitigate the incident.





Emergency System

Employ a smart emergency system with a convenient push-to-call button for anyone having an emergency to call for help. Then the person will be automatically connected to an emergency team with a picture, intercom communication, and emergency light on the spot to pinpoint the location and provide safety for the caller. The system is ideal for public venues, highways, communities, schools, factories, or organizations that require safety and security.







Smart Sensor

Employ a smart sensor system that detects malfunctions of electrical devices such as street lights, water pumps, weather/humidity sensors, and call points, allowing reading and closing/opening of the devices through a CT clamp as well as notifying a maintenance team to handle the situation. The system also supports LoRaWAN networks at 923–925MHz with no less than 16 dBm transmission power and internal battery designed to last longer than 3 years.

CCTV System

Employ a CCTV system on an analytical platform to monitor and prevent crimes. The system is ideal for public services such as road traffic management, disaster prevention and mitigation, and public safety. Cameras from all different networks can be integrated into one display to streamline the process and enable the users to monitor the situation in real time on the screen.





Smart Parking

Employ an AI system that detects and recognizes objects or vehicles to manage parking lots to ensure sufficiency, reduce traffic congestion, facilitate customers, and provide safety. The system can be adapted for roadside parking lots to monitor the overall capacity, reduce traffic congestion, increase safety, investigate the damage, and reduce pollution.



Wifi / RFID 4G / 5G / LoRa คัดกระจายสัญญาณ Eighting คังโปรแกรนการใช้งาน เปิล-ปิล และปรับ ความสว่างของไฟ ไล้อัลโนมัติ CCTV I พื่อความปลอดภัย LED Display แสลงนล Real-time สามารถแสลงสือโฆษณาค่าง ๆ

Smart Pole

Employ smart poles with an advanced design that supports the mounting of street lights for safety, WiFi routers for wireless connections, CCTV cameras, PM2.5 sensors, temperature/humidity sensors, emergency call buttons, LED screens for publications, and speakers for public announcements.

Smart Health Solution

Employ a healthcare system that provides bedridden persons with more convenient access to public healthcare facilities. The system helps locate bedridden persons more easily, enhances efficiency, streamlines the document process/resource planning, and saves costs.





Smart Billboard LED Full Display

Employ a digital billboard system to create a good image, government authority—citizen relations, and company—customer relations, promote credibility/dignity for organizations and business entities. With the system, information updates can be displayed immediately, a timer on/off can be set, waste materials, budget, lead time, and manpower are reduced while reaching and covering a wider audience.



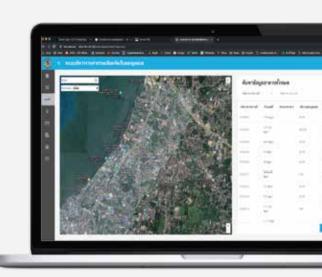


Smart City App

It is an application that provides citizens with access to public services such as news, complaint filing, report channels, and feedback channels to enhance the efficiency, convenience, and speed of the services.

Smart Collection

Employ a system to survey and manage garbage collection fee transactions and other charges levied by local authorities with the use of a GIS mobile application to manage the subscription list, enhance the management process, and streamline the garbage collection fee transactions according to the "Thailand 4.0" policy for the economy and environment.





Passenger Bus Tracking Device DTC BUS LINE

With the system, traveling is no longer a hassle because the system displays the routes and trip duration. Passengers can also find a route, pick a stop, timetable, and the closest line.



Display the position and trip duration of a bus in real time



Display the plate number, driver I.D., and current speed



Display the expected time of arrival of each stop through the application



Planning a trip is easier than ever





License Plate Recognition

The analytic system screens license plate pictures to identify the type of vehicles, plate detail, vehicle color, and province of issue.

- Plate information can be used to trace a suspect or a particular vehicle
- Support all kinds of license plates and GPS tracking devices
- Support vehicle tax payment interfaces
- Read AEC license plates

References of IoT Solutions (in royal events)

- The 2018 Bike for Dad event, a GPS system and spare battery were installed on the bicycles linked with 12 computers to track the royal group on a digital map in real time.
- The 2019 King Rama 10's Coronation Ceremony, a GPS tracking system was installed in the royal motorcade to monitor safety and trip status on a digital map in real time.
- Coronation Ceremony Grand Royal Barge Procession, a route map was produced and used in combination with the GPS tracking system installed on the royal barges to control the speed and gap distance through the cooperation between the DSI and Royal Navy.





Government References





Garbage Truck Trip Analytic System – The system analyzes the trips of garbage trucks by using GPS technology. It enhances the management and truck monitoring as the dispatcher can analyze the zoning and routes of each period to plan proper garbage collection schedules to avoid redundancy, missing areas, and ensure good feedback from the citizens.



Emergency Call System



The smart emergency call system is developed in response to the Thailand 4.0 policy in the form of a mobile application where users can send an emergency message together with pictures, videos,

descriptions, and locations to a local emergency responder for help.

Pattaya's Smart Waste Collection





The system surveys and manages garbage collection fee transactions and other charges levied by local authorities with the use of a GIS mobile application

to manage the subscription list, enhance the management process, and streamline the garbage collection fee transactions according to the "Thailand 4.0" policy for the economy and environment.

Examples for developing various systems for government agencies

GPS for Public Service Vehicles

The GPS tracking system manages public service vehicles such as garbage trucks, fire engines, and ambulances. Many local administrations have already been using it including Bangkok, Phuket, Nonthaburi, Ubon Ratchathani, and Khon Kaen.



Smart Emergency Call

Phraeksa District has begun the "Phraeksa Smart SOS" project by using the smart emergency call system in the area to provide the citizens with a convenient channel to call for help in an emergency or local information 24/7.





Smart Weight Station





The system enhances the efficiency of garbage truck management by using CCTV and RFID technologies to improve accuracy and streamline the garbage weighting process. With the system, the punctuality of garbage collection can be maintained to ensure reliable service for the citizens.



Krungthai General Services and Security Co., Ltd.

As we are a secured transportation company, the vehicle tracking system protects and monitors us very well. D.T.C. and its nationwide network coverage are our choice.

Wisit Towiwek

Senior Director – Security Management 4 in charge of Security Management, Krungthai General Services and Security Co., Ltd.



Mon Transport Co., Ltd.

We chose D.T.C. because they are the best GPS fleet management system provider. We no longer worry about monitoring our valuable assets.

> Sirimon Usap Chief Executive Officer



Siam City Cement PCL

We chose D.T.C. because they meet our hardware/ software requirements, their aftersales services, and they have been in the business for a very long time.

> Worawut Taowongsa Logistics Operation Manager





And many more from our 12,000 customers.





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