Midas Touch

magic embedded

SUCCESSFUL CASES

Midas Touch handheld computers with abundant functions cater to the needs of multiple industries, helping streamline workflows, enhance efficiency and contain operating costs.

Until now, we have provided industrial PDAs and intelligent solutions to over 4000 clients from over 100 countries worldwide in transportation, logistics, healthcare, finance, livestock and etc.

Successful cases

VEHICLE COMPUTERS DEPLOYED BY OVER 2000 DRIVING SCHOOLS IN CHINA

Industry Application:
Education

Region:
China

Model:
MTA-3055
Vehicle Computer

BACKGROUND

Most of driving schools in China have adopted information technologies to further strengthen the management of driving schools, to regulate driving training processes and to improve training quality. Until now, over 2000 domestic driving schools have chosen Midas Touch' s solution.

CHALLENGES

1. The school management is complicated and efficiency low.
2. It is hard to record training hours and driving mileage of students.
3. Identity fraud cannot be avoided due to the lack of an efficient way to verify student identity.
4. The driver training processes cannot be monitored and managed in real time.

SOLUTIONS

Integrating functions such as HF RFID reading & writing, fingerprint recognition,camera, etc., Midas Touch solution which covers software and hardware enables driving schools to monitor the whole training process in real time.

Identity verification: Fingerprint recognition or IC card authentication make sure that students and instructor identity can be verified quickly and accurately, effectively reduced identity fraud.

Timing management: Students need to swipe cards and verify their fingerprints every time they start training. The system will automatically recognize and record the hours and mileage, etc., and upload them to the management platform. Trainees can also check their training hours and driving mileage online at any time by logging in their ID account.

Real-time monitoring: the intelligent vehicle computers can timely monitor the current state of the vehicle (moving / stop / flameout / current location/speed). Additionally, GPS can monitor and playback the vehicle moving track.

Online Learning: Midas Touch has established an online learning system so that the students can learn by themselves on web page or APP already downloaded, giving them more freedom and convenience.

EFFECTS

1. It simplified workflows of driving training and tests, reduced unnecessary waste of resources.
2. All the records can be transmitted to the backend system in real-time. Records about instructor workload can be an indicator for performance assessment; those about student training status and school work progress facilitated the overall management of driving schools.

DEVICE CONFIGURATION

P/N: MTA-3055
Functions: RFID, Fingerprint, GPRS

DEPLOY MIDAS TOUCH MTA-3055 MANAGE DRIVING SCHOOL VEHICLES IN DUBAI

Industry Application:
Driving Schools

Region:
UAE

Model:
MTA-3055 Vehicle Computer

BACKGROUND

A state-owned driving school in Dubai is in urgent need to strengthen the management of its vehicles, driving coaches and students, and regulate the driver training processes. Some officials search for a complete solution provider to help them improve the quality and service of driving training, and drive Dubai' s driving training to a new era of modernization.

CHALLENGES

1. The management work is complicated, which takes a lot of manpower and material resources. Moreover, the driving school faces problems of low efficiency and negative effect.
2. It is hard to effectively count the students' training hours and mileage. There is no guarantee of sufficient time for practicing.
3. It is almost impossible to monitor the whole driving training process.
4. The identity of coaches and students cannot be effectively identified, which increase the chances for identity fraud.

SOLUTIONS

Taking the requirements of driving training industry and that of Dubai government into consideration, Midas Touch has customized a "one-stop" solution for this driving school. By cooperating with a software developer and providing MTA-3055 vehicle computers, Midas Touch is able to solve all problems faced by the driving school.

APPLICATION DETAILS

Identity verification

MTA-3055 with fingerprint scanning and IC card reading abilities can quickly and accurately verify the identities of coaches and students, which effectively solves problems like identity fraud and substitution.

Timing management

Each student is assigned with an IC card with his/her unique identity information. Also, the fingerprint is enrolled. When they start or end the training, they need to verify their IC cards or fingerprints. In this way, the training hours, mileage, etc. can be clearly recorded on the vehicle computer. At the same time, these records are uploaded to the backend system in real time where administrators can have real-time access to these records. This function effectively ensures that every student has got enough training time. Students can also check the training hours and driving mileage at any time.

Real-time Monitoring

MTA-3055 vehicle computers with OBD and GPS functions enable real-time monitoring of vehicle status, like driving speed, start and stop, break down, current position, affiliated driving school, etc. Accurate GPS makes driving route playback possible. With high definition cameras, everything can be recorded and saved.

EFFECTS

1. MTA-3055 vehicle computers facilitate and simplify the whole driving training process, as well as reduce manpower and overheads.
2. Data collected can be referred to evaluate the performance of each driving school, training branch and caoching staff. This solution greatly improves the management and operation efficiency.
3. It significantly improves the quality of training services, enhances the overall quality of students, and stimulates their independent learning interest.

PDA CONFIGURATION

P/N: MTA-3055
Functions: Fingerprint, HF RFID, GPS

VEHICLE COMPUTERS MANAGE VEHICLES & PERSONNEL IN LUXEMBOURG

Industry Application:
Fleet & Personnel Management

Region:
Luxembourg

Model:
MTA-3055

BACKGROUND

Luxembourg is the smallest Member State in the EU after Malta, and is generating one of the highest amounts of MSW in Europe per inhabitant (678 kg/cap in 2010) but has one of the highest rates of separately collected MSW. All municipalities have a recycling centers where most items can be disposed of.

CHALLENGES

1. Luxembourg has clear policies on waste management and recycling. Each day garbage trucks as well as many private cars transport waste to recycling centers. If these vehicles are not managed properly, traffic jam around the centers may occur.
2. The traditional way ro manage staff and to control access at recycling centers is time-consuming, error-prone and labor-intensive.
3. Paper-based access control records are hard to be shared in real time and hard to be checked from another physical place.

SOLUTION

By equipping Midas Touch MTA-3055 intelligent terminal on garbage trucks and at recycling centers and by providing IC cards with staff at recycling centers and truck drivers, and efficient system of clock-in-and-out management and automatic identification of trucks and drivers is established. All data is captured and transmitted in real time to a backend server.

EFFECTS

1. On the backend server, administrators dispatch different trucks to come in different hours. This way traffic jam is prevented.
2. MTA-3055 at the recycling center gate connects to cameras via USB to record the real-time situation. Inside the center, staff need to scan their fingerprint and IC cards to clock in and out on MTA-3055.
3. Every garbage truck is tracked and data is transferred to the backend server for real-time check and further analysis.

Device Configuration

P/N: MTA-3055
Functions: Fingerprint, HF RFID
Front Camera, 4G(EU), WiFi, USB Camera

VEHICLE COMPUTERS CONNECT TAXIES IN IRAQ

Industry Application:
Fleet Management

Region:
Iraq

Model:
MTA-3055

BACKGROUND

This Western Asian country sees a rapid growth in taxi market. With ever increasing cost of fuel and operational overheads, one taxi fleet company feels urgent to find new technologies and devices to stay competitive. On the other hand, passengers tend to choose those taxi companies which always bring a satisfactory service.

CHALLENGES

1. Without telematics devices a taxi fleet administrator cannot access to the real-time location and status of a taxi.
2. It happens when taxi drivers have some improper driving behaviors or charge passengers more than it should be. Passenger satisfaction and travel safety is a big worry.
3. Taxi administrators need some time to dispatch the latest taxi ride requests to the most suitable drivers.

SOLUTION

Midas Touch MTA-3055 telematics device features GPS to locate a vehicle, OBD data to detect vehicle status, HF/fingerprint to authenticate a driver, and 4G connectivity to provide passengers a stable Wi-Fi hotspot and to update the latest driving data to the backend management system in real time.

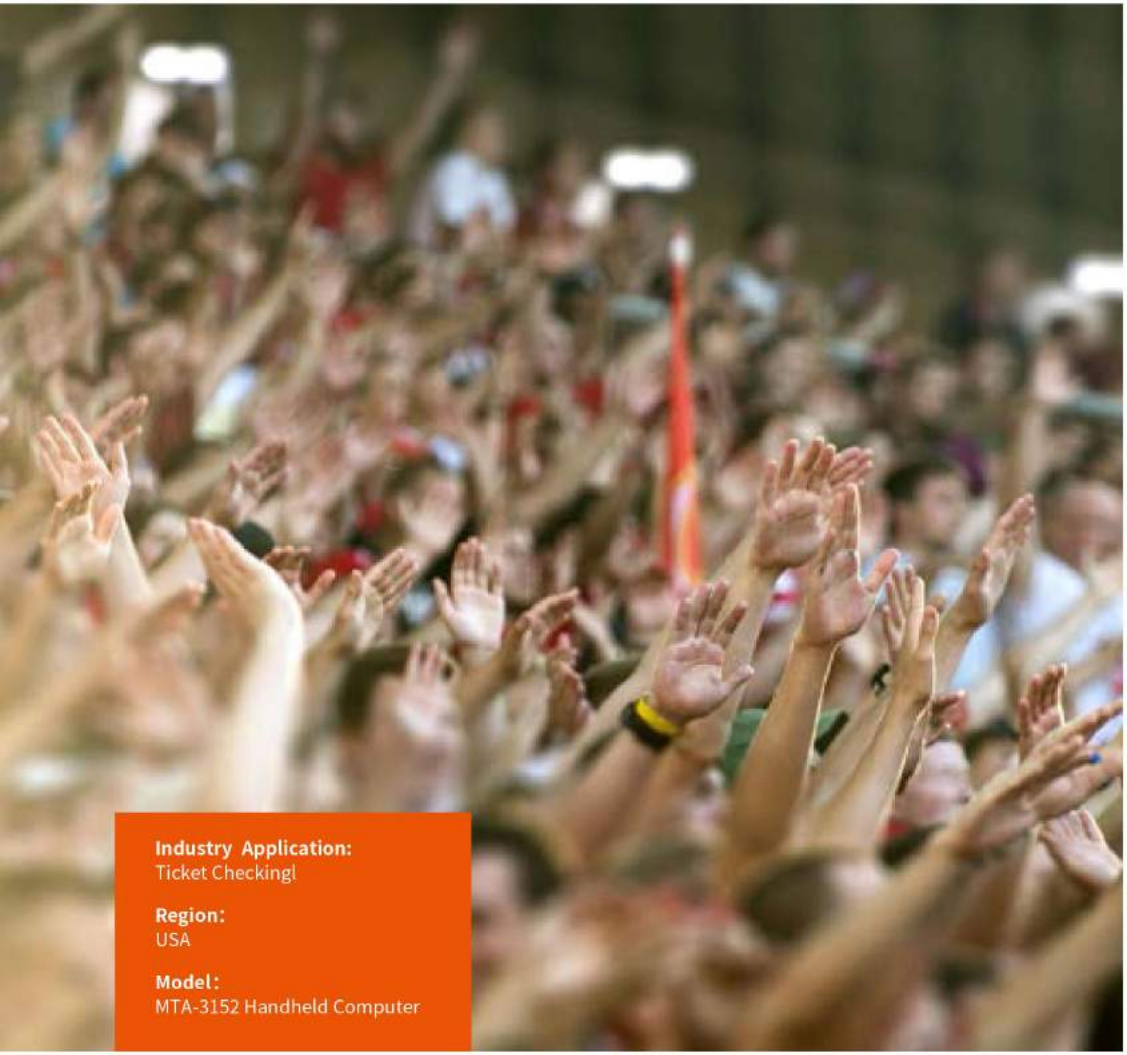
EFFECTS

1. Midas Touch MTA-3055 verifies a driver' s identity by scanning his/her fingerprint or IC card. Fleet administrators can know each driver' s working schedule and workload.
2. MTA-3055 vehicle-mounted computer has an OBD port through which connects to the taxi' s OBD system. The tech records any dangerous driving behaviors such as harsh acceleration and brake, it also detects the vehicle' s status including fuel consumption and RPM.
3. MTA-3055 provides passengers with as Wi-Fi hotspot as a value-added service.
4. MTA-3055 connects to the ridesharing app and the backend management server. The latest ride requests can be dispatched in real time. V600 also displays the shortest route for taxi drivers to save time and fuel.

DEVICE CONFIGURATION

P/N: MTA-3055
Functions: HF RFID, Front Camera, 4G, WiFi, OBD

VERIFY TICKETS IN USA WITH MIDAS TOUCH MOBILE COMPUTERS



Industry Application:
Ticket Checkingl

Region:
USA

Model:
MTA-3152 Handheld Computer

BACKGROUND

This company tries to look for mobile devices that can help them to scan different tickets with 1D/2D barcodes and HF tags for a sport game. And the mobile device need to meet higher industrial protection level, up to 1.5 meter drop proof feature. For this occasion, the customer chose Midas Touch MTA-3152 to verify tickets at different gates of a stadium.

CHALLENGES

1. Visitors need to stand in long queues to present tickets for virtual checking.
2. Counterfeit tickets are difficult to be identified.
3. Event holders do not have real-time access to ticketing data.

SOLUTION

With extensive functions and high performance, Midas Touch MTA-3152 are preferred by the client. Theirsecurity staff use Midas Touch mobile computers to scan tickets, which is inlayed with a RFID chip and prints a 2D barcode on the front. By connecting to the backend database via wireless network 4G and Wi-Fi, the staff will know if the ticket is fake or not.

EFFECTS

1. The intelligent checking rather than physical checking greatly shortens the time of visitors coming in and out.
2. The intelligent system put an end to ticket fraud.
3. The real-time supervision strengthens the management of inspection work.

PDA CONFIGURATION

P/N: MTA-3152
Functions: 2D, NFC, 4G, WiFi

MIDAS TOUCH HANDHELD COMPUTERS READ CAMPUS CARDS IN CHINESE UNIVERSITIES

Industry Application:
Campus Card Reading

Region:
China

Model:
MTA-3152 Handheld Computer

campus cards work well in identity verification

BACKGROUND

Nowadays more and more universities are adopting "all-in-one" campus cards. The campus card solution mainly consists of a university backend server, inductive RF IC cards and handheld computers that read IC cards. These campus cards work well in identity verification and electronic payment. They can be used for time & attendance, in canteens, supermarkets, school buses, libraries, computer labs, swimming pools, stadiums, etc.

CHALLENGES

1. Students usually hold a variety of IC cards, like student card, library card, meal card, school bus card and so on. Collecting and managing all these student cards and data becomes a heavy burden for the university management teams. Besides, the cost of time and labor is high.
2. Holding many cards at one time troubles students too.
3. A modernized campus management cannot be realized.
4. Traditional fixed card readers cannot be moved. And their maintenance cost is high.

SOLUTIONS

To overcome the above problems faced by many universities in China, Midas Touch MTA-3152 handheld computers are deployed and RFID IC cards are used. This "all-in-one" card functions as a student card, library card, meal card, school bus card, shopping card, etc. University staff can use Chainway handheld computers to scan the card on any occasion. Identity verification or electronic payment can be done in seconds with high accuracy. And all these scanning records are synched to the university backend server in real time so that administrators can check all kinds of student info anytime and anywhere.

EFFECTS

1. It provides tremendous convenience to teachers and students in identity verification and electronic payment.
2. For universities, it helps reduce expenditures, facilitate information sharing, and improve the level of management and service.
3. It is conducive to enhancing the school image, helping to attract more students.
4. It enables electronic payment, eliminating the insecurities of carrying cash.

UNIVERSITIES

Shanghai Jiao Tong University, Northwestern Polytechnical University Chang'an Campus, Chongqing University, Xi' an Jiao Tong University, Central South University, Northwest University, Zhongnan University of Economics and Law, Huazhong University of Science and Technology, Harbin Institute of Technology, Zhejiang University, Sun Yat-sen University South Campus, Shenzhen University, Shandong University, Hefei University of Technology, Anhui University, Beijing Normal University Zhuhai Campus, China University of Geosciences, Tongji University, China University of Petroleum, Southeast University, etc.

PDA CONFIGURATION

P/N: MTA-3152
Functions: HF RFID, PSAM, 4G/2G

FACILITATE TICKET BUSINESS FOR PARIS DISNEYLAND WITH MIDAS TOUCH MTA-3152

Industry Application:
Ticket Validation and Management

Region:
France

Model:
MTA-3152 Mobile Computer

BACKGROUND

With the development of IoT (barcode/RFID) technology and the pursuit of higher service quality, electronic ticket validation has become more popular in scenic spots. Disneyland, as the giant of the amusement park industry, also wants to keep pace with the trend. Paris Disneyland coped with Chainway and deployed MTA-3152 mobile computers for automatic ticket validation in order to attract more customers and best satisfy existing ones.

CHALLENGES

1. Disneyland is so well-known that it attracts thousands of tourists every day. People crowd especially during holidays. The traditional way to validate ticket is really slow, which sometimes wears tourist patience.
2. The anti-counterfeiting performance of traditional tickets is poor and it takes time to verify these tickets, causing economic losses to the Paris Disneyland.
3. The number of visitors entering the amusement park cannot be effectively summed up and controlled in real time. Too many visitors may result in safety problems. It also affects the tourist experience.
4. It is hard to effectively record the ticket sales data which can be referred by the administration team for future promotion and management strategy.

comes up with an efficient solution to facilitate

SOLUTION

In order to overcome these problems, Midas Touch comes up with an efficient solution to facilitate ticket business for the Paris Disneyland. Each ticket now is printed with a unique 2D barcode. The ticket inspectors now only need to use Midas Touch MTA-3152 mobile computers to scan the QR code of the ticket, then automatic ticket validation can be quickly done under wireless connection. The whole process takes just a second or so. More importantly, fake tickets find no way to survive. What' s more, Midas Touch MTA-3152 is portable and light with ergonomic design, which brings great convenience. All kinds of sales data statistics can be done and synced to the backend database immediately.

EFFECTS

1. Use the tickets with QR codes improves the management level of Disneyland and enhances the brand image.
2. After connecting WIFI, both the efficienct and accuracy of ticket validation have been greatly improved. As each barcode is unique and the backend system records every scan, the tickets that have been verified cannot be verified again. Ticket counterfeit and re-use never happen again.
3. The number of portable mobile computers can be increased according to visitor flow, so visitors don' t need to line up in a long queue any more.
4. The number of visitors can be monitored at any time, which provides effective data support for the management team.

DEVICE CONFIGURATION

Module: MTA-3152
Functions: 2D, WIFI

CSG'S INFRARED-BASED AUTOMATIC METER READING PROJECT

Industry Application:
Meter Reading

Region:
China

Model:
MTA-3152

BACKGROUND

China Southern Power Grid Company Limited (CSG) is one of the two state-owned enterprises in the power system. It takes charges of participating in the investment, construction and management of power transmission, transformation and distribution covering southern China' s five southern provinces.

CHALLENGES

1. Large number of electric transmission produces heaven workload and expense of meter reading.
2. CSG needed to send employees periodically to each physical location to read a meter.
3. Meter readers record data manually on site and enter it to computer back to the office. This process increases the chance for human error.

SOLUTION

Midas Touch, Inc., the leading manufacturer of IoT devices including handheld computers, offer CSG IR-enabled handheld device MTA-3152 IR stands for infrared, which can receive meter readings automatically from an infrared capable meter. In case of the meter' s IR transceiver not functioning, meter reader scans the 1D barcode of the meter to ensure its number, and manually enters visual readings for transferring to a backend system on MTA-3152 wirelessly.

EFFECTS

1. Automatic meter reading is realized.
2. IR-based meter reading eliminates the inconvenience of meter readers entering private properties, or locating and opening an underground meter pit. Carrying MTA-3152, meter reader walks by the locations where meters are installed as they go through their meter reading route.
3. The flow of real-time data makes grid connected and smart. It provides real-time billing information, reduces human errors and disputes.

PDA CONFIGURATION

P/N: MTA-3152
Functions: 2D, 4G, WiFi, Infrared, GPS, Camera

INFRARED-BASED AUTOMATIC METER READING IN NIGERIA

Industry Application:
Energy

Region:
Nigeria

Model:
MTA-3152

BACKGROUND

This Nigerian electricity company is mainly engaged in power transmission and distribution. It has a large amount of installed electricity generation capacity. Traditional way to enter every house to read meters is far from efficient.

CHALLENGES

1. Due to Nigerian geographic features and large population, manual meter reading is a heavy workload.
2. Coming into each house to read meters disturbs residents.
3. There is no effective mangement system to track meter readers' performance.
4. Paper records are not easy to save and not convenient to query.

SOLUTION

The company chose Midas Touch MTA-3152 mobile computer to facilitate electricity meter reading. Every meter is equipped with an infrared transceiver. Midas Touch infrared-enabled device sends infrared signals to the meter's IR transceiver, instructs the transceiver to transmit its consumption, diagnostic, and status data to a central database for billing and analysis under wireless connectivity. This way automatic meter reading is achieved.

EFFECTS

1. It realizes remote meter reading by infrared modules. Workers do not need to enter the property or home, or climb high to see the consumption or to locate and open an underground meter pit. Employee safety is enhanced.
2. Automatic meter reading eliminates laborious manual operations, significantly improves efficiency and accuracy.
3. All data can be transferred wirelessly in real time, and checked and managed any time in the backend system.
4. GPS feature requires employees to be onsite to collect data, thereby eliminating employee fraud.

PDA CONFIGURATION

P/N: MTA-3152
Functions: 2D, 4G, WiFi, Infrared, NFC, GPS

SUBSTATION ON ITS WAY TO DIGITIZATION WITH CUSTOMIZED DEVICES

Industry Application:
Asset Management

Region:
China

Model:
MTA-3152

BACKGROUND

Nowadays, a growing number of industries have embraced new digital technologies. There is no exception for power sector. At present each substation box is equipped with a key-based padlock and all keys are kept in the same place. It's easy to imagine that locks and keys are lost or mismatched time and again. There exist risks as padlocks can be easily picked. Besides, administration team can’t effectively record maintenance time and detailed operations.

CHALLENGES

1. Mechanical locks and keys are easy to get lost or stolen. Power equipment may be accessed to by the unprofessional, being a potential safety risk.
2. Paper records cannot be well kept. It is also quite inconvenient to track previous records.
3. It is almost impossible to trace the person in charge if incident happens.

SOLUTIONS

Determined to place everything in order, Everlink decided to collaborate with Midas Touch. MTA-3152 mobile computers are customized to be part of the solution as well as electromagnetic locks. Each time during inspection and maintenance, field workers need to read the RFID tag attached in the substation box, then log in with his username and password in an app to open the box automatically. After maintenance is done, lock it directly on MTA-3152 handhelds. The backend server syncs maintenance time, personnel and equipment number for future check.

EFFECTS

1. It turns out to be convenient and efficient when using MTA-3152 mobile computers to open and lock electromagnetic locks.
2. When field workers log in the app, their identity and maintenance operation can be matched and recorded automatically. It is easy to trace and track if workers misbehave.
3. Maintenance records synced to the backend server make it possible for administration team to learn substation status in real time.
4. In general, Everlink Substation in Yantai, Shandong is heading for digitization and scientific management.

PDA CONFIGURATION

P/N: MTA-3152
Functions: 4G, WiFi, Electromagnetics modules offered by the user

Midas Touch

magic embedded

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