Call: ERASMUS-EDU-2022-CBHE-STRAND-2
Project Number: 101082860

Study program: **MARINE/LAND TRANSPORT MANAGEMENT**

2-YEAR STUDY PROGRAM Professional Diploma

Subject:MANAGEMENT OF TRANSPORT TERMINALS- new

Sem. I (III), Year II, mandatory

academic year 2024-2025

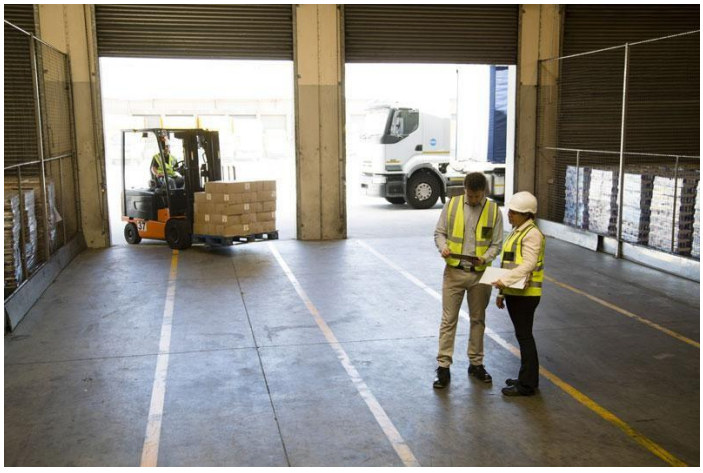
Topic:

SYSTEM MANAGEMENTIt isTERMINALS, TRANSPORT EFFICIENCY

Reported by: Eng.Luiza LLURI

Logistics Services - Facility and Terminal Operations - Terminal Management

Terminal management system is an important system in terms of managing all terminal business processes and facilitating the loading processes of businesses. Today's terminal managements face a number of challenges to be profitable in an increasingly complex market environment. For terminal businesses in the oil and gas industry, accurate and effective terminal management is essential to maximize terminal efficiency, remain the main suppliers to customers and be financially successful.



Today, terminal companies enter into contracts with customers through a web-based terminal portal, manage orders, effectively plan loading transactions, track accounting data and physical inventory, and manage all terminal business processes.

In order to increase their operational efficiency, businesses are turning to terminal management systems not only for loading and unloading operations, but also for terminal business management. These systems also optimize businesses' cash cycle and streamline customer supply chain logistics activities.

There are two main challenges that many tank terminals and refineries face: reducing operating costs and improving safety. A properly managed terminal management system optimizes and automates all logistical and administrative processes in terminals and refineries. It provides the necessary tools for efficient, transparent and safe terminal management. Thanks to this system, product movement and product storage are planned and controlled, stock management is carried out for each tank, loading and unloading of all modes of transport is monitored and detailed control checks are carried out. There are creators.

Our organization also provides terminal management services between facilities and terminal operations services provided within the scope of logistics services. Thanks to these services, businesses provide more efficient, high-performance and quality services in a safe, fast and uninterrupted manner.

Market Prospects of Intelligent Vehicle Terminal Tablet Industry

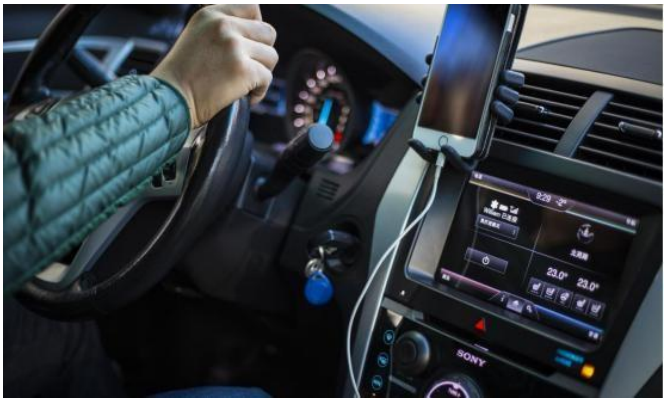
The intelligent vehicle terminal industry can only work in specific scenes, and the automatic driving algorithm must go through many scene tests and technical improvements if it wants to reach the level of human drivers. Moreover, the adaptability of domestic intelligent automobile technology to low temperature and snow and ice environment has not been fully tested.

Intelligent terminal devices are an important entry into**Internet of Things,** covering a wide range of categories, including education, medical care, security and other fields with large market space. VR devices, robots, wearable devices, vehicle-mounted smart devices and other

hot new smart terminal devices are the most widely used. In the "smart plus" wave, smart terminal devices are an extension of the IoT input in addition to mobile phones.

According to the "Smart Vehicle Terminal Market Investment Prospect Analysis and Supply and Demand Research Model Forecast Report 2022-2027" by Zhongresearch&Puhua Research Institute:

According to data, the sales volume of intelligent connected vehicles in China in 2020 was 3.032 million, with a year-on-year increase of 107%, and the penetration rate reached 15%.



With the scale of the intelligent vehicle terminal market. With the increase of technology investment cost in the scale of the intelligent vehicle terminal market, the corresponding technology of the self-service terminal equipment industry will be more and more perfect. The self-service terminal equipment market is developing rapidly, and retail sales are increasing year by year. The future market size of intelligent vehicle-mounted terminals is 10.63 trillion yuan.

Call: ERASMUS-EDU-2022-CBHE-STRAND-2
Project Number: 101082860

In recent years, the domestic automobile industry has actively embraced a new round of scientific and technological revolution, adhered to innovation-driven development, and displayed a new atmosphere in the first year of the "14th Five-Year Plan". Faced with multiple risks and challenges, such as chip shortages, the spread of the epidemic, and rising raw material prices, the central and local governments have determined the situation, actively guided the situation, and introduced a series of supporting policies to push the domestic automobile market to end the "three consecutive declines". CAAC data showed that the full-year vehicle sales in China's automobile market reached 26.275 million units in 2021, with a year-on-year increase of 3.8 percent.

With the continuous development of 5G, the Internet of Things and other technologies, the application process of the Internet of Vehicles is also advancing. In recent years, relevant state departments have issued a series of relevant policies and regulations to encourage the development of the industry, providing a good policy environment for the development of the industry.

Call: ERASMUS-EDU-2022-CBHE-STRAND-2
Project Number: 101082860

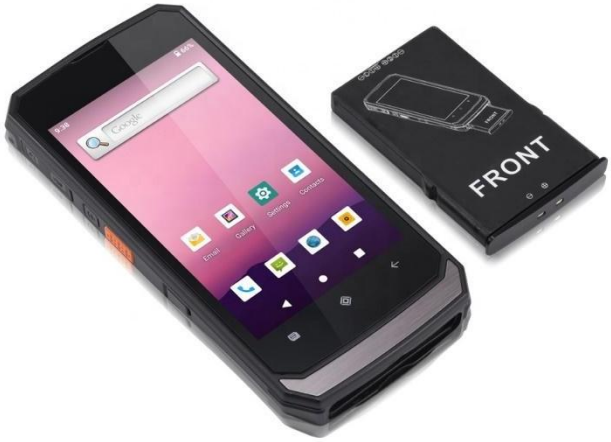
The typical application of vehicle-mounted intelligent terminal in the field of transportation will also bring broad development prospects with the continuous expansion of the scale of the digital economy. Data show that China's digital economy has continued to flourish in recent years, with the scale increasing from 2.6 trillion yuan in 2005 to 39.2 trillion yuan in 2020.

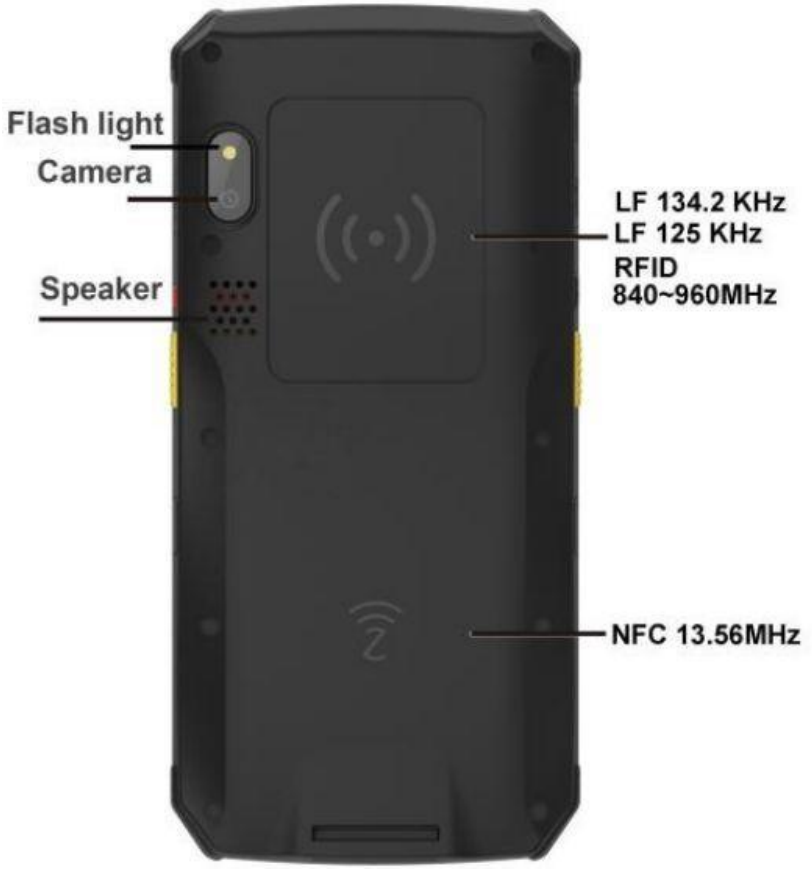
Application of RFID handheld terminals in traffic management

With the rapid development of the global economy, the number of urban vehicles increased rapidly, and the citytraffic managementis increasingly complex. Traffic police in addition to verifying driver and vehicle information and patrol management, but also to deal with the increasing complexity of the traffic situation, the traditional manual judgment processing is easy to cause errors and inefficiency, unable to meet the needs of current traffic management. work, which requires the traffic management department to use a more modern management tool.

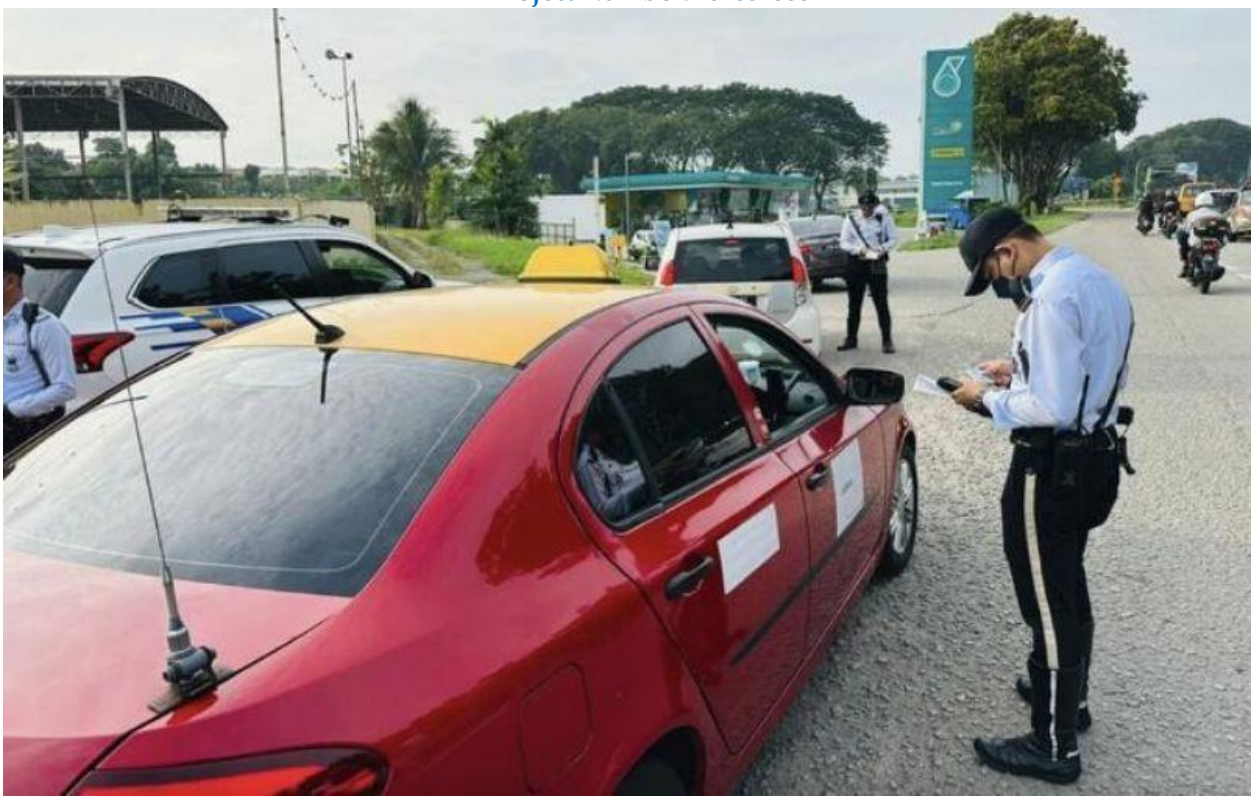
Based on these shortcomings, we launched this V520 product to integrate and introduce existing traffic managementRFID technologylike oneUHF RFID handheld traffic violation punishment terminal systemmwith onehot swappable batteryto ensure24-hour non-stop workas well as a sunlight-viewable screen for traffic law enforcement. When the traffic police find a suspicious vehicle, the traffic police usehandheld terminalto control the vehicle to ensure speed accuracy and efficiency.

Call: ERASMUS-EDU-2022-CBHE-STRAND-2
Project Number: 101082860





Call: ERASMUS-EDU-2022-CBHE-STRAND-2
Project Number: 101082860



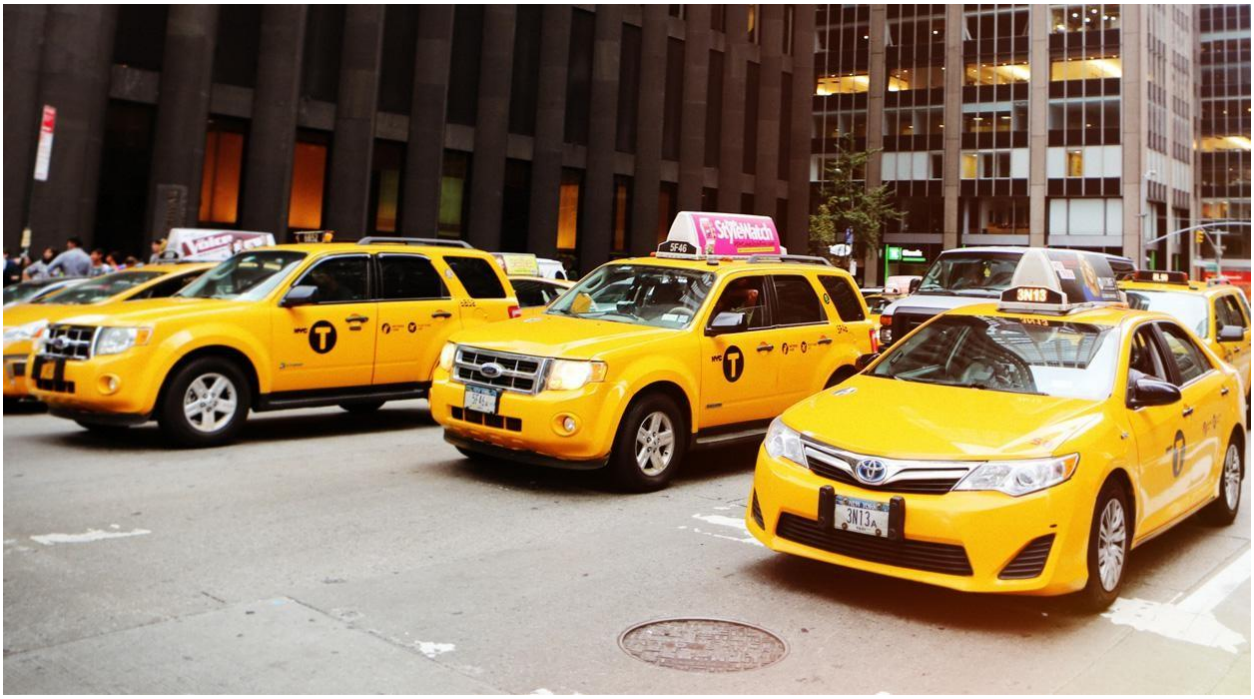
Accurate verification of information: Compared with traditional traffic police in traffic law enforcement, driver information and document authenticity are difficult to effectively judge,V520 RFID mobile terminalcan directly scan the driver's license to obtain personal information, through the driver's fingerprints to match, quickly verify the driver's identity information, and quickly access the vehicle data and other relevant information system data for the driver and the vehicle to carry out accurate identity verification. This effectively avoids manual judgment errors and improves law enforcement efficiency.

Fixed point patrol: Manual traffic police patrols require a long time, a heavy workload, and now they just have to keepV520 RFID handheld terminalCombined with the traffic system, you can achieve mobile law enforcement office, real-time and efficient statistics of a variety of patrol information, accurate records of inspection and law enforcement results, real-time recording and uploading of patrol information to the management system, so as to obtain more standardized, scientific management results.

Illegal punishment: Through the joint application of multiple groups ofV520 RFID handheld terminalsand the unique peakHot-swap batteryTHEThe hand-held machine can work continuously for 24 hours., in order to ensure that traffic police can investigate and punish

illegal vehicles anytime and anywhere, and the ticket printed on the spot automatically charges the system for punishment, effectively avoiding the failure of information transmission due to power problems.

Vehicle Multi Media Terminal



Taxi Dispatch and Management

LILLIPUT Mobile Data Terminal (MDT) which can be applied to Vehicle Multimedia System (AMS). AMS provides functions of multimedia, advertisement display, GPS navigation, wireless internet, car reverse screen and car assistance control. It includes seven modules - multimedia game, geographic information system (GIS), wireless communication, radio, car signal reception and alarm, data acquisition and display control.

Multimedia Playback Module: MP4, MP3 video media;

GIS Module: Providing GPS navigation;

Wireless communication module: Providing wireless internet, Bluetooth and WI-FI interfaces, etc.;

Vehicle Signal Acquisition and Alarm Module: Providing vehicle temperature, tire pressure, and travel distance data to the CPU for alarm reporting and automatic control processing;

Data acquisition module: Collecting images through the CCD camera installed at the back of a car, after encoding and decoding, the image information will be sent to the screen to display.

References:

Lecture Series – Luiza LLuri

https://www.gozetim.com/sq/petrol-ve-dogalgaz/downstream-hizmetleri/lojistik-hizmetler-tesis-ve-terminal-operasyonlari-terminal-yonetimi/

"The Perspective of Digital Terminals"http://sq.riyexian.com/news/the-market-prospect-of-intelligent-vehicle-terminal-tablet-industry/

"Application of RFID handheld terminals"https://www.ruggedi.com/sq/news/application-of-rfid-handheld-terminals-in-traffic-management

''Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.''