

# Successful stories of Intelligent Manufacturing Industry



Digital Transformation/Revolution for warehousing, logistics, security and inspection



**Background:** With the increase of actual demand and system upgrading, the wired or Bluetooth scanners in the factory of Goertek, a leading enterprise in the headphone industry, have been unable to meet the needs of frequent mobile operations, and need to be replaced with more intelligent terminals.

Project time: February 2022

Solution configuration:



Handheld PDA



Handheld RFID device

# **♦** Demands/Requirements

- Hope to install APPs on the scanning terminal
- Hope the equipment to be mobility
- Mobile security and inspection requirements

# **Applications:**

Warehousing and logistics management









Security and inspection management



NFC/ Identity recognition



Special verification by mobile phones



Input of epidemic prevention and control information



Mobile security equipment

### **♦** Project benefits

Efficiency is expected to be increased by 30% through RFID (DT50U); For the first use of RFID, the management efficiency will be increased by at least 30% according to the RFID usage data for traditional warehouse management



# LONGi Digital warehousing management and DPM code scanning application



Background: LONGi Green Energy Technology Co., Ltd. is the world's No.1 solar energy technology company. In the new era, LONGi takes the initiative to embrace digital technology, actively promotes the digital transformation of the enterprise, sets up digital transformation office, and systematically promotes digital transformation work.

Project time: October 2018



Full

**PDA** 



**Industrial Tablet** 

# **♦** Demands/Requirements

- The information interchange efficiency of each link in the workshop is not high
- It is difficult to exchange information between the upstream and downstream of the logistics supply chain
- DPM code carved by single crystal silicon rod and QR code under laminating film are difficult to be recognized by ordinary scanners
- WMS pages display a lot of content, which requires terminals with larger screens

### **Applications:**

2035DPM scanning application







Warehouse-in of goods

Product traceability management

Warehouse-out of goods

WMS warehousing management

Shelves-on of







WMS logistics management (P8100)





- ✓ 2035DPM scanner can scan the silicon rod QR code, which greatly improves the success rate of identification
- ✓ Real-time data collection and digital management of the whole process
- ✓ Realize the traceability of goods with one code for one cargo to reduce the error rate for the circulation of goods



# **Anjoy Foods Group**

Upgraded traceability and control of pre-made food



**Background:** As a leading enterprise in the quick-freezing industry, Anjoy Foods Group has actively embraced changes and restructured key online and offline operation scenarios by establishing digital management of food production workshops and food traceability and control projects.

Project time: April 2022



Full screen **PDA** 

## **Demands/Requirements**

- It is difficult to control the food quality
- It is difficult to trace food problems
- It is difficult to trace the closed loop of manual quality inspection
- It is difficult to manage the recall of pre-made food

## **Applications:**

Digital management of food production workshop











Warehouse-in >> of prepared materials

Picking and ordering

Sampling quality inspection

Warehouse-in of >> prepared materials

Traceability management of the whole process of pre-made food



**Production** traceability





- Realize the digital management of goods in the whole scene to reduce abnormal losses
- Realize the quality and safety control and information traceability of the whole process from raw material source to warehousing and logistics
- Realize the real-time monitoring, early warning and management around the shelf life from production of pre-made food
- Shorten after-sales service time, and improve customer satisfaction and corporate recognition



# Tianjin Tiangang United Special Steel

Information construction of dual safety control system



**Background:** In order to fully realize the management goal of "zero injury" and "zero accident" in long-cycle safety production, Tianjin Tiangang urgently needs to build a dual control mechanism of graded safety risk control and potential risk identification and management

**Project time:** July 2022

Solution configuration:



Full screen PDA

# **♦** Demands/Requirements

- It is difficult to implement safety responsibilities
- It is not comprehensive to identify risks
- It is difficult to obtain safety control data
- It is difficult to trace the closed loop for the management of potential risks
- There is no support for fine control

### **Applications:**



Risk identification



Potential risk tracking



Potential risk query



Tasks to be handled



Task statistics



Accident cases

### Project benefits:

Real-time perception and whole-process control | Ultra-early warning and agile emergency response | Data operation and maintenance, and fine operation



# Ningbo Water Meter

Warehouse WMS equipment application



Background: Ningbo Water Meter is the leading manufacturer with the largest scale, the strongest technical force and the best quality in the water meter industry. The traditional manual inventory can no longer meet the intelligent needs of the factory.

Project time: 2022



# **♦** Demands/Requirements

- Hope to install more/different software functions on the scanning terminal
- Hope the equipment to be mobile
- Mobile security and inspection requirements

# **Applications:**

Finished product warehouse management







Production site management



Production process tracing



Shelves-off

Allocating

Line storage area management



Inventory

- Effectively control the company's inventory and material turnover
- Realize digital design, intelligent production and smart management



# Poyun Build a "fast track of digital factory" • Demands/Requirements



Background: Under the development opportunities of the new-generation digital technology, Poyun hopes to realize the purpose of decentralization and customer orientation through the construction of digital factories, and promote the maximization of production efficiency.

**Project time:** November 2022



Handheld



Handheld **PDA** 

- The production process has many variables
- It is difficult to collect traditional data
- Information interchange costs are high
- It is difficult to control manual feeding

## **Applications:**



Machine networking - Scan code to start/stop the machine

- ✓ Realize the traceability of the production quality in the whole process
- ✓ Integrate multiple enterprise applications to eliminate information silos
- ✓ The system timely reminds of receiving and replenishing to optimize inventory management
- ✓ Improve the level of fine management, and improve the operation efficiency and project delivery quality



# CRRC Digital operation and mobile train inspection



**Background:** As a world-leading rail transit equipment supplier with complete varieties and first-class technology, CRRC workshop needs to implement digital transformation of the production line, so as to adapt to more efficient operating methods and realize more efficient digital production.

Project time: October 2015

Solution configuration:



# **♦** Demands/Requirements

- There are a wide variety of vehicle accessories
- The error rate of manual bookkeeping is high
- Data transfer is not timely
- It is difficult to query historical data

# **♦** Applications:

• MES production management application

ERP integration and >> Material

**ERP** 





>> Process quality >> at management



Assembly and packaging managemen



Customer return maintenance records

work order release



Kanban and reports

management



Product traceability management



Equipment management

Mobile maintenance and inspection of railway depot





Vehicle depot inspection

### Project benefits:

- ✓ Realize the whole-process digital operation and production quality traceability
- ✓ Realize the closed loop/refined resource allocation and scheduling decision of the whole vehicle status inspection and the whole life cycle monitoring



# Konka

# Information management of omni-channel supply chain



**Background:** As a leading electronic information enterprise in China, Konka hopes to conduct efficient and high-speed warehouse goods management through PDA scanning, so as to save labor costs and improve inventory efficiency.

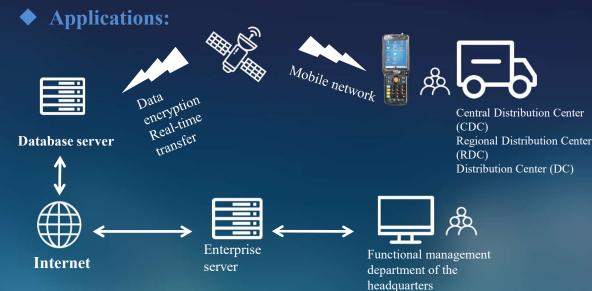
Solution configuration



Handheld PDA

# **♦** Demands/Requirements

- Manual inventory is troublesome, and the account of goods assets is not consistent with the entity
- Manual inventory is slow, and the difference feedback of cargo handling vehicles is not timely
- Inventory and delivery timeliness can not be guaranteed, leading to customer complaints
- After-sales service time is long, and the quality of service is poor
- The management granularity is coarse, and the production information is not transparent and not easy to trace



### Project benefits:

- ✓ [Logistics distribution] Realize the real-time management of warehouse logistics, and seamless connection with the enterprise information management system to facilitate the inquiry.
- [Warehouse management] Ensure that the inventory meets the needs of customers' orders or production plans; barcode data collection accuracy is high to reduce human error input
- ✓ [Manufacturing management] Realize the digitization of enterprise production information, as well as the paperless and transparent management of the production process
- ✓ [After-sales management] Shorten the after-sales service time, and improve customer satisfaction and corporate recognition



# Quanyou Furniture

Whole-process traceability of WMS warehouse in/out of goods



**Background:** As a large modern home furnishing enterprise integrating production, research and marketing, after 30 years of development, the whole logistics system of Quanyou Furniture is seeking the transformation of the whole-process information management

Project time: December 2021

Solution configuration:

Full screen PDA

# **♦** Demands/Requirements

- In the process of handling large goods such as sofas, the information collection terminal is easy to be damaged, so a mobile handheld terminal more resistant to falling is needed
- In the process of handling large goods, hands are occupied, so a more portable PDA is needed

# **♦** Applications:

WMS warehousing management









WMS Logistics management





### Project benefits:

- Data are collected in real time to realize the digital management of the whole process
- The whole process of goods can be traced and queried to ensure the integrity of the delivered goods