Examples of use

MOBILE DATA COLLECTION

Mobile Terminals

Goods management in the food retail industry

Task / problem
Companies from the food retail industry are constantly looking for flexible and time-saving solutions for the reordering and management of their goods. The aspired solution must be mobile and simple to operate. Furthermore, a connection to existing goods management systems is absolutely essential.

Procedure
The employees are able to work quickly and safely thanks to the specific configuration of the M210/M210SE mobile terminal. A special feature of the terminal is the large, numerical quick-entry keypad that, in terms of its dimensions, is similar to a checkout keyboard. The employees are able to reliably and quickly perform blind inputs with the M210SE in the same way that they are used to at the checkout. This saves a significant amount of time and ensures effective work. The colour display that is easy to read supports the employees when randomly checking the input. Depending upon the equipment of the branch, the recorded data is transferred to the back office PC via WLAN or the docking station and then on to the respective goods management system.

Result
Thanks to the accurate fulfilment of existing customer requirements, numerous food retailers use the M210/M210SE mobile terminals.
The ACD products are also used in the associated warehouses. The primary focus here is the picking of goods. Vehicle terminals on warehouse trucks or mobile terminals and voice clients ensure smooth processes and, consequently, also ensure that all branches open their doors in the morning with well-stocked shelves.

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Examples of use

MOBILE DATA COLLECTION

Mobile Terminals

Paperless picking solution: Trolley with a mobile terminal and scanner

Task / problem
The starting point was the search for a “terminal” that can be operated on the picking trolley without an external voltage source. The initial consideration was a vehicle terminal that, however, constantly requires an external voltage source.

Procedure
In close collaboration with the customer, the idea to modify the M210 mobile terminal and to use it as a “vehicle terminal” with an external scanner emerged. In order to implement the idea, the M210 is clipped into a specially-made clip holder on the picking trolley. The external scanner hangs in a support bracket and is connected to the M210 via an industrial plug-in connection (or via Bluetooth). Consequently, the power supply of the scanner is assumed by the M210. The picking employee receives their destination on the M210 display, scans the respective item number and places the desired quantity of the item into the trolley.

Result
The result is a simple and effective solution. The fastening of M210 mobile terminal and the external scanner to the trolley, the fast removal and attachment to a different, empty trolley permits an extremely flexible and efficient working method. One system per person is sufficient which ensures continuous productivity. No external voltage source or additional battery pack is required as the mobile terminal battery can be replaced in a matter of seconds.

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Examples of use

MOBILE DATA COLLECTION

Mobile Terminals

Optimisation of inventory management in the motor vehicle wholesale industry

Task / problem
The starting point of this case study was the switch from the manual recording of all order processes and movements of goods. Customer orders previously arrived via telephone, fax or the Internet. These orders were subsequently recorded by the employees and entered into the central goods management system. The delivery note that was then generated was printed out in the warehouses and, at the same time, served as a picking order. The responsible employee fetched the ordered goods from the shelves and placed them into the picking container. Once the employee had processed their orders with the aid of the delivery note, the goods were brought to Outgoing Goods and made ready for dispatch. Consequently, a great time of time was lost due to no cross-order picking and respective optimisation of the routes.

Procedure
Together with a longstanding partner, the introduction of paperless picking was suggested. A clear advantage is the direct online booking of all processes within the warehouse and the optimisation of the routes. The implementation is possible thanks to the use of mobile terminals. In doing so, great importance was attached to ergonomics, functionality and simple operation. Without these basic requirements, the smooth sequence is not ensured in the branch warehouses.

Result
The desired real-time bookings are performed via a direct connection of the mobile terminal to the goods management system via WLAN. The customer benefits from the reliability in terms of the inventory and accuracy that is achieved as a result as well as the accelerated process that can be attributed to the paperless working method. As a result, the quality of customer service was ultimately improved to a significant extent thanks to higher availabilities and faster deliveries.rt.

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Examples of use

MOBILE DATA COLLECTION

Mobile Terminals

RFID monitoring of crane assemblies during rental

Task / problem
When renting machines and devices consisting of multiple components, mobile data collection can provide support, particularly in two areas. At the start of each lease, all of the necessary parts must be fully and accurately recorded and picked. At the same time, the parts must be checked in terms of completeness and switches in addition to wear and damage when returned. As cranes are usually put together directly on the construction site using many assemblies, high costs are incurred during assembly if the ordered assemblies are delivered incompletely or incorrectly.
During each return, it must also be ensured that the assemblies are complete and that no switches have taken place on the construction site, e.g. with older or more worn parts.

Procedure
In order to implement an efficient solution, all assemblies were equipped with RFID tags during production at the customer's premises. This can also be carried out retrospectively on request. The tags are stored in a protected manner in steel chambers which are sealed with a plastic cover and welded to the assembly. Thanks to the attached RFID tags, the assemblies are clearly identifiable and it is almost impossible for switches to occur. M260 mobile terminals with LF-RFID are used in order to implement the picking / return of the crane parts. The mobile RFID readers are particularly suitable for tough, industrial applications and communicate in the 125 kHz range.

Result
The first devices are currently being used at a location in Switzerland. Following completion of this test phase, further locations will be equipped in Europe, Canada and Saudi Arabia.

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Examples of use

MOBILE DATA COLLECTION

Pick by Voice

Picking using Pick by Voice

Task / problem
The utilised Pick by Voice Clients that have been used for the picking of cosmetic store items have gradually become outdated and, as a result, are no longer state-of-the-art and are not adequately efficient. Therefore, it is absolutely essential that these systems are replaced with up-to-date devices. It goes without saying that great importance was attached to the price of the new acquisition as well as supplementary services in addition to important, necessary optimisations in terms of performance.

Procedure
The Voxter Elite Edition, which is currently the smallest and most powerful voice client on the market, appeared to be a suitable alternative to the existing old devices. As the utilised products previously functioned without any notable difficulties, the greatest problem was to smoothly and quickly integrate the Voxter Elite Edition into the existing and functioning system landscape. The integration was implemented in close cooperation with the customer and our software partner. It was possible to solve initial electrostatic charge problems with a complete, customer-specific hardware revision. Furthermore, special flat-rate prices for repairs were agreed in order to provide ideal after-sales service.

Result
Today, almost 150 Voice Clients are already in use and are able to exhibit a 20% faster picking performance compared to previous models. In the meantime, other products such as the M260 mobile terminal and the MFT920 vehicle terminal are now being used in the picking sector and are also managing to convince as a result of their ideal performance.

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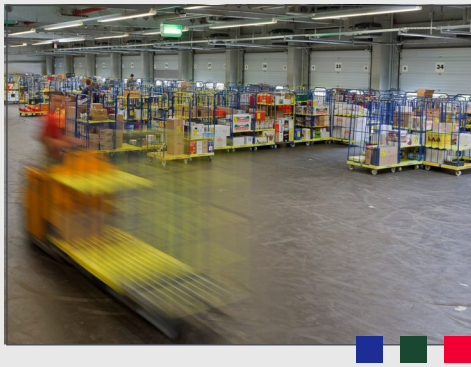
Examples of use

MOBILE DATA COLLECTION

Vehicle Mount Terminals

MFT960: Warehouse picking in tough conditions



Task / problem
The primary focus was the search for a vehicle terminal for picking in extremely tough warehouse environments that runs on Linux and meets the 802.11n WLAN standard. Previously-used terminals from other manufacturers exhibited high failure rates; therefore, the cries for replacement devices became louder and louder.

Procedure
Over a long period of development, the MFT960 standard vehicle terminal with the Linux operating system was developed and extensively tested together with the customer. The development of the radio driver in order to be able to also offer WLAN according with the n-standard in the future was particularly critical and time-intensive. A Java-based client that informs the employee of the storage location, the products to be picked and the subsequently-appropriate picking trolley runs on the MFT960 vehicle terminal with the Linux operating system.

Result
Following completion of development and an extensive test phase, the MFT960 vehicle terminal with the Linux operating system was able to convince in terms of speed and functional efficiency. The on-site accompanying support of the installation was greatly appreciated. The MFT960 vehicle terminals offer a quick and efficient solution in the warehouse and are used for picking applications on forklift trucks, mobile trucks as well as in a stationary manner. Furthermore, the MFTs are also used as fixed printer terminals in combination with the mobile MAX workstation. Today, hundreds of terminals boasting this specification are already being used.

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Examples of use

MOBILE DATA COLLECTION

Mobile Workstation

Mobile workstations in the warehouse

Task / problem
A mobile workstation with extremely special requirements / additional functions was sought for use in the spare part management storage area. Initially, the standard equipment characteristics of our mobile workstation MAX did not correspond with the wishes. For instance, the customer wanted a variety of holders. Furthermore, a laptop on the trolley should display the individual screens.

Procedure
With the mobile workstation MAX, ACD already offers an extremely customer-specific, mobile solution for use in the warehouse. Previous discrepencies with the requirements were ironed out together with the customer and replaced with suitable solution suggestions. For example, special holders such as a cup holder and improvised pen holder were developed and constructed for the customer. Ultimately, it was possible to meet all of the necessary customer requirements.

Result
After an extremly long test phase, the willingness to implement certain adjustments to the customer managed to persuade the customer in favour of the mobile workstation MAX.

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