



Coca-Cola's Article Inventory System

Problems and Background

In the factory of Coca-Cola Beverages Ltd. several sorts of popular soft drinks are produced, such as Coca-Cola Light, Fanta or Sprite. The circulation of these goods is very fast. After being in stock in the warehouse for a short time, they are soon delivered to consumers and are replaced by recently produced items. In the finished goods warehouse, stocks of 250 different products on 40000 pallets occupy 1000-1200 storage spaces.

For the company, accurate and up-to-date information on the inventory is of primary importance, so daily, weekly and monthly inventories are taken of the products. In order to guarantee accuracy, the same stocks are checked several times by different inventory taking 'teams'. The results gained by applying this method, are compared during the process, consequently, the inventory system can guarantee accurate results.



This work used to be carried out at Coca-Cola Hungary Ltd. by using Symbol PDT3100 terminals, but their production and component supply had been finished definitively, and a new device had to be found to replace them. Since the company had been fully satisfied with **Motorola MC70** devices in other fields, the application of these modern, multi-functional PDAs seemed to be a good solution for this purpose as well.

Solution

The new **Article Inventory** solution for the client's MC70 devices was prepared by BCS Hungary Ltd. The new system had to preserve the functionality of the previous system, since Coca Cola Hungary Ltd. had not planned any changes concerning the background structures.



Information on the inventory which is to be checked during inventory taking is provided by the business management system (ERP) for the Article Inventory. Perfect data transfer (interface) between them had to be solved as well. The background database is operated by using Microsoft SQL.

The system consists of two parts:
a PC user interface and a mobile user interface.



The functions of the program running on the desktop are the followings:

- The preparation of inventory taking tasks,
- Master data management
- Data exchange with the business management system,
- Downloading and uploading inventory taking tasks from the data loggers (MC70),
- Evaluation,
- Preparation and printing of reports.

Functions of the program running on the mobile device:

- Daily inventory taking,
- Weekly, monthly inventory taking,
- Up- and downloading data between the PC and the MC70.

In the course of daily inventory taking, based on the list of articles to be taken stock of, the operator compares the quantity of goods stored in the warehouse with the quantity of goods given by the terminal.

In the course of weekly and monthly inventory taking, the operator prepares a so called 'blind inventory', which means that the terminal does not indicate the quantity of goods in stock. In this case, the items in stock have to be counted one by one. Then the differences are checked by the PC software and the necessary correction and new controlling inventory taking are carried out.

In the course of inventory taking, it is possible to modify product data, write a remark or give quality characteristics. During the work, the operator's identity code and the exact date of inventory taking are recorded, so the data of the persons responsible for certain operations is always searchable.

Different quantities can be recorded flexibly. Several measurement and packaging units are available (crate, pallet, piece).

Business benefits

Our new **Article Inventory** solution has been created by using the most modern methods. Tasks are easy to distribute and complete. Due to the multiple controlling functions, possibilities of error are minimal. The operation of the system can be taught very fast to employees, therefore precious worktime can be saved.

The new system completely fulfils Coca Cola's requirements, and, to the greatest satisfaction of the client, works very accurately and reliably, reducing the extent of possible material and moral damages arising from erroneous inventory taking to the minimum.