



Fraud prevention

PUTTING AN END TO INEXPLICABLE SHRINKAGE, CASH REGISTER FRAUD AND LOST INVENTORY

Fraud prevention

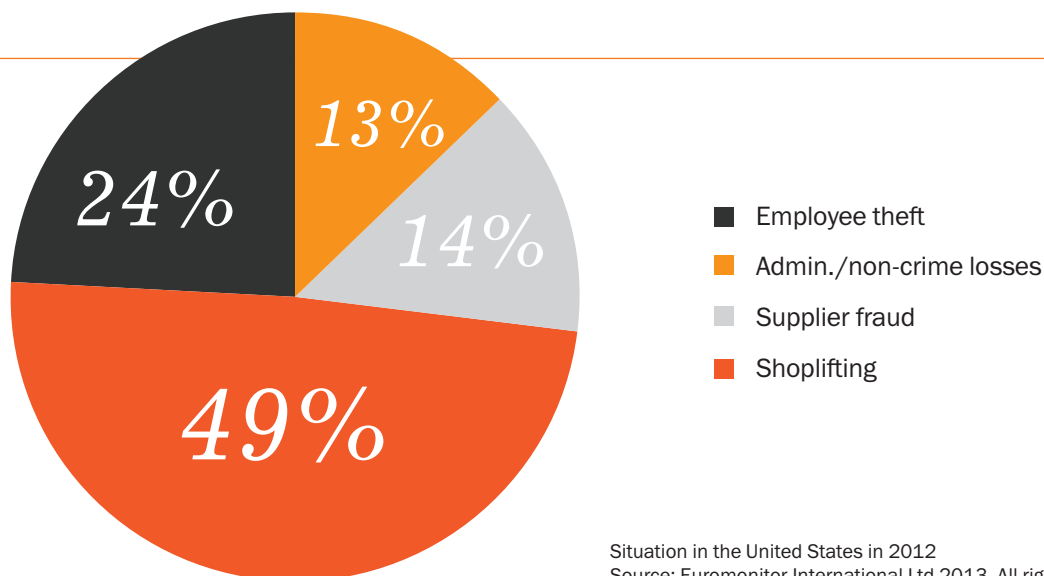
The main topics in this context are:

- > *CASH REGISTER FRAUD*
- > *CUSTOMER FRAUD*
- > *INVENTORY SHRINKAGE*
- > *SPECIAL SITUATION FOR TELCO RETAILERS*

Minimizing losses due to fraud and inventory shrinkage plays an important role in today's retail business.

According to the Global Retail Theft Barometer, shrinkage rates worldwide vary between 1.0% and 1.6% of sales, showing an increasing trend. Losses due to shrinkage are primarily caused by theft of goods or cash, cash register fraud as well as more or less significant process-related errors. Especially in the context of selling high-quality or subsidized goods, fraud prevention becomes more and more important.

Opportunities to commit fraud or theft are seemingly endless, starting with goods acceptance in the warehouse and ranging to the cash desk and on the sales floor. Theft committed by dishonest employees ranks second right after shoplifting. Employees have free access to the goods showcased in sales shelves or kept in storage as well as to the money inside the cash drawer. This offers a wide variety of different fraudulent activities since monitoring and control are limited. In order to successfully tackle this problem, NTS Retail provides a great number of corresponding security measures.



Situation in the United States in 2012
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Cash register fraud



Cash register manipulation

A rather common kind of fraud is manipulation at the cash register. Instead of handling the sales transaction the usual way, the cash drawer is opened by means of a zero-amount transaction in order to return change to the customer. By doing so, the received cash is not registered with the cash register system and goes right in the sales agent's own pocket. Another possibility is the retrospective cancellation of a previously performed sales transaction.

Preventing such scenarios requires proper user authentication, intelligent reporting and analyzing methods as well as a comprehensive permissions, inventory and serial number management system. Only by implementing the necessary measures can such fraudulent activities be put to an end.

User authentication

A fundamental prerequisite for successful fraud prevention is a qualified employee authentication system in all your stores. It must be possible to trace back each transaction at a sales terminal and see who performed it.

The NTS Retail Suite offers a secure login procedure via entering a username and password or using a personal RFID chip. Sales terminals that have not been used for a certain period of time will automatically be locked. It is also possible to make it manda-

tory to re-enter user credentials after each completed transaction. In addition to that, strict guidelines ensure maximum password security. Using the NTS Retail Suite, you can adapt those guidelines individually (e.g., automatically disabling an account after a certain number of failed login attempts, password expiry after a certain amount of days, special characters that have to be part of a password, etc.). The NTS Retail password management system follows international SOX guidelines.

Reports and intelligent analyses

An elaborate reporting and analyzing system is essential to prevent fraud. The NTS Retail Suite enables you to analyze all sales transactions and other data collected at a particular location in real-time and thus identify any suspicious activities or certain trends. By analyzing occurrences of zero-amount transactions or cancellations performed by each employee it is possible to spot and act on any suspicious behavior.

Permissions management system

Cash register manipulations of any kind can be prevented by implementing a proper permissions management system. Not every employee is to have the permission to perform all the available functions. Functionalities such as cancelling a previous sales transaction should not be possible for regular sales agents.

Inventory and serial number management

To identify lost inventory it is necessary to keep track of all goods movements. Additionally, it is recommended to use serial number tracing for rather expensive goods. By enabling this functionality, each goods movement involving the respective article requires the input of its serial number. This allows for seamless traceability of exclusive items.

Excessively high discounts

Higher than usual discounts for old friends or for articles you buy for yourself are always nice, right? Discounts that are way too high and which are simply unauthorized are part of the daily business in many shops. Many people may see this as simple misdemeanor; however, this practice needs to stop.

Discount regulations

Applying restrictions to price reductions can be done easily via the NTS Retail Suite. This ensures that discounts can only be granted in regard to predefined discount reasons and in appropriate amounts. Furthermore, it is also possible to restrict discounts to certain customer and/or user groups. You can even define specific discount budgets for a particular time period.

Discount coupons

By allowing discounts to be granted only when a corresponding coupon code is entered, arbitrary price changes are a thing of the past. The coupon code itself defines the discount amount as well as the condition under which it can be applied.

Discount monitoring

It is possible to analyze all discounts granted by each employee or at a specific location. This allows you to take a closer look at which discount has been granted by whom and how many times.

The money in the cash drawer

As the day goes on, the money inside the cash drawer becomes more and more. Depending on internal regulations, cash transfers become necessary, coinage and smaller bills have to be stocked up in order to give back change, money is being moved to the main cash drawer or your own cash drawer is handed over to the next cashier. Now it is important to not lose track of all those cash movements and install reliable controlling mechanisms.

No matter if it is a cash transfer or a deposit or withdrawal of any kind, a record of every cash flow has to be saved in the system. It must be possible to

calculate the target balances of cash drawers and match them to the actual balances at any time. And although this might not help to prevent fraud itself, it sure helps minimize losses due to administrative errors.

Furthermore, system-based control mechanisms for handing over cash drawers to other cashiers, performing a daily balance of the cash drawer and detailed reports of all cash movements allow you to keep track of all cash flows.

Overview of available fraud prevention functionalities:

- User authentication
- Analyses of zero-amount transactions on employee level
- Highly flexible permissions management system
- Possibility of restricting cancellations
- Inventory management incl. validation of serial numbers
- Analysis of individual transactions
- Identification of certain trends and inconsistencies
- Saving user details and the IP address of the used computer for each completed transaction
- Extensive regulation of discounts and discount amounts
- Restriction of discounts to certain products, customer or user groups, applicable price lists or time periods
- Various reporting and analyzing possibilities
- Prevention of cumulative discounts
- Definition of minimum prices on article level
- Discount restrictions by means of discount budgets
- Cash drawer handover function for cashier changes
- Detailed reports showing all cash flows
- Means of payment statistics
- Cash drawer daily balance functionality
- Prevention of postings using already balanced cash days

Customer fraud



Return or exchange transaction related fraud

There are plenty of different ways for customers to commit fraud when returning or exchanging previously bought articles. The following example provides a classical example: A customer buys a product and comes to your shop to return it on the following day. However, he does not actually bring the very article he bought the day before and instead takes a new one from the shelf. Now he walks up to the cash desk and presents the original receipt to return the article and get a refund.

Other examples of customer fraud include:

- Forging receipts
- Returning discounted items for the full price
- Exchanging defective goods with new ones
- Returning articles that have been bought somewhere else at a lower price

And here is the solution: Using the NTS Retail Suite, return transactions require a system reference to the original transaction. The sales agent calls up the original transaction and gets information on all respective serial numbers involved. Only if the serial number of the product presented by the customer matches the one stored in the system can the return process be finalized.

Forged coupons and vouchers

Another very common type of fraud involves forged vouchers or customers trying to redeem coupons

more than once. The NTS Retail Suite provides a solution for this as well. Only vouchers that have previously been sold can be redeemed (verification of serial numbers across the entire branch structure). A once redeemed voucher needs to be resold in order to be used a second time.

This also prevents dishonest employees from re-using already redeemed vouchers over and over again. Additionally, it is also possible to disallow the repeated use of discount coupons in general.

Overview of available fraud prevention functionalities:

- Return transactions require a reference to system records
- Serial numbers of articles to be returned are validated
- Permissions to perform a return transaction can be restricted (on article level)
- Warranty periods are checked automatically in case of customer claims
- Possibility to return purchased goods is limited to a certain time period
- Verification of vouchers and gift cards via serial numbers
- Validation of gift cards
- Prevention of the repeated use of discount coupons

Inventory shrinkage



Shrinkage is oftentimes only discovered when stocktakes reveal discrepancies between actual and target quantities. In this case, it is usually impossible to identify the reason why or how the respective items got lost. The NTS Retail Suite offers a wide variety of functions that help prevent fraud and identify possible causes for shrinkage and lost inventory.

Seamless goods tracking

As soon as the inventory management functionality has been enabled, all goods movements ranging from the stock addition of an article over any possible relocations to its sale are recorded in the system. Using the serial number tracking feature, the entire life cycle of an article can be reconstructed. Status, current location and sales details, all this information can be accessed at any point.

Digital bill of delivery (DBOD)

DBODs help minimize the potential for errors in terms of a manual input of article numbers or quantities when performing a stock addition. The DBOD provides the person in charge with all the details of the expected articles, removing the need to enter everything manually. This leads to a significant improvement of the entire stock addition process.

Shop-to-shop transfers

Items that are missing in one shop could be easily re-assigned to another shop, right? Wrong! Something like this should not be possible at all, which is why the NTS Retail Suite comes with the necessary control mechanisms. For example, it is possible to define that stock level adjustment postings are only carried out after the respective articles have actually arrived

at the target location and the goods receipt has been confirmed. Furthermore, you can make it mandatory that all transfers require previous confirmation by headquarter employees.

Stocktakes

To uncover any possible shrinkage, it is necessary to perform regular stocktakes. A detailed report on missing items including all relevant serial numbers enables you to identify lost inventory and to adjust the inventory numbers accordingly. However, even stocktakes provide dishonest employees with opportunities to commit fraud. They might, for example, swipe something and mark the respective item as missing during the stocktake process. Here, mandatory stocktake confirmation comes in handy. When enabled, all stocktake results have to be confirmed by headquarters and individual items have to be re-counted in case of excessive discrepancies.

Overview of available fraud prevention functionalities:

- Serial number tracking
- Traceability of all goods movements
- Stock additions via DBOD
- Previous approval of shop-to-shop transfers
- Stocktake confirmation
- Transfer postings are only carried out after confirmation of the goods receipt

Special situation for telco retailers



TELCO SPECIAL

Fraud prevention is even more important for retailers in the telecommunications sector. Looking at the

wide range of tasks and services provided by a telco store employee, one quickly realizes that fraudulent activities can cause substantial damage. Often consisting of various combinations of different items and services, the offered products are highly complex. A sales transaction, for example, may include a mobile phone combined with a certain contract type, tariff or similar options. Depending on the chosen tariff, contract and service options, the price of the purchased device may vary significantly. In addition to that, the sales agent is also responsible for redeeming the customer's bonus points, collecting money to pay for open phone bills and topping up the customer's phone credit.

This opens the door for a whole variety of fraud schemes: Unrightfully marking the open amount on a friend's phone bill as paid, topping up your daughter's phone credit, accumulating bonus points with-

out a sales transaction, linking phones with another price list to get a better deal or even setting up your own private top-up business — there is nothing that has not been done before. However, to prevent cases like these, the NTS Retail Suite offers high security standards as well as a variety of effective counter-measures.

Seamless integration of OSS and BSS systems

One thing becomes rapidly clear: A seamless integration of operations support and business support systems with the POS system is essential to prevent any kind of fraud.

The NTS Retail Suite smoothly integrates into your system environment. Each transaction that requires payment of any kind can only be completed after the payment has been received. If a customer wishes to activate a special service, the respective feature is only unlocked once the payment process has been finalized electronically or using cash. When paying an open phone bill, its status will only be changed after the money has been received. Since the actual cash drawer balance has to match the system records, any form of manipulation can be ruled out.

The same principle applies to top-ups or the activation of gift cards. The NTS Retail Suite offers a platform for integrating internal and external added value services. This allows you to make the activation of the respective services dependent on the actual receipt of the payment. Thus, eVoucher codes, eTopUps and iTunes gift cards are only activated after they have been paid for.

An integration with the order management system ensures that, depending on the chosen tariff or contract options, the correct prices for the purchased products are being charged. The actual activation again only takes place after payment has been received. Furthermore, a connection to the customer loyalty system allows it to automatically earn or use bonus points without the risk of fraud.

NTS Retail

KEY FACTS

NTS Retail creates agile commerce software for telecom operators. We help our clients reinvent their retail environment in order to:

- enable true customer-centricity
- boost sales performance
- minimize operational costs

Leading telco brands worldwide rely on NTS Retail to optimize customer engagement, retail management and stock management. They value our expertise, which was refined over more than 20 years with a track record of 350+ successful retail transformation projects.

