

# GLOBAL

An iceberg floating in the ocean. The tip of the iceberg is visible above the water surface, while the much larger, jagged part of the iceberg is submerged below the surface. The water is a deep blue, and the sky above is a lighter blue with some clouds. The overall image serves as a metaphor for hidden costs or risks.

#1  
GUNNEBO®

SECURITY MAGAZINE

## The hidden costs of cash *and how to avoid them*

**+ RETAIL SECURITY**  
Minimise your exposure to risk

**+ MASS TRANSIT**  
The future of ticket validation

**+ STEP-BY-STEP GUIDE**  
How to choose the right safe for your business

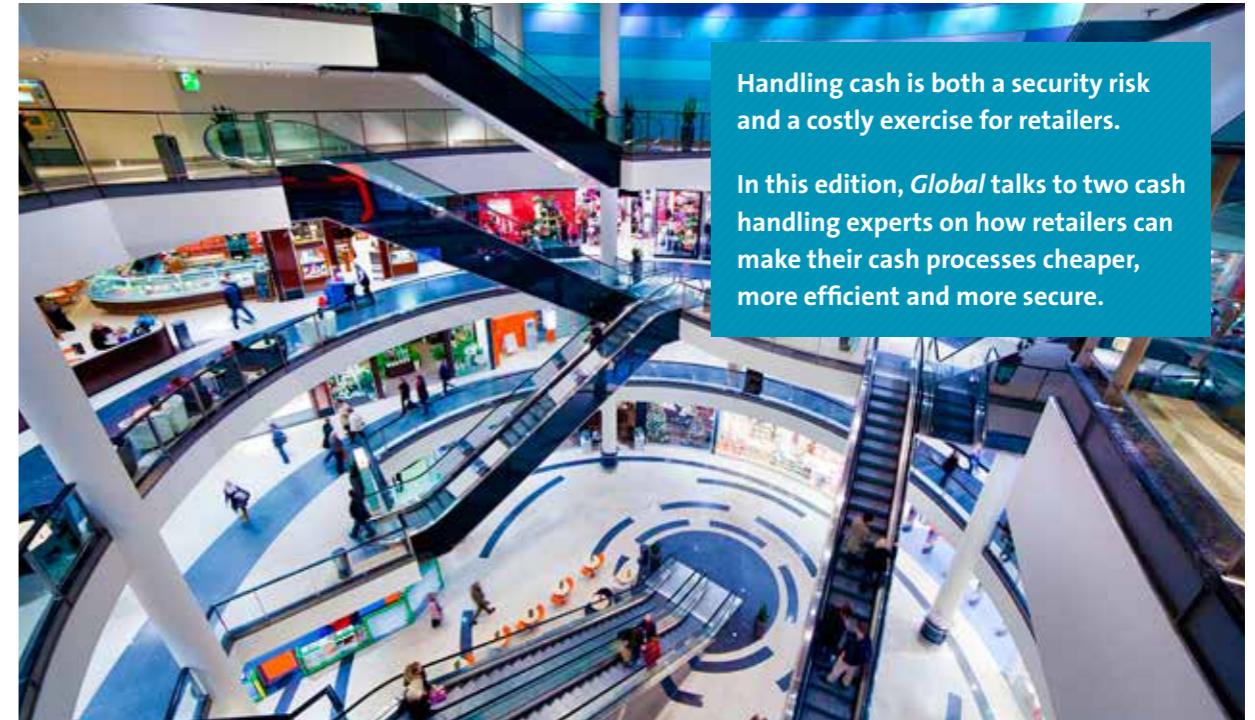
# Take control of your cash

Gunnebo's intelligent cash handling solutions for retail are designed to reduce the time spent on cash management, improve efficiencies in the cash cycle and make the whole cash handling process more secure – giving you back control over the cash in your store.

[www.gunnebo.com](http://www.gunnebo.com)

**GUNNEBO**

## CONTENTS



Handling cash is both a security risk and a costly exercise for retailers.

In this edition, *Global* talks to two cash handling experts on how retailers can make their cash processes cheaper, more efficient and more secure.



**4–7**

The Cost of Cash... and How to Reduce it

“ The first step to removing the cost of cash is to understand it

**8–11**

Retail Security: Five Reasons to Think Again

“ Many businesses are reluctant to recognise they have a problem with shrinkage

## MEET THE EXPERTS



**BOB TURNER**

40 years of experience in the security and cash handling industry.



**FRANS DE WIT**

Global cash handling product manager and cash handling strategist.



**PIETER DE VLAAM**

Chair of several committees responsible for setting industry standards for safes.

**12–15**

7 Steps to Choosing the Right Safe for Your Business

HELP GUIDE



**16**

Self-Service Security Tech for Airports  
*The move towards seamless security checks*



**17**

The Future of Ticket Validation  
*Is NFC the answer for mass transit?*



# The cost of cash... *and how to reduce it*

Nobody likes to admit that disloyal staff are pilfering money from the company, that counterfeit bills are slipping into the till, or that they are vulnerable to robbery.

*Global* speaks to Bob Turner, a security expert from Sydney, Australia, about how to maximise the potential for cash handling technology to take costs out of your business.

 David Crouch



## IN SUMMARY

### The costs inherent with handling cash

- Cost of transit
- Cost of mistrust
- Cost of staff
- Cost of counting
- Cost of errors

### Cost of transit

Getting cash out of your customer's pocket, into your register, and safely to the bank comes at a price.

"There are significant costs along the way, and many retailers don't see that," says Bob Turner. "It differs from business to business, but cash is not for free."

Take a recent example: a chain of petrol service stations in Australia. Each needed several collections by a cash-in-transit (CIT) service every week because errors by cashiers could only be spotted after the final count at the bank, and delaying collections made it even harder to reconcile the takings with the value of sales.

With each collection costing around A\$100, getting cash to the bank was costing a small fortune.

"By employing technology that could count the cash and immediately reconcile it on the day meant they could extend the collection period to once a week, taking a phenomenal cost out of the business," Bob says.

So the machines paid for themselves in six months. "Their life expectancy is five to seven years, maybe even longer – so that's a lot of pure gain."

### Cost of mistrust

A fundamental feature of cash is lack of trust, Bob says. Retailers don't trust their staff, who don't trust the customers, while the CIT company doesn't trust the retailer, and nobody trusts the bank – a feeling that is often mutual.

"If you sit down with everyone involved in cash you would find everyone has an absence of trust in others involved in the process. So businesses create costly, labour intensive systems and processes for checking cash as it passes through the company."

Faced by a new machine, it is common to mistrust that as well. But cash handling technology can strip away costly and cumbersome processes, and restore trust.

"Smart businesses can also use the technology to build the confidence of their staff," Bob says. "The machines give you accuracy, removing a source of mistrust in a system that is ridden with suspicion, boosting staff morale."

## Cost of staff

It is an obvious point, but if you currently employ someone to count your cash in the store, automating the process removes that cost.

One retail franchisee in Australia, for example, employed two full-time accountants for his 70 outlets and was on the verge of employing a third, which would have required moving to new premises to accommodate the expansion.

By installing cash-handling machines he was able to move the second accountant to part time, while saving on his overheads by staying in the existing office.

Bob gives another example from Singapore, where there is very little theft – one of the main reasons companies invest in cash-handling technology. But the machines are still popular because many businesses rely on unskilled and illiterate labour for customer service tasks. This in turn places a high burden on managers to provide the cash management functions.

“In one cinema, cash-handling technology saved managers four or five hours a day simply by automating the depositing and dispensing of cash, bringing significant advantages.”

## Cost of counting

Banks can be suspicious of cash handling technology. In one case, Bob agreed to check the machines with the client by counting millions of dollars both manually and automatically. Together they established an accuracy rate for the machines of 99.9999969% – that’s an error of 1 cent in every \$3 million. And the technology has improved since then!

There are systems now that can automate all the functions of the cash office, preparation of floats, provision and delivery of change, to counting back at the end of the business day.

Staff just use a PIN or a fingerprint, and the machine will dispense a pre-defined starting float – when they need more change they deposit the big notes and the machine dispenses coins. At the close of business they simply empty their draw into the machine to be counted and sorted at up to 15 notes per second – just a tiny bit faster than doing it manually.

“The machine should be seen as second pair of eyes, it is replicating the functions of a manager, supervisor or senior cashier,” says Bob.

## Cost of error

When you employ low- or semi-skilled workers, you can run into problems. “It is remarkable how easily \$338.30 becomes \$383.80 or even \$33.83 when data enters your accounting system,” comments Bob. Let’s say you’re a fast-food chain, with employees depositing cash into a safe in envelopes at the end of each day. You have a manager who spends 90 minutes every day reconciling the cash and sales, then taking it down to the nearest bank, which then processes it and informs head office.

At least three parties have entered data somewhere in the system. Every day there is an error. And every error has a cost because it has to be reconciled.

“Sometimes a business can spend days trying to reconcile a simple data entry error,” says Bob. “How much time does it take to reconcile a missing \$10? You can spend \$200 chasing those \$10.”

With an automated cash handling system, notes and coins are counted and validated, the safe itself communicates to the bank, and the bank can place that value on your business account then and there – even though the cash remains on your premises. That level of automation requires a lot of engagement from the bank, Bob points out.



BOB TURNER

Bob Turner has worked in the security industry for nearly 40 years. He was Director and Owner of one of Australia’s largest privately owned security companies, API Security, and since 2010 he has been a driving force behind the expansion of Gunnebo’s Cash Handling solutions in Asia-Pacific.

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Each company has its own specific requirements depending on the relationships it has with the various people that handle the cash as it passes through the business. But each of those relationships incurs a cost, which a machine has the potential to eliminate.

“With different accounting packages, different methodologies and internal processes for handling cash, each business needs a tailored solution,” says Bob.

“But the first step to removing the cost of cash is to understand it – then what might look like a big investment in automation suddenly seems like a very good idea.”

## IN SUMMARY

## Why automated cash handling?

- Cash is continuing to grow worldwide
- Shrinkage is a global phenomenon
- Large gains to be made in operational efficiency
- Being a safe place to work makes recruitment easier
- Modern security systems operate in an open environment
- Technology integrates with POS and back-office

# Retail Security:

## *5 reasons to think again*

Retailers could be exposing themselves to unnecessary risk if they overlook the security and efficiency benefits of cash handling machines. Nobody likes to admit that disloyal staff are pilfering money from the company, that counterfeit bills are slipping into the till, or that they are vulnerable to robbery.

 David Crouch

Retailers, the hospitality and entertainment industries, and any business making cash sales can save money and improve relations with staff and customers thanks to the latest cash handling machines. This technology replaces the till by accepting notes and coins, verifying and counting them, and storing them securely.

Below retail security expert, Frans de Wit, tells *Global* about common objections to the new technology – and how it can help you.

An unexpected knock-on effect of the company's move to mechanise its cash handling was that a rival chain started to complain, because the robbers were targeting it instead!

### 1 *“The store down the street was robbed last month, but...”*

Companies often seek advice on cash handling because they want to improve efficiency, Frans says. “But when we go in and talk to employees, it turns out that they are high on the local hit list to be robbed – everyone around is being targeted. Security is a big issue.”

Sometimes the danger is more obvious. Recently a retail was being robbed once or twice a month. The company was getting bad press and the union was up in arms because of the threat to staff.

“After they put in cash handling machines they had two or three more robbery attempts that failed, and then it completely stopped. In their job adverts they can now say they offer a safe place to work with a secure environment. The entire business case was made around security – also shrinkage has gone and efficiency is up.”

### 2 *“My employees are loyal, surely they would never ...”*

Shrinkage is not just a problem for your rivals. Globally, for example, recent surveys show that retailers lose \$128.5 billion (€115 billion) in cash a year, with almost one-third due to internal theft and a further 20% due to errors<sup>3</sup>. When you are hiring students or other transient and inexperienced workers, shrinkage can become a headache, Frans says.

“I have seen supermarkets, for example, where managers spend two hours a day simply checking tills and security cameras because money is missing. In other environments you have managers who check the managers who check other managers because they are being robbed by employees every minute.”

Many businesses are reluctant to recognise they have a problem with shrinkage.

“They feel ashamed – until we show the figures that demonstrate it is a global phenomenon,” Frans says. “But there are also managers who simply shrug their shoulders and think nothing can be done.”

When, however, the customer simply feeds their money into a machine and gets their change back automatically, staff are never in contact with the cash, preventing handling errors – and removing the temptation to help themselves.

<sup>3</sup>Source: Global Retail Theft Barometer 2013-14

### 3 “Cash is so 20th century”

Despite all the hype about the advent of a ‘cashless society’, cash volumes have never been bigger, Frans says. “Payment by mobile phone will dent it a little, but mainly it will take away from normal bank card payments.”

The figures suggest that cash is set to continue growing in the Americas, Europe, Asia, Africa and the Middle East – only in the Nordics is this not the case. The number of retailers worldwide is on the increase and the total volume of purchase transactions – of which cash accounts for the majority – is rising.

So cash is going to be a reality for businesses for the foreseeable future.

“Faced with intensive global competition, retailers are increasingly likely to need cash handling solutions that offer better security, lower costs and improved productivity,” Frans says.

### 4 “I use heavy glass to protect my staff and tills”

Some retailers, and of course old-fashioned banks, favour erecting a barrier between staff and customers. But cash handling machines mean businesses can create an open retail environment again and transform their interaction with customers.

“Compared to five years ago, you now see a much more open environment in banks, with most of the cash in a self-service area with a machine that dispenses cash and takes deposits,” says Frans.

“You can apply the same philosophy in retail, where you can take down the physical protection and get out on the floor with the customers.”

Minimising the threat of in-store robbery like this also makes employees feel safer and takes the tension out of the retail environment. Managers taking cash to a bank are no longer walking targets, as deposits are now picked up by a specialist cash-in-transit service.

External theft doesn’t just come in the form of an armed robbery. “Customers paying with counterfeit bills can be almost as costly to a business over time as a one-time hold up,” according to Frans.

Cash deposit machines at the checkout help prevent this problem by automatically rejecting fraudulent bills, while the cashier can avoid confrontation by simply blaming the machine and asking for another form of payment.

### 5 “Technology is just a quick fix, my business is complex”

Certainly it’s no good just looking at the technical specifications of different machines, says Frans. A balance needs to be struck between security and expense, while the technology needs to be integrated into point-of-sale and back-office systems.

An advisor therefore needs to sit down with the customer to understand the entire journey that cash makes through their business – what their day looks like, where they store the cash, how they get it to staff, how they delegate, whether tills are shared or separate, how they reconcile the cash register with the actual amounts remaining.

“We go into the store, sit with them, look at the real issues. Sometimes head office doesn’t have an accurate view of what’s happening on the shop floor.”

The technology is flexible to suit individual businesses, with a large portfolio of solutions ranging from entry-level to complete closed cash handling systems. And the benefits are very likely to outweigh any teething problems.

“Efficiency improves, shrinkage plummets, robbery attempts are thwarted, data on the cash cycle is more readily available and counterfeit currency is rejected on the spot,” summarises Frans.



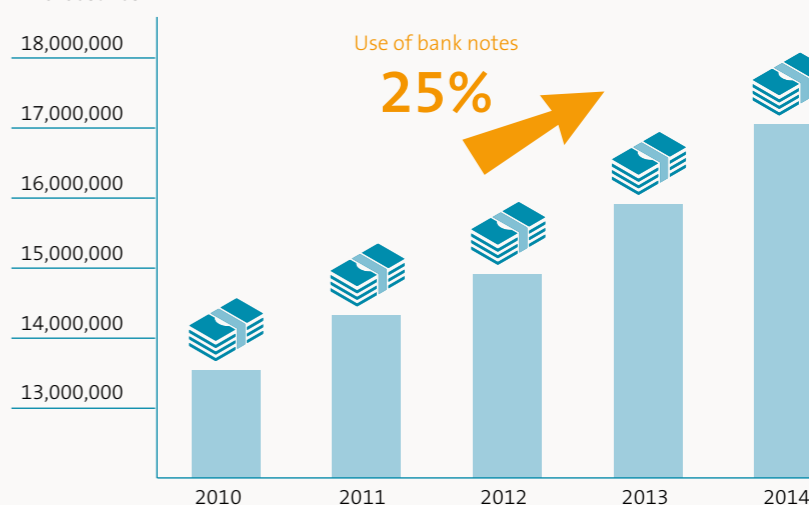
FRANS DE WIT

Frans de Wit works as a Global Product Manager and Cash Handling Strategist at Gunnebo. Frans has been active in the security industry since the mid-90s and has considerable experience addressing the security issues businesses have with both cash handling and the storage of valuables.

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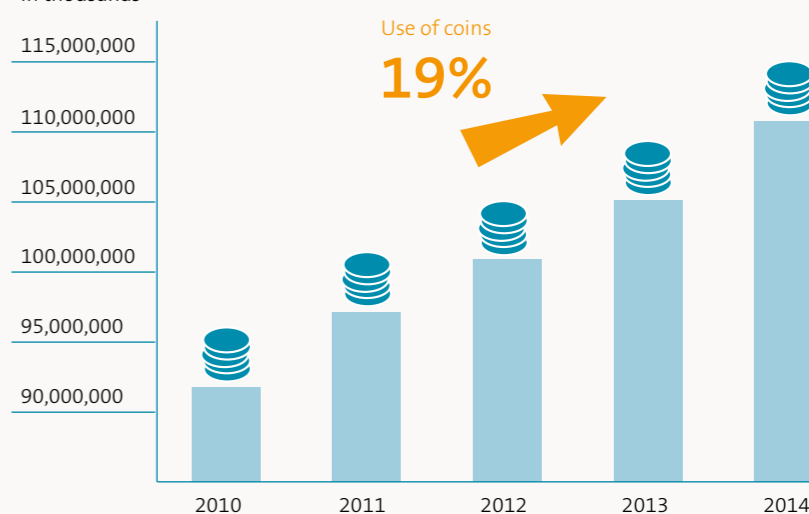
#### Notes

Euro banknotes quantity in thousands



#### Coins

Euro coins quantity in thousands



Figures show the number of euro banknotes and coins in circulation at the end of each year.

SOURCE: European Central Bank, Euro Banknotes and Coins Statistics, March 2015.

# 7 steps

## to choosing the right safe for your business



**7** Choose which grade of safe suits your needs

**6** Check the product is ECB certified

**5** Talk to a professional

**4** Know your enemy

**3** Buy yourself time

**2** Observe the 'trinity of security'

**1** Don't help the thief

*Worried your company may be vulnerable to theft? Here are some essential tips to ensure you make your money work harder to provide the best possible security while avoiding common mistakes.*

It feels like a calculated risk, but the consequences could wipe out your business. A well-timed break-in that scoops your last month's income might jeopardise the company's future. Perhaps your product is small and easily portable – lose it and the business is dead.

So perhaps it's time to buy a safe, or upgrade your existing one. To guide you through the process, *Global* speaks to Pieter de Vlaam, a security specialist from the Netherlands and one of Europe's foremost experts on testing safes.

 David Crouch

### 1 Don't help the thief

It is tempting to feel that any level of protection is better than none, and to take the easy option of buying whatever is most available. But impulse buys can make things worse, Pieter de Vlaam says. "It is perfectly legal to sell a safe that has not been tested or certified. So buying a product like that only helps the burglar – they don't even have to search for your valuables, because you have conveniently put them all in one place!" And a small safe unattached to the wall or floor means the burglar can simply take it home to open at his leisure.

### 2 Observe the 'trinity of security'

How easy is it for a criminal to find out you have something worth stealing? Can people walk into your premises and find them empty? Without the basic discipline of keeping valuables hidden, installing secure locks and ensuring staff are vigilant, the security value of a safe approaches that of a chocolate teapot. "Discipline is the cheapest investment, and organising your property in this way is the first essential step in the 'trinity of security' – organise, monitor, protect," Pieter says. It costs relatively little to remedy the situation, and doing so will make a lot of difference. Only when you have taken these measures and you think they aren't enough should you decide to buy a safe.

### 3 Buy yourself time

Given a diamond grinder or sufficient explosives, a skilled and determined burglar can break into any safe eventually. The better the safe, the longer it will take to break into it.

You need to make sure your property is monitored with a good quality alarm system, or security guards, so an attack will be quickly detected and police or private security personnel alerted swiftly. This is the second step in the 'trinity of security' – organise, monitor, protect.

"What safes sell is time, because the time for a burglar to attack a safe is usually limited," says Pieter de Vlaam. "People think a safe can provide protection for days, but often we are talking about minutes. A safe needs to go hand in hand with an alarm system, or some other detection system, such as neighbours or security guards."

If your premises are empty at the weekends, for example, a criminal has two days to figure out how to crack your safe. So it is pointless to buy a good product if nobody reacts for 48 hours.

If you have something to protect in an industrial area that is not monitored over the weekend, and the value is substantial, then you have to work out how quickly you can detect that someone with the wrong intentions is attacking the safe and how long it will take for the police or security to get there.

## 4 Know your enemy

You need to profile the possible intruder: are you likely to be up against a professional who has been tipped off about your valuables, or just an opportunist thief looking for some quick cash?

Professional burglars will have tested different types of safe to find the optimum method of cracking them, so they won't waste time by using the wrong tools or attacking the wrong spot, Pieter says. This is particularly the case with ATMs, which are an attractive target being close to roads and full of cash.

"The time it takes for specialists to crack a safe in a laboratory is often not too much shorter than the time a professional burglar will need in the field. But at the other end of the scale, an amateur will take five to ten times longer."

The bigger the prize, the greater the risks a burglar will take to get it, which might include using bulky, dangerous or noisy technology. An oxyacetylene torch gives off smoke and is easily seen, but criminals are prepared to take the risk of trying to cut their way into your safe if a substantial sum is involved – they might even bring their safe-cracking technology in a truck.

## 5 Talk to a professional

Your property is monitored, you have taken steps to minimize its attractiveness to a burglar, and you have a pretty good idea of who you are protecting yourself against. Now you are ready to look at which safe to buy – the 'protection' stage in the trinity of security.

"A good salesperson won't just ask how much you have to spend. A good salesperson will ask what is your perceived risk and what is the threat in terms of perpetrator profile, and the reaction time. That gives you a methodical approach to buying the right product," Pieter de Vlaam says.

The dilemma of the security manager is that you can never get it right: if you spend a substantial sum on a safe that is very secure, but then there is no burglary, it looks like you have wasted the company's money; take a cheaper option and the safe suffers a successful attack, and you have miscalculated. A methodical assessment of the risks, plus professional advice, will maximise the chances that you make the right decision.

### WEB TIPS

The ECB•S website is a useful tool for helping you buy the right type of safe. Here you can also find a concise guide on the insurance ratings for different countries.

READ MORE AT [www.ecb-s.com](http://www.ecb-s.com)

## 6 Check the product is ECB certified

This is straightforward, but very important. The European Certification Body, or ECB•S, is jointly supported by insurers and manufacturers of safes to provide independent, expert laboratory testing and auditing of manufacturing processes for security products (the 'S' is for 'security').

Look out for this logo on the product. If it's there, that means it measures up to the agreed industry standards in Europe. Buyer beware! Other certificates can be meaningless.

"Unfortunately there is a problem with fraud in safe manufacture and certification – there are good certificates and bad certificates," says Pieter, who chairs several committees within CEN TC 263, the European body that sets standards for the industry. No matter how well a safe may perform in the laboratory, the manufacturing process itself needs to be audited to ensure quality is maintained.

Testing of safes is unique in that you can't get a machine to do it, he says. "We tried to build a machine that could cut by various methods, but found out that it cannot reproduce the behaviour of a burglar equipped with a variety of tools to get into a safe or vault. You need real people with intelligence to attack the product."

Accredited laboratories take their job very seriously, train their people, and cooperate between themselves, making surprise visits to factories to check materials and manufacturing processes. Some 120 companies worldwide, including Gunnebo, use the ECB•S as an independent benchmark.

## 7 Choose which grade of safe suits your needs

Safes are graded into eight levels of security from 0 to VII – the zero does not mean 'no security', just that it was added after the other seven levels were decided upon. The 'resistance grade' of the safe is printed on the certification label.

According to which country you live in, insurers will promise to insure the contents of the safe for different amounts according to the grade – and according to whether your home has a quality burglar alarm. So you can match the safe to the value of the contents you wish to keep in it, and the preventive measure you have already taken to secure your property.

You can find a concise guide to the amounts insured in different countries on the ECB•S website.

## And that's not all...

Choosing a safe involves a lot of different considerations, Pieter de Vlaam says. "But if you have followed the seven steps above, your choice will be based on a thorough understanding of how to make your money work to give you the best possible protection."



PIETER DE VLAAM

Pieter de Vlaam has been part of the security industry for over 30 years. During this time he has worked in engineering, product development, plant management, product management and product testing & certification.

Today Pieter manages Gunnebo's online training centre whilst lecturing on security management and working actively with the drafting of international standards for the certification of burglary and fire resistant products.

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## A CAUTIONARY TALE

Mistakes can be costly, as a medium sized European retail chain recently discovered. The business had a single model of handling their security, assuming they could copy the same system throughout the chain. Fatally, they had no alarm systems, and kept spare keys in the top of each safe.

Moreover, they overlooked the fact that they sold grinder machines in

their outlets, including ones with diamond discs. Burglars simply took the grinders and used them to open the safes – with no alarm system, they had most of the weekend to crack them after trading finished on Saturday evening.

The first safe they cracked in an elaborate way, but once they had opened the first few they realised that by just

making a small hole in the top they could fish out the key and open the safe easily.

So, when you make your threat analysis, take into account the availability of the tools to attack in the event of an attack. And without an alarm system the trinity of security is broken – you could spend 30 times more on the safe but it would still be smashed.



## MASS TRANSIT

## The Future of Ticket Validation

*How revenue is handled and collected is pivotal to the success or failure of a mass transit system. So what are the options available to transport providers who want to improve ticket validation?*

### Contactless Cards

Electronic fare payment, which makes use of contactless cards, is perhaps the most common type of fare payment system seen in the market today.

Electronic fare payment has the benefit of making transactions much quicker, as the time it takes to get people inside the system is cut significantly. As a result, passengers can get moving more quickly.

“How customers are handled and guided within the station is key to success. Reliable ticketing systems and mass transit gates enhance the passenger experience by reducing queuing and providing instant information

for better assistance. Combined with the speed of payment, this makes the customer journey smoother and simpler – and builds confidence in the system,” states Mathieu Michel, Business Development Manager for Mass Transit at global security provider, Gunnebo.

Using technology to facilitate payment has a positive impact on the passenger experience within mass transit, but it’s worth pointing out that passengers can use the same payment system for different services.

In fact, some operators around the world already allow passengers to use their travel card for

other functions, such as entry ID to an office block, accessing a university campus or loaning books from a library. Technology can be multifunctional and the growth of electronic payment and access systems has made this the go-to approach for many companies.

Not only does it make life much simpler for passengers, as they have fewer cards to carry, it helps transport operators build up close partnerships with other businesses and helps them all operate in more integrated and efficient way.

### Near Field Communication

“We think Near Field Communication (NFC) technology could be the next big thing,” explains Mathieu. “Since consumers are using their smartphones for just about everything these days, it’s not too much of a stretch to

believe they will be a big part of the future of ticket validation.”

Estimates from the International Data Corporation suggest that the global number of smartphone shipments will go up by 12.2% this year to 1.4 billion.

With the sheer scale of the popularity and penetration of these devices, it makes perfect sense for mass transit operators to place them at the heart of their ticket validation processes.

### FARE COLLECTION – OPEN VS. CLOSED

#### Open system

Customers pay for tickets themselves, maybe with a smart card, a magnetic strip, a token system or cash. This depends on trusting the passengers to pay before they enter the system.

#### Closed system

Makes sure people validate their entry fee. Preferred as it significantly drives down fraud rates. Typically carried out using contactless cards.

### WHAT IS NFC?

Near field communication (NFC) enables smartphones and other devices to communicate by touching them together or by bringing them close to one another (anywhere up to 10cm in proximity). This opens up the possibility of using NFC enabled smartphones for access control or as a payment reader.

SOURCE: Wikipedia



## AIRPORT SECURITY

# Self-Service Tech to Make Seamless Security Checks a Reality

*With the growing shift towards self-service technology in airports, can we all remain confident that security requirements are being met?*

Numerous measures are being put in place that will change the way we travel. For instance, a document check doesn't currently have to be carried out on anyone who is flying out of the UK, but this will change very soon, with people eventually being required to undergo a document and biometric check before progressing to the departure hall.

Within the aviation industry, there are three biometric types that are mandatory in 188 countries around the world – facial, finger and iris recognition.

At many airports today, a boarding gate will read the barcode on a boarding pass, but staff are required to ask for identification.

Many passports only have the facial element, but as alternative biometric methods are added, the security process will appear more 'seamless'.

In the future, a self-service boarding gate will request that the passport is shown and take a picture, running a rapid one-to-one check to match the person at the gate to the document.

## CONTACTS AND INFO

## THE GUNNEBO SECURITY GROUP

Gunnebo is a global leader in security products, services and solutions with an offering covering cash handling, safes and vaults, entrance security and electronic security for banks, retail, CIT, mass transit, public & commercial buildings and industrial & high-risk sites.

We make your world safer.

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