

GLOBAL

#2
GUNNEBO®

SECURITY MAGAZINE

Feature:
Fire Safes

HEAT PROTECTION

Are Your Safes Up to the Job?

+ RETAIL SECURITY

Three ways to
unshackle your sales

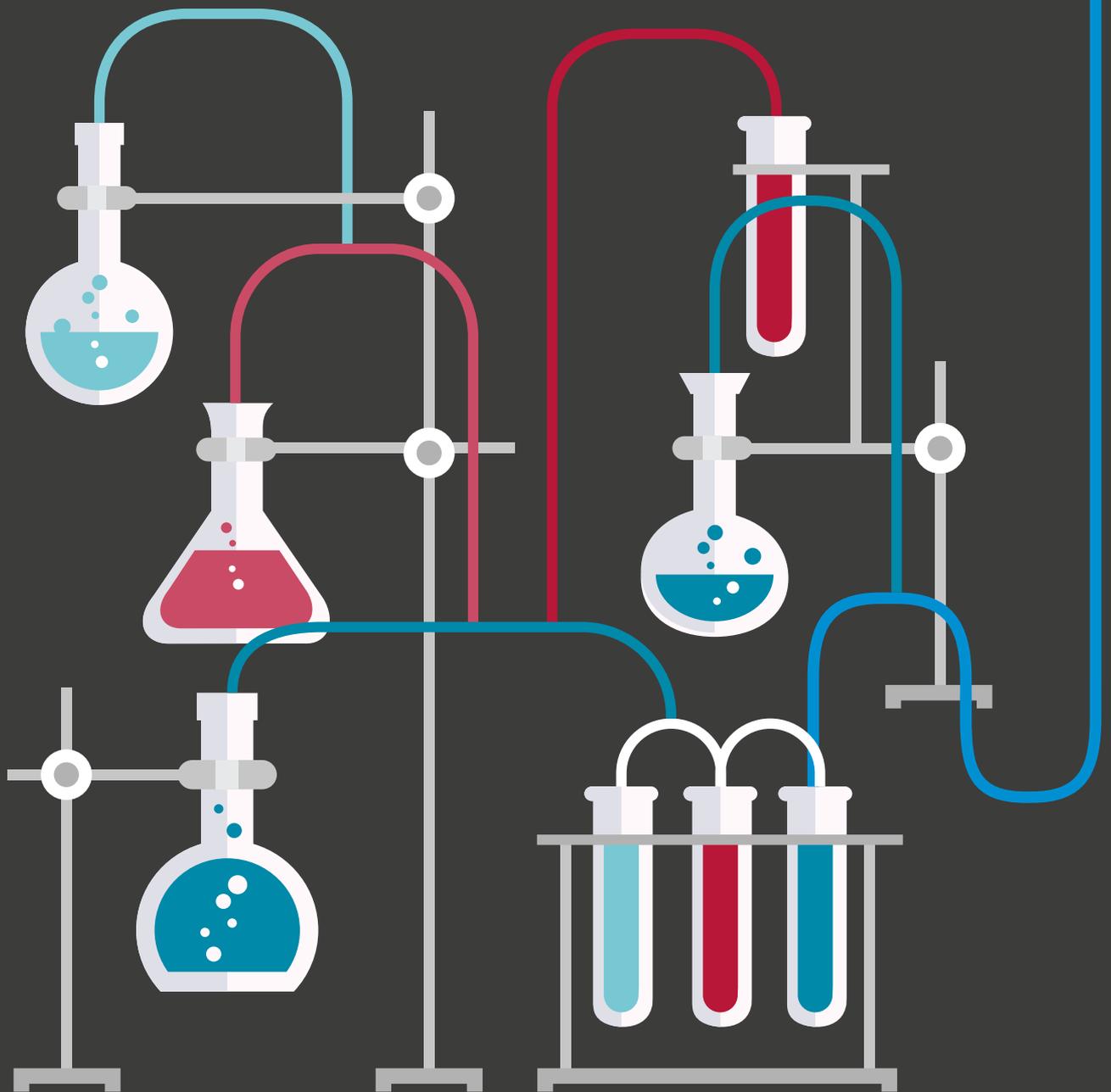
+ AIRPORT SECURITY

Are self-service gates
a help or a hindrance?

+ HELP GUIDE

How to know when it's
time to update your safe

CENTURIES OF SECURITY EXPERTISE ...



CONTENTS



If you think of security as an onion with layers of protection starting at the outer perimeter of a building and working inwards, then a safe sits at the very heart.

In this edition, *Global* talks to two safe specialists about two important aspects of secure storage – fire protection and the life expectancy of a safe.

4–9 Are all safes fireproof?

How to tell if your safe is giving your business the fire protection it needs



10–13 How to know when it's time to update your safe

Five essential questions you want answered



14–15

Cash constraints:
Three ways to unshackle
your sales



16–18

Accelerating the passenger process
in airports
*Are self-service, automated gates
a help or a hindrance?*



MEET THE EXPERTS



MARK BROOKES

Chairman of the CEN Technical Committee responsible for the maintenance of European standards for safes.



ANDY RYMILL

Nearly 20 years of experience in the security and safes industry.



JORGE RAMÍ

A product development specialist currently focusing on cash handling solutions for retailers.



MARK GEERING

Entrance security expert specialising in solutions for the airport and mass transit sectors.

Are all safes *fireproof*?

When people think about safes, they mostly think about burglary protection. But there are many things you can lose in a fire that can cost time and money – and even your business.

Global fired some questions on the subject at Mark Brookes, a fireproof safes specialist with nigh on 30 years of experience in the industry.

 David Crouch

GLOBAL: Aren't all safes protected against fire, like they are for theft?

MARK BROOKES: I'm afraid not. A burglary safe will give you some protection because the materials inside the walls act as insulators, but only for a short time and at relatively low temperatures. You can have huge differences in fire protection between safes that share the same certified level of burglary protection.

In terms of protection, it's the same for any fire suppression system you may have in the building. If there is a fire in an IT room, for example, gas or chemical suppression systems can throw up a lot of debris because they are pressurised, which can destroy data, while sprinkler systems leave you with a soggy mess.

Even though insurance companies will impose criteria for how you secure your valuables, in most countries they are much less likely to pay attention to fire protection than to theft.

GLOBAL: Still, it sounds rather last century – who needs fire protection when everything is in the Cloud?

MB: We were talking about the paperless office in the late 1980s – and we're still talking about it now!

Yes, there is the Cloud, and a lot more people are using it. But often the original information needs to be stored in a data cabinet – it's belt and braces to

make sure your business is back on the road again with minimal disruption if there's a fire. And as digital media storage has got denser, with more and more data stored on smaller and smaller items, the vulnerability of businesses has just increased.

There are basically three levels of maximum internal temperature for fireproof safes: paper, where the temperature must remain below 170°C; flash memory or USB sticks (65°C); and sensitive computers (50°C). If you're only protected for documents, a fire will destroy the CDs or memory sticks inside your safe.



“ Security is like an onion, with fire protection right at the centre.



“ You can have huge differences in fire protection between safes that share the same certified level of burglary protection.

IN SUMMARY

Without the proper fire protection, your business could be in serious danger. Here are some points you should bear mind:

- A burglary safe will give you some protection but only for a short time and at relatively low temperatures.
- Even though a lot of data is now stored in the Cloud, the paperless office is not yet a reality.
- Many businesses never entirely recover from a serious fire, losing orders, contracts and employee records.
- A fire safe is a silent insurance policy. It has no shelf life, it doesn't deteriorate, it just does its job quietly.
- A fire safe – for documents or digital media – should be correctly certified to ensure you are actually protected.

GLOBAL: Isn't it a bit over the top – you might lose money in a fire, but it's not exactly business critical, is it?

MB: If you haven't got the information to re-populate your IT system after a fire, you haven't got original contracts, invoices, stock records or machinery programmes, so how are you going to trade?

For this reason many businesses never entirely recover from a serious fire, losing orders, contracts and employee records. They may even go out of business altogether.

There is a great deal of small print in insurance policies, and while you're sorting it out it's happy days for your competitors. We don't live in a world where people volunteer that they owe you money – so your cash flow dries up.

In all insurance claims the burden of proof is on the claimant – you have to be able to prove that you actually had the items which were lost in the first place. What if all the deeds to your property are lost in a fire? It is then very difficult to prove you own your own building.

GLOBAL: Do any examples spring to mind?

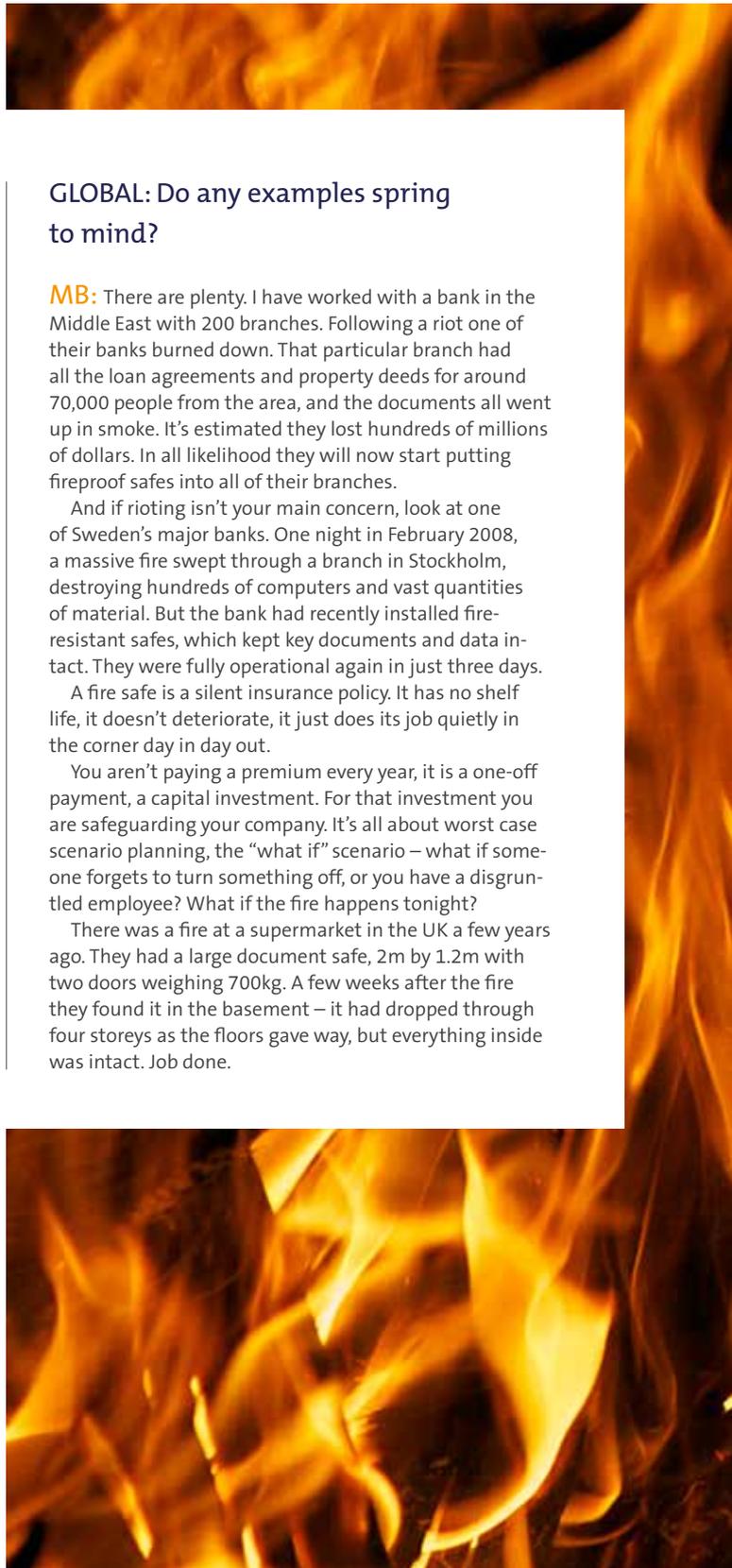
MB: There are plenty. I have worked with a bank in the Middle East with 200 branches. Following a riot one of their banks burned down. That particular branch had all the loan agreements and property deeds for around 70,000 people from the area, and the documents all went up in smoke. It's estimated they lost hundreds of millions of dollars. In all likelihood they will now start putting fireproof safes into all of their branches.

And if rioting isn't your main concern, look at one of Sweden's major banks. One night in February 2008, a massive fire swept through a branch in Stockholm, destroying hundreds of computers and vast quantities of material. But the bank had recently installed fire-resistant safes, which kept key documents and data intact. They were fully operational again in just three days.

A fire safe is a silent insurance policy. It has no shelf life, it doesn't deteriorate, it just does its job quietly in the corner day in day out.

You aren't paying a premium every year, it is a one-off payment, a capital investment. For that investment you are safeguarding your company. It's all about worst case scenario planning, the "what if" scenario – what if someone forgets to turn something off, or you have a disgruntled employee? What if the fire happens tonight?

There was a fire at a supermarket in the UK a few years ago. They had a large document safe, 2m by 1.2m with two doors weighing 700kg. A few weeks after the fire they found it in the basement – it had dropped through four storeys as the floors gave way, but everything inside was intact. Job done.



Heat toleration levels

The following temperatures indicate the point at which digital media and documents are lost to fire. It is a fire safe's job to ensure its internal temperature remains below these destructive levels.

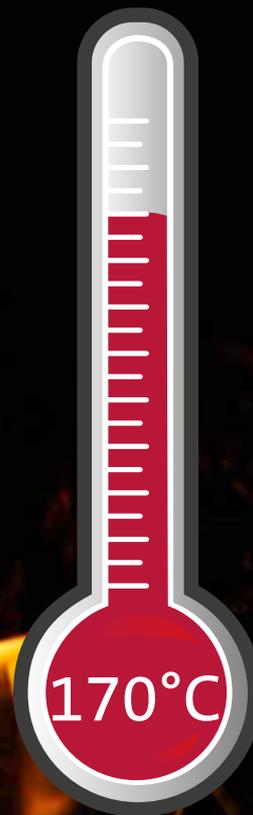
Sensitive computers



Flash memory or USB sticks



Paper



GLOBAL: So how do these things work? Lots of asbestos, right?

MB: No. We're talking about foamed, aerated, gypsum-based concrete containing anything up to 80% water.

GLOBAL: Foamy concrete – how can that protect from fire?

MB: It's concrete, but with water locked inside it. When it heats up, the water is slowly driven out of the concrete as steam, absorbing the heat – it's called an endothermic reaction – which keeps the temperature down.

But remember contained steam creates pressure, we've all heard of boilers exploding. The best fire safes are specifically designed to release this build up in a controlled way to avoid such explosions.

And that's just for documents – data safes are different. Here you have a composite barrier with an outer layer of foam concrete keeping the temperature down to 100°C, plus a layer of insulation such as a special polyurethane foam, and a layer of “phase change” material on the inside – a solid that becomes a liquid when it gets warm, so again the endothermic reaction keeps the

temperature down to acceptable levels.

GLOBAL: So to test a fire safe, you have to expose it to fire?

MB: It's a little more scientific than that, but there is nothing to stop a manufacturer saying the safe is fire tested, when actually all they have done is run a blow-torch over it. So look out for certification – the two most stringent and globally recognised are the European standard EN 1047-1 and the American UL Standard 72.

In an office fire, temperatures build up predictably and get up as high as 1,000°C. So we put products through a furnace heating process using the ISO Standard 834 cellulosic time/temperature curve to replicate this (*see graph below*).

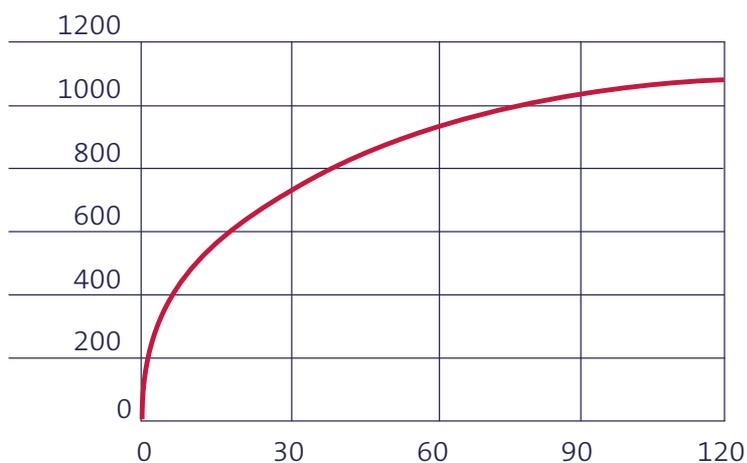
Tests include steady heating in a furnace for a timed duration. After heating, the safe or filing cabinet is dropped from a height of 9.81m and then reheated to simulate falling through the floors of a building. This is not as dramatic as it sounds but it is this test that deals with the possible damage caused by pressure build up. If the construction is poor the safe will rip itself apart.

At all times the interior temperature inside the safe has to remain below 170°C for documents and below 50°C for digital media.

Every certified fire safe carries an information label from the certification body. Look at the label as it will tell you everything you need to know – the resistance time, what the safe is classified to protect and the type of test-

THE TIME/TEMPERATURE CURVE

Furnace
Temperature (°C)



Time (mins)



ing it underwent. Be aware though, no label means no certification!

GLOBAL: So how would you sum up the role of a fire safe?

MB: Security is like an onion, with fire protection right at the centre. You have all the other systems to prevent the worst happening, but when it happens,

“ *A fire safe is a silent insurance policy. It’s all about worst case scenario planning.* ”



MARK BROOKES

Mark Brookes has been working with safes for nearly 30 years. He is Global Product Manager for fire safes at Gunnebo and Chairman of the CEN Technical Committee responsible for the maintenance of European standards for safes.

REACH ME AT mark.brookes@gunnebo.com



Is it time to update my safe?

5 essential questions

That big lump of metal has been sitting in the corner since heaven knows when. Is it still doing its job? Good quality safes rarely break down or wear out, but there are other things to bear in mind when looking at secure storage for valuables and confidential documents. *Global* turned for advice to Andy Rymill, a security specialist based in Wolverhampton, England. His recommendation? Ask yourself the following five questions.

 David Crouch

1 *Is it out of date?*

Certification – the European grading of safes according to the security they provide – began around 25 years ago. Before that there were many local standards which were constantly evolving and being reviewed. So if your safe is more than 25 years old, you should contact your insurer, because it may not be certified and therefore won't be covered.

With any safe you are buying time – the time it takes for the police to arrive while a thief is trying to get into it.

“But safe-breaking tools are constantly evolving, and the disc cutter you bought ten years ago is not as powerful as today's models,” Andy says. So a safe can become vulnerable over time, even if its certification has remained unchanged.

In retail, however, around a third of theft is internal. As a result, the industry is constantly updating its technology so that staff members don't have too much time to become familiar with it.

“You might want to update simply to reduce the risk of internal theft,” Andy says.

Furthermore, safes are changing in other ways, moving away from keys – which get lost or copied – towards mechanical combination locks, electronic and biometric devices. Bluetooth and transponders enable remote opening by a second person, adding an additional layer of security. New locks can also provide audit trails, so you can see who has been in the safe and when.

“Normally it is possible to have the lock replaced, rather than changing the whole safe – it is a design feature of most safes,” Andy says. “But with lower strength safes the cost of changing the lock can be higher than simply buying a new one.”

Other features of a safe can make it clumsy or inadequate for your changing needs. You may want to be able to make deposits, for example, or add internal fittings such as a safe within a safe so only certain parts can be accessed by certain people.

“Due to a change in their business practices some retailers will look for a customised, bespoke product,” Andy says.

Is your safe out of date?

Standards and safe-breaking tools are constantly evolving – and safe and lock technologies have moved on as well

Are you over-protected?

Calculate the risk of being robbed to determine the level and type of security you really require



Are you under-protected?

Check your local insurance ratings and make sure your grade of safe covers the value of the contents inside

Are you happy with how it looks?

Superficial maybe, but interest in safes with a design to suit an upmarket setting is on the rise

Are you likely to move premises?

Older, weightier safes are problematic to move – more modern safes can still offer the same protection at a lower weight

2 *Am I over-protected?*

Too much security sounds like a contradiction – as the jewellers of Hatton Garden will testify, the reverse situation might seem to be a bigger problem.

But many retailers are actually downgrading their safes, Andy says, because they calculate the risk of being burgled as low.

Instead, they prefer to forego insurance and supplement a lower grade of safe with other forms of security, like CCTV or electronic alarms, the cost of which is coming down. Bigger retailers have systems and protocols throughout the chain, and facilities managers often insist on changing everything so it is consistent.

“Instead of buying physical security they are buying other forms and a cheaper safe, then taking the risk,” Andy says. “There can be big savings to be made if you roll this out across your entire estate.”

Moreover, there is a large second-hand market for safes, so you can easily sell your old ones through a broker.

3 *Am I under-protected?*

The next question to ask is whether you are storing more in your safe today than you were when you bought it. With a Grade 1 certified safe, for example, the limit for insurers is £10,000 in cash plus £100,000 in valuables*. If you have more in the safe, you won't be covered.

Alternatively, do you think there is a growing risk you might be burgled? In either case, you will need to think about upgrading.

“The marketplace is changing in terms of how you buy a safe,” Andy says. “Before you would go to a locksmith in the high street. But now people buy safes off the Internet, so the personal advice you would get is missing. There is a lot of ambiguity and even misinformation.”

When you find a website selling safes, products with the same certification will be listed by price, while other factors, such as fire protection or ease of delivery, are not given as much prominence.

For advice on buying the correct safe to suit your company, see **Global #1 2015, 7 Steps to Choosing the Right Safe for Your Business.**

*Applies to the UK market. Insurance values differ from country to country, but this example gives a good indication.

4 *Am I likely to move premises?*

“In big retail businesses such as supermarkets, the cash offices are often custom-built to a single design, so they are all the same – and a lot of them are moving upstairs,” Andy says. “As a result, the safes have to be lighter because of floor-loading considerations.”

The process of installing and uninstalling safes has not changed for centuries – they are placed on metal rollers and pushed into place. There is no such thing as on-site assembly.

But moving large safes in or outside a building can cause all sorts of problems, such as getting them into lifts, and even being too heavy for the lift cables. Moreover, people often put the safe in the basement, creating additional problems.

“In that case it's probably easier to get a new one,” Andy says.

5 *Am I happy with how it looks?*

Would you like something more discreet? A little more compact? Maybe a safe that sits in the wall behind a picture? Or under the floor?

“The Cloud means that fewer documents are being stored, and when you have a big old safe taking up a lot of room you think, let's get a smaller one with some new features,” Andy says.

Many manufacturers produce luxury safes that look modern and ergonomic, even stylish. Wealthy people might want a high-specification safe to suit their property, or just to look a bit different.

“As with many products, people start with a basic model but then they want to trade up,” Andy says.

**ANDY RYMILL**

Andy Rymill has worked in the security industry for nearly 20 years. During this time he has worked in plant management, service, sales, IT, logistics and marketing. Today Andy is Global Product Manager for certified safes and locks at Gunnebo.

REACH ME AT andy.rymill@gunnebo.com



CASH CONSTRAINTS:

3 ways to unshackle your sales

Cash has been a central feature of retail for so long that it is easy to overlook the subtle ways in which it shapes your business. But retailers are beginning to realise there are ways to get around these restrictions, liberate their staff and transform the customer experience.

Jorge Rami, a Barcelona-based cash handling expert, explained to *Global* how cash handling technology can do a lot more than handle cash.

 David Crouch

Remove stress

Imagine you are young, not particularly numerate, and your salary is basic. Yet here at the checkout you are under pressure to take care of large sums, look out for counterfeit money, keep cash secure, and make sure it all adds up. When there are mistakes, you take the rap.

“If you consider all the stress this puts on staff, it impacts on the time and energy they can dedicate to the customer,” Jorge says.

When the coins and notes are fed into a machine instead, they cease to be the cashier’s responsibility, removing a constant source of attention-sapping stress.

“Instead of watching the cash, you are watching the customer, helping to make them feel at ease, sharing snippets of conversation that help establish the kind of relationship that will keep them coming back,” Jorge says.

The money stays inside the machine, protected and secure, counterfeit notes are automatically rejected, and everything is tallied neatly at the end of the day.

Security from theft pays off in other ways apart from the amount of cash that might leave the till.

“Think of the collateral effects,” Jorge says. “There is the impact on employees of the trauma they experience during a robbery, and the sense of insecurity for the customer when word gets around that your store is a target for criminals.”

Free-up store design

When cash becomes inaccessible inside a machine, stores can be laid out in very different ways.

“Instead of the traditional checkout with gates and barriers to shut the customer out, the till area becomes much more open and store layout is transformed,” Jorge says.

Cash handling machines can also be customised and branded to fit in with the store, reflecting corporate colours and design.

“Supermarket staff say that when they no longer need to focus on the pure cash transaction they feel more free to move around, to jump out and talk to clients even if they are far from the checkout, without being afraid that cash will go missing,” he says.



IN SUMMARY

Cash handling technology can do a lot more than handle cash

- It removes the burden from staff of being responsible for large sums of cash
- It allows for a freer, more open store design
- It gives staff more time to focus on the customer



Focus on selling

In this way the cashier becomes an additional sales person instead of just taking care of the transaction.

“Would you like to try this? Did you know we have this promotion on now? There is a great offer on this product...” The time you spend giving change is now focused on selling,” says Jorge.

Cashiers start their shift by logging into the cash handling machine and log out again at the end of the shift. They barely touch the cash in between.

“Stores tell us that cash handling machines have increased their average sales by around €1 or €2 per transaction because staff can now make sales pitches.”

It seems slightly ironic that cash handling machines are popular in Scandinavian countries, where moves towards “cashless” transactions using tap-and-pay credit cards and mobile phones have gone furthest. But as Jorge points out, unless the sums are tiny, it doesn't matter how much cash you are dealing with – the cost of managing it is more or less the same. In any case, the statistics show that cash transactions are still rising.

“Retailers are realising more and more that cash is time-consuming and distracting, and is not related to their core business,” Jorge says. “They want to focus on their client, on retail activity – and not just on collecting and counting.”



JORGE RAMI

Jorge is based in Barcelona and has been developing products and services within IT and security for over ten years. He currently specialises in retail cash handling for Gunnebo.

REACH ME AT jorge.rami@gunnebo.com

How to *speed up* passenger processing in airports

While the processes surrounding the landside-airside journey at airports have improved immensely in recent years, boarding a plane can still be over-complex and time-consuming.

Global talked to Mark Geering, an expert in security for mass transit systems, about what is slowing down the boarding process at airports and how passenger processing can be sped up.

IN SUMMARY

Inadequate and unclear instructions for infrequent fliers are slowing down the boarding process. What can be done to counteract this?

- Standardise processes from airport to airport
- Collaborate more
- Look at examples from other industries
- Do not remove human interaction all together
- Reassign staff to provide targeted support

Seeing it from the passenger's point of view

Regular fliers will be familiar with all the check-in and boarding processes and just want to go from A to B as quickly as possible. But this isn't the case for infrequent fliers.

"To its credit, the aviation industry has genuinely tried to make the process as painless as possible by offering simple instructions telling passengers what to do," says Mark. "But I still think there is a disconnect between those in the industry who understand the processes inside out and the less travelled passengers who need the most help. The challenge for the sector is to put itself into passengers' shoes and ensure the signage and guidance for them is totally clear and unambiguous."

Standardisation will bring clarity

With so many organisations active in the sector, from each individual airport and airline to third-party suppliers, passengers are not experiencing the same check-in or boarding process at any two airports.

"Here IATA, the International Air Transport Association, has an important role to play," says Mark. "With IATA setting guidelines on what standards everyone should adhere to, there is a greater chance that the user experience, security protocols and passenger instructions will become more familiar from airport to airport."

"This should help people become much more comfortable with them and thus speed up the process of getting them onto the plane."



Reduce – not eradicate – human interaction

While cutting out human interaction completely is the ideal end point for many travellers, some passengers will still often want someone there for those occasions when they're not certain about what to do.

Moving to automated processes as much as possible helps to make this happen – and it also has numerous benefits for airports and airlines. For instance, if an airport has got eight lanes – six automated and two manual for assisted passengers and fast-track – originally they would have been manned by eight people. This means that if the airport is on a three-shift pattern for the day, that's 24 people manning that area.

So if just two lanes are now being manned, that's only six people for the day in a three-shift pattern. Staff can then be reassigned to other duties and provide more targeted and effective support to those who really need it.

Getting customers used to automated processes

As stated above, part of the reason why plane passengers don't always board as quickly as they could is the fact they don't tend to use the technology they see in airports on a day-to-day basis. But this could be about to change.

Mark alludes to an example from mass transit where London Underground is planning to go over to barcode ticketing so large numbers of commuters will get used to using a QR code on their smartphone with a scanner every single day.

"The same technology is being used in airports for boarding passes. The process is identical, so if people become comfortable using this system in Tube stations, we can expect they will be far less intimidated by it when they're boarding a plane. If other train, bus and tram operators follow suit, they could be doing the aviation sector a massive favour!"

Most customers have already made it clear they want more self-service, and those who don't will remain satisfied if members of staff are still around to deal with any problems or queries.

If airports and airlines strike the right balance in line with customers' needs and wishes, airports should be well-placed to see positive results.

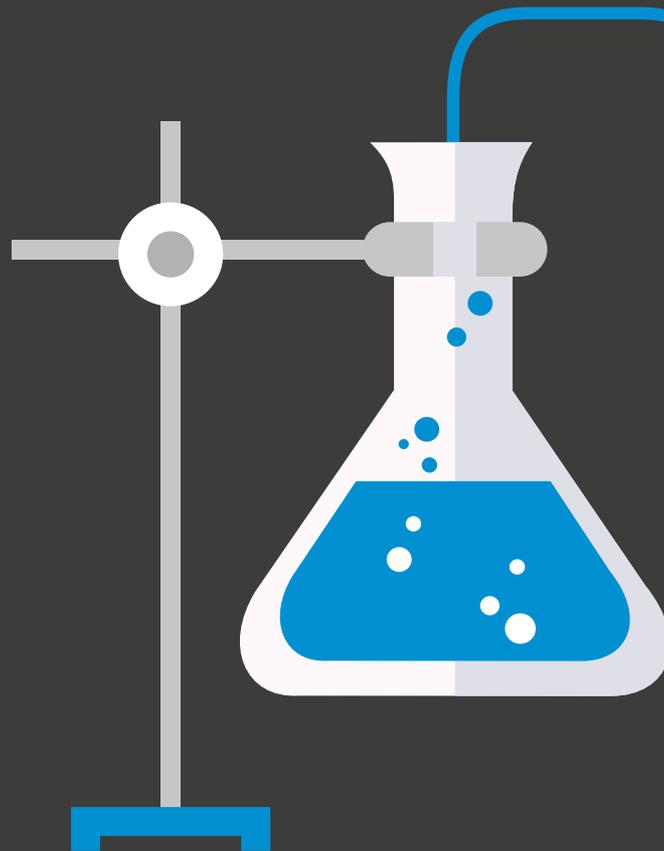


MARK GEERING

Mark is based in the UK and has been working with entrance security solutions since the mid-90s. For the past ten years his focus has been on delivering systems solutions to airports, mass transit operators and stadia.

REACH ME AT mark.geering@gunnebo.com

... DISTILLED INTO PURE
SECURITY KNOWLEDGE



**GUNNEBO –
SMARTER SECURITY**

Cash Handling | Entrance Security | Safes & Vaults | Electronic Security

www.gunnebo.com

GUNNEBO®

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.

CONTACT US

Products and Solutions

www.gunnebo.com

Investor Relations

www.gunnebogroup.com

ADDRESS

Gunnebo AB, P.O. Box 5181, 402 26 Gothenburg, Sweden

E-mail: info@gunnebo.com

Tel: +46 10 209 5000

RESPONSIBLE PUBLISHER

Karin Wallström
Group Marketing & Communication Director
+46 10 2095 026
karin.wallstrom@gunnebo.com

EDITOR

Rob Suddaby
rob.suddaby@gunnebo.com

WRITERS

David Crouch, davidgrouch@gmail.com
Axonn Media, www.axonn.co.uk

GRAPHIC DESIGN

Emma Agnred
emma.agnred@gunnebo.com

TRANSLATION

Comactiva, www.comactiva.se

PRODUCTION OF LANGUAGE VERSIONS

Newsroom, www.newsroom.se

PRINTING

Larsson Offsettryck, www.larssonoffsettryck.se
Images from iStock, Animals Animals/Earth
Scenes and Gunnebo AB
