Designs Against Shoplifting

2013 Student Challenge
According to the Office for National Statistics’ (ONS) crime survey, while overall crime has fallen significantly, shoplifting is up 6% on average, year on year. Across England and Wales, police recorded 317,027 shoplifting offences in 2013, with 34 of the 43 force areas recording an increase compared with the previous year (f1). The 2013 Commercial Victimisation Survey (CVS) published in 2014 puts the figure even higher, at 3.3m incidents of theft by customers in the wholesale and retail sector (f2). The steepest rise, according to the ONS in the UK, was in the West Midlands, where shoplifting offences were up 20%. Similarly, the BRC Retail Crime Survey (2012) indicates that the average value of customer theft also rose by almost 28% because “on average, retailers estimated that 56% of customer theft went undetected.” (f3) The context of recession has led to an increase in some types of theft and shoplifting. This is quite staggering given that crime generally has been declining in recent years. Certainly, shoplifting is viewed by some professionals and amateur thieves as a low risk vs high reward business. As Martin Gill (2007) has documented, many shops and stores do not do enough to dissuade the rational criminal, who scans every environment for an opportunity. Yet the shoplifting problem is not just linked to the motivation of thieves but the fact that the design of some retail environments is complicit with crime because it makes theft too easy. Architects as well as interior, product and packaging designers are rarely taught about shoplifting or how to avoid creating criminogenic environments (by ‘thinking thief’ as well as user).

Consequently few of the designed fittings in the store that staff and customers use every day, have benefited from crime prevention thinking.

The design responses that follow, from students at Central Saint Martins, give a brief illustration of what design could deliver in the context of small business requirements, when crime prevention is addressed. The sort of creativity needed in our stores that will look good on the eye, increase spend at the checkout, and really work to thwart thieves without breaking the bank. Shoplifting is a minor crime but the problems that cause it are complex, and competing objectives in shops often need to be reconciled to address it. It may need a committed designer to understand those competing objectives between crime prevention and other business requirements. These include attracting the right staff, maintaining aesthetic appeal/brand awareness to attract customers, addressing company values and developing and posting marketing materials to maximise profits. Small businesses shrinking profit margins and their inability to afford technology, are also factors that need to be considered. What follows are some examples of how design can make a difference…

Can the design of packaging, accessories for shop furniture, large and small secure retail products or displays for shelves or free standing objects help promote sales whilst designing against shoplifting?

This project asks you to ‘think thief’ and design for small shops and/or retail environments that cannot easily afford expensive security (staff or technological fixes such as EAS scanning or CCTV equipment).

The brief is entirely open. You can choose to focus on any location and object you wish to protect. For example, you could redesign not just new communication, packaging or display objects but also security procedures, retail management services or address the myriad of other factors in this environment that impact shoplifting and help thieves get away with it.
“What designers can do is ‘think thief’. That is, put themselves in the place of an offender, anticipate their actions, understand their tools, knowledge and skills and thereby develop design solutions that short circuit the offender’s action without jeopardising the design’s value to legitimate users.”

Problem
Alcohol is the most shoplifted item therefore the focus of the project was directed towards off-licence. I found from interviewing different shopkeepers across London that spirits were the most shoplifted items, and that thieves would lean over the counter, grab a bottle of spirit and run away. The frequent loss of the shopkeeper’s most valuable item presented a big problem. Research also revealed that brand value has a big part to play in which spirit is shoplifted most frequently.

Solution
The solution was to protect spirits by linking them together giving the bottles strength in numbers. Much like a rugby team in a scrum, or emperor penguins huddled in the Arctic to keep warm in the winter.

Context/Scenario of use
LinkCuffs have no locks or chains and are user friendly. No training is needed to use LinkCuffs. The soft silicone loop is stretched over each bottleneck manually, linking them all together. To take the LinkCuffs off, two hands are needed; one to hold the bottle still, and the other to pull each LinkCuffs loop off. The use of two hands would make it harder for shoplifters to reach over the counter and steal a bottle; it would slow down their shoplifting attempt. The LinkCuffs chain would also visually deter the thieves intention to steal. Linking up three bottles would be the minimum recommended amount.
**Typology**
LinkCuffs are made out of silicone and injection moulded in a two-part mould. Inside the silicone length is a 10cm steel cable that prevents the LinkCuff from being cut. Bells are positioned at each end of the cable and are attached with a steel loop. These will alert the shopkeeper as an extra precaution. Longest length 190mm; Longest width 40mm; Longest height (with bells) 22.3mm; LinkCuffs can be easily branded and tailored to suit.
**Problem**
Over 55% of adult shoplifters started shoplifting in their teens, an entry crime that often leads to more serious criminal conduct in later life, according to the Metropolitan Police. Based on observations and conversations made around newsagents near primary and secondary schools, the most stolen items are often placed in front of the cashier which is a blind spot often neglected by shopkeepers.

**Solution**
Arcway is a low cost confectionery divider designed to enlarge the action of removing stock off the shelf, while limiting the amount of items one customer is able to obtain. This reduces shopkeeper losses, and deters would-be shoplifters.

**Research**
By working part time in a newsagents, observing how children purchase confectioneries and empathising with shopkeeper’s routines, it became apparent that there is a blind spot in front of the till. Tools should be implemented to help shopkeepers notice any action made to their stock within the blind spot.
Context/Scenario of Use
Arcway serves as an anti-shoplifting device by limiting the number of confectionaries one is able to obtain. Each transparent block on the divider limits hand access to prevent shoplifters grabbing and running. The dividers enforce users to remove stock from the back of the shelf. Dividers are placed between various branded confectioneries to act as a system of anti-shoplifting devices while providing larger space for branding opportunities, which allow manufacturers to promote their own brand better among the numerous competitors. This also offers the chance for shopkeepers to rent this space as ‘billboards’ to the manufacturers.

Typology
The divider is two part injection moulded polypropylene with laser cut acrylic blocks. Both are accessible and low cost manufacturing processes to ensure cheap unit cost for mass production. Having consulted with a Taiwanese injection moulding factory, each divider would cost up to £1 after tooling, material and transportation cost.
Problem
Products hanging on displays are an easy target for shoplifters. It is easy to grab a large handful of products, or simply to sweep the goods into a pocket or bag. Many smaller retailers don’t actually notice the grab, only that the stock is missing, by which point it is too late to prevent the loss. The project proposes a preventative approach to shoplifting.

Solution
Crowns are a simple on-shelf anti-theft measure. Made from die-cut polypropylene, the adhesive tag can be applied to cover the existing hanging slot at the top of the product packaging, changing the shape of the slot. Crowns’ new slot allows for products to continue being hung on the store’s existing Euro hooks, while creating an increased resistance which continues to build, the more products that are attempted to be taken. The polypropylene also creates a distinctive ‘click’ as it is removed from the hook, alerting the staff to the potential theft. The new slot can also be implemented during the manufacturing stage, allowing companies to act pre-emptively, at manufacture stage, to protect their products. This device thus supplies retailers with a basic level of protection from crime, that they may not otherwise have. Crowns aim to tackle shoplifters, without creating an intrusion or hindrance to regular consumers.
Research
Designers work hard to create products that consumers enjoy using, or aspire to own, and to develop brands that inspire loyalty. Unfortunately, an inevitable consequence of this consumer dynamic, whether rooted in need or desire, is that such products become targets of theft. My research was predominately based in hardware stores, as most of these stores suffer heavily from theft and have little to no existing security, some being targeted daily. Many of the stores visited were dramatically overstocked, displaying products on every available surface, providing an optimum environment for shoplifters to operate in, as the chaotic displays obscure or hide their actions, and the stock is readily, and easily accessible. From interviews conducted within these environments, I discovered that many of the items targeted were small, high end products, which could be easily concealed and resold. The problem with the existing packaging, and in particular the die cut detail, is that it aids in the theft of multiple goods, allowing shoplifters to remove quantities of any one product easily from the shelf. The existing Euro hooks mechanism was clearly failing to address the issue. Furthermore, the stores visited said that they did not use hooks. Thus the task was providing a new design, which would be as simple and cheap as possible, and would work alongside the existing Euro hooks.
**Context/Scenario of Use**
Designed as a promotional item, Crowns are a cheap and effective solution to the theft of multiple products. Supplied in a sheet form, the tags can be removed and applied in store, as a retrospective crime prevention measure. Due to the simplicity of the design, they also have the potential to be branded, or to be supplied in a range of anti-theft colours, to alert criminals that the store is aware of the crime, and that they are actively trying to prevent shoplifting. Crowns allow consumers to remove the product from the hook, and maintain a product interaction, while preventing shoplifting, by increasing in resistance when more than one product is attempted to be removed from the hook. Crowns could also become a part of the manufacturing process, replacing the existing slot, and providing smaller retailers with a simple, free and effective level of protection.

**Typology**
The slots in pre-existing packaging, although all designed to fit standard Euro hooks, are far from standard in size or shape, and many of the existing slots have in fact been over designed, and have been designed to fit onto the Euro hook as effortlessly as possible. As a consequence of a drive to ‘user friendliness’, designers and manufacturers have increased the dimensions of their slot considerably, allowing for more ease of use, (and thus ease of theft) while, in reality, these slots could be far smaller. After an in-depth focus on the variables of pre-existing packaging and hooks, I was able to extrapolate the correct dimensions for my new design, to work on the largest cross section of hanging products. Made from die cut polypropylene, these new adhesive tags can be applied to cover almost any existing packaging, supplying a simple and effective means of crime prevention.
**Problem**
Shoplifting is a very serious problem in small jewellery retail units in markets because of the many limitations of the retail space itself.

**Solution**
Tadda is an anti-shoplifting design for small jewellery shops, with rotary pods to slow the motions of trying on jewellery, in order for shopkeepers to maintain their attention. Each unit contains a number of pods to display each item of jewellery which also serves as a time-saving measure when it comes to arranging products on display.

**Typology**
The tray of Tadda is made by ABS and shaped by vacuum forming. The domes are made of anti-reflective acrylic.

**Research**
I have divided my research into 3 parts: shopkeepers, customers and securities, which I think are the most related characters to this subject. Experience of anti-shoplifting has been found in many markets during my research period. I took a couple of days work in two jewellery shops to get real life observations of people's shopping behaviour. Some physical features of markets, such as multiple access points, packed stalls and unresponsive security measures make the life of shopkeepers even harder. However, these insights provided a chance to tackle the problem from the perspective of stopping crime opportunities.
Context/Scenario of Use

Tadda is an anti shoplifting jewellery stand. It comes as a box with many domes on it, each dome can hold at least three pieces of jewellery. The circular tray will be composed of two pieces of velvet and a steel net in the middle, so that jewellery with hooks can be displayed. The domes can be easily turned by a finger then opened using a ‘twist’ action. The circular tray that is used to hold the jewellery and domes will be united together with ‘teeth’. This is a user-friendly design that will satisfy the needs of the stall owner against shoplifting and also meets the demands of customers.
Problem
Retail crime cost the industry £1.4 billion for the period of 2010/2011; this is representative of a 30% increase on the previous year. Customer theft accounts for 85% of this figure. In recent years ecological concerns have resulted in many retailers discouraging branded plastic bag use by charging for them and promoting the use of reusable 'ecobags'. Some retailers have linked the use of eco/green bags by customers to an increase in customer theft. Eco bags are large in size, consist of thick durable material and are opaque. Shoplifters have used the legitimisation of walking throughout the store with large eco bags as an opportunity to place goods inside them and steal.

Solution
The BagBank reduces the risk of theft without compromising sustainability. By making recycled plastic bags available to shoppers at the checkout, and alerting security to the potential shoplifting activities associated with eco bags theft can be reduced and with it some aspects of undetected criminal opportunism. The aim of BagBank is to help communities re-use their plastic bags by circulating them locally. Used plastic bags are collected at the entrance to stores and staff place these bags into dispensers at the checkout for customers to use when completing their purchases. In this way BagBank as a system of use can address the environmental impact of plastic bag use and disposal whilst reducing opportunities for thieves.
**Problem**
Perfume is one of the most highly stolen products on the market, thus a product that is experienced prior to purchase making sample bottles targets for shoplifting. This project looked at the interior design of perfume stores, attracting the customer to test and experience the fragrance but most importantly preventing thieves from stealing tester bottles.

**Solution**
The solution is a Perfume Station – a new interior design for perfume stores that attracts customers to test and experience the fragrances while preventing thieves from stealing the tester bottles. Instead of using tester bottles open and available to hold, the customers experience the fragrance via traditional pump dispensers which can be pulled out of the tester station. The tester bottles are hidden behind glass which can be replaced by staff when needed. The tester bottles are hidden behind a piece of glass which makes the perfume more desirable as a product but can also be easily replaced by staff when needed.


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