Preventing plastic card fraud in the UK

Barry Webb*

Home Office, Police Research Group, 50 Queen Anne’s Gate, London SW1H 9AT, UK

Abstract

The last 30 years have seen the emergence and massive growth in use of new payment systems involving plastic cards. The use of cheque, credit and, more recently, debit cards is now commonplace in the UK, but losses arising from fraudulent use of plastic cards has also grown. This paper describes the strategy that was implemented by the banking industry in the UK, and shows how it has successfully reduced losses arising from plastic card fraud.

Keywords: Credit cards; Plastic fraud; Commercial security; Crime prevention

1. Introduction

The history of the cheque, credit and debit (plastic) card in the UK is a wonderful illustration of how new forms of social and commercial activity can also create new opportunities for criminal activity. The recent successful efforts in the UK to tackle the problem illustrate, in turn, what can be achieved by taking a strategic approach to the problem.

Plastic cards were first issued in Britain in 1965; the first was a cheque guarantee card. There are now some 86 million plastic cards in issue in the UK today, making the UK one of the world’s largest users, per capita, of plastic cards. But this growth in plastic card business also brought with it fraudulent card use. In 1990, the Home Office commissioned research to consider how the problem might best be tackled (Levi et al, 1991). The following describes the extent and nature of plastic card fraud at that time, and the strategy that was put in place to tackle it following publication of the report in 1991.

Fig. 1 shows the scale of the problem in terms of financial loss against the major retail banks by 1990. Between 1988 and 1990, total cost of fraud against the major retail banks had grown by 97%, but plastic fraud was up 126% and this occurred during a period when the number of credit cards issued increased by only 30%.

In order to design a preventive strategy, the research examined the circumstances surrounding fraudulent card use, both the ways in which cards are obtained and the location where the fraud takes place. Fig. 2 shows that the main way in which fraudsters obtained the cards was through directly stealing from the card holder or the card being lost by owners. Postal interception presented a rather different problem. Although fewer cards were obtained in the way, the loss per card is high because it takes losers longer to realise what has happened: the thief has a larger window of opportunity for using the card. In 1990, the fraudulent use of cards intercepted in the post was estimated to have constituted 24% of all plastic card fraud losses (Association for Payment Clearing Services). In relation to the place where the fraudster uses the card once it has been obtained, Fig. 3 shows that the point of sale in the retail sector was the site of nearly 80% of all fraudulent use in 1990.
2. The preventive strategy

On the basis of the recommendations presented in the research report, the banking industry implemented a preventive strategy which was targeted on:

- reducing card misuse at the point of sale in the retail sector;
- ensuring safe card delivery; and
- encouraging the public to take more care of their cards.

In deciding what could be done to reduce fraud at the point of sale in the retail sector, it was recognised that any strategy which put the responsibility for identifying card misuse entirely on retail staff could expose those workers to intimidation and violence. An example of such a strategy might be the introduction of photographs on cards with the requirement that retail staff determine, on the basis of the photo, whether the user was the legitimate owner. Consequently, the main measure taken by the banks was to lower floor limits (the transaction value at which authorisation is required from banks before the card can be accepted). Many more card transactions therefore required official authorisation. Before 1992, around 10-12% of all plastic card transactions required authorisation from the banks. By 1995, this had risen to 35% of all card transactions with an objective of 45% by 1996. In addition to lowering floor limits, the banking industry also introduced a national 'Hot Card File'. This is a system for transmitting the details of lost or stolen cards to retail outlets very quickly, enabling attempts to use cards reported lost or stolen to be detected even where transactions are made below authorisation limits.

In tackling the problem of postal interception, the banks implemented a number of measures. These included using independent couriers, recorded delivery or, if appropriate, asking customers to collect their cards from their branch. The aim was to ensure that the rightful owner received the card and did not lose it through misaddressing the application or it being stolen in the course of delivery.

Clearly, many cards were being stolen from owners, for example from cars or from handbags, or were being lost by owners. 'Card Watch,' a high profile publicity and education campaign, was launched...
therefore, by the Association for Payment Clearing Service. Posters, leaflets and TV/radio coverage were used to raise public awareness of the problem and encourage card holders to take more care of their cards.

3. Reductions in fraud

Fig. 4 shown the trends in financial loss from plastic cards from 1990 to 1994. Losses from plastic card fraud continued to grow in 1991 but, since the overall strategy has been implemented in 1992, losses have reduced by 41%.

There seems little doubt that the measures introduced at the point of sale, increasing the number of card transactions requiring bank authorisation and the introduction of the Hot Card File, have contributed substantially to this achievement. Losses arising at the point of sale have reduced by 49% between 1991 and 1994. The system now provides retailers with much greater potential for recognising an attempt to use a lost or stolen card fraudulently. The procedures introduced to ensure safe delivery of cards have also contributed greatly to the overall losses from fraud. Losses arising from cards intercepted in the post reduced by 62% between 1991 and 1994, and fell from 20% of total plastic fraud losses in 1991 to 13% in 1994.

4. Lessons for the future

Apart from demonstrating the success of this particular crime prevention strategy, there are some broader lessons to learn from this case study. In developing and introducing new products and new forms of commercial activity, it is important to recognise that new opportunities may be created for criminal activity. Although it is desirable that such opportunities are identified at the design and implementation stage, it is likely that at least some security gaps will emerge and be exploited after the system has been operating for a while. It is important therefore, that management information systems are put in place to enable the emergence of such weaknesses to be quickly identified. Once recognised, there should be a strategic response to the problem. In the case of plastic card fraud, the strategy required collaboration right across the banking and retail industry to ensure that vulnerable aspects of the plastic card system were quickly and effectively closed down right across the system.

Acknowledgements

I am grateful to the Association for Payment Clearing Services for providing me with the data on which much of this paper is based.

References