

Taking the pain out of paying

Alan/The Guardian

SHOPPING is one of Europe's favourite activities, but queuing to pay for our goods isn't. So supermarket groups across the continent are all racing to cut the frustrating delays in waiting to pay for our purchases.

France and Britain are neck and neck in the battle of the checkouts. Their ammunition is all electronic, and the buzzword throughout the trade is EPOS – electronic point of sale.

Many supermarkets now use laser barcode-reading pens at the checkout in place of the slow and cumbersome manual entry of price details through a till key-pad.

The new generation of checkout scanners has replaced the old pen scanner with a fixed window in the base of the checkout bench. Product details are logged as the package barcodes are passed over the window.

The next step will be self-scanning, where customers scan their own purchases. Different systems are now being tested in shops across Europe.

One of the most advanced of

these is in use at the Ahold Albert Heijn store in Tilburg in the Netherlands. In this experiment the customer collects a specially designed trolley and uses a hand scanner to read the barcodes as the goods are selected from the shelves. A "plus" key is pressed to indicate that a purchase is about to be made. The price is then displayed electronically.

Should the customer not like the price, the item can be "depurchased" using the "minus" key. Unintentional errors or attempts to cheat activate an alarm. When shopping is completed the customer goes through a special checkout desk where the self-scan unit is read into a till so that payment can

be made. In this way shopping does not have to be removed from the trolley until it is ready for packing, so time is saved by avoiding checkout pricing.

Other systems being tested preserve checkout pricing, but speed things up by making the customer provide the labour. CheckRobot from the United States and Scan Tower from Europe provide a fixed laser window over which customers pass purchases.

There is very little difference between these systems and the more up-to-date EPOS ones in use. The advantage in the long term will be that a large number of customer pricing points will be provided and routed through a smaller number of payment

tills. The system would be very similar to the large self-service garages in use today.

The long-term aim, however, is a once-only scan where a full trolley is passed through a very sophisticated scanner which reads all barcodes at once. In theory, the technology exists to do this now.

In practice it will be a while reaching the stores because of practical difficulties and high equipment costs.

Another approach to making supermarkets more "customer friendly" comes from electronic shelf-edge labelling. At present, changing the shelf price of merchandise is a long, involved task. Details have to be altered at the cash point, on the shelf



New smart credit cards will soon be making shopping even easier

and in the central computer. It takes time and ties up staff.

With electronic labelling, the tag is replaced by a network of shelf-edge displays with liquid crystal screens. The screens are connected to the central computer, as are the checkout tills. One person can change the price of a product in a few seconds. This may seem only a small advance and of use in saving money for the supermarket owners, but it does have benefits for the consumer. A wider range of goods can be offered since setting up displays is easy. Instant discounts can be organised for goods on special offer or those nearing their sell-by dates.

More importantly perhaps, "happy hour" discounts on a whole range of goods can be offered to encourage consumers to shop in quieter periods.

Andrew Don

Stand by for the smart card invasion

THE MORE advanced supermarket chains already offer customer payment through major credit cards and Switch-style cheque cards, but they are about to be overtaken by the smart card – probably the next plastic money craze to hit Europe.

Resembling credit cards, they contain microchip memories which can be loaded

with electronic money. Reading devices in the shops will debit or credit the card directly without the need for time-consuming authorisation slips currently required for credit cards.

The smart card is already in widespread use in France, and the Savings Bank of Norway has also issued them to customers.