

They have been the last things on the retail shopping list when it comes to buying a new EPoS system or planning a customer management strategy. They have also been well down the pecking order in terms of staff training or store design. Even so, a great deal of retailing would grind to a halt without them: printers are a vital part of the customer experience, yet technology has tended to move slowly and those growing checkout queues as the cashier struggles to change the paper roll are all too familiar.

Attitudes are finally changing, however, with the realisation that receipts can also be valuable marketing tools offering money-off coupons, brand reinforcement and promotional messages: those scrappy bits of badly printed thermal paper really are no longer good enough. "One of the biggest changes we've seen in the past couple of years has been retailers starting to talk about printer options early on in the selection process for a new EPoS system," says Annette Tarlton, marketing manager at Star Micronics. "In the past, the printer was usually the last thing they thought about.

Print perfect

Faster, quieter, cheaper – in the past the requirements for retail printers have tended to be fairly basic but not anymore: colour, couponing, flexible connections, environmentally friendly and adaptable software are also now on the agenda, as Penelope Ody demonstrates

Now they are testing printers before they buy and really looking at the functionality."

Tarlton believes that retail emphasis on branding has been a key driver for this changing attitude with the need to print logos or graphics as well as providing a receipt that reflects the retail image. Star's latest FuturePRNT devices come with greatly enhanced and flexible software options, making it easy to produce the sort of up-market stylish receipts that many retailers now want. Customers include Harrods, which installed some 950 printers last year. "The flexible software provided fits in with our current IT strategy," says IT director, David Llamas. "Thus allowing

us to adopt a far more tailored and focused customer marketing strategy which offers significant benefits for both us and our customers."

Dick Arnold, NCR's vice president for marketing retail, hospitality and self-service solutions, agrees with this emphasis on the customer experience: "The receipt is the last form of communication a retailer has with their customer before leaving the store. As such, they want to maximise the real estate on the receipt to generate more return sales, consumer feedback and competitive differentiation."

As well as brand reinforcement with a well-printed logo, Arnold is seeing retailers printing "...consumer surveys, promotional and community messaging, in-store giveaways and more" onto their receipts. NCR launched a double-sided thermal printer a couple of years ago and is seeing significant take-up of the device. "It enables retailers to take advantage of opportunities to maximise use of both sides of their receipt," he says. "And also allows for coloured text on one side, while improving the overall transaction throughput."

While double-sided printing can produce shorter receipts and save paper – NCR suggests a 40 per cent reduction – it can also deliver an attractive transaction-related coupon with high redemption rates: some studies suggest up to 60 per cent with a 0.5-1 per cent increase in-store spend as a result. Not all printer producers believe the market is yet ready for such developments, however. "We have double-sided printing products in development," says Richard Bright, product manager for impact printers at TallyGenicom. "But we've not seen any real demand for them."



Bright believes that retailers still prefer to pre-print promotional messages onto one side of the receipt paper giving a much higher quality product, although he acknowledges that this does not deliver the sort of transaction-specific individual customer offer that marketeers may prefer.

Problem solving

Bixelon – known as Samsung Mini-Printers until it was sold to the current owners a few years ago – is looking to solve the problem with an additional small footprint thermal transfer printer alongside the main receipt printer launched in March. This can use colourful pre-printed paper stock and with relevant offer details simply added, based on the individual transaction, at the time of the sale. "Colour printers are very expensive," says Bixelon UK sales director, Mike Leary. "And they are also very slow with lots of colour consumables that no one really wants to keep replacing at the PoS."

While promotional material is certainly on the agenda, TallyGenicom's Bright argues that the, "main priorities for retailers when it comes to printers are still, quieter, faster and less expensive." Today's speeds are certainly fast: high speed thermal printers running at 200mm/second or more are now commonplace. Earlier this year, US producer Greydon launched a pack label printer capable of producing scannable barcodes at a speed of 500mm/second.

While speed, durability and cost of consumables are important factors when it comes to choosing a printer, consultant Karen Coxall at Itim Consulting believes retailers should look at the wider issues as well. "Retailers need to consider if they will have a requirement for colour printing in future – to make an impact or for distinctive vouchers for customised promotions," she says. "They should also consider where the transaction will take place – is queue busting or mobile-PoS a requirement?"

With retailing increasingly multi-channel, receipt printers may also be needed for kiosk sales or from a hand-held or laptop in an assisted selling environment. More printers are also being supplied with USB connections rather than the traditional RS-232 serial systems. USB makes it much easier to send graphics across the network to the printer as well as standardising

connections to assorted devices. Powered USB technology also means that the printer can be run directly from the PC/EPOS terminal so cutting down on cabling. "We're providing dual interfaces for our RealPOS range," says NCR's Dick Arnold. "To migrate from RS-232 to USB just requires a cable change so it is easy and seamless."

Star's Tarlton believes Ethernet could prove a better solution in future: "It enables connections over much greater distances than USB and the technology is familiar and robust," she says. Her company has recently launched an entry-level Ethernet printer.

As in other areas of retail technology, printers are also becoming more customer facing and 'green'. Bixelon recently launched an 'on demand' printer which can be operated by shoppers who simply press a button if they want a receipt. "It is ideal for those customers worried about their carbon footprint, saving paper and energy," argues Bixelon's Leary.

Carbon footprint apart, it also represents significant savings for retailers, both in terms of reduced cost of consumables and electricity as well as a potentially longer printer life as it is not used for every transaction. Leary argues that returns can be handled by checking electronic journals, while security concerns could be met with a small slip of paper simply giving time of transaction and reference number rather than a long detailed receipt. Bixelon is hoping to start trials with a UK supermarket and European general retailer shortly. While Leary will not give the names of these potential customers, the more observant may have noticed that Tesco has been moving its printer stations in some stores to be adjacent to the old cheque stand and PINpad and draw their own conclusions.

But while print technology and printer communications may be progressing, will the entire concept of a printed receipt become obsolete as we move further into the digital age? Why not just SMS the details to a shopper's mobile phone or e-mail it to their home PC for a permanent record? Indeed, NCR introduced a system for digital receipts around five years ago, although take-up is still slow.

"Certain market requirements, including a focus on the environment and a more technological savvy younger generation, will inevitably influence and drive the demand for a digital receipt," says NCR's

Arnold. "However, this will not happen overnight. There are significant hurdles to overcome, including the technology infrastructure and potential security concerns. We will continue to keep our finger on the pulse of this type of technology."

Star, too, is keeping pace. "It's something we talk about a lot as it seriously impacts the future of our business," says Star's Tarlton. "Perhaps one day receipts will just be sent to your mobile phone – but every customer will need to sign up for the service with every retailer they want to trade with in this way and legislation still currently dictates a paper receipt. Perhaps the paperless checkout will be rather like the paperless office – something that is widely predicted but never actually happens."

Collaboration pays off

DSG International (DSGi) has saved an estimated four million pieces of paper and reduced its carbon footprint through its environmental work with Lexmark UK. The electrical retailer says that it has saved approximately 93 tonnes of CO2 emissions a year, thanks to Lexmark's power save solution, which reduces the energy a printer uses after 15 minutes on standby.

The company has been working with DSGi since the implementation of the Lexmark Managed Print Service, covering nearly 5,000 printers and multi-functional devices in July 2006. Clare Brine, corporate responsibility manager at DSGi, comments: "We are extremely supportive of suppliers that share our dedication to protecting the environment. In addition to vastly reducing the amount of paper and energy we consume, Lexmark has also helped us cut the quantity of toner we use by an estimated 2,500 cartridges per year. We have also signed up to their toner recycling programme which ensures that every cartridge we consume is reused."



Reduced carbon footprint at DSGi.