OPTIMISING PAPER SUPPLY CHAIN MANAGEMENT

A best practice guide for paper merchants and printers

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FOREWORD

The supply and distribution of the paper consumed every day by the UK's £14bn printing sector is a complex and expensive logistical process, typically accounting for up to 40% of a print company's consumables spend.

So with print prices under pressure as the result of reduced demand and increasing competition from e-media, the publication of this guide to optimising paper supply chain management is timely. It is now more important than ever that every cost in the supply chain - from forest to front door - is managed down to its absolute minimum, while at the same time service levels must be maintained or improved. Supply chain inefficiencies, such as those emanating from poor communications between suppliers and customers, must be driven out. Working in partnership with the NAPM, we are seeking to inject fresh thinking into this traditional area. We hope to persuade those who have hitherto perhaps seen themselves as adversaries to start to work together to address what is after all a common problem – the need to reduce supply chain costs and enhance the value of the end-product. But hopefully it's about more than this. Ultimately all businesses need to develop exciting and innovative products and services if they are to remain viable and profitable. There is no reason why they cannot apply the same spirit to their supply chains, maintaining a necessary focus on cost, quality, and delivery but also embracing innovation and growth.

Kathy Woodward
Chief Executive
BPIF

BPiF

Over the last four years, since the world recession began in late 2008, the UK's paper merchanting industry has seen a fall in demand for its paper and board products supplied mainly to the printing industry of around 8% per annum on average.

It is the NAPM's firmly-held view that these "lost" tonnes will never return and that the consumption of paper and board products will continue to decline for several more years to come yet, although, hopefully, at a slowing rate. Indeed many merchants have actively sought other product lines to sell, like plastics and packaging, to lessen their dependency on paper.

Already though the merchanting industry has experienced huge structural changes as NAPM members do everything possible to adapt to the unprecedented downturn in demand for paper. With 25% fewer employees than in 2008, less branches, less commercial vehicles and indeed, fewer operating companies in the market, as merchants have merged and integrated their operations, it has become vitally important that the printing industry better understands, acknowledges and appreciates those changes that the merchanting industry has necessarily had to make in the past few years and will continue to have to make in the coming years ahead.

The already excellent working relationship which exists between the BPIF and NAPM has been clearly enhanced by the coming together of both bodies in order to publish this guide.

Tim Bowler
Director
NAPM

NAPM

EXECUTIVE SUMMARY

The two years prior to the publication of this guide in September 2012 have seen growing concern across much of the printing industry about increases in the price of paper.

Although paper prices eased to some degree in the months preceding publication they remain relatively high compared with those of this century's first decade, during which significant price reductions were experienced. Price pressures have inevitably caused the industry to look for ways to improve efficiency in the supply chain. At the same time, paper merchants themselves have felt squeezed by the demands being put on them both by their printer customers and the mills.

Such issues are being raised against a backdrop of consolidation in both industries, for which the current economic downturn is only partly to blame.

The total number of paper merchants operating in the UK is half what it was in the late 1990s, while between 2008 and 2011 the printing industry contracted by 9 per cent in terms of total companies operating in the sector, and 11.5 per cent in terms of total workforce.

While this consolidation in itself may be a reason for the crisis on pricing, the timber and forestry industry is also experiencing increases in demand from other sectors, particularly the biomass and furniture industry, which may initially look far more enticing to them than the traditional graphic paper market. It is our contention in this guide, then, that printers and paper merchants can and should work much more closely together both to reduce supply chain costs and to dampen the effect of price increases, but also more importantly to grow their market to make it more attractive to paper mills.

Having conducted an online survey during the summer of 2012 of nearly 90 printers, and having spoken to a wide range of paper merchants, we believe that this could be achieved in particular by co-operating more on deliveries, using IT more widely, working proactively to agree credit terms that are comfortable for both parties, and working together to reduce waste and convert it back into a saleable product.

We feel that by working together in such a way, both printers and paper merchants can be seen to be far more proactive in their business, helping to withstand not just the pressure of paper pricing but also the equally challenging competitive threats from digital media.

INTRODUCTION

This guide to best practice in paper purchasing and supply chain management has been published by the BPIF and the NAPM as part of a joint initiative to promote greater co-operation between printers and paper merchants in reducing supply chain costs, and has been written by PrintYorkshire CEO Robert McClements.

The aim of the guide is to provide a considered basis for subsequent discussions between printers and their paper suppliers and to help them work together more effectively in coping with the impact of rising paper prices.

In order to gather data from the printing industry an online survey, the BPIF Paper Procurement Survey 2012 was sent to members of the BPIF as a link embedded in an email. This invited recipients to complete a questionnaire and provide free text comments that would contribute to the debate about paper prices and ways to drive costs out of the supply chain.

This methodology allowed us not only to analyse responses but also to have an international dimension to the survey by enlisting the help of printing trade associations overseas and other selected third parties in gathering company data.

We received a total of 90 UK responses, mainly from "General printers" (over three quarters of UK respondents classified themselves as that) and from a mix of company sizes that truly reflected the breadth of the market. In New Zealand 81 printers responded from a much smaller industry. Comparisons have been highlighted in the "International" section of the guide. The relatively small number of responses from the USA (California), and from Denmark, Hungary and Norway were used to identify any similarities or variations in custom and practice. In the case of Norway, the responses came from a printing company owner and current president of Intergraf.

In view of the relatively smaller number of merchants we chose to carry out a series of structured interviews with NAPM members. Where there was a possibility of more detailed discussion we invited the respondents to provide information to be included as best practice or a mini case study. We have respected all requests made by recipients who asked for their comments not to be attributed.

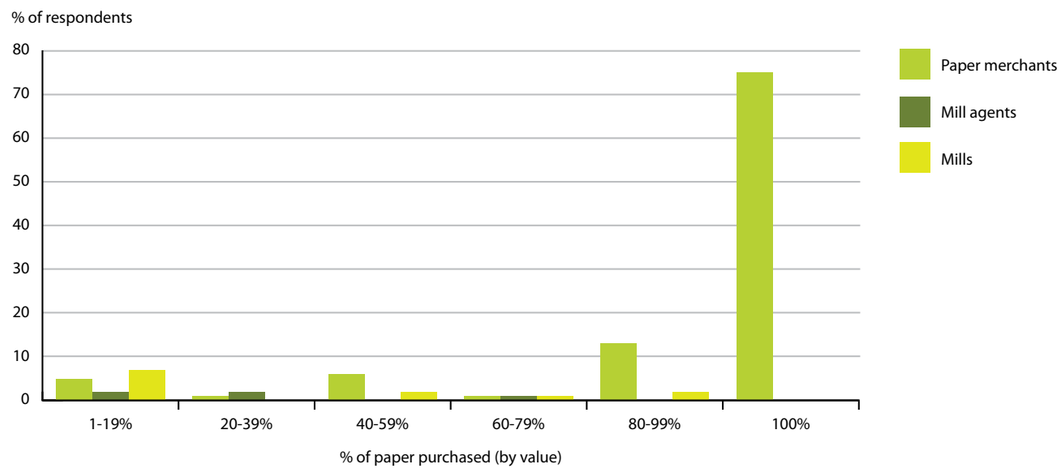
THE CURRENT SITUATION

The eventual price of the product you are selling is bound to be a contentious issue in any industry, and at any time. But, partly because of the tough trading conditions facing most printers, the escalation in paper prices seen since the onset of the recession has become a particular source of friction between paper mills, paper merchants and printers in the past few years. Other factors creating friction are pressures created by the highly competitive nature of business in the printing industry which impacts on both printers and merchants.
The upward drift of energy and raw material costs has reduced margins that were already slender. Although in the last few months paper prices have eased slightly, the longer term expectation is for prices to continue to rise.

Printers see merchants as being responsible for these price increases. In the same way merchants feel paper mills are responsible, and paper mills in turn say their production costs are being driven up by the impact of rising energy costs on the price of pulp. One thing the survey we ran while producing this guide did uncover is that printers are unlikely to hear arguments from both of these parties, as most seem to deal either with mills or with paper merchants – few deal with both.

Survey respondents were asked to state what proportion of their paper they purchased from paper merchants, paper agents and mills respectively, putting each category of supplier into a scale of percentage bands to show the proportion they purchased from each (i.e. 1-19, 20-29 etc). The chart below shows that the majority purchased the bulk of their paper from merchants – in fact 75% buy solely from this source – with very few using multiple sources of paper supply.

WHERE PRINTERS PURCHASE THEIR PAPER



Source: BPIF Paper Procurement Survey 2012.

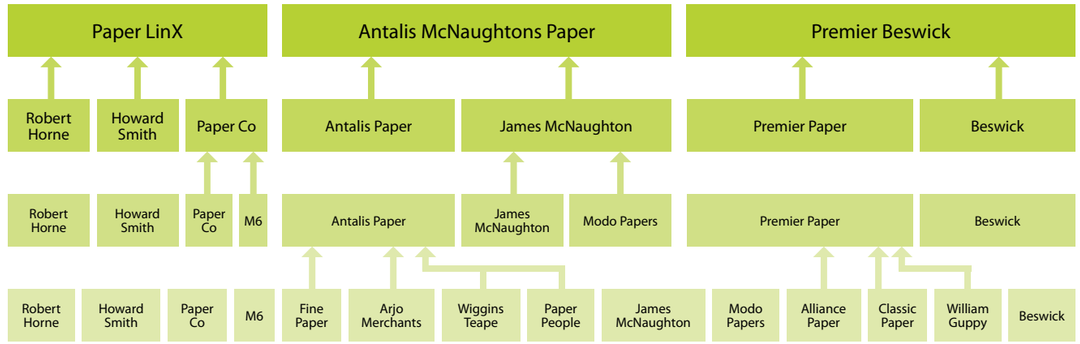
The suspicion on the part of printers that their paper suppliers are not doing enough to contain the cost of their products can be summed up by calls from some who answered our survey for the BPIF either to produce a benchmark for paper prices – something that would be contentious if cited in subsequent negotiations - or at least to gather market intelligence that could help its members actively seek out better deals.

If this suspicion is left unchecked, it could have serious consequences for two industries that have already seen significant market changes over the past few years.

In looking at these changes further, let's start with paper merchants. There are around 30 paper merchants left in the UK, of which around a quarter are specialist board merchants. This total has halved in the last 15 years or so, due in part to a series of takeovers, such as the Australian company PaperlinX's acquisition in 2002 of Bunzl Paper, later renamed The Paper Company, which in itself covered the previously separate brands Robert Horne and Howard Smith.

We can trace the development of today's paper merchants by using a simple family tree-style graph as in the diagram below:

UK MERCHANTS CONSOLIDATION 1990-2010



Source: Communisis plc.

The result of this consolidation is that today just three major groups currently account for around 75 per cent of all paper sold to printers in the UK – PaperlinX, Antalis McNaughton and Premier Beswick.

Such consolidation inevitably entails an ever decreasing range of options open to a printing company hoping to be able to offer a better price for his end customers.

The changes have also led to a squeeze on quality in some areas, as more and more merchants abandon selling a wider range of papers in favour of going for the mid range. In part this is because printers themselves can now use technology to put "high gloss" or "satin" finishes on paper during the printing process. Much of this consolidation has been caused by reduced demand for paper overall – itself a consequence of the economic downturn. Total tonnages sold declined by 25 per cent between 2008 and 2011, although the 8 per cent decline measured so far across 2012 represents something of a tailing off. In reaction to this, the total number of employees in the paper merchanting industry has also declined by 25 per cent in the last three and a half years.

The UK print market has declined similarly. It shrank by 6 per cent between 2008 and 2011. But the overall market reduction in printing has been overtaken by the percentage decrease in both the number of companies and employees, which have decreased by 9 per cent and 11.5 per cent respectively. The forecast would appear to continue on a downward trend, as you can see from the following graph.

PRINTING COMPANIES AND EMPLOYMENT - NUMBERS IN DECLINE

NOTE: A significant overhaul of the statistical classification system by the ONS in 2008 make comparisons pre and post 2008 inadvisable.
*Source: BPIF Research analysis of BERR Enterprise Directorate Analytical Unit SME statistics (SIC 22.2 + part 21.2): *BPIF Research estimate and forecast.*

The decline in printing's market volume and in its perceived importance as a communications medium is aptly described by Darren Shepherd, managing director of Jade Print, a mid-sized printer based in Leeds. He claims that ultimately print in general today is massively underpriced and undervalued. *"We have a number of older customers who worked in print in the 1980s and 1990s – and they have voiced that print is probably priced at 25 per cent less than it should be for what goes into it,"* he said.

There is however an equally serious threat to both printers and paper merchants from the end user. Customers are already being bombarded with all sorts of reasons why switching to electronic and digital communications makes sense. The printing industry is responding well to these challenges. It is going through huge evolutionary changes as more and more of its companies transform themselves into multi channel communication specialists delivering every conceivable type of media communication their clients need.

But paper clearly remains a key component of what the printer has to offer, and the current tension over paper prices cannot be a good thing for either printers or paper merchants. If paper price increases are passed on to end customers, this will only encourage them to switch more of their communications to digital media – and at a faster pace.

We need, then, to understand a little more about why the current situation has developed. What are the underlying trends that are causing these price rises? Anyone who is currently worried about the impact of the rises surely needs to understand the reasons for this.

The NAPM says the consolidation and accompanying reduction in market volumes is itself to blame. As the industry loses some of the economies of scale that larger scale production would have brought it, so prices go up. It adds that paper suffers from over- and under-supply problems on a cyclical basis, just like many other manufactured commodities, and that affects price. Paper is also unusual in that to increase or decrease capacity in the paper industry to match demand is not always easy as the industry is very capital intensive with long investment cycles. Price fluctuations therefore reflect these supply imbalances.

But another reason for price changes might be the additional markets that are opening up for many paper mills across Europe and beyond. Markets such as biomass, for example. Renewable energy is becoming an increasingly lucrative sales channel for paper mills. So much so that, for example, Burgo, an Italian multinational paper mill company with a subsidiary in the UK, has gone as far as setting up a separate energy division in its home country that supplies energy nationally.

Other outlets, such as furniture and animal bedding, are opening out to paper mills as well. In other words, graphic paper is fast becoming only one of a number of sectors the mills can sell into – and it is probably not the most lucrative option for them anyway. (This goes some way to explaining why it is much more difficult to order a special sized making from a mill nowadays – many mills have simply chosen not to offer such work, as they do not see it as commercially viable.)

As NAPM director Tim Bowler says: *"Mill groups are in fact mainly timber and forestry groups who don't necessarily see making paper as their core business."*

You can see this change highlighted very clearly in *Unfold the Future: 2050 Roadmap to a Low-Carbon Bio-Economy*, a report produced by the Confederation of European Paper Industries (CEPI) in 2011. The European papermakers' trade body makes it amply clear in this report that paper is only one of a number of end products that mills are capable of producing. As principal author of CEPI's strategy, Marco Mensink, Deputy Director General outlines the industry's plans to achieve 50% more added value from forest fibre on the road to 2050 while cutting CO2 emissions by 80%. In fact the report foresees a situation in 2050 where wood-based refineries will produce "wood products, pulp, paper and board, bio-energy and biofuels, biocomposites and biochemicals". In other words, a whole range of products will be produced from forest fibre, not just paper.

It would seem obvious, then, that printers and paper merchants, far from sparring about who is to blame for price rises, need to come together to work out ways of increasing market size by enhancing the value of the printed product and streamlining supply chain efficiency. Only by doing so will they remain an attractive proposition to the paper mills.

This guide aims to set out ways in which this could be done. Right across the industry we think there are changes that could be made to achieve this result – in logistics, in the use of IT, in education and training, in finance and even in how each sector deals with waste – a seemingly peripheral concern, but one that can reap strong rewards for both sectors and improve their corporate social responsibility into the bargain.

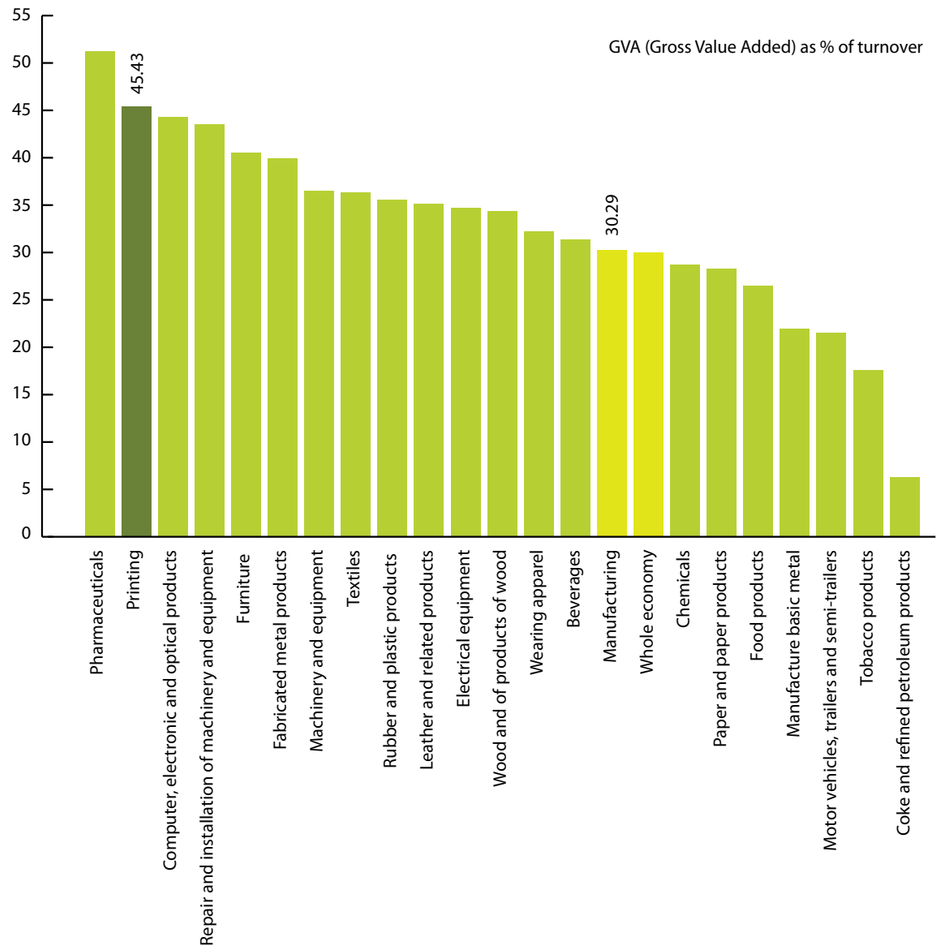
We see this as something of a wake-up call for the industry. As one paper merchant said to us: *"There really is a need to change the whole of the industry – otherwise print will become more expensive and less competitive with new alternative media."*

THE PRINTING INDUSTRY TODAY

Printing remains a major contributor to the UK economy. It is the 12th largest ranked by GVA (Gross Value Added), but 2nd highest when ranked by GVA / turnover ratio. (Pharmaceuticals has the highest ratio.)

It is also the UK's 5th largest manufacturing industry behind the food industry. And if the printing sector is combined with the allied pulp, paper and publishing sectors, then it is catapulted into being the second largest UK manufacturing industry.

PRINTING ADDS RELATIVELY MORE VALUE THAN ALL BUT ONE OTHER MANUFACTURING INDUSTRY



Source: BPIF REsearch analysis of ONS, Annual Business Survey - June 2012.

WHAT ARE THE MAJOR ISSUES?

In both the survey and our discussions with merchants, printers and customers, a number of themes or issues began to emerge. We believe that these are the areas upon which both paper merchants and printers need to concentrate in order to maximise relationships for their mutual benefit and that of the ultimate customer. Those issues are:

Logistics
Waste
Information Technology
Education and training
Finance and credit

LOGISTICS

It is a conundrum in the industry that while many paper merchants see the quality, speed and timeliness of their delivery services as being a key way of providing added value to their customers the printers, many also feel that delivery itself is a hidden cost they cannot bear on their own.

For many paper merchants the cost of goods only makes up 80p in every £1 of cost of the product. The rest is distribution costs – so how you distribute could make a big difference to your ultimate profit margin.

Some merchants report that they are sometimes delivering two or three times a day to the same printer, but do not usually fully recover the marginal cost of doing this because they want to portray this practice as good customer service. So it may be, but offering such service once at no extra cost encourages such behaviour to be repeated, and that results in costs which in time become structural inefficiencies.

One merchant has tried to overcome this problem by moving account managers around so that they do not become complicit with printers and offer not to charge them more for rush deliveries. Other merchants, fearful of acting in such a possibly unpopular manner, are simply cutting costs at their end by closing local depots and consolidating into larger regional or sub-national hubs. That's a practice that does not always find favour with printers. But are printers prepared to pay more for a 'deluxe' distribution service? It seems not.

This burden of these costs becomes particularly acute with the smaller delivery sizes that some paper merchants say are becoming increasingly popular – and which many printers still expect to be delivered on the same day.
Some paper merchants have tried to overcome this problem by charging for smaller deliveries, but by and large printers seem reluctant to take on these charges. And those merchants who have imposed, say, a surcharge for deliveries below £50 in value often find that a canny printer will aim to make an order that comes in at £51.

But there is a reverse side to this too. We came across many printers who, having seen the inefficiencies in having two or three deliveries from the same merchant in one day, had tried to open up a discussion about possibly getting a discount if they improved their forward ordering. Most found the merchants were either unwilling or unable to enter into such an agreement – possibly because prices had already been adjusted to cover the inefficiencies involved.

Nigel Stubley, MD at Northend, said, *"We need more transparency in paper pricing so that printers can decide what level of service they are willing to pay for - an incentive for better planning, fewer deliveries, greater flexibility in demanded time slots for deliveries."*

Best practice – merchants and printers to agree service levels up front, including delivery charges (if any).

Synchronisation of delivery

Like many other industries, many in the industry, including the experts in the BPIF's Vision in Print programme, have been encouraging printers and paper merchants to venture more into just in time delivery and backloading (a process where the merchant takes on another load from the customer and delivers it to another location) as part of the drive towards lean manufacturing.

Backloading sounds fine in theory, but clearly in any printing operation there will be a time delay while the printed material itself is produced on the paper provided. Paper merchants may deliver in the morning, but they do not have the time or resources to wait around for another load. In any case, as some merchants contract out their deliveries or have dedicated subsidiaries, this is not always a workable proposition.

When it comes to backloading, printers may also be reluctant to give up control of exactly when their products arrive at a customer's door. They would be particularly displeased, for example, to find that they were being made to wait for a rival's finished product also to be loaded up onto the same lorry before the delivery can be completed.

That is probably why many printers do not use shared deliveries. Some 35.4 per cent of our respondents would never consider doing so, and only 34.2 per cent always do. The main persuading factor seems to be that such an approach is still considered to be too risky. As Andy Galloway, managing director of Stockport-based printers Galloways, said: *"Delivery to customers is too important to trust anyone else."*

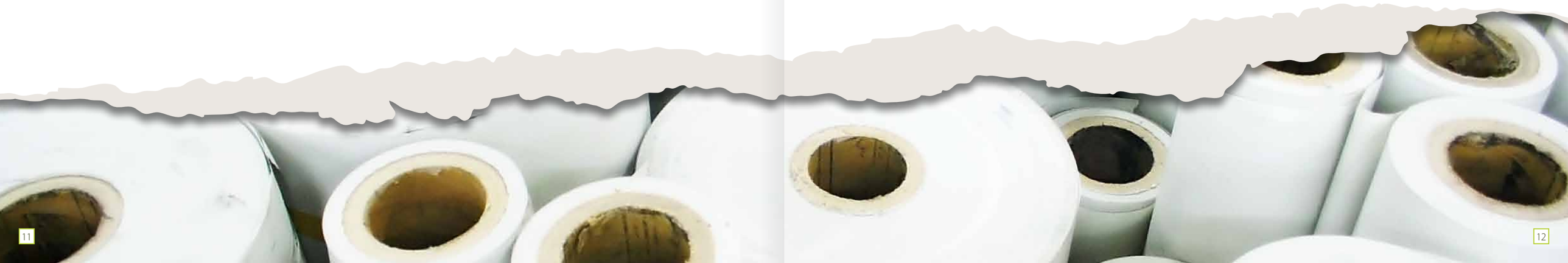
That said, shared delivery is being tried out in some quarters: PaperlinX has started delivering finished goods to printers' customers as part of a collaborative trial project – but only where there is a predictable workflow.

Another merchant, having realised that it has become expert in moving palletised goods, is back loading deliveries with soft drinks from a nearby supplier that are also palletised.

Best practice – printers to identify which of their finished goods customer deliveries are not time-sensitive and then negotiate with the paper merchant on a delivery schedule/price structure.

PRINTERS USING SHARED DELIVERY RUNS

Source: BPIF Paper Procurement Survey 2012.



WASTE

The paper and printing industry has not always had a good track record when it comes to dealing with waste, although it is consistently improving. Paper was one of the first materials to be easily recyclable, but it has taken the industry quite a long time to get to grips with how recycling can effectively work.

There have been reasons for this: waste paper from printing falls roughly into four categories: waste paper that is produced during the printing set up process; paper that is waste as a result of a faulty print run; paper that is left over at the end of a run; and trimmed product. Segregating this waste, which is often a prerequisite of sending it on, can be a time-consuming and hence costly exercise. There is also a big difference – often as much as £50 per tonne - in the price waste can fetch, depending on whether it is "virgin" or printed. And there is the question of what you do with the core at the end. For a sheet-fed printer the question is the same with the top and bottom sheet in a ream, or the bottom sheets on a pallet. Do you set up your system so there is no waste paper left on there at all – potentially adding risk to the operation – or do you leave, for example, 20 metres left over on a reel? All these issues show why any recycling operation involving printing has to be carefully coordinated. Yet clearly if waste paper can be returned – effectively sold back – to the source, then such efficiency can quite considerably help to bring costs down.

And there are signs that this is happening. Antalis McNaughton is currently rolling out a closed loop system called Full Cycle. Under this scheme, which is open to any size of customer and not just printers, all the customer's waste graphics and office paper is collected and recycled at facilities run by Arjowiggins, before being sold back to the customer with a special Full Cycle logo stamp, to show that it has been through the process. Customers get credits for every tonne of paper they send through the system.

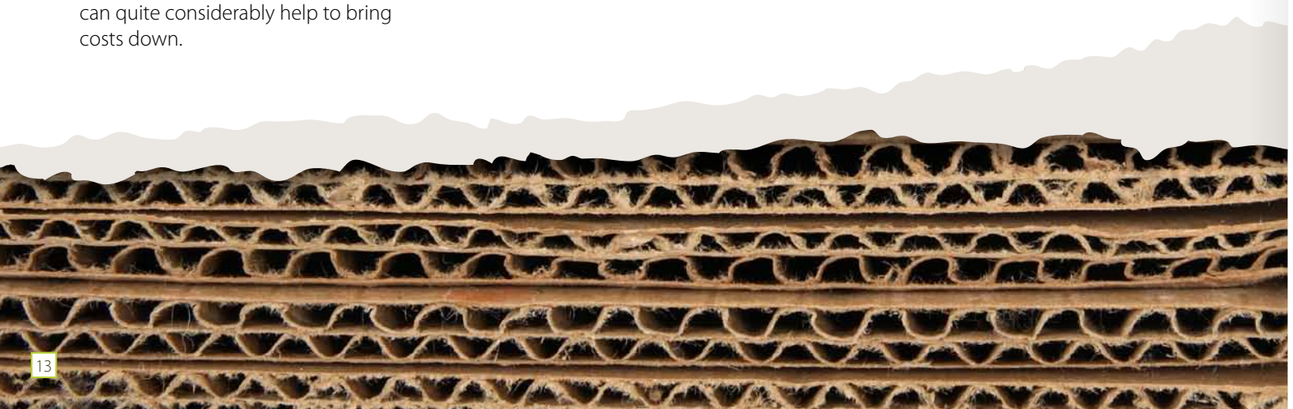
Best practice - Printers should also "shop around" for the best way to dispose of the four paper wastes highlighted above. Merchants are also alive to the opportunities to offer further services to their customers involving waste reduction.

Environmental management

Other paper merchants are also working with environmental management companies to collect waste from printers for recycling. One advantage of this process is that it is not as time-sensitive as with the printers' finished goods.

Such schemes should be encouraged if the printing and paper industry is really to grasp the benefits of the "green" economy.

Best practice – lean manufacturing techniques, such as those expounded by the BPIF's Vision in Print engineers, can help to reduce paper waste in print production and should be applied to supply chain management.



Hub and spoke systems

Many printers comment on the waste involved in having, for example, deliveries from three different paper merchants on the same day who arrive with half-loaded vehicles and are all more or less coming from the same place. They compare this system with the hub and spoke model they see many general logistics companies using, and wonder why paper merchants cannot adopt something similar.

Hub and spoke models are, however, considerably more expensive to set up, and would clearly require there to be a general spread of paper merchants' customers across all regions in the UK. This is not always the case. The very nature of the hub and spoke system also means that delivery times are usually longer, so merchants would no longer be able to offer their USP of express, early morning deliveries.

While some paper merchants have gone down the road of outsourcing their deliveries to hub and spoke logistics companies, this also may not be a popular choice for all merchants, as it usually means they lose the marketing benefit of having their own lorry driving around, advertising their brand name.

In addition, printers may not appreciate the loss of local experts in depots or in the sales role (see below).

Best practice – merchants should employ structured consultation in all cases when planning logistics re-organisations, depot closures and changes in sales representatives' territories.

Warehousing

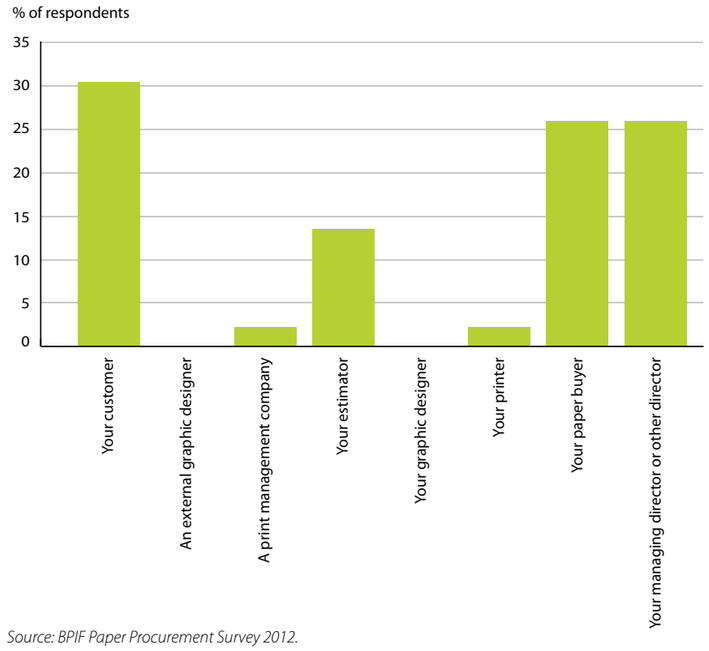
Because so many printers now seem to require a next-day service, many paper merchants are carrying stock levels that are far higher than are probably ideal. One has a warehouse that is on average 96 per cent full. This is clearly not an efficient use of resources, as stock is lying around unused, not bringing in any return to the company and clearly adding to costs.

Traditionally some paper merchants have sought to overcome this problem by only stocking certain "house styles" of paper regularly, and only ordering in special styles as and when necessary. Particularly when it comes to contracts with print management companies, many paper merchants will require them to use only certain styles which the print management company's customers must choose from.

Printers usually will follow such house styles as well. A common trend is for the director to negotiate house styles with the paper merchant or mill at the start of each year (often an intricate process) and for the sales team to try to sell off that.

But many printers are coming under increasing pressure to allow the customer to choose paper styles – and that can throw such a carefully structured system awry. Our survey clearly bears this out. Asked who had the most influence over which style of paper was used, 25.8 per cent said the managing director of the company, 25.8 per cent – the same number - said the paper buyer, but 30.3 per cent said the customer. (It is just possible that some of those who responded that way were being correct in an academic way only – the customer has the influence because they pay in the end, but the director may still make the decision.)

MAJOR INFLUENCER OVER PAPER USED



Source: BPIF Paper Procurement Survey 2012.

On top of that, customers' input is also coming into supplying the paper, particularly in response to the new trend for back selling (see below). While just under half of those who responded – 44.8 per cent – said the customer never got involved, almost as many – 41.4 per cent – said the customer, in some sectors such as magazine production, might supply as much as 20 per cent of all the paper they used. Comments such as "Our head of procurement and category manager work on paper choice, although customers increasingly have a say on what materials to use and are more often supplying their own materials" were not uncommon.

Such variations in specification can prove a headache for printers, who often have limited storage space to accommodate it.

Best practice – printers to use their historical data on paper usage from their management information system (MIS) to make arrangements to ensure that merchants always hold such stock on call off.

And yet alternative delivery options are still fairly uncharted territory. The practice of calling off – where the paper is bought by the printer but actually remains on the wharf, not even in the paper merchant's warehouse – is still a bit of a rarity among printers. Almost two thirds of our respondents – 61.3 per cent – still never consider using this.

They may be missing something, because one merchant suggested that one way to increase efficiency would be to introduce a system where the paper merchant manages the paper for customers direct from the mill – and in effect charges a management service fee for doing so. There are problems with such set-ups, however. The first is over who takes advantage of the yield from the actual sale of the paper. One paper merchant said print management companies, who are keen to drive down costs and commoditise and so might be attracted by such a venture, see little value in pursuing yield, believing that is more of interest to printers themselves.

The other issue is that such elaborate relationships work fine for large contract-based printing, with regular production schedules and deliveries. But such work is not, in fact, the norm for most printers. Many of them are driven entirely by their customers' sometimes erratic demands, by their customers' expectation of next day deliveries, and by their own unwillingness to pass on the cost of delivery to the customer.

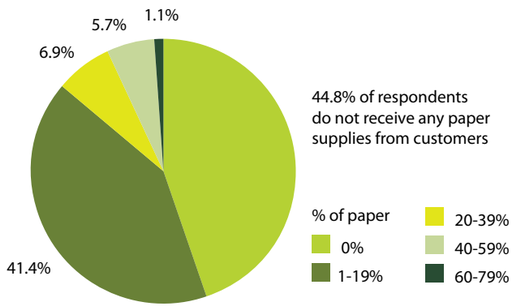
Marketing

One issue that particularly annoys printers – and which could be better illuminated by improved industry education – is the tendency for some paper merchants to differentiate one brand of paper they sell both from others they sell and from the competition, even if the paper all comes from the same process in the same mill. The printers who responded to our survey can see that paper merchants need to build their brands this way, but also feel that such lack of transparency destroys trust between customer and supplier.

It could also be argued that it adds cost to the supply chain too, as separate brands require their own merchandising, and have to be ordered separately, putting up the cost. But whether paper merchants would be willing to come together to market papers in a collective way is at best debatable: such co-operation would appear to go against the basic principles of brand and business building.

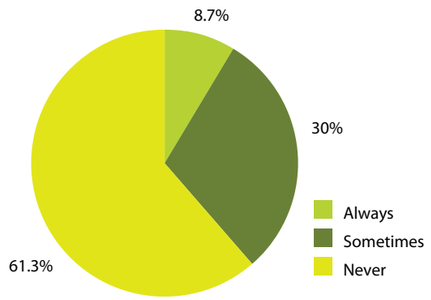
Best practice – merchants to transparently identify brands with the manufacturing mill.

PROPORTION OF PAPER SUPPLIED BY CUSTOMERS



Source: BPIF Paper Procurement Survey 2012.

SCOPE FOR WHARF STORAGE AND INVOICE ON CALL OFF

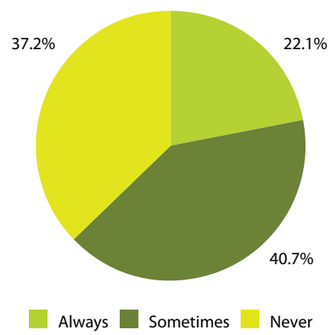


Source: BPIF Paper Procurement Survey 2012.

The results of our survey show a surprisingly low use of e-commerce, even with transactions costs currently estimated to be at between £50 and £60 per transaction.

Nearly two decades after the word 'internet' entered the English language, there are many companies within the printing industry who still view it as "new" technology. Anecdotally, some paper merchants talk about still receiving orders by fax, sometimes even by post. This may explain why paper merchants on the whole seem not to show much enthusiasm for increasing the amount of business they do online. And neither, it seems, do printers. In our survey, only 22.1 per cent of respondents said they always used electronic invoicing, for example. In contrast, 37.2 per cent said they never used it, and many said they were loathe to give up the human contact they get from negotiating with a person for a few lines of text typed on a screen.

PRINTERS USING ELECTRONIC INVOICING TO HELP DRIVE COST REDUCTIONS



Source: BPIF Paper Procurement Survey 2012.

This contrasts sharply with some paper merchants' experience of other countries. One paper merchant said his customers in Scandinavia think nothing of putting together an order in the middle of the night, because they are used to doing their business online, 24/7. While such a work ethic may not be to everybody's taste, the fact that they can order at such a time shows how flexible and efficient such a digitally enhanced relationship could be. At the same time, British printers who do not make themselves so available online may feel that they are in more control of their customers as a result – customers have to play more to their tune.

Best practice – paper merchants to consider the use of significant incentives to encourage printers to accept electronic invoicing.

Specialist IT

To be truly technically literate, any industry needs purpose-built software that takes account of its special needs and idiosyncrasies. When it comes to paper merchants, such software seems to be produced largely by the merchants themselves, of which paper merchant Denmaur's system is a good example.

The company's TOPS11 system, which was developed in-house, has already helped it reduced its own purchasing function from 45 working days per month for a team of eight people to two hours weekly for one person. But it does much more besides. Customers can access the system themselves to compile reports and stock records – the company is currently piloting with a printer to allow it to enter all its usage details directly. The system can also produce interface files that can populate a customer's accounting system. It can even produce a report with the customer's own logo – useful for print management companies – and it can create a budget based on planned usage.

Some printing companies, in contrast, have made valuable gains by investing in ever more sophisticated IT options. For example, in February 2010 Cheshire-based County Print upgraded the Shuttleworth estimating module it was already using with the free Estimating Wizard.

Although Shuttleworth devised a dedicated three-day training session for the company's commercial director, the upgrade includes a "simple entry screen" which is designed to allow non-experienced estimators to produce estimates. It also has a multiple operations feature which allows you to quote with the same specifications but with different variations. The company has found that in effect this helps it forecast the best production method for each job – which is particularly useful for jobs with borderline quantities. And as a result of using the wizard, the

company has reduced its quoting timescales by a third.

A general printer cites a simple example of MIS being able to create a requisition for paper. Generated by the estimating system which also creates the electronic job bag the requisition is stored until the job goes live. At that point the printer groups a number of requisitions together and they are dropped into an electronic purchase order which is automatically sent to the supplier. The supplier's MIS system then responds with a delivery and eventually an electronic invoice with an option for settlement by direct debit.

Best practice – printers to exploit the synergies of MIS which allows an estimate to generate not only a job bag but also a paper order.

Paper merchant Elliott Baxter is exploring the introduction of e-invoicing, particularly a process that would generate a direct debit advice note 10 days prior to the debit, allowing the customer ample time to raise any queries. It would remove the need to raise cheques and create cost savings for both parties.

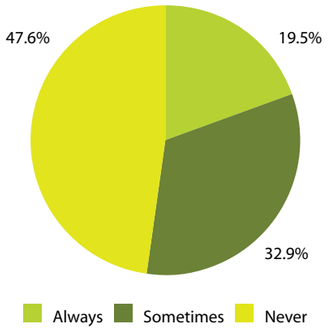
But of course, all these systems need to be able to talk to each other for relationships to run smoothly, and you have to get buy-in from all concerned – mills, merchants, estimators and accounts. They all have to trust the system enough to release what can be very important and sensitive information to a computer. The fact that so many of our respondents said they did not take part in electronic invoicing because it was "too risky" suggests there is some way to go in this.

CRM systems

Customer relationship management (CRM) software has become a prerequisite of many industry sectors in recent years, as it enables companies to analyse their sales and marketing activity to put together a much more detailed picture of how their customers behave and hence how to sell to them more effectively. Such information gleaned about the end user would clearly benefit the paper merchant/printer relationship, as both parties would understand better what the end goal of their operation was.

Such analysis, however, appears to have relatively little take-up within the printing industry. Some 47.6 per cent of respondents to our survey said they never studied historical purchasing data to work out how and when to sell to customers in the future.

USE OF HISTORICAL PURCHASING DATA TO FORECAST AND ENABLE BULK PURCHASING



Source: BPIF Paper Procurement Survey 2012.

Print procurement software consultancy Blue Buffalo, well known in the industry for helping BSkyB take its print management in-house, thinks this seeming reluctance to use data is holding back printers' productivity. It feels its efforts to improve efficiency within the industry's purchasing processes are often hampered by data not being stored in a way that makes it easy to analyse spend on print in small and large organisations. This lack of data, it feels, leads to inconsistency in buying, and often ends up with the wrong item being ordered from the wrong people, and an ensuing struggle for the supplier to be able to deliver using what has been supplied. Even something as relatively simple as separating product costs from logistics costs, it says, would help to identify where some costs could be saved.

There may be a reason for this seeming reluctance to go down the CRM route, however. Unlike industries which have embraced CRM wholeheartedly – such as insurance – buying patterns in the printing industry, except for those involved in publishing, are not usually regular enough for printers to collect reliable information from what has gone on before. Even Blue Buffalo admits that there is a challenge in aggregating spend across silos of buyers, particularly with print management companies who often do not really have centralised procurement. Still, there may be more room for the printing industry to explore the possibilities that CRM brings up in more detail.

Best practice - Ensure that all patterns of paper usage are analysed, data gathered and used to forecast requirements using the best available system whether it is provided by the printer or the merchant

EDUCATION AND TRAINING

Many paper merchants feel that the problems they are facing with wasted capacity - deliveries not synchronising and different grades of paper being ordered - are just as much a problem for the printer as they are for the paper merchant, and that the relationship would work better if printers were better educated about paper.

One paper merchant remarked that many printers did not realise, for example, that cheaper grades of paper are sometimes a false economy because they tend to take up more ink. At the same time, many printers probably think their work would be a lot easier if paper merchants were better educated about how printing works. One printer specifically complained about the reduction in the number of locally-based merchants, who were being replaced by call centre staff with less experience and knowledge.
The consequences of this are spelled out in a audit Blue Buffalo carried out on print spend that found variations of up to 20 per cent in the cost of paper used on a specific job. It reckoned such variations were caused by differing print performance and also by variations in the choice of paper, particularly where less expensive options would perform equally well.

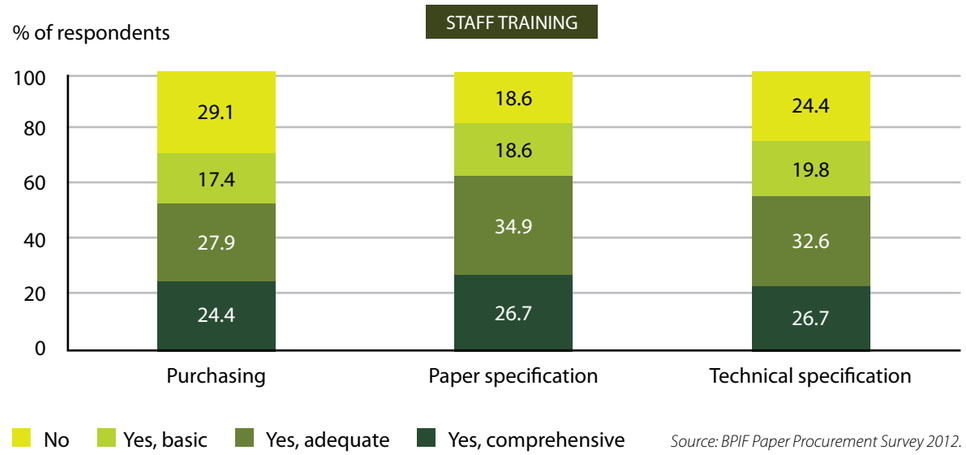
Certainly our survey highlighted training as an issue: more than a quarter – 29.1 per cent – of printers who responded had never given their staff any training in purchasing, and only just over a quarter – 26.7 per cent – were giving them comprehensive training in paper specification.

Best practice – printers to provide a team approach within the company in providing background technical support and purchasing expertise to a less experienced paper buyer, who is in turn updated and informed by the merchant.

But it is not easy to see how a system that involves the supplier educating the customer would work in practice. Many paper merchants say they shy away from any kind of one-to-one consultancy work, as they feel this smacks of telling the customer what they already know. Their sales people in particular do not want to jeopardise the relationship they may have with their individual customer by bringing such issues into the discussion. Some paper merchants have instead opted for more of a seminar approach – but there is clearly the extra cost of organising such events, which may be hard to bear, for example, for a paper merchant whose USP hangs on the cost of its product.

One approach would be for the BPIF and NAPM to organise a series of joint seminars to educate merchants about printing and printers about paper.

STAFF TRAINING



Source: BPIF Paper Procurement Survey 2012.

Such an industry-wide approach might jeopardise any one company's plan to provide added value by offering such training. It would also need to be carefully managed in order to focus on shared benefits stemming from a better understanding of how to manage the supply chain. But at least everyone would have access to proper training.

One aspect of "education" that can certainly affect the progress of the market is back selling – paper merchants promoting their wares directly to the designer who will be putting the end product together, rather than to the buying director of the printing company itself.
As we have already seen, designers are increasingly having an influence over the choice of paper the printer uses, so it is not surprising to hear that back selling has become a popular option for many paper merchants. One paper merchant with a turnover of around £100m, for example, has over 60 employees, and employs three people within its sales team who are solely focused on such back selling. Another organised a trade exhibition in London that was specifically targeted at designers, and managed to get 4,000 visitors in one week.

But such business practices are clearly disliked by many of the printers who replied to our survey and who we spoke to, as they feel it undermines their business opportunities. One said his company had lost a major contract directly as a result of such back selling, which made him "furious".

Best practice - embrace every opportunity to educate any person involved in specifying paper, regardless of who is providing the information. Better informed decision making can only improve the quality of decisions.

FINANCE AND CREDIT

Clearly all discussions about finance in the current economic climate have to take account of the attitude of banks and the many complaints all industry sectors make – not just printing and paper merchanting – that banks are not doing all they can to provide the necessary funds to allow businesses to grow.

In recent years, printing in particular has in fact never been particularly high on the list of sectors that finance companies wish to invest in. The swathe of private equity investments that affected many industry sectors in the boom periods of the last decade largely passed printing by, perhaps because private equity houses regarded the industry as being in decline. For example, media companies accounted for just 3 per cent of all the money invested in companies by members of the British Venture Capital Association in 2011 – up from 2 per cent the year before, but down from 7 per cent in 2009, and well down from the 24 per cent scored just before the credit crunch in 2007. What's more, this "media" category would have included web and web-related companies, who, given their relative youth, venture capitalists probably see as a more exciting investment anyway. You could say that is a good thing – the fact that private equity houses did not pour money into printing companies means that they are not laden down with leveraged debt now. But the attitude to both printing and paper merchants may still be there.

Best practice - Explore alternative sources of finance with care and ensure that all debt is serviceable in the longer term.

Credit terms

Deciding when to set your credit terms and whether to offer regular payers a discount has become something of a crucial issue in theses straitened times. Many more businesses across the whole UK economy are now exploring all the options open to them, including greatly extending their credit terms to the point where the seller is effectively subsidising the buyer's business, on the presumption that they will continue to work with them in the future.

Such systems have been enthusiastically taken up by some printers, who see they can make commercial advantage from managing and exploiting credit with merchants. As one printer said: "Our managing director negotiates price and credit terms, and the buyer and merchants work within that." However, our research suggests that very few paper merchants are willing to experiment with such arrangements, partly because they believe their customers are getting generous enough terms already and do not have sufficient buying power to make such arrangements inevitable, and partly because of the ongoing risk of printers going out of business. They are not willing, in effect, to provide banking services for their all their customers. Good customers are likely to get credit terms and early settlement discounts - but only if they maintain their track record and consistently take the settlement discount every month.

A look at the bad debt that paper merchants have had to stomach in the past decade might go some way to explaining this caution.

Bad debt suffered by paper merchants since 2003 (in £000s)

	Q1	Q2	Q3	Q4	Total
2003	2,740	2,040	3,225	5,904	13,908
2004	2,074	5,624	2,409	2,574	12,681
2005	1,763	3,643	1,480	1,423	8,309
2006	3,038	4,505	3,284	1,747	12,574
2007	2,285	2,452	2,005	2,590	9,332
2008	2,362	3,318	4,328	4,504	14,512
2009	4,875	6,077	3,487	3,076	17,515
2010	4,904	4,072	2,875	2,739	14,590
2011	3,042	2,909	2,120	1,330	9,401
2012	2,238	813	N/A	N/A	3,051
Total	24,041	31,731	23,092	24,557	103,421

Source: NAPM.

Insurance

There is always the possibility of insuring against bad debt, but many paper merchants we spoke to think the jury is still out on whether this actually benefits the seller at all – all it means is that, in the event of a bad debt occurring, as a paper merchant you will only get paid later, and your premiums will go up afterwards as a result. There is also something odd about banks and other finance houses offering you insurance against a bad debt coming from an industry sector – printing – which they themselves view as being too risky to invest in. One way out of this dilemma is to self- insure – effectively to set aside enough capital to protect yourself against bad debt. But clearly only larger organisations can afford to do this and locking up capital in such a way prevents it being invested more effectively in the business.

The customer: npower

As you might expect from one of the UK's largest energy companies, npower has a substantial printed communications requirement, and not just in terms of all those bills it sends out. Its annual budget for communications extends to £3m, while its transactional services budget is a still impressive £2m a year. That amounts to an annual paper tonnage requirement of 2,200 tonnes.The print supply chain ranges from 16pp Web to B3 sheet.

A significant customer for the paper industry then. Yet the company's experience of dealing with paper merchants has been at best mixed. Three years ago it wanted to streamline operations by putting one paper management contract out to tender to three paper merchant groups. Under the tender terms, the merchant would store all the paper required under the contract terms, and the printer would come and collect from them. The merchant would also do all the contract reconciliation, and provide npower with regular updates of how the contract was performing. Nothing particularly out of the ordinary, then, apart from the contract's size.

Partly because npower's print manager had noticed that printers who were successful at converting winning jobs tended to have lower production costs and higher paper costs compared with other suppliers that were pricing, the company benchmarked all the paper merchants' tender prices against a benchmark provided by a large printing group who he knew bought paper well. The tender document was also very specific about the grade of paper to be used and covered all the sheet and reel sizes along with service levels he knew his suppliers would require.

The result? *"We found that even with a retrospective discount the prices the merchants were quoting were always at least 2 per cent more in the merchant's favour than the benchmark prices,"* says Jeff Richards, npower's Print Services Manager.

Three years down the line, he is setting more store on improving the efficiency of npower contracts by judicious use of software. He's been using automated software for ten years now but wanted a more complete end to end process. For its day-to-day marketing collateral auctions, the company has started using the Crystal system developed by Blue Buffalo. *"I find it is good at getting granular information, recording every detail of the job including the tonnage and the exact size of material required,"* says Richards.

There is also a paper buying module that could perhaps be developed to allow paper merchants to bid transparently for the paper content of a job once the winning printer's requirement is known. *"I am a big fan of outsourced software that gives everybody visibility in the cloud. Paper merchants could also consider collaborating with transport and develop software to control forward and back loads, allowing them to exploit efficient and timely movement,"* he adds.

Even still, he feels a wider use of cloud technology software would hugely benefit printers in particular. He thinks they are often inefficient in the way they pitch for work, quoting a price in a bid to secure the deal but then not being able to secure the most efficient paper size. Exploiting Web2print systems would allow printers to gang work more efficiently and win work whilst optimising their margin, he believes.

The logistics company: Wincanton

Wincanton has extensive experience within the print and paper industries and related sectors, and says it can see much within the industry that is common to all the sectors it deals in. This includes:

- Consolidation on both the supply and demand side
- Demand for smaller and more frequent deliveries
- An increasing demand for "greener", more efficient solutions
- A need to provide as good if not better services continually for a lower cost

But it also believes there are issues that are peculiar to the print industry which are mainly to do with its still relatively fragmented nature and the size and frequency of volumes being distributed.

The industry undoubtedly needs to collaborate more, and quickly it says, if it is to take advantage of the efficiencies this brings. But such collaboration, given the many stakeholders involved, is likely to be a two-stage process. The end game would still be an industry-wide logistics solution, as currently operates across much of the drinks sector but a more achievable quicker result might be the development of clusters of businesses that work together to gain economies of scale and set industry standards. So, for example, parcel carriers and pallet networks would work together in a system managed by an integrator working on behalf of the print industry to ensure integrity, conformance, and value for money.

The company is quite used to working with industries and businesses to see such operations come to fruition. It starts by gathering data on both individual businesses and industry sectors so that it can establish what the opportunities are. Then, having fed back the results to the industry to gain its support, it starts modeling possible outcomes. With printing this would probably involve testing different combinations of businesses and volumes to establish where significant opportunities for going forward might lie, and in particular what, if any, quick wins can be made.

Such a process has already proved fruitful for Sainsbury's and Panasonic, who in March this year began a collaborative contract with Wincanton in the Midlands that has seen each company reduce their own extended fleets that were often lying idle by 14 and 31 per cent respectively. Peak volumes are now controlled and operated by Wincanton using its larger fleet and charged on a "pay as you go" basis, yet both companies have retained local execution of their fleets. The programme has now been joined by another large food retailer.

Wincanton has also worked with WHSmiths, which was also seeking to reduce costs while maintaining support for its branch network, by encouraging other companies with a similar profile to use the Smiths-branded vehicles.

In both cases companies that directly compete with one another are continuing to do so while sharing the same route to market at a considerably reduced cost – exactly what efficient logistics is all supposed to be about.

The communications company: Communisis

According to its corporate slogan, Communisis aims to help its customers make their communication processes more profitable. In recent years the communication processes it takes part in have helped it grow considerably – the listed company had a £210m turnover in 2010 and currently employs 1,400 people across the UK and Europe. But these processes have also extended well beyond paper: as well as conventional printing, the company now provides integrated marketing services, including data management and analytics, produces targeted direct marketing campaigns, takes part in multi-channel delivery and can also offer print management services.

But while the company may be involved in such multi-channel strategies, it believes paper is still the most powerful medium and produces its highest revenue streams. Paper is procured, supplied and consumed at each of the company's manufacturing sites. It is also the raw material that forms the basis of the outsourced print undertaken by its print management division. Without a delivery of paper the manufacturing sites would cease production within hours and the subcontracted printers would be unable to meet many of the time critical production schedules required of them.

Paper is so important both operationally and financially to the company that when Communisis BFF, a subsidiary it previously owned, was allowed to go through a management buyout in 2008, Communisis still formed a 10-year strategic trading relationship with the new company, Integrity Print. This involves both companies collaborating on buying paper, utilities, and ink. It allows both companies, who together have an annual volume of around 80,000 tonnes, to benefit from the strengths of the other in specific product areas.

Since 2003 negotiation rather than tendering has become an increasingly important part of the annual pricing discussions. In 2004, after months of pre-agreement negotiations, a three-year heads of agreement was reached with a major mill owner to supply 30,000 tonnes of paper to all parts of the company.

A formal paper team, with lead buyers from each site, reviews the company's paper arrangements on an annual basis. The annual review doesn't just include agreeing prices and volumes with suppliers but also maps actual progress over the previous 12 months against the strategic plan and looks forward to the next year as well. It also checks that risk and continuity plans are sufficiently robust.

The company believes that adopting such an approach ensures it keeps paper prices low and indent lead times short.

The international dimension: B+F Papers Ltd (New Zealand)

Industry trends in New Zealand echo the challenges in the UK. Market consolidation is a feature as over the last 35 years the number of merchants has reduced from 13 to 3. Design houses are installing digital machines and becoming customers. New initiatives have seen more business from larger print companies and there has been an attempt to bundle consumables with paper.

B+F Papers CEO Barry Tripp considers that the reputational risk is too high for bundling to be worthwhile, as evidenced by an Australian offering. The result of the offering was that paper sales personnel struggled to deal with technical issues about printing plates and processing chemicals.

When problems arose they could not be dealt with quickly and the merchant lost not only the bundled products but the paper contract as well. A salutary lesson.

There is a very interesting model used by B+F when servicing the Pacific Islands. As a result of difficult and challenging logistics they co-ordinate distribution to their customers in the Pacific Islands on behalf of the suppliers of all consumables including printing plates, inks, chemicals and packaging materials. The difference is that B+F are not acting as agents – the transactions, and therefore the commercial risk and responsibilities rest with the suppliers and manufacturers. The customer gets one delivery, one set of paperwork (customs bills of ladings in this case) and the process is efficient, carbon footprint is minimised and the supply chain operates with reduced cost. Could this possibly be a model that is ripe for transfer?

The merchant: Paper4Print

Throughout this guide there are examples of best practice and innovation. Each merchant does some but not all and each is looking at how to improve service and maintain a competitive position.

As an illustration we have chosen independent merchants Paper4Print. Although they choose not to deal with print management companies some of their customers do have contracts with print management companies. They are multi-sourcing and include papers from Japan. High service levels are a constant feature with 7.30am to 6.00pm being standard hours with mobile phone cover outside those hours and over the weekend. Business is growing and over the last 12 months they have found new specialist sectors ready to contract. Increasing use of IT allows them to run off usage patterns and determine minimum stock levels. Bespoke sizes are checked weekly for spikes in demand and ordered from the mills. E-billing is used but not in all cases.

As with most merchants they are reluctant to charge for premium deliveries. Although they have discussed backloading this has not really materialised. However, there are a couple of encouraging initiatives where they use return runs to deliver print into print finishing companies for their customers.

Storage and cash limitations appear to limit the flexibility of printers who depend on quick response – there are no premiums for panic deliveries and no minimum order value.

The printer: Linney Group

The Linney Group, a £65m turnover multi-faceted print group based near Mansfield, has a reasonable volume of contract work which helps with the predictability of demand for paper.

But managing director Miles Linney believes you can only feel secure about such predictability if you track previous trends as a guide to future needs. He does this. This historical analysis forms the basis of the preparation for discussions with paper merchants for the year ahead.

The company runs these discussions according to a three point plan which is always in the back of everyone's mind:

1. Plan ahead and do your homework on your needs. This applies to both quality – in other words working out what papers that run best on the company's presses - and quantity.
2. Begin your discussions early – do not put yourself in a corner.
3. Show some loyalty to your suppliers and it will be rewarded.

Linney feels these discussions are so important that they are overseen by him but conducted by the company's professionally trained procurement manager and a highly experienced paper buyer.

It is in these discussions that loyalty comes into play. Linney suggests that you should try to do business with suppliers whose business practices best match your own. For example, on one occasion a merchant requested an early payment to help its cash flow and Linney obliged on the basis of "what goes around comes around".

But the company is by no means a soft touch: these are hard-nosed business decisions, but carried out to a particular successful business philosophy. For example, in the contracts the company has with merchants, in addition to the usual clauses you would expect, there are tough and detailed obligations on the merchants with regard to expected service levels. Yet it is recognised that this could, in defined circumstances, include payments for very special deliveries. Printers don't want to be arguing about who pays for a delivery when a press is lying idle.

Logistics on a beermat

The drinks industry is a classic example of how radical changes to logistics can have a positive impact.

In previous decades, before deregulation, breweries essentially had their own "tied" pubs for which they were sole supplier. They competed with each other to supply the "free house" market, as this was where the sales volumes were. They used their own fleets for both channels to market.

Following deregulation, however, breweries were forced to sell much of their "tied" estate to pub operating companies such as Spirit, Enterprise and Wetherspoons. That lost them guaranteed sales volume just at a time when the health agenda and increased competition from supermarkets and elsewhere was also having an impact.

The old delivery model was no longer working, and Bass was first to realise it. Some 15 years ago it converted its formerly dedicated fleet to effectively become a third party logistics business, called Trade Team, which would also be open for their competitors to use.

Scottish & Newcastle followed suit with a similar deal shortly afterwards, creating K&N Drinks Logistics. Today the drinks industry is broadly served by just these two customers.

The customer: BSkyB

BSkyB uses several thousand tonnes of paper per annum, and has gone against market trends in recent years by bringing its print operation in-house.

The man who helped masterminded this move was Mark Cruise, its head of print management, who has worked in the industry for the past 12 years.

In spite of his company's substantial spend, he chooses to buy paper through merchants rather than direct from the mills because he feels merchants provide an added value by managing and monitoring his paper stock with the printers. He wants to maximise efficiency with his suppliers and the key to this, he feels, is service level agreements (SLAs) that regulate the printers' performance, although he realises that as an intermediary he can be required to be reactive and that can mean the inevitable 'rushed job'.

While he does not have SLAs to regulate the performance of his internal customers, the marketers, he feels they share a duty of care to minimise the pressure that can be created. The key to this is education – educating the customer into planning ahead, understanding the need to standardise on stock papers, and avoiding special makings unless there is time for this to be done.

To instill such discipline, wherever possible he tries to insist on realistic cost recovery for every job. Repeatedly accepting additional costs for late ordering, unnecessary non-standard stock, rework to art work and authors' corrections might mean the offending job does not carry its full cost. In the longer term an allowance can be built into costings, but this is not the most efficient way of operating.

Cruise believes he can bring about this culture of education by having open and honest relationships throughout the supply chain and holding suppliers and internal customers to account when unnecessary costs are incurred. It is accepted there will always need to be flexibility and give and take over incidental costs, but the underlying approach should be to educate in planning and specifying, and understanding that those costs do contribute to the overall efficiency of the supply chain.

The delivery company: Delivery Co.

The challenge for merchants is that the service demands required by printers cannot be met without increasing the costs of delivery. Finding a way to reward individual printers who are less demanding will only work if there is a critical mass.

For example, if a 2-day delivery was guaranteed and sufficient printers worked to that it would be possible to reduce the costs of logistics. Similarly, timed deliveries that create peak demand result in additional vehicle journeys. Running a computer model showed that the 20% of deliveries demanded before 10am resulted in 10% more vehicles.

Purchasing and credit cycles also cause bottle necks. Two days before the end of any accounting month there is spare capacity – on the last day of the month orders flood for delivery the next day.

In the absence of any likelihood of a change in this behaviour there are examples of 'horizontal collaboration'. One example is The Delivery Co also distributing Fedrigoni paper. Although they are competing they have been able to share costs.

International: The printing industry is the same the world over – but is paper buying?

Our research included a look at what other countries think is important in paper buying. We conducted a major survey in New Zealand and took soundings in the USA, specifically California, and Scandinavia, specifically Norway. While we believe that the New Zealand survey is statistically valid, the opinions expressed in other areas sampled are indicative only.

New Zealand

The structure of the two industries in New Zealand is broadly similar to what it is in the UK. Merchanting is represented by some of the usual names and most printers are small businesses – although in the UK more put themselves under the "General printing" label (76.4 per cent compared with 49.4 per cent in New Zealand). As a result there were only small differences in responses, although some of those differences were significant.

The clearest differences begin to appear in answer to the question: "Who has the most influence on paper buying?" The estimator has more influence in New Zealand (19 per cent compared with 13.5 per cent in the UK) whereas the paper buyer has almost twice the influence in the UK.

Printers in the UK are also more likely to offer substitute grades than New Zealand, but in New Zealand they are more likely to hold a stock of much used paper. Admittedly this may be more down to the geography of the country than an actual commercial choice.

Training, either in purchasing or technical matters, is not high on the agenda of either country, but in the UK there seems to be a polarisation – you either do it or you don't.

Finally, in administration it seems printers in the UK prefer to deal with merchants by telephone, whereas there is a greater likelihood of electronic ordering and invoicing in New Zealand.

Best practice – UK printers and merchants to take on board the apparent enthusiasm in a similar industry to give electronic business a chance.

Norway

In answering the same question about who has the most influence in buying, Norway contributed that most influence came from the managing director or another director. Other differences, that might be significant when looking at the industry in the UK are:

- Norwegian printers always carry some stock papers
- Printers have comprehensive training in both purchasing and paper specifications
- They always use historical analysis to guide buying
- They always use online ordering and take discounts

Håvard Grjotheim, from 07 Gruppen, a large printer in Norway, thinks there is a very good reason why the managing director, of at least "someone who is representing the leadership of the company", is involved in buying what is probably a printer's most important raw material besides ink.

Grjotheim, who is current president of European printers' confederation Intergraf, said: *"The printing industry is filled up with a lot of small and medium sized companies. They are very often negotiating on their own with very big multinational companies. That is not easy, and sometimes less easy then many of them tend to believe."*

He also feels knowledge about paper has slipped quite dramatically among printers in the past two decades. *"Some 20 years ago competence on the customer side was much higher when talking about paper,"* he said.

Such change can, however, have an up side. *"Today we have a much better opportunity to standardise paper and convince customers to use a specific quality."*

Best practice – printers to work with customers to seize the paper specification initiative and examine opportunities for rationalisation and greater efficiency.

California

In California our respondents favoured the customer as the greatest influence on paper buying, but did not set great store in formal training: most only offered basic or adequate training in purchasing and paper specifications. However, a significant number of respondents were "sometimes or always" using:

- Electronic invoicing.
- Online ordering.
- Historical data to guide future buying.

Dan Nelson, from the Visual Media Alliance trade association, said: *"Paper buying in California is heavily influenced by the needs of the customer but there is an increasing role for the trained company buyer. A further innovation is the increasing usage of electronic invoicing and online ordering."*

Best practice – printers and merchants to provide training in procurement, training in technical understanding of paper specifying and combine this with comprehensive use of IT built around data gathering and forecasting serviced by online transactions.

Conclusion

We began by saying that "the printing industry is the same all over the world", and our survey seems to suggest that the approach to paper buying is also much the same. But what differences there are come in the influencers, with Californians acknowledging the customer and the Norwegians the company's own directors. Other countries do seem to favour more electronic business rather than rely on telephone as the UK seems to do.

RECOMMENDATIONS

Thanks to the collaboration between the BPIF and NAPM this survey has had unparalleled access to the widest possible range of paper merchants and has had responses from around 100 printers. From our analysis of that, we make the following recommendations:

To printers and paper merchants:

- Paper merchants should provide greater **transparency in costs**, as this will help printers determine the level of service they are willing to pay for. Printers should be perfectly comfortable with such a system, which is, after all, how most ecommerce websites operate: they offer you a level and speed of delivery, and you choose what to pay for. But there should also be action taken to ensure that the part of the supply chain that is causing the rush delivery pays for it – even if that is the end consumer.

- Paper merchants should identify the **source mill** for each branded product.

- Printers and merchants should have Service Level Agreements (SLAs) that include **scales of charges** up front of legitimate extras and printers should make that information available to clients who would be re-charged accordingly.

- Printers should have **SLAs with their customers** that make provision for such re-charges when the costs incurred are the responsibility of the customer.

- Printers and paper merchants should make more use of **information technology** to slim down transaction costs, for example by installing MIS systems that interact with estimating and stock, and in effect provide a closed loop for waste monitoring. There should also be more opportunities for information gathering to forecast usage – this is being done at the moment, but not nearly as extensively as it could be. This should be supported by seminars held in conjunction with MIS providers, so that take-up is actively encouraged.

- Printers should ensure that all **patterns of paper usage are analysed**, data gathered and used to forecast requirements using the best available system whether it is provided by the printer or the merchant.

- Printers should use their historical data on paper usage from their MIS system to make arrangements to ensure that merchants always hold **relevant stock on call off**.

- Printers should identify which of their **finished goods customer deliveries** are not time-sensitive and then negotiate with the paper merchant on a delivery schedule/ price structure.

- Printers should "shop around" for the best way to dispose of **paper wastes**, and merchants should harness opportunities to offer further services to their customers involving waste reduction.

- **Lean manufacturing** techniques, such as those expounded by the BPIF's Vision in Print engineers, can help to reduce paper waste in print production and should be applied to supply chain management.

- Paper merchants should employ structured consultation in all cases when planning **logistics re-organisations, depot closures and changes in sales representatives' territories**.

- Paper merchants to consider the use of significant incentives to encourage printers to accept **electronic invoicing**.

- Printers should provide a team approach within the company in providing background **technical support and purchasing expertise to a less experienced paper buyer**, who is in turn updated and informed by the merchant.

- **Alternative sources of finance** should be explored with care, ensuring that all debt is serviceable in the longer term.

- Less reliance should be placed on **credit insurance** to cover customers who are a bad credit risk should be discouraged. Such practices usually only end up protecting companies who should not be trading, and ultimately leads to higher premiums.

RECOMMENDATIONS

To the BPIF and NAPM:

- A **cross-industry review** should be set up to consider how to improve efficiency, reduce carbon footprints and evaluate the options of further consolidation of transport and warehousing. This could include:
  - a "third party logistics solution", with centralised warehousing and a third party supplier providing all vehicles and some or all of the warehousing.
  - a "fourth party" option, which would see an independent logistics provider overseeing the existing infrastructure on behalf of merchants, and looking to integrate finished print deliveries where possible.
  - the use of "shared delivery loads" and "backloading" with printers' customer deliveries.

- The BPIF, supported by the NAPM, should mount a campaign through regional workshops to show the benefit of applying **lean principles** to supply chain management.

- The NAPM and BPIF should investigate **integrated MIS systems** that may improve the efficiency of the supply chain.

- Both industries need to invest in the development of their buyers and sellers to make them as **highly trained** as possible. This could include shared workshops including both printers and paper merchants, and possibly even representatives from the paper mills. The seminars should be organised by the BPIF and the NAPM. In particular, buyers and sellers need to be given tools that allow them to **move on from adversarial bargaining**, and to feel confident in being firm but fair when it comes to charging customers for costly extras. Such charging will in itself improve efficiency by rewarding responsible customers. Education should, of course, also include better training in understanding paper choice, and in determining what exactly a proper commercial rate for a job should be.

- **Education should also extend to marketers and designers**. The BPIF and NAPM should host seminars for designers and others (possibly in conjunction with appropriate trade associations) in innovation and paper choice .so that they are not so easily swayed by some back selling merchants who are trying to upsell more expensive paper. This is not an attempt to drive out added value improved papers – innovation and creativity in paper choice should be encouraged – but to ensure that end users are fully informed of the extra costs involved. Simply passing these costs down to the printer, who in turn tries to squeeze the merchant, is not sustainable.

CONCLUSION

There are many examples of best practice we have come across while compiling this guide, some of which are highlighted. But they are not universally adopted, and even with those who had adopted some best practice there was room for improvement.

Our recommendations, taken together, should go some way to taking costs out of the supply chain and smoothing the relationship between printer and paper merchant.

But they should do a lot more besides. As we said at the start, one of the crucial challenges facing both printers and paper merchants is to make the whole print and paper industry more attractive to the paper mills again. From speaking to the paper mills themselves, it seems clear that establishing a sleeker, more proactive relationship is in itself a good way to do this. As Olli Heikkilä, vice president for supply chain development at UPM Paper Business Group said:
"Attractiveness is driven mainly by the commercial relationship. From the supply chain point of view, attractiveness is driven by improved inventory management, optimised logistics, efficient planning, and lower transaction costs."

It's about gathering the data effectively, sharing the information and accepting responsibility for costs - by each part of the supply chain that causes them. Educating buyers and sellers into best practice in their relationships is a basic necessity. Informed decisions would produce more efficiency by rewarding best practice and penalising those who create the costs. Cost savings could be apportioned on an agreed 'gainshare' where collaboration results in cost saving are split on a pre-agreed basis.

We are reminded that individuals and their companies are often slow to recognise the macro-level pressures that will ultimately determine their futures. However, it has been encouraging to see an increasingly shared view that the tension at the point of contact between paper merchants and printers is created by pressure above and below them in the supply chain. When we say that the printing and paper industries are competitive we need to remember that competition is not simply between printers or among competing merchants - it is the competition for alternative uses of pulp and the alternatives to print that will determine the competitiveness of our industry. There is much to work on. The relationship between printer and merchant can only succeed through cooperation to drive out cost from the paper supply chain.

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Robert McClements MBA FRSA - Author of *"Optimising paper supply chain management"*
Robert McClements is Chief Executive of Print Yorkshire and has extensive experience as Managing Director of printing companies in paper purchasing for sheet fed litho, screen print and contract newspaper printing. He has a passion for effective negotiating and has used his practical experience to good effect as a consultant to senior executives and non-executive directors in printing. During the last 10 years he has also trained senior managers at the BBC in the skills of commercial negotiation and worked internationally including the US, New Zealand and the Middle East.

Mike Hopkins was responsible for much of the international content of the guide. He was formerly a senior director of the BPIF having worked for the BPIF for over 20 years. He has since retirement from full time work in 2009 worked for Print Yorkshire and at the international level as an Industry Expert for Intergraf.

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BPIF

The BPIF is the principal business support organisation representing the UK print, printed packaging and graphic communications industry.

It is one of the country's leading trade associations, delivering practical, value-adding solutions for all areas of a print organisation, including health, safety, environmental and quality; implementation of human resource management requirements; resolution of technical or legal issues; and advice and support on marketing, sales and finance. This is all delivered by individuals and teams of highly skilled and experienced print and media industry specialists. The BPIF also offers a wide range of opportunities for networking both regionally and nationally, including prestigious events, special interest groups, seminars, conferences, workshops, training and short courses on a wide range of topics and skills.

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NAPM

The National Association of Paper Merchants has been the only accredited trade association for paper and board merchants and wholesalers since it's foundation in 1920.

No trade or industry of true standing can be without its own association or federation and the existence of our association, fully supported by the overwhelming majority of merchant companies in the UK, creates status and credibility to the paper merchanting sector. In turn, membership acts as a hallmark of professional competence and business integrity.

The NAPM's primary purpose can be simply stated as: *"Promoting the Value of the UK Paper and Board Merchant"*

All trade associations base their activities on the principle that more can be achieved by a single organisation acting on behalf of its many members than by any of those members acting individually. The NAPM is able to act and speak with all the power provided by being the sole representative of some 22 companies which in itself represents the overwhelming majority of the paper merchanting sector within the UK.

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