

E4books

The Road to Universal e-commerce for the Book Industry

A report by Simon Edwards



Commissioned by Book Industry Communication

Author's Note

In part, this report is written for the e-enlightened, those who either do e-commerce or take for granted that e-commerce is beneficial. They have probably spent years working on e-commerce amongst the big companies and it is obvious to them that progress and technology are beneficial. Ordering electronically is quicker and more accurate, electronic invoices can be matched very efficiently and bills paid on time. These are self-evident to the e-commerce community. This report tries to explain how the non-e-commerce world thinks about e-commerce and what needs to be done to persuade them to do e-commerce. This information gap needs to be bridged if e-commerce is to become "universal" in the UK book trade. E-commerce should be seen as part of the infrastructure of bookselling and as a crucial part of the cost of entry to this business. You wouldn't think of starting up in the oil business without the necessary machinery to drill for oil and e-commerce is becoming just as critical for booksellers and publishers.

Simply telling a trading partner "e-commerce is good for you" isn't going to cut it!

This report is based on research I have conducted and on views and opinions offered by book trade companies and individuals during interviews and in a questionnaire. The research covered all the main types of book trade business including specialist publishers, major publishers, distributors, independent booksellers, chain booksellers, wholesalers, systems suppliers and e-commerce providers. (The library sector was specifically excluded in the project scope). Although it was not possible to contact all of the many thousands of businesses involved in the book trade the questionnaire was sent to members of BIC, the PA, BA and IPG. News items or articles were also featured in the trade press so the trade had at least an opportunity to provide input if desired.

The report seeks to:

- Highlight issues and problems, which exist amongst some sectors of the trade with regard to e-commerce. These views are important because they are held by smaller companies and may not be fully understood or acknowledged by "the big players" in the e-commerce world.
- Recommend practical solutions to these problems and show a way forward for the roll-out of supply chain e-commerce throughout the book trade

As part of this report I have attempted to map the many and varied e-commerce services showing their capabilities and how these services fit together to offer e-commerce to the book trade.

Simon Edwards
26 August 2004

Note

The views expressed in this report are those of the consultant and do not necessarily reflect the opinions of Book Industry Communication, sponsors or members of the project steering committee.

Executive Summary

This project was commissioned by Book Industry Communication (BIC) and sponsored by The Publishers Association, The Booksellers Association, Nielsen BookNet, PubEasy and Vista, with the support of a number of interested parties including the Independent Publishers Guild, major retailers and distributors.

E4books is a study of supply chain e-commerce. E-commerce has been identified as important for the book trade in reducing costs and improving efficiency. There is a lot of e-commerce activity and significant progress has been made, but the rate of expansion is slowing as the size of the remaining non-e-commerce capable trading partners decreases. Small companies are proving resistant to e-commerce. Big companies have some blind spots and overall e-commerce usage could be greater, to the benefit of all.

E4books research comprised face to face and telephone interviews with a number of companies from across the booktrade. This research was conducted between April and July 2004 and a questionnaire was distributed widely in the book trade. Some of the questionnaires were then followed-up with telephone interviews to ensure clarity. Findings from the research and the questionnaire were then incorporated into this report. The report details the problems of e-commerce adoption in the book trade and then provides specific practical recommendations to overcome these problems.

The research received input from 10 bookselling chains, over 100 independent booksellers, 12 major publishers/distributors and over 50 independent publishers/distributors as well as some libraries, wholesalers, systems suppliers and e-commerce providers etc.

The following is a summary of key findings and recommendations:

- To galvanise the book industry to adopt e-commerce it is suggested that a target date be set towards which the whole industry can aim. This "e-Day" will be used to focus the industry on e-commerce and to ensure that a more collaborative approach is engendered so that trading partners, systems suppliers and e-commerce providers can all work together to develop and promote the necessary solutions.
- There is too little information available to potential users about the available e-commerce services, their cost and their suitability. There is a desperate need for impartial guidance. This should be addressed by the service providers and by development of an impartial industry website, an industry-wide discussion forum and case studies of new implementations going forward.
- The quality of distributors' and wholesalers' service to paper-based traders actually discourages automation. The distributors' imperative to provide a first-class service to their client publishers and to their clients' customers, regardless of the means employed, militates against promoting e-commerce. It is recommended that distributors look at the costs and benefits of these services.
- E-commerce declines in the hotline season. Distributors provide expensive customer service personnel and other resources to provide a service which is often no better than that given throughout the year to customers who trade electronically. They should promote their preferred e-commerce services, advertise standard service levels for e-commerce order fulfilment

and consider offering additional discount to customers using e-commerce rather than telephone hotlines.

- Publishers should reconsider the order-taking role of reps. It is often most effective for booksellers to place orders through their own EPOS systems. Orders recorded by reps can actually disrupt the electronic process by creating duplications when booksellers use their own ordering systems as well.
- Terms and discounts should reflect the true 'cost to serve' and reward e-commerce usage, as well as taking into account advantageous delivery routines, and the levels of returns and customer service and hotline calls.
- Every company should have an e-commerce champion at a sufficiently strategic level to avoid the fragmentation, which exists both in systems and in departmental attitudes.
- There is still a huge need for integrating the various systems and services available to users of all sizes. The benefits of e-commerce in terms of single-keying data are still not being realised because of fragmentation of systems. This is particularly true of small-business accounting and other generic programs.
- Service providers must find ways of making their products more attractive to smaller companies, e.g. by tailoring bundled services to the individual needs of their customers, ensuring the costs suit the customer's pocket, and by demystifying the services offered.
- There has been significant technological change over the last two years e.g. with web services, broadband and AS2. Add to this the e-commerce roles now played by wholesalers, systems integrators and bureaux to provide e-commerce capability for the smaller players. With the new e-commerce services, which are now available or coming on stream, the industry has never been so well equipped to make e-commerce universal.

Conclusion

Significant progress has been made in rolling out e-commerce but more could be done. This report has highlighted that some of the barriers to doing e-commerce are self-inflicted: for instance, the trade provides and even promotes excellent non-electronic services. Many companies are quite open to the idea of doing e-commerce but they need unbiased help and information. This report shows that there is much that can be done to speed up the adoption of e-commerce and with several new e-commerce services becoming available and Internet access and broadband rolling out across the country now is the time to review and implement the recommendations of this report.

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A. Introduction

1. Scope and objectives of e4books project

The assumption is made that every company has the use of a PC or Mac with internet access; and the project's definition of electronic commerce is, for booksellers:

- access to up-to-date product information;
- ordering and processing of order acknowledgements and delivery notes;
- processing electronic invoices/credit notes;
- returns management;

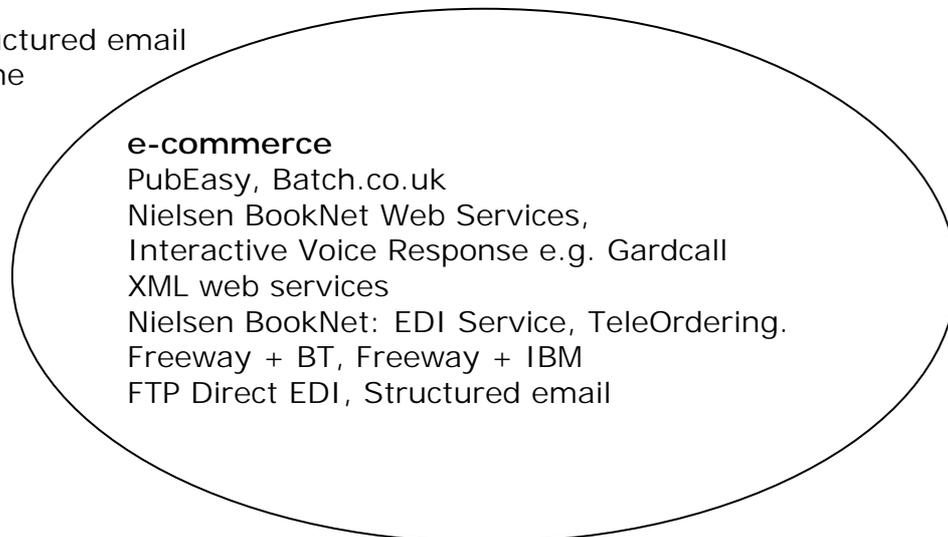
and for publishers and distributors:

- supplying product information and updates;
 - handling incoming electronic orders from various sources and systems;
 - generating electronic order acknowledgements;
 - generating electronic invoices and credit notes;
 - handling electronic returns requests.
-
- **E4books** cannot "roll-out" e-commerce: it can only research the subject and make recommendations. It is up to the project sponsors, BIC, the trade associations and individual companies to discuss and, if necessary, refine the recommendations before taking appropriate action.
 - Some of the recommendations from this report will be accepted and implemented whilst some may be rejected, probably for good reasons. But it is important that the book trade displays the sort of courage that was exhibited on the Industry Returns Initiative a few years ago, in order to really benefit from this research. If we only take the easy options then we may miss out on the bigger prize.
 - During the research it was emphasised by leading distributors that e-commerce within the UK book trade is well ahead of e-commerce between the UK and the rest of the world. The latter is outside the scope of this project but it is clear that for many companies, especially large distributors, a bigger prize would be available from undertaking an equivalent international research project and implementing recommendations on the UK book trade's international business. This could be a separate project or a future phase of **e4books**. It should be considered because coming from a much lower base the wins would be proportionately bigger.
 - **E4books** is focused on e-commerce in the context of supply chain electronic trading rather than the more common use of the term meaning online shopping (although benefits accrue from linking them together). E-commerce, for the purposes of this report, includes business to business communications and incorporates electronic data interchange (EDI) as well as online services and web services which offer business to business communication.

2. E-commerce Services Diagram

Non-e-commerce

e.g.
Non-structured email
Telephone
Fax
Post



This diagram gives some examples of how the project differentiates non-e-commerce message exchange from e-commerce. Many companies believe that sending an order or an AI sheet as an attachment via email is doing e-commerce and of course it is quicker to do this than print it out and send in the post. However, to do e-commerce it is necessary to minimise the manual intervention in the transaction. An email with a structured file attached, which could simply be loaded and processed, would be e-commerce. If the message forces the recipient to print it and re-key it then this is not e-commerce. The goal is to make routine business messages “machine to machine” so that there is minimal manual intervention. This is not an exhaustive list of e-commerce services but it does serve to illustrate the basic types of non-e-commerce and e-commerce services.

3. Definitions

In this report we are dealing with the main types of trading partner in the UK book trade: retailer, wholesaler, publisher and distributor. It is important that we understand what we mean by these terms and their sub-groupings, e.g. academic publishers or Christian retailers.

Retailers

Retailers are primarily bookshops and subgroupings include independent, chain and Internet. They can also be further defined by books sold or market sectors addressed: range/general, specialist, Christian, academic/educational, library/school supply. For the purposes of this report, these terms are being used only in the context of e-commerce when applied to these types of business. For example a big chain will see e-commerce benefits in one way and a small Christian bookshop will see them differently. That is not to say that the chain does not sell some Christian books.

Wholesalers

By wholesaler we mean a business with a retail function (i.e. they order books from suppliers) and a supplier function (i.e. they supply books to retailers).

Wholesalers therefore have the e-commerce characteristics of both retailers and distributors.

Publishers

By publisher we mean the editorial and sales and marketing function of a publishing business as distinct from the distribution side. Their role is to commission and publish books. For the purposes of this report publishers do not distribute books: their role is to provide new title information to the trade. Publishers may also be involved in other matters, e.g. agreeing to have their distributors join the book trade industry returns initiative. If publishers do their own distribution then for this report they are also classed as a distributor.

Distributor

By distributor we mean any businesses (including small publishers) which distribute books on behalf of themselves or others to retailers and wholesalers. So Macmillan Distribution Ltd., Pearson, Random House, Littlehampton Book Services and HarperCollins are all distributors, as are Turnaround and Central Books. Small publishers who do their own distribution are de facto "distributors". The distributor receives the order, handles order processing and despatches the books. They receive back the returns and process them and also provide updates on latest price and availability. (On the other hand, third party pick and despatch distributors like The Trade Counter or Niche Logistics do not do order processing or hold the sales ledger for their client publishers and, therefore, where e-commerce is concerned, cannot be classed as a distributor.)

B: Key Issues

1. Motivation for e-commerce

Behavioural scientists say that people don't do anything without some form of motivation whether positive or negative. If you want to persuade someone to do something you need to remove any barriers which exist and at the same time provide some benefits from the proposed action.

For companies to invest in e-commerce the same conditions must apply. Ideally a company should see no serious barriers and some attractive benefits. And of course the benefits must out-weigh the barriers. Many companies, which have not yet invested in e-commerce, perceive numerous barriers, ranging from the concrete, such as the costs of e-commerce, to the nebulous, such as worries about possible system failures etc.

On the incentive side of the equation, for many companies the benefits case has not been adequately made and the benefits are neither understood nor accepted as fact. This explains the resistance to e-commerce from many smaller companies.

2. Typical situation (a snap shot)

The **e4books** research has found many examples of companies in the following situation.

They are specialist or niche publishers/distributors (or sometimes booksellers, although the wholesalers often have a major role to play here). They are making money but they have to control their costs very carefully and cannot invest in anything non-core unless it is certain to pay back. Their major focus and their major risk is in their core business of publishing books, and this is also their passion. E-commerce is most likely not on their radar at all. Their priorities are all about editorial, sales and marketing etc., not about trading electronically.

They are also settled on their accounts system, whether manual or computer-based, and they are very reluctant to change anything that basically works. They like their paper-based system. They understand it; they probably designed it themselves and have evolved and improved it over the years. It is secure, robust and risk free. They acknowledge that some of their business processes are time-consuming and repetitive but they have few staff and these staff understand what they are doing and so do the job reliably. They perceive little risk in continuing to trade as they have always traded. (This situation may change if big retailers start to implement charging.) They may use an accounts package on a computer but they are not usually technology enthusiasts and they are easy prey for the scare stories about computer crashes, viruses, data loss and so on. Generally they find a PC and an accounts package which work and they then stick with it and change it as little as possible. They have no spare time or resource to tweak their systems and they are reluctant to upgrade their system in any way as this is perceived to be risky. "If it ain't broke..." describes their view.

Some of these companies are well aware of the Internet and its potential and some even have very well designed web sites, which they use to trade with end customers. These sites deliver orders which are then processed manually or keyed into their system. Generally, they feel that their business is too small to warrant major investment in computerising their systems beyond their current

solution. Typically they spent from £100 to £1000 on their accounts package and they bought a low spec machine as they did not see a need for powerful processors or graphics packages. Some spreadsheets, some word processing and the accounts package are enough. (Sage Line 50, the most used package in the book trade starts at £500.) Niche publishers/distributors may increasingly be finding the Internet and various direct methods of selling more lucrative than the traditional book trade and most of these companies turn over less than £500,000 and employ fewer than 10 staff. They may do their own distribution or use a third party distributor, or they may use a pick, pack and despatch distributor and retain control of their own order processing and sales ledger.

Many independent niche businesses are run by entrepreneurs with a passion for publishing. These people are not usually Luddites (although as with any industry there are some of course). They are, however, independent minded and they value their right to run their businesses their own way very highly. There is a risk that such publishers perceive being "told" to do e-commerce "because it will be good for their business" as a bad thing. In order to become committed to e-commerce a strong business case has to be made for such publishers to consider altering the systems they have developed, in some cases over many years. This is a problem because the e-commerce providers have become successful by selling to large distributors with their knowledgeable IT staff and high volume businesses. The same sales techniques don't seem to work as well with the independent distributors. A different approach is needed, with a more finely tailored technical solution and a more reasonable price. You cannot easily sell £3000 worth of EDI software and services to a company, which paid £1000 for its whole system. This explains the success of bureau services such as that offered by Sweetens: by understanding the smaller publisher/distributor's point of view and offloading the technical responsibility for e-commerce, they can still facilitate the exchange of messages with key trading partners. One publisher stated that they were "saved by Sweetens". This bureau approach does mean yet another middleman in the supply chain but they are experts at e-commerce, already exchange messages with the leading retailers and can therefore accommodate additional publishers very simply. This is a cost-effective way forward for some SME publishers who lack the resources and management time to implement their own solution.

By no means all publishers are saying no to e-commerce out of hand. Many are actually quite keen to trade electronically, and they know they should invest over the next few years or their businesses may suffer. But these companies often say that they too don't know enough about e-commerce and need practical help and support; and as they have other more pressing day to day problems so the subject of e-commerce is put on the back-burner.

3. Downward scalability of services

One major barrier for smaller companies is cost. They will be prepared to invest if they are confident that their investment will pay back; and currently many companies are not confident of this.

What needs to be done must be met head on and understood by the e-commerce providers. Discounting an expensive service by a few percent is not going to make the necessary difference. One of the issues with e-commerce costs is that they may appear to be open-ended; and the literature from the providers is often unclear on what the eventual costs are likely to be. Software can be a major cost, but then there are sometimes management and consultancy fees, comms or telephony costs, quite apart from the hardware and perhaps an extra phone line.

This can look like a mountain of cost for smaller companies; and once they have invested in the service and paid to set it up, they may then be asked to pay to use it. The e-commerce service can attract a traffic charge and with EDI there are often mailbox and EDI envelope charges. Much more clarity and bundling of products and services are needed in this area. In contrast, some of the new web services, such as PubEasy and Batch.co.uk, offer a free service to booksellers whilst charging the publishers/distributors. We are likely to see the development of more services with this kind of pricing model as time goes on and the Internet becomes more established as a business to business tool.

4. Integrating systems

Resistance to e-commerce does not only arise from the cost of the e-commerce service itself. To get all the available benefits from implementing e-commerce it is vital to remove any areas of duplication or manual processing such as re-keying orders. This means that the small distributor's system must be tailored to integrate with the e-commerce provider's system so that an order can be received electronically and processed without delay. The order will give a SAN or GLN to denote the customer which needs to be recognised and translated into the correct account number for that customer. Similarly the book ordered will have an ISBN which must be recognised and may have to be translated into an SBN, alpha or other code used by the small distributor to identify a book. For the small distributor with a basic accounts package and low spec hardware, these integration issues can be a major deterrent to the adoption of e-commerce.

The idea of receiving orders and processing them automatically or with minimal delay may frighten some small distributors as they may be worried about not being able to control their orders or, for example, to allocate scarce stock to important customers. These concerns do not surface easily and may be hidden by the more obvious systems issues. They are not even restricted to small distributors. Some major publishers like to get hold of their orders on paper. One publisher receives orders electronically only to print them out to check them on paper before keying them back into the system. Their books are distributed by a major distributor and their orders could go seamlessly and automatically into the distributor's system to be picked but they insist on this extra manual loop. As a result, some errors do occur from time to time which can almost invariably be traced back to the practice of re-keying the orders. These publishers seem to find it reassuring to hold actual paper orders, but many modern systems enable the user to review orders on screen before accepting them and passing them on for processing. So it is possible to review orders without printing out and re-keying.

5. Non-mediated electronic trading

FTP is an old technology but it is well known, very simple and it enables files to be sent across the Internet at no traffic cost at all. An increasing number of book trade companies have developed an FTP capability, with many major distributors using FTP to receive their orders from TeleOrdering and even the value-added networks obtaining an increasing proportion of their traffic from customers using FTP to send the files. As it becomes more widespread larger businesses can use it to reduce the traffic costs of their value-added networks. This is possible because they have IT resource and a relatively small community of major trading partners. The question is how far FTP could be rolled-out as a trade-wide solution.

With appropriate guidance smaller companies could implement an FTP Direct solution. Bertram's have found the EDItEUR FTP file-naming standard very helpful in making FTP a major part of the way they do business.

One part of the e-commerce provider's service has always been to put trading partners together to discuss their mutual business and to manage the relationships and the setting up of e-commerce connections. If the trading partners decide to go direct (via FTP) without the hand-holding by the e-commerce provider they will have to manage these relationships themselves. A directory listing contact details and FTP site addresses for companies using FTP might be a valuable resource.

An interesting alternative to FTP could be AS2. This is a technologically advanced solution but it does have its drawbacks: it requires a company to be connected to the Internet 24/7 (so broadband would be a necessity); and it requires companies to manage digital certificates, which requires them to check certificate revocation lists etc. These can be overcome by using a larger service provider or VAN but what is gained by going direct is diminished by network charges. Integrators such as Freeway Commerce or Masterlink may be able to help.

The problem for the e-commerce providers is that if big companies go direct and disintermediate e-commerce they will lose a large tranche of revenue. There may then be a reluctance to pursue the much less profitable business at the other end of the scale, setting up small companies for EDI where traffic volumes are lower. This "losing the cream" problem is a serious threat to e-commerce in the book trade: if big retailers stop using TeleOrdering or big distributors stop using VANs, these services could become uneconomic to run. TeleOrdering has been going for more than 20 years but some 10,000 smaller distributors still receive *for free* their daily trickle of orders on paper in the post or on fax. Arguably this free service has kept the "tail" of suppliers going in a period when the trend has been towards increasing consolidation and has helped to give the book trade its breadth and variety. On the other hand, it is paid for in part by the "cream" and depends for its survival on high volumes of more lucrative business. However, a big distributor or retailer is unlikely to take these factors into account when making a decision on future dis-intermediation.

6. Hub and Spoke

Other industries have rolled out full EDI by the "Hub and Spoke" model. The hub, typically a major supermarket chain, decides on an EDI strategy and informs their several thousand suppliers of their solution. These suppliers either conform, invest in the system and develop the capability to exchange electronic messages, or the hub decides not to trade with them. As these hubs are a huge percentage of their business the suppliers have no choice but to conform. The book trade is different and a major hub such as Waterstone's, Blackwell's or Amazon does not have the quite the same market share to dominate in this way. The retailers have some market power but they are also conscious of the need to offer the variety of books available from the smaller companies. Some publishers contacted in the **e4books** research undertake only part of their business in the book trade and some do as little as 30%. This is still a significant piece of business but it dilutes the imperative of doing e-commerce in the book trade. Some publishers have complained that increasingly the book trade itself is a less lucrative market for them and they are looking elsewhere in other sectors to sell their often niche or specialist books. A publisher who does a lot of business direct, e.g. with students, will sell at full price and the students may even pay postage and packing when ordering over the web. This may well seem more attractive than trading with a

major book retailer, giving away large discounts, paying carriage charges and risking future returns.

7. Issues with e-enabling smaller publishers

Most new services set out to take revenue from the most lucrative layer of the trade before working down as far as possible towards the point where extra business is break-even. At this point they stop. They may consider companies below this break-even point are too small to do full e-commerce commercially, although they can use some of the available free services (e.g. PubEasy for retailers). When the big companies have rolled-out e-commerce as far as they can by these means they are left with the decision:

- either stop trading with uneconomic trading partners and off-load their business to intermediaries such as wholesalers;
- or, perhaps, pay to set up these trading partners with e-commerce so that their own invoice processing costs are reduced.

Waterstone's has done a remarkable job working closely with First Edition (Now renamed as Nielsen BookNet EDI Service) to roll-out EDI with smaller and smaller publisher/distributors. More than 80% of Waterstone's invoices and credit notes are now exchanged electronically and this has revolutionised the way they handle invoices to the lasting benefit of their business. The remaining publishers who do not yet trade electronically with Waterstone's are getting smaller as the programme is rolled out and the remaining publisher distributors are getting more and more difficult to push into e-commerce. Waterstone's is offering some inducements such as access to core stock and head office buyers, more accurate and complete payments and fewer queries, but this may not be enough to persuade publishers to invest in e-commerce. Waterstone's also has limited weaponry to coerce reluctant publishers apart from such things as the removal of core-stock privileges. There is limited win-win here, and often none is perceived by some of the publishers who were contacted as part of **e4books** research.

These publishers perceive themselves as disadvantaged in this relationship and have been further turned off e-commerce by the simultaneous terms re-negotiation which has apparently been going on in parallel with the e-commerce push. In fact these terms negotiations are actually the agreement of up to date terms and conditions which reflect the nature of today's book business and include electronic trading. They also include a number of benefits for publishers who have traditionally complained that they haven't had access to Waterstone's buyers etc. The new terms and conditions enable the publisher to have access to the central buying, marketing and bibliographic teams at Waterstone's and this should help the publisher and Waterstone's to work better together in the future.

Publishers put in the investment, staff time and effort to do e-commerce with Waterstone's and, as they see it, there is this requirement to give additional discount to Waterstone's "for the privilege". A change in discount levels does not in fact go hand in hand with e-commerce but as electronic links, core stock privileges etc. tend to boost volumes so better discounts may be sought by Waterstone's buyers.

It is perhaps therefore not surprising that some publishers resist the joint approach of Waterstone's and Nielsen BookNet and because they don't want to give offence with a straight 'No' (because they feel the pressure to conform) they tend to go along with the idea, but reluctantly. This can lead to the implementation project taking some time, as other higher priorities in a small

business will often win over the implementation of e-commerce. This is a very sensitive issue with one side feeling pushed into something and the other side feeling frustrated with progress.

One publisher admitted to being almost masochistically pleased to have been pressured into e-commerce and admitted that it wouldn't have happened without Waterstone's persistence.

To Waterstone's credit they have increasingly been stressing the wider perspective that if you can exchange electronic messages with Waterstone's via Nielsen BookNet, you can also do this with other major retailers and wholesalers, all of whom can use the same system. This has helped to persuade some publishers.

8. Smaller publisher solutions

For smaller publishers who are too small for full EDI, Waterstone's and Nielsen BookNet worked together on a low cost, low spec option called 1stexchange.net (now part of Nielsen BookNet Web Services.) This service enabled publishers to log into the Nielsen BookNet/GXS network and download orders. The download facility is rather cumbersome and doesn't make it easy for the publisher to integrate the data with their accounting system. The 1stexchange.net service does, however, enable the publisher to convert (or "spin") the order into an invoice and send it back via the EDI network. Waterstone's was keen to roll this service out to 100 small publishers but in the end only ten were actually set up on this service. (One reason for this disappointing pilot was that Waterstone's was sending orders via TeleOrdering not 1stexchange, so the suppliers did not have the ability to "spin" an order into an invoice but had to re-key the order first.)

The publishers can receive EDI orders from wholesalers and major retailers via Nielsen BookNet Web Service (1stexchange). But orders received from Nielsen BookNet TeleOrdering have to be keyed into the system in order to output an invoice to the booksellers. This means that publishers, faced with a duplication of systems, lose much of the benefit of the service.

8.1 Nielsen BookNet Web Services

Once the 1stexchange.net service is merged with the WhitakerWeb publisher module the new combined service - to be called Nielsen BookNet Web Services - should be able to supply both EDI orders and TeleOrders to these publishers and facilitate converting these into invoices. This new service is apparently in final testing and can't come soon enough for the handful of publishers who have been using 1stexchange for several years. It is hoped that this web service may offer the comprehensive range of messages that full EDI offers and at a bargain price. A few hundred pounds a year for this service would be significantly better value than the several thousand pounds for full EDI. Much will depend on the interface with the publisher and any potential for integration with the publisher's accounts system. The optimum situation is for this service to enable publishers to receive EDI orders and TeleOrders and integrate them straight into the publisher's accounts system. This would do away with two lots of keying, one into the accounting system and one into the Nielsen BookNet Web Service (1stexchange.net) to send the invoice back. This double duplication is currently costing the small publishers who joined the

pilot scheme (about 10 publishers in all) at least 2 hours per week extra effort. Over the four years of the 1stexchange.net pilot this will have cost the publisher over £2,000.

This new Nielsen BookNet service stands every chance of being successful in that it will already hold the orders and can convert these into invoices, order responses and delivery notes without a lot of extra keying. The main pitfall is likely to be cost and if Nielsen pitches this service above, say, £500 a year all in, there will not be many takers. Other important facilities should include a translation of ISBNs to publisher product codes (typically an alpha code taken from the title) and back, and a translation of location codes from GLN and SAN to alpha customer description. These are vital facilities to make the system work for small publishers, and integration with Sage and other accounting systems will also be essential.

8.2 Batch.co.uk invoicing for smaller publishers

Batch.co.uk offers a comprehensive service for all booksellers and publishers including invoices, electronic delivery notes (EDNs), statements and online payments, and for small publishers Batch have developed a very low cost invoicing solution which enables publishers to supply invoices electronically to big retailers via Batch. This utilises a simple web page into which the publisher keys the invoice information. If a publisher has an Internet-enabled PC, they can conform to the retailers' requirements for full EDI by keying invoices into this facility. At the other end the retailer will receive a full EDI invoice message from Batch. Batch charges about £10 per month for this basic service but it is not widely promoted at present. This solution offers all smaller publishers the ability to conform to the e-commerce requirements of major retailers and wholesalers but at a fraction of the cost of full EDI. Batch has also been busy integrating their system with leading publisher accounts packages. If Batch is really serious about addressing the small publisher sector then they need to boost their marketing and promotional efforts so that small publishers realise that this basic service exists.

Batch has also developed a low cost returns system using structured email and the web to transmit requests for returns and responses to those requests, including the production of bar code labels. This service complies with the Book Industry Returns Initiative requirements and is free to booksellers who are BA members. It is proving to be very popular amongst booksellers even though there is only a handful of distributors on board at present. Some 160 booksellers are thought to have signed up to Batch Returns and this number is growing steadily.

These two services perhaps offer a way forward for the book trade. These services are inexpensive or free and they illustrate the way that the Internet can be used to provide low-end solutions for the smaller companies.

8.3 PubEasy for small and mid-sized publishers and distributors

PubEasy has the /EXCHANGE service which enables small/mid-sized publishers and distributors to offer a PubEasy website to booksellers worldwide. This service has been in existence for some time but without very active marketing. This is the sort of service that the trade needs in

order to roll e-commerce out to smaller publishers. It is stronger on the product information, ordering and order chasing side than providing EDI invoices. There is considerable potential for synergy for smaller publishers in a combination of PubEasy/Exchange and Batch. PubEasy and Batch were both developed by Vista and it is likely that the systems architecture of both services may be similar and some useful collaboration could result in a really excellent service for publishers. This could cover product information, ordering and order chasing, invoices, EDNs, payments, statements and finally returns.

The important point to note about all these basic systems for smaller companies is that they effectively provide a level playing field whereby for a fraction of the cost and a little effort, a small company can trade with anybody with all the facilities of the big company i.e. their trading partners can receive full EDI messages without the small company having to invest in full EDI.

9. The need for information

Many book trade companies claim that no trading partner has ever asked them to trade electronically. This may sound extraordinary but some companies, both booksellers and publishers, researched for **e4books** claimed never to have even heard of Batch.co.uk or to know anything about it.

The **e4books** research has also consistently encountered the issue of information and the lack of knowledge about e-commerce. There is confusion everywhere. Available e-commerce services are not well understood. Some publishers apparently still think that TeleOrdering is short for Telephone Ordering and many publishers have stated that they receive TeleOrders via both post and fax, when this is in fact impossible. The situation is not helped by the marketing material put out by the e-commerce service providers, the systems integrators and the EPOS systems suppliers, all of which tends to speak the jargon of business and IT rather than publishing or bookselling. The nature of the service, what it actually does, whom they can trade with on it, whom they can't trade with on it, the price, the on-going costs, the systems they would need to have in place and how to get them, these are all areas of ignorance and confusion. What e-commerce is, what EDI is, what the benefits are and what the possible downsides might be, are all misunderstood or unknown. In the **e4books** questionnaire the suggestion that "I do not understand electronic trading" was the highest scored response along with "I need independent clear practical information about electronic trading". The few who disagreed strongly with the latter suggestion also marked the "happy to continue trading using paper documents as I always have" very highly; in other words, they don't want to do e-commerce and so they don't want the information on how to do it. This is confirmed by other related responses. So there is a definite need for information to clarify:

- the facts about e-commerce – what it does and how;
- the benefits of e-commerce;
- what e-commerce services are available, their prices and systems requirements, how they perform, what their plans are, how they overlap and what gaps exist;
- how to implement e-commerce as a small publisher or small bookseller, together with frank independent advice on an e-commerce strategy and the pitfalls to watch out for.

10. Current availability of non-e-commerce systems

One of the reasons many companies are happy to continue trading with paper rather than implementing e-commerce is that the book trade provides excellent non-electronic services. The providers of these services need to be aware of this and analyse the costs that are incurred in their provision.

10.1 BCH and TeleOrdering paper-based services

Two such services are TeleOrdering (Part of Nielsen BookNet) and BCH (Bookseller's Clearing House, part of Batch):

- TeleOrdering is 95% electronic and it handles millions of order lines electronically. However, up to 10,000 smaller companies can receive orders on paper in the post or on fax and, below a specified threshold, this service is free.
- BCH provides the crucial payment clearing facility via a paper-based system and again it works and it is free. Batch offers a paper version in parallel with BCH and this enables independent retailers to cope with their payments without implementing an e-commerce solution. In fact they prefer this as the paper invoices can be reconciled with the Batch invoices and any missing invoices can be chased up. However, Batch aims eventually to replace the BCH paper-based system with the electronic version.

10.2 E-mail

Email provides another important low-cost facility, which enables publishers to exchange new product information with bibliographic data agencies as well as key customers. A lot of orders are placed and received using email and this gives companies at least some part of the available benefit. The fact that this email is in no way structured and cannot be processed automatically is irrelevant to these companies. Email is seen to speed up their business and that gives them some benefit. Bertram's have done a lot of work on ordering from smaller publishers using an email system. They insist that their suppliers reply to each order using email by at least hitting the reply key. Bertram's may be about to go further and add a URL to the email so that a supplier can click on the URL, be taken to a page on the Bertram's web site for distributors where they can add order acknowledgement information and update price and availability information.

10.3 Wholesalers

Although the wholesalers have invested heavily in providing excellent systems for their customers and they incentivise their customers to use their EPOS systems by subsidising its cost (in return for restricting their ability to order from other sources), wholesalers continue to offer excellent service to non-e-commerce capable booksellers. For example one wholesaler telephones booksellers at a regular time to collect their orders! This telesales service may seem to be proactive marketing activity which

boosts sales but it also competes with e-commerce. Many of the services which the wholesaler developed to build its business pre-e-commerce are still available in some form. This encourages some booksellers to continue to trade on paper with the major wholesalers.

Booksellers can trade with one or more wholesalers, look up price and availability either on CD or online, send orders, receive order acknowledgements, delivery notes, invoices and even do returns. These facilities are all available to users of that wholesaler's EPOS system. Several retailers reported to **e4books** that they did a full range of e-commerce messages but with just one or sometimes two suppliers (i.e. their wholesalers). Wholesalers have a major role to play in promoting e-commerce by developing EPOS systems with built in e-commerce capabilities and also by incentivising electronic trading, e.g. as Bertram's does by giving extra discount to customers placing electronic orders.

10.4 Distributors

Distributors also offer excellent facilities to paper based trading partners. These distributors not only need to deliver their parent companies' books efficiently but they often need to be seen to provide a first class service on behalf of their client publishers. They therefore develop best in class services to their retailers, partly to impress their client publishers, so that a bookseller can pick up the telephone and check prices and availability, place orders, chase overdue orders and so on. Retailers seem fairly happy with the time taken to make these calls and they didn't report any significant problems getting through to distributors. Many distributors offer next day delivery to booksellers who place orders over a certain value. This next day service is often outside normal pick days and, so long as the retailer orders enough value, the distributor is effectively offering a free Rolls Royce service no matter how urgent these orders really are.

10.5 Ordering is an art

For an independent bookseller spreading orders between wholesalers and distributors in such a way as to maximise discount and optimise delivery is something of an art. They need to be able to navigate minimum order quantities or minimum value thresholds, dodge carriage charges and understand when their next pick day would normally be. By these means independent booksellers without complex EPOS systems or EDI ordering systems have learned to order intelligently from a range of sources. Although web based e-commerce systems offer price and availability data and ordering and chasing facilities, a telephone user can make further enquires and have more of a dialogue with customer services at a distributor or wholesaler. For example, they can in addition ask a wholesaler if a book is just "temporarily out of stock" at the wholesaler or also at the publisher. Depending on the answer to this question, the order can be recorded as a due at the wholesaler, or placed with a rival wholesaler who holds stock, or it can be placed or recorded with the distributor. (N.B. PubEasy shows availability at the participating distributor and at Gardners). For a retailer working hard at maximising discount and optimising deliveries, e-commerce may be perceived as a less flexible mechanism, even if it saves a bit of time. The e-commerce service providers could develop the necessary enhanced understanding of their customers' needs and make additional investment in designing the

necessary systems. These could be made to cater for all these situations and could use the new web technologies to deploy intelligent Web Agents to make these sorts of enquiries and deliver these services but it might not be cost effective given that many of these web services are free to booksellers.

10.6 Telephone hotlines

As well as the telephone order lines which work all year round from some publishers, there are Christmas and Back to School/College hotlines. Hotlines are popular with customers because they believe that when a human being at the other end of the telephone says, "Yes, I'll take that order for you now and you'll get the book tomorrow," they will actually get it tomorrow. The distributors want to impress their client publishers as well as their sales and marketing colleagues. These peak times are becoming increasingly crucial to the book business and no distributor is going to be the first to say, "I have analysed my hotline service and worked out that it costs me so much that I am going to discontinue it." Those last minute sales at Christmas can make or break both publisher and retailer and, if a hotline seems to smooth out wrinkles in the supply chain, it is hard to argue against it. However, the reality is that a Christmas order placed electronically doesn't need re-keying and doesn't get delayed. It is also very cheap to process. (N.B. It is possible to assign a hotline priority to an EDI order and use the code "HOT" in the comment field in TeleOrdering. These both result in an electronic hotline order, but implementation of these facilities has been patchy so they are not widely used.)

High hotline usage should not be a surprise to anyone who has visited or worked in a bookstore at Christmas. Staff are so busy that in one of the rare bookshops where Internet access is very widely available, it is still probable that, for urgent orders, the telephone and the rapid dial button will be used by most staff. Ultimately, hotlines are about certainty and reliability. When a customer asks you to order a book for example as a Christmas gift a few days before Christmas, you will use whichever method is most reliable in order to get the book in before the deadline.

One solution is for distributors who provide hotlines also to promote electronic orders with service levels and guarantees. If the electronic order was promoted as more likely to be delivered on time than the hotline order, customers might start to trust their systems. If additional discount was offered for electronic orders, that might tell too. A lot of work could be done in this area to monitor the fulfilment of electronic orders at distributors and publicise the excellent service to be had from ordering electronically. It might be possible, using EDI proof of delivery messages, for booksellers to receive a report showing the orders they placed, the dates and times they were placed, picked, packed and received into the shop, which would prove that e-commerce really works better for ordering than hotlines.

11. Staffing levels

Companies do look at their workload and their staffing levels and they don't carry too many staff very willingly. Many publishers and booksellers have to key invoices into their accounting systems or spreadsheets and this is very time-consuming. A successful independent retailer could spend a day a week keying in

invoices and doing other financial control activity. A small chain might spend two or even three staff days a week. E-commerce can help this by providing invoices in a format which can be downloaded into accounting systems. Quite a lot of work has been done or is planned in this area of systems integration. There are probably up to a hundred different accounts packages in use. Sage is the most popular package but it only accounts for about 25% of book trade companies and even Sage comes in several flavours (Sage Line 50, Line 100, Line 200 etc, not to mention sub versions of Sage Line 50 etc.) Integration work is therefore expensive relative to any single implementation and it is hard to find an implementation that is not unique. If a major business employing over 100 staff invests in a service which saves them two full time staff, then the business can re-deploy their staff or they can reduce their headcount relatively easily. A small business with three or four staff is not in the same situation. Reducing workload could enable resources to be re-deployed but there is not the same scope for savings. If a small business reduces headcount from this already very modest level, there may be later problems with illness or holiday cover, which can bring the operation to its knees.

The perception of many small publishers is that to do e-commerce and even to look into the subject would necessitate more, not fewer, staff. This is because they are very busy keeping their businesses afloat and they don't have the time to invest in research, BIC meetings, seminars, etc. They are completely focused on their business and are not likely to initiate moving to e-commerce by themselves.

12. How receptive are companies to e-commerce?

It would be useful to measure e-commerce adoption across the book trade, partly to track progress from the **e4books** initiative. This could be done by measuring implementations and messages and trading partners, and BIC has undertaken surveys of this sort for several years. One new approach might be to try to track opinion and perception of e-commerce in addition to actual implementations.

The following is a possible spectrum of opinion on e-commerce ranging from 1 to 8:

- 1) They will not entertain it. Computers are evil and they put people out of work. Nothing wrong with the way they've traded on paper for years. E-commerce is a symptom of the depersonalisation of business.
- 2) They would do it but believe their business is too small or too specialised.
- 3) They think they already do it (website, email, TeleOrdering on paper or fax, BCH/Batch on paper etc.)
- 4) They would actually like to do it but they don't know how to start, what to do, what's involved, who to trust etc.
- 5) They would actually like to do it and have maybe tried in the past but overall found that it is far too expensive (upgrading systems, installing an additional phone line, buying integration software and so on.)
- 6) They are doing some e-commerce but not everything they could, and they are only getting a fraction of the available benefits (for example, a publisher convinced by Waterstone's to do invoices but not actually integrating orders, acknowledgements, returns etc).

7) They are doing it and are keen on it but distributors and others provide excellent service alternatives, which encourage them to continue to use some non-e-commerce methods such as hotlines.

8) Model e-citizens

This spectrum of opinion could be used to classify trading partners and customers and could be used to chart the progress of e-commerce adoption in the future. Companies could be asked to report their place in the scale in BIC and trade associations' e-commerce surveys.

13. Time the great e-healer

The book trade is in a state of flux as ever! The Internet has only been a significant force for a few years, several new e-commerce services have appeared recently, and companies big and small are facing new challenges and having to find new solutions. The book trade needs to hold its nerve, acknowledge the problems and issues raised in this report but focus on what can be done about them. Over time the inevitable flow will be from old to new; the older, more traditional booksellers will retire and younger and more technologically aware booksellers will succeed them. Computers will be replaced by more powerful models and systems will over time be upgrade to more capable systems in which e-commerce could be a standard facility.

Internet access has gone from expensive to free for dial-up and from very expensive to quite reasonable for ADSL broadband. This last change has only happened over the last year. E-commerce will become the norm but to achieve this everyone involved has got to wake up and smell the e-coffee! In other words, everyone must get on board the idea that e-commerce of the proper integrated kind – whether EDI or web services - will become the norm over the next few years. This means that systems suppliers need to incorporate e-commerce into their systems for both publisher and retailer. Incorporating e-commerce into base versions of EPOS and back office software will do a lot to make e-commerce the normal way to do business. BIC needs to work more closely and pro-actively with book trade EPOS and back office systems suppliers so that, as systems develop new functionality and as e-commerce develops, the two are in harness together. Gradually the book trade will upgrade its infrastructure and it is vital that the next release of each book trade system includes an e-commerce module, or - even better - e-commerce should be at the core of the system. Rather than make a business decision to buy e-commerce as an extra option when buying a new system (a very critical and stressful decision for most businesses) it would be far easier for a book trade company not to have to make a decision on e-commerce at this point. It would be best if e-commerce were already included in the purchase as an intrinsic part of the base system and as a facility, which could be switched on as soon as the difficult process of bedding in a new system is completed. It is not realistic to expect companies to take on a new system and e-commerce together in a "big bang" implementation as the risks will be perceived as too great. The ideal is therefore to have e-commerce facilities included in the purchase so that e-commerce can be implemented once the dust settles.

C. Recommendations

These recommendations are grouped into four categories, as follows:

- Strategic issues
- Knowledge/understanding
- Cost/benefit
- System integration

1. Strategic issues

1.1 e-Day

- A key recommendation is to have a trade-wide date by which the whole book trade should be live on e-commerce. This “e-Day” could be used as a focus for the whole trade to concentrate on e-commerce and make real progress in e-commerce adoption. E-commerce has to be a collaborative exercise in that the sender and receiver of business messages, as well as the e-commerce provider in the middle, have to have the necessary systems up and running. An e-Day approach will help all the interested parties to pull together. E-Day will need to be set far enough ahead for all the other appropriate recommendations to be implemented in order to make it achievable. The trade is aiming to implement the ISBN13 by 2007 and this recommendation is to set a date – proposed as 1 May 2008 - in a similar way for e-Day. If the e-Day recommendation is accepted across the trade then every company needs to accommodate e-Day in their future business strategy.

1.2 Large retailer/independent distributor trading relationships

- Small publisher/distributors complain that they feel coerced into doing e-commerce. There is a need to identify and emphasise extra benefits which could attract small distributors to embrace e-commerce more whole-heartedly.
- Would big retailers consider any form of incentivisation - such as a special status, improved terms, inclusion in core stock, co-operation on promotions, window displays or dumpbins - which reflected the reduced cost to trade with a particular distributor? (This would have to be considered on an individual basis bearing in mind competition rules.)
- A win-win situation would help smaller publisher/distributors to co-operate more fully with leading retailers. At the moment retailers are perceived as take-take-take and it is not uncommon for greater discounts to be demanded at the same time as pressure is brought to bear to invest in e-commerce! Though this might seem rather tactless and unlikely to encourage e-commerce take-up, the increase in business which may result from rolling out e-commerce with a major chain may indeed justify better discounts.
- Retailers need to be aware that for some distributors the simple fact that the retailer looks very keen on something (e.g. e-commerce)

suggests that it must be to the retailer's advantage and not necessarily to theirs.

- Conversely, a more positive win-win approach would make it easier to justify a dis-incentivisation approach for non-compliance, such as charging for keying in paper invoices, as implemented by Waterstone's in 1999. This report cannot recommend charging for processing manual documents, however, unless and until adequate e-commerce services are available at reasonable prices.
- Once effective and appropriate solutions which offer full systems integration with accounts packages are widely available and actually proven, then charging could be legitimately deployed for those who could do e-commerce (in terms of size of business etc.) but who still refuse.
- Large retailers could make clear their e-commerce capabilities, and preferred systems/standards by posting them on their corporate websites, perhaps also with details of their policies on how publishers can sell to them, how to conform to their invoice processing procedures and any information about charging and so on.

1.3 Monitoring by distributors

- Large distributors have mostly implemented e-commerce and often full EDI. This will have cost them thousands of pounds each year. They should be encouraged to develop the systems to monitor usage of these systems and track the benefits of e-commerce amongst their customers and so justify their own expenditure.
- They should, for example, look at their retail customers and produce a list of retailers who provide less than 75% of their orders electronically. They could then cross-check these retailers against a list of retailers using hotline facilities or placing orders via reps or customer services. If it turns out that retailers are using hotlines at non-critical times of year or ordering with customer services routinely when they have full e-commerce facilities, then the distributor might want to take some action. This could be to discuss it with the retailer or, in the case of a chain, with the retailer's head office and suggest some training or other procedural changes.
- Distributors' customer service staff could fill in a simple sheet with tick boxes for the main types of calls and this will quickly show the percentage of calls received which are querying price and availability, or placing orders etc. Some research done by PubEasy affiliated distributors some years ago showed that more than 65% of all calls received into distributors were for price and availability queries. It is in the interest of the distributor to promote an e-commerce service (for which they are paying) if it can be used to satisfy price and availability enquiries online.
- Some distributors are willing to promote subscription services and some will only promote free services. It would be best if distributors had confidence in all the services to which they subscribe and could openly endorse all of them – or, if this will confuse the market, get behind one service and really push it. Where distributors have done

this it has been effective: Macmillan Distribution pressing the merits of PubEasy; or other distributors encouraging their customers to pay invoices via Batch.

- Ideally, orders should be keyed into EPOS systems and ordered electronically from there. There should be no need for reps to collect shop orders and key them in at the office or via a laptop system, although this practice is still widespread. Although it can save some time in the shop, it would be better to implement good ordering systems by the bookseller and leave the rep to a sales promotional and advisory role. This could also prevent avoidable duplications of orders. Any official change to a rep's role needs to be reflected fairly in the rep's remuneration package. If a rep were paid directly on sales that he keys into the host system then he will want to continue to do this. If he is rewarded based on total sales from his territory then this change should not be an issue.

1.4 Sales and distribution: "joined up management"

- When negotiating terms and discounts with customers, publishers should always involve the distribution function along with sales and marketing. There is no point in gaining an advantage in one area at the expense of another area of the business. When giving terms and discounts to retailers, publishers/distributors should look at *all* the costs of servicing that retailer. These could include rep visits, branch deliveries, multiple pick-days, usage of hotlines, high or low returns levels, co-operation on local marketing promotions and author signings, phone calls to customer services, and of course e-commerce usage. All these elements go to make up the true cost of servicing that customer.
- Gradually, over time, terms and discounts should reflect the true "cost to serve". This would subtly penalise usage of the old paper trade systems - e.g. hotlines, rep visits, phone calls to customer services - and it would reward e-commerce usage. An itemised list of these services offered by the distributor and used by the customer could be produced and a putative cost allocated to each item. Positive items such as use of e-commerce could be used to reduce these costs. This empirical approach might be useful in negotiating default or platform terms.
- This would be a more justifiable approach to evolving discounts over time than an arbitrary discount change across the board for customers who refuse to take up e-commerce, which would never be popular. If there were some benefit given for trading electronically, such as a discount percentage point off-set against other services, then real progress could be made.

1.5 Involving stakeholders in decisions on e-commerce

- When looking at e-commerce and deciding whether to implement a system, a company should have the opportunity to trial the system, ideally at no cost, to prove it is fit for purpose.

- Management should make the decision and implement the solution as a trial with the active co-operation of key staff and then review progress with real data to judge its suitability.
- Investment decisions must be taken at a strategic level. The company should not give an effective veto to vested interest groups within the company. For example, the credit controller should not have an absolute veto on whether or not to implement Batch, or the customer service manager should not have a veto on PubEasy. These roles in some more traditional companies may be resistant to change.

1.6 Telephone hotlines

- Distributors should cost and review the use of telephone hotlines. They should monitor usage and identify major users. If these users also do e-commerce, the distributor is competing against its own investment in e-commerce.
- Some distributors currently offer all year round hotlines, which deliver a premium service outside normal shop pick days.
- Distributors will only abolish hotlines or restrict them to small non e-commerce capable companies when customers are persuaded that electronic ordering does the job as well or better. The ideal must be to build trust in the e-commerce systems so that orders placed are guaranteed and hotline usage is naturally reduced.
- Distributors should be encouraged to promote e-commerce services to their retail customers (and perhaps use this promotional activity to negotiate reductions in their e-commerce costs with e-commerce providers.)
- Distributors could publish facts and figures about how the orders are treated, how many orders are placed and how many were supplied within a given time.
- Advertisements in the Bookseller promoting hotlines should at least always carry electronic ordering arrangements and service level guarantees. These should be based not on the claims of the e-commerce providers but real factual data showing how orders will be processed. If retailers actually start to believe that their electronic orders are really guaranteed they would place them with more confidence and use the phone less often – especially if distributors were able to offer extra discount for e-orders.
- Distributors should monitor their customers' ordering patterns and react promptly if ordering levels drop suddenly. This is better than waiting for a problem to be reported. At present most e-commerce is installed and then mostly forgotten about until someone complains about an error. The onus is always on the trading partner to say when there's a problem.
- E-commerce providers must be encouraged to improve the pro-active monitoring of their services. Do they wait until a problem is reported or do they check automatically every five minutes that their website is

live and actually working by using a web robot to visit, log in and test the service by doing a programmed search to find a given piece of data? This is important, as some web services look available when major functions are actually down.

- The major VANs (Value Added Networks) publish their service level figures usually on the web to show any unscheduled down times and overall service percentages. This is helpful in judging the performance of a VAN or e-commerce provider.

1.7 Product information data quality

- Over the past several months there have been issues with the quality of the bibliographic data (product information) in the trade. Whilst most of these problems have been cleared up as they have appeared it would be worth checking bibliographic and supplier data.
- Retailers should look at who their system says is the correct supplier and look at the price and availability code. If a significant proportion of a representative sample is wrong then the retailer should complain to its data suppliers.
- Product information drives ordering, the information given to the end customer, the price charged and invoicing and payment to the supplier. Daily product and price feeds are becoming more common in the book trade as they provide more up to date information. However, when companies implement these feeds they then often stop loading the full files and rely only on the daily feeds. These feeds supplied as part of e-commerce are very beneficial to the business but it is important to refresh the whole database at least once a year to prevent the local database getting out of sync with the data provider. This is because on any one day a feed could be rejected and it may never be corrected, re-sent or re-loaded as it will be soon be superseded by the next day's feed. These feeds tend to only contain changes to the database so it is easy to see how over time they may be prone to error.

1.8 Collaboration between service providers

- E-commerce providers should promote their products jointly to booksellers where they are not competing directly or look to upgrade existing customers to new services as part of a bundle deal.
- PubEasy and Batch. If booksellers decide to use PubEasy for part of its ordering, they should also consider using Batch for invoices and payments. Both services are free to retailers and they do not compete.
- If the bookseller is larger and already uses TeleOrdering, the bookseller should be encouraged to talk to Nielsen BookNet about web services and full EDI capability as a bundle.

1.9 Appoint an e-commerce champion

- Larger companies should look at appointing a champion for e-commerce. This individual should be a senior and experienced executive able to look at e-commerce across the business. Most companies give e-commerce to the over-worked IT or Finance Director. This often makes it difficult to make real progress and it also tends to bias the e-commerce development towards Finance or IT; for instance, invoices tend to be the first to be implemented when the Finance Director is in charge. Companies like Macmillan Distribution and Cavendish Publishing have been very successful with e-commerce and have derived business benefit from it by having a senior e-commerce champion.

1.10 Have an e-commerce strategy

- Everyone in the book trade should be encouraged to have an e-commerce strategy even if that strategy is to decide not to do anything for now. The point is that the situation is constantly changing.
- A few years ago Batch payments and Batch returns did not exist. A new service is due from Nielsen BookNet. Broadband is rolling out across the country, making Internet services a more attractive option than ever before. PubEasy has dramatically improved its service to booksellers via its central services suite (enabling the routing of orders to PubEasy affiliate distributors). Booksellers can now benefit from the new functionality available in EPOS systems such as Booksolve, which has integrated Batch Returns, Nielsen BookData's bibliographic information and Nielsen BookNet's e-commerce services. And there is The Book Partnership with its innovative solution to a bookseller's needs and e-commerce built in from scratch.

2. Knowledge/understanding

2.1 Information for all

Booksellers, publishers and distributors have stated overwhelmingly that they need information about e-commerce.

- They want the unbiased truth, the benefits, the costs and the pitfalls to avoid. They need to be shown where e-commerce is useful to their business. There is no point in conning them into a short-term investment which they then pull out of later because it doesn't benefit them. They need to have e-commerce de-mystified and they need to feel that it is not something to be feared or procrastinated.
- The industry needs a user's guide to e-commerce. This would be written from the viewpoint of the user and tailored to the needs of publishers, distributors and retailers in specific market segments in order to take into account the different ways in which businesses operate and their particular characteristics. If hearts and minds are to be won over it is important to speak the right language: treating all booksellers as stockists of mass-market paperbacks or all publishers as publishers of hardback biographies will not do the trick. A comment as

simple as, "Implement your new system in the summer, not over the Christmas peak," might seem like good advice but would be interpreted differently by academic booksellers and by range booksellers, given that these businesses have different seasonal peaks. Similarly a Christian bookshop turning over less than £50k per annum and staffed by 20 unpaid volunteers all doing two hours per week is going to have a different approach to e-commerce from that of a large chain. Staff training requirements and cost benefit analysis will be very different in these businesses.

- The language used should be non-technical and easy to understand. The objective is to de-mystify the subject and spell out the costs and the benefits honestly and openly. It will be necessary to be completely honest and say that one e-commerce solution may be more appropriate than another in some circumstances. This would not be another EDI manual but a user-friendly document describing all the various sorts of e-commerce, including FTP Direct, Interactive Voice Response (IVR) telephony systems such as GardCall or "Call Bertie", web services such as Batch and PubEasy, as well as full EDI. It should focus on the business need ("check an over-due order" or "place an urgent purchase order", and so on).

2.2 E-commerce website

- Develop an e-commerce website for the book trade. This could be a part of the current BIC site or it could have its own more relevant domain name, e.g. booktradeecommerce.org.uk or e4books.org.uk.
- This could include basic information about e-commerce, downloadable guides written in non-technical terms, updated information about the service providers and their services, prices, and links to other relevant sites. It would be possible to list all EDI capable companies with their contact details and the services they can use so that a trading partner can contact the right person to investigate implementing an EDI relationship. An FAQ section could be put together and maintained and could build into a very useful reference tool.
- E-commerce providers could submit marketing information and price lists describing their services provided that it was clear that this was not independently evaluated information.
- A section on this site could provide advice on XML "Web Services" and the companies, which provide these services as they develop. There is some understandable secrecy attached to these developments but as they are made public they could be featured on this website. Vista is certainly active in this area providing a new range of web services, which will enable booksellers and commercial services to access distributor data, place orders and so on. This will not supersede EDI but this sort of application using the new web services technology will encourage more data sharing between trading partners. This type of work is expected to expand over the next few years and it is important that the industry keeps up to date both with the technology and its applications in the trade and the website would be ideal for this.

The cost of developing a dynamic website to its full potential would be non-trivial and ongoing and some means of funding it would be necessary. In order to control and manage content an impartial editor might be needed as well as technical support.

- There should be a clear difference between this specialised e-commerce site and the current BIC site, which contains relatively static resources and information.
- Questions (however naive) and feedback from users would also be useful here so that companies can feed back their experiences of different e-commerce services. An online forum could be used to host this feedback mechanism. BIC members or members of trade associations affiliated to BIC could register on an online forum and post their views and experiences about the services they have used e.g. what was good and what was less good. Ideally this would be moderated but this would incur cost. The e-commerce providers could also register and put their views and any solutions or actions taken to resolve any problems. This would help communication on e-commerce within the trade.

2.3 Case studies

- A series of real case studies should be undertaken to describe the process of implementing e-commerce – the benefits and the costs – and this needs to be completely honest and a “warts and all” description. At present there are no case studies which are not written by the e-commerce provider involved or are not spun in some way. Perhaps BIC could commission a neutral view of an e-commerce implementation:
 - *Before the implementation started*, recording the objectives, plans, budgets and views of the people involved;
 - *During the implementation*, what went right and what went wrong;
 - *After the implementation*, how it measured up to the objectives, what the real benefits are, etc.

Ideally the trade would fund such a case study and subsidise the first implementation as a pilot with the implementer's start-up costs being paid for. This would help to kick start the idea and it should mean that a first case study could be completed very quickly and provide some useful information early on. This would go a long way towards demystifying e-commerce and would also be an incentive for the participants to deliver a successful implementation.

- In addition to detailed case studies, simple descriptions of what other companies have done would help to improve confidence. For example, one of the largest distributors, Macmillan Distribution, has made e-commerce a major part of its business strategy and this has been a source of competitive advantage for it. A smaller business like Cavendish Publishing has also identified e-commerce as beneficial and has become one of the most advanced e-commerce users. Even some quite partisan information about what, how and why things were done as they were, and what the benefits were, would help to inspire take up.

2.4 Staff training

- Training is required to help retailers learn how to implement e-commerce and why. Trade associations such as the BA, PA and IPG are probably best situated to develop training seminars to focus on e-commerce. Many companies have said that they know very little about e-commerce and some have said they feel this may disadvantage their business and they would like to make the effort to find out more. This training is needed for both booksellers and publishers. Existing book trade training such as that provided by the Publishing Training Centre (formerly Book House Training Centre) covers many aspects of publishing including publishing-related technology, but not supply chain e-commerce.
- Systems and service suppliers might be approached to sponsor this sort of training but it is important that this training is independent and impartial and provided by a third party rather than, for example, an e-commerce provider.

2.5 Bundling e-commerce services

- Service providers should make it easy for a bookseller or small publisher/distributor to get hold of the right equipment and get connected to the Internet by offering bundled services offering everything from a plug to a PC to a modem to a broadband Internet connection.
- Bundles should be tailored to individual requirements. When starting out to implement e-commerce, a company needs to be confident that they are buying good equipment from reliable suppliers and not being taken advantage of through their own ignorance.
- Batch has already done a deal with Tiscali to provide broadband access. This recommendation expands on this idea and tries to take away from the individual publisher, distributor or bookseller worries about buying all the elements needed to do e-commerce.
- Trade associations (the BA's new small business forums, for instance) may be able to help by recommending local suppliers.

2.6 Providing support to users

- Consideration should be given to providing or facilitating basic IT support to users. The book trade is not at present adequately resourced to provide this service but BIC, the trade associations, commercial providers and major industry companies should consider possible options. Small companies investing in new technology would be greatly encouraged if such an independent service were provided.
- A deal might be possible with providers of account packages (Sage or one of their resellers) or certain PC suppliers to provide perhaps a phone line or 0845 local call helpline number. This would go a long way towards holding the hand of the hesitant company looking at investing in e-commerce for the first time.

2.7 Systems and services accreditation

- BIC could ask suppliers of EPOS and publisher/distributor back office systems to apply for a BIC e-tick which certifies that the system is e-commerce compatible for the book trade.
- This could help to encourage suppliers to provide e-commerce capabilities in the base version of their systems, not as an expensive add-on. It could also help booksellers and publishers to ensure that new systems they buy have e-commerce functionality.

2.8 Improve e-commerce training at leading retailers

- A lot of useful work could be done by leading retailers to enable staff in their branches to understand what TeleOrdering, EDI, PubEasy and Batch do and how best to use them. For example, as far as ordering is concerned, the retailer should look at timings, e.g. pick-days, release of orders, relative merits of ordering from distributors or wholesalers, the costs and benefits of electronic ordering versus hotlines, and so on.
- Some big retailers say they are ignorant or out of touch on the detail of these services and how they work. New staff join and are trained poorly and myths are perpetuated, e.g. that you have to place your TeleOrders at the end of the day for overnight delivery to the distributor or that the quickest way to get an order to a distributor is via fax (both nonsense!)
- E-commerce providers need to educate leading retailers about their services and their benefits. They also need to understand the retailers' business better in order to tailor their services more appropriately.
- The supposition is always that the big companies are OK and the problems are all with the small companies. In fact large chains, unless they have completely automated systems, still rely on staff knowledge in their branches to make decisions on when and how to order. For example, staff need to know their pick day at each distributor, what the charge is for an urgent delivery phoned through a hotline but not hitting the MOQ (Minimum order quantity) etc.
- Even experienced staff are probably unaware of some of these issues and few distributors make an effort to update retail branch staff on changes in their policies and working practices.
- This works both ways. Are distributors aware that orders are now placed throughout the day and so do they run their invoices/picking lists more than once a day?

2.9 Promotion of broadband

- Small retailers, publishers and distributors should be advised to consider investing in broadband, which is becoming widely available. For less than £20 per month it is possible to have permanent access to the Internet. They will need to be warned up front about securing their

Internet PC with firewall and anti-virus software but this should not be seen as a negative, merely part of going online successfully.

- Once they have access to broadband, they should investigate the many sites and services which are now available: for instance, PubEasy, Batch, Nielsen BookNet, wholesaler websites and the sites of major publishers and Internet booksellers. Information about these and other relevant book trade web sites and services should be promoted by BIC and the trade associations to small businesses so that critical mass is generated and the broadband connection is seen as good value for money.
- At present many companies use email, some have websites and some use web services. However, a co-ordinated approach seems to be lacking. Often the bookseller-facing services are free whilst the small distributor-facing services are not. Information is needed to enable users to navigate their way through the various available services.

2.10 Targeted marketing by e-commerce providers

- The e-commerce providers should look at their marketing materials and their sales message. As part of **e4books** research, the marketing material of the main providers was reviewed.
- The language is often from the viewpoint of the provider rather than the customer. It was sometimes too technical and often too general to attract any particular market segment.
- It is obviously too expensive to produce printed marketing material for each market segment but this could be done on a website and a simple print out of this content could accompany a sales letter so that customers really feel that their business is understood.
- At the moment smaller distributors feel that the e-commerce providers do not understand their business. If a provider quotes several thousands of pounds for an e-commerce service then it immediately causes the smaller distributor to reject e-commerce.
- Ensure that the advertised benefits from the services are likely to apply to the customer that the e-commerce provider is marketing to. For example, if the benefits are to reduce staff costs and the customer is a Christian bookshop with unpaid volunteer staff, then the cost saving will not apply.
- Independently commissioned case studies would also be useful here in proving to small publisher/distributors that this service can be implemented successfully by a similar business.

3. Cost/benefit

3.1 Dis-intermediating e-commerce

- One way of reducing the costs of e-commerce amongst big companies may be to dis-intermediate the e-commerce provider and replace the value added network with an FTP Direct solution.

- This is not necessarily a magic trade-wide solution in itself, as software at either end is still needed to process the file received. When the order is placed in a folder on the FTP site it will just stay there unless a process is kicked off to import the file in a correct format into the order processing system.
- Amongst the big companies with IT resources and large volumes with a handful of big trading partners a direct solution seems quite sensible in reducing costs. It will not, however, be easy to roll out this solution to smaller trading partners as they have less IT resource and need the handholding provided by the e-commerce providers.
- If trading partners wish to develop an FTP message exchange the information on the e-commerce web site could be used to put trading partners in touch with each other and supply the formats to be used.
- Other formats and technologies are available apart from FTP. AS2, for example, enables EDI messages to be encrypted and sent securely over the Internet. It does have some drawbacks (e.g. with digital certification) and might be better provided via an integrator such as Freeway Commerce or Masterlink, although this service is now also provided by the major VANs.

3.2 Loans and grants to e-commerce beginners

- One of the reasons for reluctance to implement e-commerce is that the cost of the e-commerce services is perceived to be too high.
- If enough book trade companies believe that e-commerce is beneficial, they may be prepared to set up a "fighting fund" to enable this cost barrier to be lowered for certain deserving cases.
- The fund would be designed to make a loan available to the user company to enable them to implement e-commerce. The expectation would be that twelve months after implementing e-commerce the user company would start to pay back the loan from the benefits they had gained. This might be a useful way of kick-starting the process and enabling a company to take the risk of investing in e-commerce.
- There would need to be adequate safeguards: against companies defaulting on loans; e-commerce providers putting their prices up; and so on.
- This is probably the most difficult recommendation to implement but it is directly aimed at tackling one of the major problems inhibiting e-commerce implementation.

3.3 Availability of government funding

- It would be sensible to explore DTI or some other form of matched funding for the loan scheme but recent changes in the DTI funding rules seem to indicate that DTI funding can only be obtained for companies but not trade associations. This is still good news in that DTI funding could help adoption of e-commerce but it could lead to a

competitive issue where one company obtained funding but a competitor did not.

- Another alternative might be to enlist the help of a UK financial organisation, e.g. a high street bank. This could solve some of the issues of administration and security and put the scheme on an adequate legal footing.

3.4 Service providers' incentives

- The e-commerce providers could look at the idea of forgoing short-term revenue in order to develop the market for smaller companies. Putting off charging for a new service for up to twelve months would help customers to put up with any teething problems and get the service fully implemented. If the benefits can be proved to the doubters without their incurring all the costs up front, this will help to persuade these companies to give e-commerce a try.
- This recommendation is not expecting e-commerce providers to be altruistic but merely to acknowledge the difficulties in opening up this market and consider taking bold action to break the log jam.
- Recently TMS Bookmaster has started to defer cost in implementing new systems with big distributors. The cost barriers here are even higher than with e-commerce but this strategy of working with the prospect to trial the service and ensure it does what they expect *before* they commit to a contract must go a long way towards removing risk and encouraging take-up.

4. Systems integration

4.1 Middleware

- Freeway, Masterlink, Batch and Nielsen BookNet, as well as the major wholesalers, are all looking at or have already gone some way towards integrating their systems with Sage (at least Sage Line 50) and perhaps some of the other top accounts systems. Is there any way that BIC could work with Sage and the top accounts systems and define the interface centrally so these companies could do this work just once? There is a lot of wheel re-invention here. Even though a lot of work on integration has been done it is not widely known. It is not easy to find out from the above four companies which systems have been integrated and at which customers. This information would help similar companies with the same systems to contact these e-commerce users for information and this would help them to feel more confident about investing in e-commerce.
- A standard piece of middleware could be developed or made available to the trade as a whole. This would be an extension of book trade standards work and could incorporate all the requirements such as GLN/SAN translation to account numbers and ISBN mapping to distributor's product codes. Such a piece of middleware would be very helpful with the major issue of systems integration.

- One of the problems with developing this middleware is that if the take up is small for any one service it is too expensive to develop. If the take-up was shared across the book trade, the development costs would be relatively lower and a more cost-effective solution could be available.
- To leave this to individual organisations would run the risk that they would only focus on their particular area of interest; for example, Batch might develop middleware for invoices but not orders. If BIC was the organisation controlling the development of the middleware, it could be updated to reflect best practice as requirements in the trade change and e-commerce develops.
- It is likely that a company, which has already invested in this development, would display understandable reluctance to share information or lessons learned with competitors. Nevertheless it is recommended that BIC sound out these companies to see what progress has been made and how willing they might be to contribute to a trade-wide development of appropriate middleware.

4.2 A holistic strategy for implementing e-commerce

- Most companies doing EDI prioritise the messages which deliver the biggest benefits but may be unaware of how the messages they send benefit their trading partners. For instance, retailers benefit and reduce costs from electronic invoices; publishers benefit from electronic orders. Each is initiated by the other so that a symbiotic relationship is formed.
- As a general policy it would be best to implement orders and order acknowledgements and/or delivery notes and/or invoices together rather than go live with just one message and then start the whole process again later to implement another message. This may explain why major trading partners have sometimes only implemented orders or invoices and not done both at the same time. This piecemeal approach is a problem in encouraging roll-out, and some of the integrators perpetuate it by selling modules for one message with one trading partner at a time rather than going for a comprehensive approach and implementing the software to deliver all orders or all invoices (or even better the full suite of messages) in one go.
- Many major retailers have implemented the invoice message and the delivery note but not the order acknowledgement, though this is arguably the message which, when supplied by exception, is probably the most beneficial for customer service.
- More available information on e-commerce strategy ought to encourage companies to understand the benefits of the messages to their trading partner's business as well as their own. This would create more of a win-win situation.

D. Which e-commerce service is suitable?

1. Segmentation analysis for e-commerce

This section looks at the main types of book trade business from the viewpoint of e-commerce and recommends an appropriate e-commerce service or services for each type.

For simplicity, **e4books** assumes that all supply chain e-commerce trading can be divided into three types of messages:

- product information
- trade transactions, sub-divided into orders and the rest;
- returns

and all book trade businesses are either buyers or sellers (or of course both) and these can be sub-divided for e-commerce purposes as follows:

Buyers

Local/specialist/children's/Christian: Small

Educational/academic: Small/large

General/range: Small/large

Library suppliers: Small/large

Sellers

Local/specialist/children's/Christian: Small/large

Educational/academic: Small/large

General/range: Small/large

This market segmentation is a very basic simplification of a very complex trade but the idea is to match these business types with the available e-commerce services in order to identify the most obviously appropriate for each. Each of the different segments has a number of factors, which differentiate its business type, such as price points, volumes, range, margins, seasonality and cost structure. For example, children's books tend to be at lower price points. Also some e-commerce services have made more progress in one segment than another: for example, PubEasy is only now starting to sign up academic publishers such as CUP.

The effect of this segmentation should be, first, to match services to the needs of individual companies. Second, the service has to fit the customer: for instance, if the seller only publishes one book a year or receives very few orders but for huge quantities, building an e-commerce solution may not be cost effective.

2. Services for buyers

2.1 Trade transactions: ordering

Booksellers	Ordering
Small: Local, Specialist, Childrens	Wholesaler, PubEasy, TeleOrdering
Small: Educational/Academic	Wholesaler, TeleOrdering
Small: General/Range	Wholesaler, PubEasy, TeleOrdering
Small: Christian	Wholesaler (STL)
Large: Educational/Academic	Nielsen BookNet EDI Service/TeleOrdering
Large: General/Range	NBN EDI Service/TeleOrdering, PubEasy

- For small booksellers who use wholesalers, e-commerce ordering is available through the wholesaler EPOS systems (Bertline, Gardlink, THEsis, BOSS).
- Wholesaler EPOS systems can be purchased at very reasonable prices if the bookseller is prepared to place most orders with the chosen wholesaler.
- With a full price EPOS system it is possible to order either from the wholesalers or via TeleOrdering or other services.
- For small booksellers who need to order from the big mass-market publishers, PubEasy is an excellent choice and is available via a browser connected to the Internet. This service is free to booksellers.
- Small booksellers who need to order from a wide range of publishers can use TeleOrdering or via the Internet WhitakerWeb (to be renamed Nielsen BookNet web service for retailers). This costs booksellers about £500 per annum but offers access to all UK publishers and the service routes the order to the correct distributor. Almost all bookseller EPOS systems are integrated with TeleOrdering.
- Larger booksellers can use wholesalers, TeleOrdering and/or PubEasy. Large booksellers with full EDI systems can also send orders via Nielsen BookNet's EDI Service (formerly First EDition) or other EDI Value Added Networks. Integrators such as Freeway Commerce offer the necessary software and have deals with major networks for larger users.

2.2 Trade transactions: order acknowledgements (Acks), electronic delivery notes (EDNs), invoices and credit notes

Booksellers	Acks, EDNs, Invoices, Credit Notes
Small: Local, Specialist, Childrens	Wholesaler, PubEasy, NBN Web Service
Small: Educational/Academic	Wholesaler, NBN Web Service
Small: General/Range	Wholesaler, PubEasy, NBN Web Service
Small: Christian	Wholesaler (STL)
Large: Educational/Academic	NBN EDI/NBN Web Service/Batch/PubEasy
Large: General/Range	NBN EDI/NBN Web Service/Batch/PubEasy

PubEasy and Nielsen BookNet Web Service can provide order acknowledgement and electronic delivery note information. Nielsen BookNet EDI Service (and Freeway via BT or IBM) can supply order acknowledgements, EDNs, invoices and credit notes, statements and remittances, whilst Batch can supply EDNs, invoices, credit notes, statements, remittances and payments.

2.3 Returns

Booksellers	Returns
Small: Local, Specialist, Childrens	Batch
Small: Educational/Academic	Batch
Small: General/Range	Batch
Small: Christian	Batch
Large: Educational/Academic	Nielsen BookNet EDI Service, Batch
Large: General/Range	Nielsen BookNet EDI Service, Batch

The Industry Returns Initiative has set up the environment for e-commerce returns processing and companies are rolling out the necessary systems. For booksellers, Batch offers a free returns service with participating distributors. Larger booksellers can also use this service or they can implement the necessary EDI messages and use Nielsen BookNet or Freeway Commerce.

2.4 Product Information

Booksellers	Product Information
Small: Local, Specialist, Childrens	Wholesaler, Amazon, PubEasy
Small: Educational/Academic	Wholesaler, Amazon, NBN Web Service
Small: General/Range	Wholesaler, PubEasy, NBN Web Service
Small: Christian	Wholesaler(STL)
Large: Educational/Academic	NBN Web Service
Large: General/Range	NBN Web Service, PubEasy

- Product Information includes access to bibliographic information on new and current titles as well as information on the latest price and availability status.
- PubEasy offers good search facilities on a fairly basic bibliographic database (provided by the affiliated distributors) and this service is free.
- Amazon.co.uk is the leading online bookseller and some bookshops use Amazon's website as a free search tool to find information about books.
- Many other sources exist, including publisher websites, the Bookseller magazine and Publishing News. All these services are available via a browser connected to the Internet (some on subscription only).
- The bibliographic data agency in the UK is Nielsen BookData. They are currently looking to rationalise their product range but for now booksellers can use Nielsen BookNet Web Service (formerly WhitakerWeb) and BookData services such as BookFind online. These are subscription online services.
- RR Bowker is the main US bibliographic data agency and they have a subscription web service called Globalbooksinprint.com. Other major companies also offer bibliographic information, notably the main UK wholesalers and the US wholesalers, Ingram and Baker & Taylor.
- Small booksellers should be able to access either free information via Amazon or PubEasy or they can use subscription services from a number of sources including, Nielsen BookNet Web Service, the Book Partnership, a traditional CD-ROM such as BookBank/BookWise, or a bibliographic product from their wholesaler. These subscription services are priced between £600 and £2000

depending on the data set and where you buy it. The cheapest way of buying access to bibliographic data may be via a wholesaler. Christian Booksellers can usually buy a CD-ROM product for a little over £150.

- Larger companies can use these services or they can subscribe to data supply services from the bibliographic agencies and get a daily feed of updates in formats including ONIX XML or tagged ASCII.

3. Services for sellers

For sellers, business type is less significant where e-commerce is concerned. What is more important is size and volume of business and the amount of business done with the book trade. Distributors can be divided into small (book trade turnover c. £250,000), medium (turnover c. £1,000,000) and large (turnover c. £5,000,000+) and the appropriate services are shown for the main types of e-commerce:

3.1 Receiving orders

Distributors	Receiving Orders
Small	NBN TeleOrdering/Web Service (basic level)
Medium	NBN TeleOrdering/EDI Service, PubEasy/EXCHANGE
Large	NBN TeleOrdering/EDI Service/Web Service, PubEasy

Small distributors tend to be small publishers who do their own distribution.

- TeleOrdering supplies orders on paper and fax to small publishers and this service is free for publishers with low volumes.
- NBN Web Service (basic level) is the old WhitakerWeb Publisher Module version 1 and it is simply a way of collecting TeleOrders over the web using a browser. This service is very basic and is likely to be priced at around £100 per annum. This is part of Nielsen BookNet's web services for publishers.
- NBN Web Service also includes the old 1stexchange.net service, which enabled small distributors to receive EDI orders and output EDI order acknowledgements, EDNs and invoices. It is understood that 1stexchange.net is to be merged with the WhitakerWeb Publisher Module version 2 to produce a new service for small distributors called Nielsen BookNet Web Service for Publishers. This development is apparently in final testing but no price has yet been indicated.
- PubEasy offers distributors a service called PubEasy/Exchange which enables small distributors to have a presence on PubEasy. This is likely to attract the middle-sized distributors rather than the very small.
- Large distributors can receive TeleOrders electronically or EDI orders via Nielsen BookNet, Freeway etc.
- They can also join PubEasy and/or Nielsen BookNet and make their data available to their customers online.

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- Vista is developing a new way for the large distributors to make their data available via the Internet using web services technology and this service is called I-connect.

3.2 Sending acknowledgements, EDNs, invoices/credit notes/statements

Distributors	Acks, EDNs, Invoices/Credit Notes and Statements
Small	NBN Web Service, Batch
Medium	NBN EDI Service, PubEasy/EXCHANGE, Batch
Large	NBN EDI Service/Web Service, PubEasy, Batch

- NBN Web Service offers a very simple interface to enable distributors to receive EDI orders and send back order acknowledgements, EDNs and invoices.
- Batch.co.uk enables small distributors to input invoices and credit notes and from the invoice an EDN (delivery note) is also derived. Batch also does statements and provides remittance information as well as the payment via direct debit from retailers.
- Batch provides small distributors with a basic service for around £120 per annum whilst larger distributors pay based on a percentage of invoice value going through the system, capped at a monthly amount. Thus, larger distributors have to pay more but, once they reach the cap level, all extra invoice traffic is free. This makes it worthwhile to roll out to all possible customers once this level is reached.
- Nielsen BookNet's EDI Service (First Edition) handles all these messages via full EDI as does Freeway via other networks.
- PubEasy and Nielsen BookNet make available distributor data for acknowledgements and EDNs so that retailers using these web services can look up this data. PubEasy Exchange is for middle-sized distributors.
- Nielsen BookNet's EDI Service (First Edition) offers a full EDI service and charges for a mailbox and traffic costs, plus an annual fee. This service is suitable for large distributors with large volumes of data. An average Nielsen BookNet distributor might be paying several thousand pounds to use this service but the volumes are so big that significant benefits are obtained.

3.3 Returns

Distributors	Returns
Small	none
Medium	Batch, Nielsen BookNet EDI Service
Large	Batch, Nielsen BookNet EDI Service

- There are only two main options for returns at present. One is Batch.co.uk, which has launched a basic returns system, and the other is to use full EDI either via Nielsen BookNet's EDI Service (First Edition) or FreewayCommerce etc.

- These e-commerce services handle the returns messages but the distributor's system needs to be able to process the returns messages, look up sales history and appropriate discounts, authorise the returns, send a barcode to the bookseller, make all the necessary financial transactions and provide full reporting. It is important to note that the e-commerce services do not provide this functionality and this is left to the distributor's systems supplier e.g. Vista.
- These systems would normally be beyond the small publisher/distributor. It would, however, be feasible for a web service such as Batch.co.uk or Nielsen BookNet to develop a basic solution for returns. This could receive returns requests and enable a user to give authorisation etc. via e-commerce. Conceptually there is not much difference between receiving an order and sending back an invoice and receiving a returns request and sending back an authorisation. A web service could handle this and the sophistication would be to integrate the service to look up sales history on the accounts system.
- Whilst this service could certainly be developed, there may be no business need as the **e4books** research indicated that most smaller publishers do not have a major returns problem. This is because a high proportion of their books are supplied for customer special orders rather than stock and these tend to be on firm sale. In common with the order processing services, a returns service for smaller companies would have to be keenly priced.
- Only a handful of companies are currently signed up to the Industry Returns Initiative but the early signs are that these services are going to be popular and will grow rapidly this year. For example Batch has over 160 retailers sending returns requests to 3 distributors with a further 4 distributors announced so far as planning to join this year. In addition, Waterstone's and Ottakar's have recently rolled IRI out to all their stores so this could give this area of e-commerce a significant boost. This is likely to encourage more distributors to invest in the necessary IRI compliant systems.

3.4 Product Information

- Product Information from distributors mainly concerns price and availability data and there are a number of ways that distributors can update this data with the bibliographic agency. This can be via FTP, ONIX or EDI.
- Smaller distributors can use the web services offered by Nielsen BookData e.g. PubWeb/BDConnect.
- Publishers provide information on new books via paper AI sheets or increasingly AI sheets attached to emails. This is not full e-commerce and the AI sheet still needs to be scanned and edited by the agencies. Publishers can subscribe to PubWeb/BDConnect as part of their subscription to Nielsen BookData and they can input new titles and edit existing records online.
- Various proprietary software solutions are becoming available to facilitate the transmission of ONIX messages from small publishers to Nielsen BookData and others.

From this information it should be possible to recommend an appropriate solution for any book trade business with a suitable price to match. There are several free or very inexpensive services available and these should enable a very small business to compete on a level playing field with much larger businesses. It is

important that this information is put across clearly and simply so that small businesses can feel confident that these services work. This analysis shows very clearly how complicated a maze of services can be for the various different business messages. To make this clearer the services could be presented in a different way, as follows.

4. Services for a small publisher/distributor

As a minimum, a small publisher/distributor needs to do the following:

- Output product information (bibliographic and price and availability updates)
- Receive orders from the book trade
- Output invoices to trading partners
- Handle returns (if appropriate)

4.1 How cheaply and simply could this be done?

- The product information requirements can be done by supplying the UK bibliographic agency (Nielsen BookData) with information about the books. A small publisher only publishes a few titles each year so keying them into a web service like PubWeb is simple and efficient.
- To receive orders from the book trade the publisher can collect TeleOrders from the Web using Nielsen BookNet Web Service. This is very simple and inexpensive and the orders can be downloaded into a PC. In the future it will be possible to integrate this process with the publisher's accounting system, but for now receiving TeleOrders over the web in real time rather than waiting for the post or the fax once a day is a step forward.
- Nielsen BookNet will be upgrading 1stexchange.net in the near future and merging this with WhitakerWeb Publisher Module to form Nielsen BookNet Web Services for Publishers so that EDI orders from Gardners, Bertrams and other major companies can be received along with TeleOrders; and invoices can be sent back. If the publisher system doesn't integrate yet, there is some keying in to do but it is minimised by the fact that the system should already hold the order and may even retain the price last used for that ISBN/product code. With minimal keying, order acknowledgements, EDNs and invoices can all be sent.
- Alternatively the publisher/distributor could use Batch and key in the necessary invoice information. Payment from Batch and BCH subscribers would be made when Batch collects the money monthly from the booksellers via direct debit.
- Publisher/distributors could subscribe to PubWeb (this may be part of a subscription to Nielsen BookData) and that would enable them to input new titles online. They can also use PubWeb to check the records held by Nielsen BookData and ensure they are accurate.
- They could subscribe to Batch or Nielsen BookNet (or both) and the cost for a small business for both systems should be less than £250 p.a.

These services are inexpensive and they do deliver some benefits but take up amongst the small companies has been very slow. The e-commerce providers need to be encouraged to identify small companies as a market sector and to

market these services directly to them. At the moment, neither the Batch nor Nielsen BookNet websites are sufficiently clear about their target customers and how they might be expected to understand the services on offer and make a buying decision.

5. Systems Integration Update

This has been highlighted as an important factor in expanding e-commerce and the following describes the current picture:

5.1 Buyers

Orders

- PubEasy is working on interfacing with EPOS.
- TeleOrdering: most EPOS systems integrate with TeleOrdering.
- Booksolve can interrogate Nielsen BookNet data seamlessly via an API.
- Wholesaler EPOS systems all integrate with their own systems at the wholesaler.

Invoices

- Wholesalers: integration with Sage Line50 is on at least one wholesaler's "wish list" but has not yet been developed

Returns

- As the IRI gathers momentum it will be very important for systems suppliers to consider returns for integration

5.2 Sellers

- Batch, Freeway and Masterlink have all developed integration software with Sage Line50.
- Nielsen BookNet is working on integrating with Sage Line50 and has developed an API as well as some limited customisable download formats.

Some of these details are rather vague. It is hard to find out exactly what these companies have done and whether, for example, their integration software is actually live yet or has been implemented with a client. Now that this report has detailed some of the integration work which is going on in the trade, it may be that the companies involved will come out in public with updates as to their progress and details of their investments in integration work. This integration work should be a major selling point but is currently hidden. It may be that the uniqueness of each publisher system means that integration implementation carries a high price and this is therefore not cost-effective for the e-commerce providers to undertake for the smaller companies.

BIC could help by working with the providers to develop some middleware capable of integrating the main e-commerce services with the main accounts

e4books

packages. There are over a hundred accounting and back office systems in use by publishers and to integrate with them all is probably an impossible task. By developing integration solutions with the top five or so systems and by promoting these systems to the user base it may be possible over time to encourage small companies to move to a better and more e-commerce capable system.

E. Conclusions

This report describes e-commerce in the book trade. It investigates a wide range of existing problems and issues and it recommends practical solutions to these problems. This report alone cannot deliver an expansion of e-commerce in the book trade, but it can be the catalyst to action on the part of BIC, e-commerce providers and major industry companies.

Once a report like this is published it is crucial that the momentum is not lost and that some next steps or quick wins are identified and acted on.

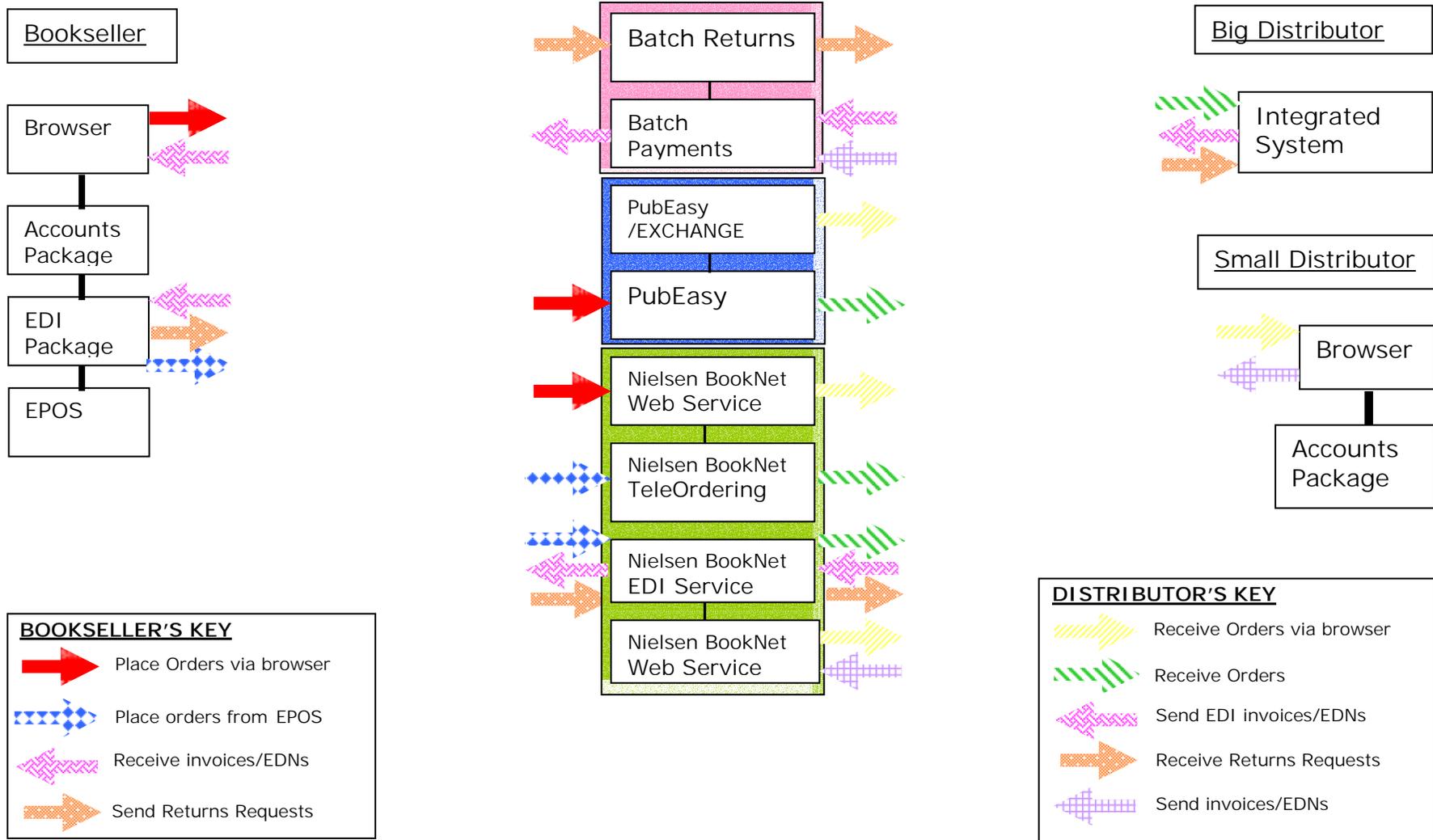
- BIC will be working to review the recommendations and come up with an action plan for implementation. Some timescales need to be set for such recommendations as the e-commerce website, feedback forum and user guide to help clear the fog surrounding e-commerce in some sectors.
- Ideally a case study should be started this summer/autumn and the results published as soon as possible after the subject goes live.
- Some method of judging progress made is important. This report suggests a simple classification of book trade companies according to their willingness to implement supply chain e-commerce. The questionnaire distributed as part of **e4books** could be a start in classifying companies from 1 to 8 as suggested in this report. BIC could use this as part of an annual survey to track movement of the trade from 1 to 8 over time on the way to e-Day in 2008?

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Simplified supply chain e-commerce map



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