Keeping books alive using on-demand printing

David Taylor, Managing Director, Lightning Source UK Ltd

A genuine print-ondemand proposition has at its core the ability to print and distribute a single copy of a book from a file that is held digitally. The ability to receive an order and print and distribute a book in response to that order is a complete reversal of the traditional publishing supply chain that requires the printing and storage of inventory in anticipation of orders.

This model is typically characterised by the offset printing of speculative inventory at levels based on best guess sales projections and the storage of that inventory in distribution centres. The sales effort is geared to the stimulation of orders. A key aim for the publisher's production function is getting the lowest possible unit cost for the number of copies that the publisher wants to carry based on their sales projections for the title.

The more copies printed, the lower the unit cost but the more capital the publisher ties up in inventory. The more capital tied up in inventory, the greater the risk that the company takes. Print too much inventory and run the risk of write-offs; print too little inventory and run the risk of losing sales because you ran out. Get the reprint wrong and you can't sell. Bad print decisions can leave The acronyms
RPUC, RP or TOS
all add up to one
thing: a missed sale
and an unhappy
customer

a nasty hole in the balance sheet of a publishing business too; in some extreme cases, they can kill off a business.

Bad print decisions can also leave a hole in the profit and loss account as sales are missed because the book is not available. The acronyms RPUC, RP or TOS all add up to one thing: a missed sale and an unhappy customer. Ask any bookseller who has had to explain what these terms mean to a customer. The supply chain that the print-on-demand model is now propagating means that a

book is always available and that therefore a sale can always be made. In the marginal world of bookselling and publishing where every sale counts, this is proving to be an increasingly attractive proposition.

There are, of course, competing alternatives to what I have described as the genuine print-on-demand model. Rapid improvements in the capabilities of digital printing equipment, coupled with fierce competitive pressures in the book printing market, have led to ever smaller print runs being offered to a publishing market that in turn has a growing appetite for inventory reduction and just-in-time manufacture. Driving out inventory costs can have a significant impact on the balance sheet and cash flow of a publishing business.

Ultra-short-run digital printing offers an attractive option for publishers as it also allows them to continue to utilise their existing supply chain model. Traditional publishers will often have significant legacy issues that can slow the move to a genuine zero inventory/print-on-demand model even though such a move could result in dramatic improvements in the fiscal profile of the business.





systems that may have been the subject of major investment decisions and that therefore represent significant sunk costs. Exit costs from such scenarios can be prohibitive and inevitably the timescale will be long.

Existing supply contracts with third party distributors that are premised on exclusive distribution rights in a given geography may also delay integration with a print-on-demand supplier, although a number of major book distributors in the UK are now starting to weave links with such companies into their supply chain offer to their client publishers.

Production values in terms of trim sizes, paper specification and binding types may also act as barriers to a traditional publisher moving quickly to a print-on-demand supply model. However rapid improvements in the product that digital print equipment can produce, together with a growth in the

So far I have only talked about what I call "traditional" publishers, those publishers whose business model is rooted in the established supply chain and who have legacy issues to manage. These traditional publishers are currently using print-on-demand in a number of different ways, depending upon where they are in their business cycle and therefore what their priorities are as a commercial organisation. Here are just a few of the many ways that they are using these new capabilities:

- Keeping titles in print and capturing sales that would otherwise have been lost;
- Bringing titles back into print from out-of-print (OP) status and realising new revenue;
- Issuing titles in paperback for the first time that have only been available in hardback to date;
- Reducing inventory levels and reducing cash tied up in the business;

Some organisations, for example, offer fulfilment systems that allow not only publisher/distributor direct ordering but also a buy/sell relationship with book wholesalers such as Ingram Book and Gardners, and Internet retailers such as Amazon and Barnes and Noble. In this scenario, a publisher need not carry any inventory or indeed physically handle the book to fulfil an order. Inventory is printed from a digital file only when an order is received. The only entry cost for the publisher is therefore the setting up and management of the digital file and its associated metadata.

The effect of this model is to reduce dramatically the barriers to entry in terms of capital for a start-up publisher; this in turn has stimulated an explosion in new publishers entering the market for whom print-on-demand is core to their whole business model. This new type of publisher is fundamentally a selling/marketing model with a very different-looking balance sheet to the traditional publisher with its requirement to hold and finance speculative inventory.

In addition, print-on-demand has allowed completely new publishing models to emerge. In the US in particular, there has been an explosion in the field of self-publishing in the last five years, underpinned by both the print-on-demand model and the ability to support and market these titles via the Internet bookselling model. The removal of the need to print large quantities of speculative inventory has reduced the real cost of publishing for those authors who are willing to go it alone.

The other major new model to emerge on the back of print-on-demand is the Content Aggregator. These organisations will typically utilise the ability that print-on-demand has to bring books back from the out-of-print graveyard. Titles out of copyright can be scanned from the original text and reissued as a facsimile of the original, even dropped into a generic cover, and made available in the market via the provision of metadata about the title to the book trade. The unique ability of the Internet selling model to underpin the sale of the 'long tail' of backlist and highly specialised titles is well-known.

The effect that print-on-demand is having on the book trade is in its infancy. One of the great ironies of this emerging trend is the new lease of life that a cutting-edge, digitally-based technology is giving to one of the oldest products on the planet – the paper book. To paraphrase Mark Twain, rumours of the death of the printed book have been much exaggerated.

The genuine print-on-demand model allows a publisher to operate a virtual stock policy with titles being printed only when there is an order

variety of trim sizes that can be offered, is starting to reduce the importance of these legacy issues.

Another alternative to the genuine print-on-demand model is the managed inventory option. In this case, a distributor may offer their publisher clients an in-warehouse digital printing facility, topping up a publisher's inventory with ultra-short-runs of their titles so that a book, in theory, never goes out of stock and therefore a sale is never lost. There are many different flavours to this model but its essence still relies upon the concept of inventory being on hand ahead of orders being received.

For the publisher this means committing cash to the pre-order printing of inventory and therefore still accepting the business risk that this represents, albeit a reduced one due to the smaller print runs held by the distributor. The distributor may also seek to lock in the publisher's printing of these titles via an exclusivity clause in line with the typical exclusivity that a distributor would expect for the sales and distribution of a publisher's titles in a specific geography.

- Reduction of real estate warehousing;
- Import and export via printing in country rather than holding inventory in country:
- Development of new products and revenue streams (e.g. large print).

There is little doubt that print-ondemand is becoming an increasingly important part of inventory and supply chain management for both traditional publishers and their distributors; market trends and advances in digital print capabilities are set to accelerate the take-up over time and legacy issues will decrease in importance.

However, print-on-demand is having another major impact in the global book trade and one that is fuelling a rapid rise in the number of titles that are in print. The genuine print-on-demand model allows a publisher to operate a virtual stock policy with titles being printed only when there is an order. This model removes the need to tie up capital in speculative inventory, thereby also removing the need for real estate warehousing and distribution facilities.