

# Short Runs, Fast: Virtual Literature Management Automates Production of More Than a Thousand Jobs a Day

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## Abstract

This paper describes the business model and workflow employed by one of the world's largest digital color print providers operating in the commercial print-for-pay market, along with the needs of one particular end customer (print buyer). By understanding how this company has built a profitable and growing business, other print service providers, and technology vendors, can apply the lessons learned for the mutual success of the digital color printing market.

## Introduction - A New Breed of Print Provider

In 1965, a new communications company in Dublin, Ireland, called Graphic Reproduction opened its doors as a traditional prepress service bureau. Thirty-six years later, the name has changed, and so has the business.

Realizing the profit potential of the Internet, the company changed its focus and its name to Virtual Literature Management, or VLM. Today VLM is a marketing services company that serves customers online – and puts digital presses to the test.

- Short-run, versioned, personalized, and customized full-color printing
- Next-day turnaround on every job
- Production of 800 to 1,200 full-color jobs each day
- Average run lengths of 60, but some runs as small as 1, or as large as 20,000
- Average monthly print volume of 3,000,000 pages, and growing

VLM operates from two locations – its original Dublin facility, which employs around 70 people, and its new location in Birmingham, England, which includes around 20 people. VLM also has an in-house development and technical support team of eight – with plans to increase these numbers – that builds and maintains the company's customized web-based solutions for clients.

Unlike many print service providers who have taken a passive approach toward digital print sales, VLM made a strategic decision to proactively address the needs of their customers. One of the first markets VLM targeted for digital printing was the real estate industry, providing realtors the opportunity to produce short-run brochures, from one page to four pages, to hand out to prospective

buyers or purchasers of homes. Today, the company produces millions of finished pieces each month, serving the real estate industry and many other markets, in particular the financial and IT sectors.

## The Print Customer's Perspective - TMX Provides Estate Agents With Tools to Create and Order High Quality Brochures Online

For real estate agents, appealing exposés, or sell sheets, with a color photograph and specifications of the property are the most important selling tool. Quite frequently, though, these exposés are still produced manually by pasting color photos onto the selling points and copying them. However, the costs associated with making the copies – not to mention the time involved – can add up quickly, without the quality to show for it.

TMX Spicerhaart, Europe's largest independent estate agency, has made manually produced materials obsolete with the adoption of a Web-based tool that enables its real estate agents to create full-color property exposés.

“The production of our sales details must be in keeping with the group's branding, something that is not possible by traditional localized laser equipment,” said Steve Lamb, IT Director at TMX Spicerhaart. “Agents need a relatively small number of pieces for each property that are customized and printed quickly, with the highest-possible image quality at an affordable cost.”

TMX with 2,000 employees in 250 agency branches is renowned for leading the housing industry into new technology. In fact, during the last two years the company has focused on developing technology that allows seamless integrated functions between its many departments.

The company's Web site [tmxhome.com](http://tmxhome.com) offers a portal to more than 20,000 properties and is designed as a resource for every part of the home-selling process, including tips on moving. The site brings together TMX group agents and home vendors, such as interior designers and architects, to one location.

TMX extended its commitment to technical innovation by turning to a revolutionary digital color printing technology that takes estate short-run brochures to a higher level. The company now offers full-color brochures created by the agents themselves and produced, with no manual operator intervention, by VLM.



Figure 1. TMX estate agents can create a variety of customized full-color marketing materials online using pre-defined templates. The average run length is 60 and most orders are delivered the next day.

### An Automated Process

The key to the success of VLM and TMX has been the fully automated process, which allows agents to go online, choose a template for marketing collateral, upload images, type in the text, and the system actually builds a marketing collateral piece.

“Quick turnaround is important for us because it eliminates the argument of convenience of an in-house printer or copier,” Malone added. “We say, ‘Look, if you order this at 5 p.m., you’ll have it the next day, so why bother with an expensive in-house printer’ – we can offer a competitive product at a higher quality level.”

TMX agents all have access to a separate administrative site where they can first create their own full-color brochures and immediately send them off for production. An agent simply chooses one of the various design templates available online, uploads data and property photographs directly from his computer and uses a preview function allowing the agent to review his brochure before sending it off.

The agent also chooses the paper weight, the quantity and the address for where the printed brochures should be delivered. The cost is calculated and displayed on screen immediately. The job is then automatically transmitted to one of three NexPress 2100 digital color presses at VLM. Within 24 hours, the printed marketing pieces are sent to the agent directly from VLM. If they wish, the agent can monitor the status of their print order on the Internet: from queuing, to printed, to shipped.

### Low-touch Workflow

Key to VLM's ability to turnaround full-customized print jobs within 24 hours is an automated workflow inside the manufacturing plant that keeps operator intervention to an absolute minimum. Pricing and service level agreements are agreed upon in advance, so there is no need for a customer service representative to create and submit a traditional estimate. Document designs are pre-created through on-line templates, so there is no need for a prepress employee to construct or prepare documents for printing. VLM worked with TMX, as they do with all

of their clients, to optimize the design of each document for digital color printing.

PDF files are automatically generated by VLM's internet print management system and then routed to the appropriate print queue, so there is no need for a pressman to manually select files for printing or assign paper types. Printed jobs are grouped in the press delivery stacker using the offset feature on the NexPress 2100's main delivery, so there is no need for additional collation or stacking.

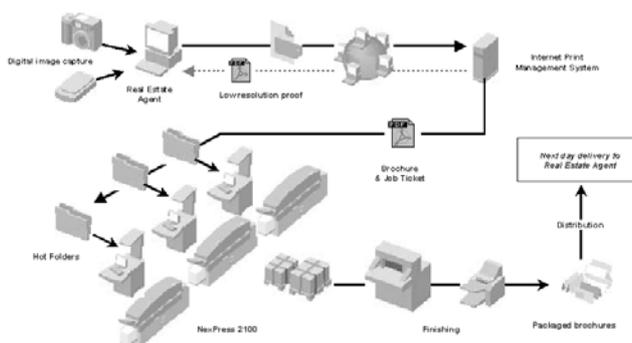


Figure 2. Manual operations and human intervention are kept to a minimum. Once the end customer creates a customized document via their web browser, this entire prepress, press, and postpress workflow is staffed by just three people per shift for an average monthly print volume of over 3,000,000 pages.

The first time a job is physically touched is when an operator retrieves a stack of printed sheets from the back of the press, scanning the top sheet with a hand-held scanner which reads a barcode, updates the tracking system, and generates a finishing and delivery ticket that is printed on a desktop printer. All postpress process, excluding lamination, are handled in-house by this same operator. Completed jobs are shrink-wrapped and stacked in delivery blocks for pick-up at the end of the day. This entire prepress, press, and postpress manufacturing process is staffed by just three people per shift.

### Supply Chain Optimization

With the completely automated process worked out between VLM and TMX, they have eliminated the long cycle times previously associated with brochure production, and internal labor costs have been dramatically reduced. This has helped TMX to reduce the costs associated with carrying inventory of printed documents and the raw materials required to create them.

According to Steve Lamb, on average TMX needs about 500 jobs averaging 25,000 pieces a day. To make print on demand a success, quick turnaround and consistent image quality are essential.

“Excellent photo reproduction is vital to our business, and we are always looking for new technology that helps us improve quality,” Lamb says. “Prior to VLM installing a NexPress 2100, we were using digital color copiers that didn’t fully meet our needs. With the dramatic improvement in the NexPress 2100 press’ print quality, we now have full-color tools printed on-demand that help make our job easier.”



Figure 3. Finished sets of documents are shrink-wrapped and sorted according to their delivery route. Each set is marked with a delivery ticket automatically generated by the VLM internet print management system.

### Moving Up The Value Chain

Even as it implements internet print management systems into its business, VLM is thinking ahead to its next challenge. The company plans to move up the personalization value chain and add transactional and fully-customized variable data printing to its service offers in the near future.

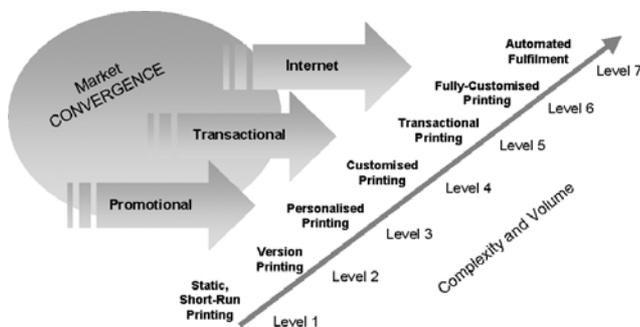


Figure 4. Digital color printing applications can be categorized into seven different levels of complexity, fueled by the convergence of promotional, transactional, and internet data streams.<sup>1</sup>

TMX is now also developing new, variable data color collateral, such as personalized moving letters, interior design brochures and mortgage reports, that in the past would not have been possible using previous digital color printing technology.

“Our goal is to become a significant player in the fastest growing area of the print world – digital print,” Malone said. “The technology infrastructure we've built is necessary, but not sufficient. Our future success will come from helping our customers improve their business processes for marketing and print collateral.”

### Conclusion

VLM have built a profitable and growing business by developing systems and relationships that individuals and organizations are unwilling to walk away from. Rather than focusing on simply being a print provider, they offer their customers individual print marketing solutions.

Some of VLM's specific success factors include:

1. Analyzing the needs of a vertical market before deciding to enter
2. Selling benefits, not technology or price
3. Managing expectations through service level agreements that govern pricing, delivery, and print quality
4. Automating every workflow step possible to minimize cost and maximize quality
5. Managing costs through self-maintenance of their digital presses
6. Providing transparency to printing costs through daily, weekly, and monthly reporting

In an industry that is currently undergoing intense competition and limited growth, many printing firms can learn from the success of VLM.

### References

1. Christopher Bondy. NexPress Solutions LLC. Print Services & Solutions White Paper (2002).

### Biography

**Will Mansfield** is European sales support and market development manager for NexPress GmbH. He has consulted to executive teams and senior change leaders in printing and publishing to start, accelerate and gain maximum return on investments in business strategies embracing new digital printing opportunities. Will received his B.A. in Public Relations from Eastern Kentucky University in 1983. He has held management positions in sales, marketing, training and business development in the graphic arts industry in North America and Europe.