

Discrimination in Digital Printing

Personalised Printing: A “Must” for the Graphic Arts Market to Survive

*Jan-Pieter Breugem
Atlas Software BV, PrintShop Mail
Harderwijk, The Netherlands*

Introduction

Are you aware of the fact, that mass marketing is for everybody, and 1-1 marketing is for individuals. That’s “discrimination” in printing, it sounds not social, but it is the only way the GA—Graphic arts can get a position in the only print market with a constant grow. “Digital Printing market”.

Although there is a serious increase in turnover and volume in the market of Print, this happens in general outside the traditional graphic arts market. (The market around digital printing).

The GA is surely aware of these new opportunities, the question is why does the GA not make this step easily?

In this seminar we want to find the solution of how “new Graphic Arts”, need to act, to ensure they are a player in the market and will remain.

We will cover:

1. The GA market needs to think and act different!
2. Who is moving the GA market to digital printing, and why!
3. Which role will the GA market play in the digital print business?
4. Which products and technologies support the GA?
5. Why are the next GA companies very successful with personalised printing?

The Graphic Arts Market Needs to Think and Act Different

The current Graphic Arts (Design companies, Commercial printers, Print for pay and mail house) thinks in their communication products in target groups (mass marketing). The results of their design are complete products like brochures, documents. General: story/message for everybody. → Mass marketing.

In personalised printing you are oriented on the individual, i.e., ages, social class, area’s etc.

In the Netherlands the Post bank, communicate with 7 million customers on a personal level. Teens receive teens information, personalised and adults receive information specified for their needs.

I assume everybody has seen and received personalised products, and knows the principle of it; - Database driven communication.

Today we present **print automation** which is a step ahead. All different graphical parts are prepared and stored “some where” on the server, and will be merged on the fly, resulting in unique documents.

This way of thinking/acting is totally different from the Graphic arts currently. As I stated, in their messages they aim for Print art to Mass-target groups, and not individual communication. Still the question is how the GA can pick up this way of individualised communication.

Personalised Printing That Is Their Only Way To Survive

In the next chapters we will explain who is moving the GA to personalised printing and which type of technologies supports effectively the GA in the Right direction.

Who is Moving the GA Market to Personalised Printing, and Why!

Today we experience more and more that the document owners are the most important driving forces in digital printing in the GA market. They are making the rules. You can imagine a retailer who wants to achieve in a market under pressure, good and representative results. Therefore he will use new marketing methods. It is therefore important for the GA markets to be in close contact with the document owners.

Today we see that the document owners now turn to solutions like variable data printing.

Who are the Document owners? Company layout firms, who are in charge of the corporate design. They see the added value of an efficient mail merge function in their corporate design management like MS Word. Also Marketing managers, Product managers marketing, brand managers will see the added value of targeted mailings; print only what is necessary and understand what the customer wants to read/receive.

Going global adds even more challenges. Multinational companies want a uniform look but they need to communicate in multiple languages. They want their messages to be consistent and universal - yet they

also want to appear local to each community they are in. Together with full web based integrated solutions like Internet, CRM and corporate design management.

This illustrates that Digital printing and Personalised printing needs a different kind of customer approach. The document owners need to be approached because it is even more difficult to be in contact with the final customer.

But there is good news: The document owners now more and more push the GA market to manage for them the personalised documents (pull marketing for the GA); because today it is known the power of digital printing is full personalised documents.

In Fig. 1 we show you the difference between push and pull marketing. Important is to see the role of the GA. With Push Marketing, we see an on demand role, with pull marketing we experience an active full service provider with integrated solutions like Automated print processes which is necessary to play an active role and be a player in the market of print, anyway the market with growth.

In next chapters we will detail the new role of the Graphic arts and which workflow can be an option to realize that.

Push vs. Pull Personalization

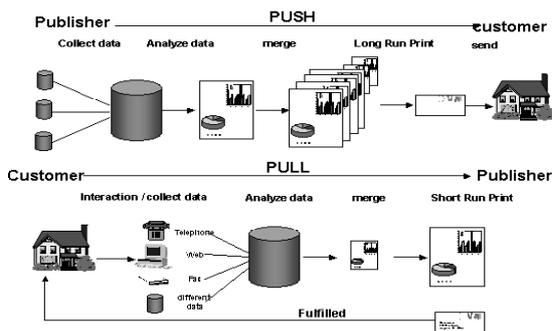


Figure 1. Role of the GA in Push and Pull

Which Role Will the GA Market Play in the Digital Print Business

The today's role of the GA is mainly to produce what they get ordered. Print on demand. The new role of the GA will present himself as a full service provider to organise the output management in any way and format. This can be demanded for offset, digital printing or wide format printing, but more important the organisation and logistics behind it. Summarised, to focus on efficiency, speed and to strengthen customer business relationship. One of the main questions is how to organise the **Financial Strategy like stock, time, material and depreciation**, which is necessary behind the mentioned investments.

In offset-printing, usually long-term investments are made. For the traditional oriented management the new technology is difficult to offer and calculate. Therefore also for digital printing there needs to be a business plan behind this investment, to make sure the **return of investment is realised** within 4 years.

What are the main guidelines for a business plan around digital and personalised printing? First of all explore the current customers, what type, what is the type of print output they have, and what type of printout they need and wish. Also explore the area the printer is operating in. What types of companies are there are? Retail, Government, education, Financial, airlines, Industries etc. What is the product portfolio you as a GA company can offer (combination Offset digital printing, personalised printing, design, job preparation, workflow support and database management).

The GA needs to present themselves as a one-stop shop that can support the companies in the total workflow of the possible printouts, and also the logistics.

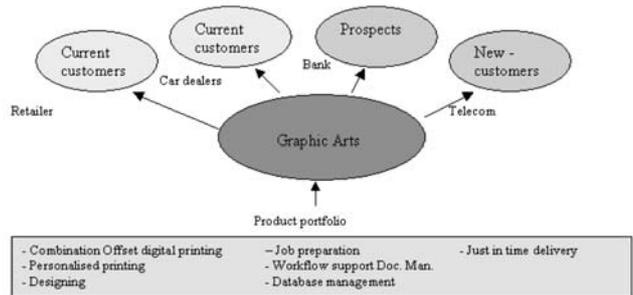


Figure 2. The new Graphic arts → Full service provider “the one stop shop”

Which Products and Technology Supports the GA to Achieve Their New Position?

In the previous chapters we evaluate d the way the GA act and needs to operate. Key is an efficient and effective workflow, both on technology and logistic side.

In this chapter we will go in depth to give you a clear idea what is today available, what about the technical synchronisation and how customers implement that.

Practical solutions with an open architecture support the GA to make the step to Digital and personalised printing easily and successful. Easy to use and an open architecture till advanced features is key in this environment.

First of all we would like to inform you what about the Technical synchronisation of the necessary ingredients. In Fig. 3 we show the necessary ingredients for personalised printing and how they need to be synchronised.

In Fig. 3 we show the necessary ingredients

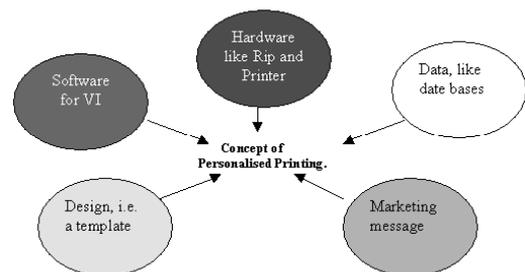


Figure 3.

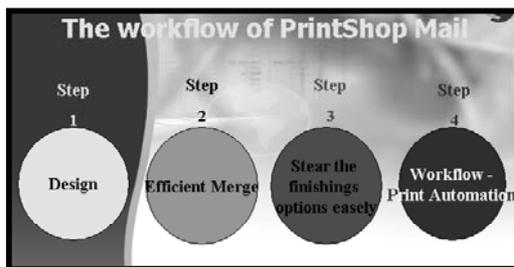


Figure 4. Workflow for personalized printing

Software

In Fig. 4 We would like to evaluate an ideal workflow for The GA.

As an example we use the advance workflow in 4 steps of PrintShop Mail.

Create the Design:

You can **create your own design** (single - multi-page) in PrintShop Mail with easily drag and drop static images, variable images, variable text, in any color, position, Font with the most graphic usual features. You can also open a Word document, which will be on the fly, convert into PDF, which enables an efficient way of sending data to the Rip. Also you can open a PDF, as it is an image to be scalable.

Next to these generic design features you can create also barcodes, which fonts are free delivered with the software and create data driven graphics (Pie charts) to complete mailings.

Efficient Merge:

On an efficient way, you can manage **the merge** with sending the static once to the RIP, to be ripped only once, and the variables will be send also once to the rip, Instead of merging the data on the PC's (other programs do), PrintShop Mail provides to Merge the data on the Rip, which is created to do complex calculations.

Steer and Control Subset Finishing:

In PrintShop Mail you can easily steer **the finishing's** options of the Printer. The Printers, which are designed, for booklet making, subset stapling, duplex printing and paper-tray selection, can be controlled in the print-menu. Also for a number of printer types we added embedded postscript, to make sure, they can really staple or booklet per record. Also paper tray selection can be steered per record also with different conditions per layout per record. We call this page picking, i.e., Record 1 can have 5 pages; record 2 can have 3 pages, record 3 can have 8 pages, also from different paper trays or by-pass tray/insertor with digital pre/offset printed covers.

Workflow and Print Automation:

With the print automation feature you can steer the PrintShop Mail application from another application, i.e., ORACLE etc.

Examples of the workflow can be: Automate scanning of documents turned into PDF, send this PDF to PrintShop Mail automatic placed into the application,

automatic opens the right database, in which the variables comes on the right position, automatic print and finish.

Also a web-based solution can be made. The data can be collected through an website, automated stored into a database which will be opened in PrintShop Mail to enables to create a specific document (requested by a customer) individualized, which will be printed automatically on specific times a day. You can imagine this feature is ideal for enterprice companies who want to use PrintShop Mail on the background for handling personalised/individualised printing for repeatable jobs. (Standard offers, forms etc.)

Case with Print Automation

Web based solution with an automated print workflow

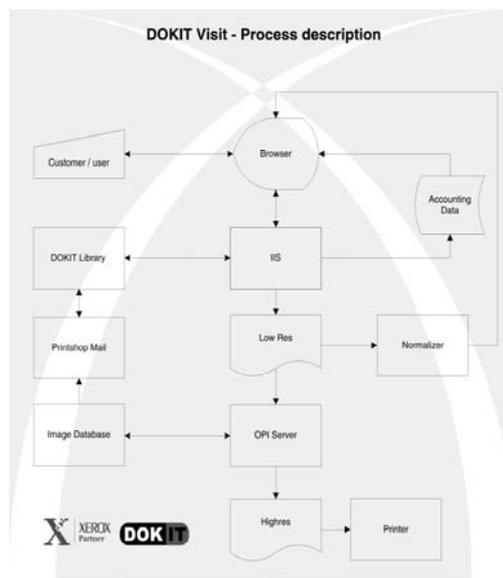


Figure 5. PrintShop Mail used as automated print engine.

A solution that utilizes the advanced scripting functionality which has been supplied with PrintShop Mail 4.1, and thereby allows an enterprise to service its customers with an Internet based solution to print on demand and customer related communication with their existing colour printers, while the web-server and the software for document handling can be placed somewhere else, for instance in a different company. See Fig. 5.

Let us see how the travel agency used this feature in a personalised brochure.

Make Your Own Personalized Brochure

If you want to sell something to people, it is always best to show them the products in a way that is related to their needs. A relevant image attracts a lot more attention than just an image, and once you have the attention, you have already done a good job in your fight for a sale. The closer you get to people and their daily life when you approach them, the better are the opportunities you have for making them interested in your product. You will

achieve an increased response to your mailings. That is true for sale of holiday breaks. Maybe you see an image of a lovely white beach with palm trees, an exciting landscape or a well known “must see”. And the observer says to himself “... oh, that looks nice – I wonder where it is?” In our system you could put a travel brochure on the Internet (Fig. 6), which is automatically personalized to the end user, before it automatically is sent to production – on the right type of paper, with the right imposition, with cutting marks and in the right format – and/or gets delivered as PDF to the end users PC.



Figure 6. Travel brochure

If you start with a solution for production of business cards and let us do the hosting, the price is down to approximately \$ 1.500 for the smallest solution. The files are then handled on our server and we take responsibility for the process from one end to the other, which means that the customer only has one vendor to talk to.

The print will be delivered automatically at the printer’s site, the customer just need to have the technology necessary for connecting a printer to the network - or the printer can be located at a printing site which is known by the customer or in another kind of enterprise he is cooperating with. Alternatively the file can be sent as PDF to an e-mail address or be ready for download.

When you invest in such a solution you achieve several advantages. Since you move the responsibility away from you – it is the end user who fills out the dialogue box on the web site and thereby decides what has to be printed – you minimize failed productions that cannot be invoiced or sold since errors nearly always can be located somewhere at the user’s end. At the same time you minimize those resources normally used in preparation time for the production and thereby reducing production costs to only print and paper.

It can be a difficult task to calculate the market price for print and many shops might be selling cheaper than they should.

Instead of joining that spiral it could be an idea to focus on the different solutions i.e. we can provide. Never mind the brand of the printers they have – yes of course we would also like to sell them a Xerox printer – however our one2one and print on demand solutions can be integrated with any printer anywhere on any network.

Technology: Printer and Rip

The feedback we received from experts in the market is to have multiple data streams for any postscript Printers.

The bridge between software and hardware is to have an open architecture, especially on the software side to make sure the data streams can be sent and received. Software like PrintShop Mail wants to be a Personalisation Solution with an open architecture; therefore it supports and output almost any data stream. The need is also because most of the customers has not only 1 mark of Printers.

It is important to have a product who outputs following data streams:

- Optimised postscript
- Freeform 1 and 2
- VPS
- PPML
- PPML/VDX
- VIPP

Databases

Any database like .dbf/.xls/.mdb/.db/.txt/.csv/sql ODBC support need to be able to handle in the workflow.

Design/Creativity

Any Design like Adobe prod. Like Illustrator, Photoshop, inDesign, Pagemaker, Quark Xpress, Corel, MS word; need to be easily handled in the personalisation software to be merged; as images or templates.

The Message:

As you understand the message is “Key” in personalised Printing. Therefore the document owners, market communicator (Market managers, Product managers) and DMU need to be approached and

Why Are the Next GA Companies Very Successful with Personalised Printing?

- Ted Gigaprint
- Financials:**
- Zion Bank Utah
- Swedish Bank
- ING
- ABN Amro
- Price waterhouse Coupers:
- Retail:**
- AHOLD/Colruyt/C&A
- Industry:**
- Hyundai Motor Corporation
- Heineken and Carlsberg beer
- Mission Pharmacol

Government:

- Ministries with efficient communication

Airlines:

KLM and Lufthansa

Print for pay:

- Multicopy,
- Sirspeedy,
- Kall Kwik

These customers and others are successful (see Fig. 7) because the efficiency, and increasing business they achieve by supporting the Graphic Arts. Their design agency, Ad Agency, Mail house, and commercial printers supported them as a full service provider (combination Offset digital printing, personalized printing, design, job preparation, workflow/logistic support and database management) which results in being a player in the market!

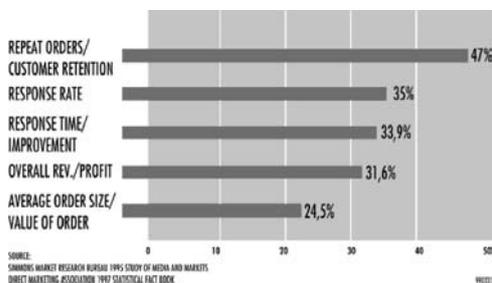


Figure 7. Overall increased business

Conclusion

Today and it is more and more difficult to be in contact with your customers, and final customers, therefore we

expect the document owners will push the use of Personalised Printing enormously. It is for them a main issue to survive as well. Therefore these decision makers will only cooperate with partners who understand their needs and can communicate on the same level. Experts predict that if the Graphic arts market wants to survive, they need to act as a full service company in print, logistic around, support in commercial advices and design which results in unique documents shipped the same day.

Discrimination in digital printing, yes, but it sounds very social and gives the Graphic arts market a unique change. Because the ingredients and technology is available, the customers are waiting for you; it is now the time to start Personalised printing, today!

Industry experts general agree following economics of the Print business:

- There will be printed WW 18,4 Triljard pages/year.
- 4% 0,74 Trilard are printed digital.
- Grow of these digital pages will be around 22% a year
- Turn over WW = 20 Billion a year (2002)
- Expected Turn over in (2004) around 35 Billion a year
- Digital printing will be equal to offset by Digital printing will be equal to offset by 2010 (Heidelberg)
- The only area of print that shows real growth potential.
- Will sit alongside offset and complement it where appropriate.
- Customers will not be concerned which technology is used, providing the job requirements are met.
- Personalisation will become very important and will drive digital print.

Andy Tribute former editor in chief of Seybold report