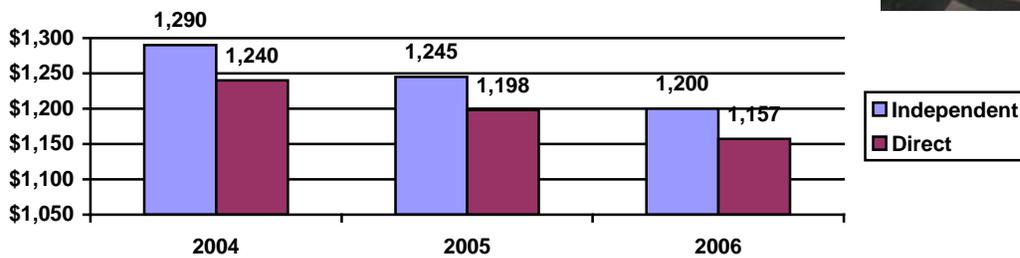


Maggio – White Paper Jumbo Rolls and Cut Sheets –

With the total market for business forms essentially flat or declining depending on who your source is it is critical to recognize and focus on those segments that are growing. It is equally important that we look at the underlying factors that influence that growth.

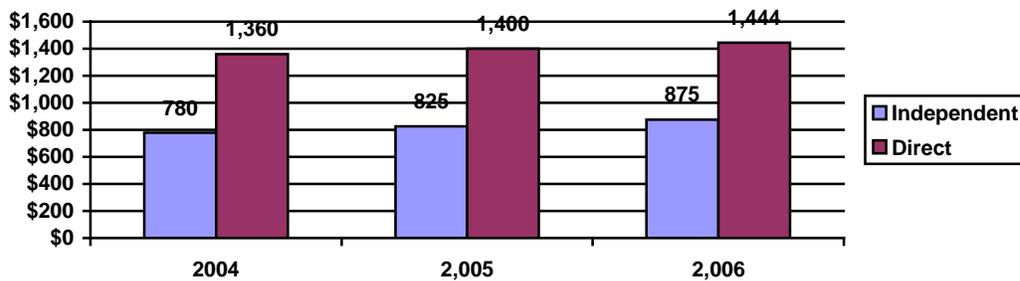
The Outlook -

To start with according to Formtrac (DMIA) the following are the projections for both cut sheet and continuous broken down for both the Independent segment and the Directs:



Unfortunately, there are no available statistics for rolls though this segment is clearly growing. Additional capacity has been added by Independent manufacturers. Continuous, in total, continues to decline while the roll segment grows.

Cut Sheet Sales in Millions



Cut sheet continues to grow for the Independent segment, which is projected to grow at approximately 6%. The direct segment is projected to grow at a rate approximating 3% or about half the rate of the Independent segment.

Rolls and cut sheets are growing, in part, due to the growth of two market segments, Outsourcing and Direct Mail. Keep in mind that volume for both of these segments were affected by 9/11 and a relatively weak economy starting in 2000 causing a retrenchment and did not experience a strong recovery until 2004. The economic outlook for the next year or two is expected to be

reasonably good according to a recent Wharton School of Business study. It expects GDP growth of 3.5 to 4% and inflation to be at a moderate rate of 2.5%.

Let's look at the projections that were made in February, 2002 by CAP Ventures. At that time their analysts forecast robust growth for U.S. document outsourcing, predicting it would grow at a compound rate of 12%. This would have meant growing from \$27.8 billion in 2000 to approximately \$50 billion in 2005. While there was growth, due to the weak economy CAP now reports that 2004 was at \$32 billion; a much weaker growth rate, but growth none the less. They are now predicting continued growth at a 4% rate.

Looking specifically at statement printing, which has a direct affect on our industry, CAP had predicted substantial growth as well. They forecast that this area would grow from \$2.5 billion in 2000 to just over \$4 billion. Well, the economy played havoc with this forecast as well and sales in 2004 according to CAP were just \$2.6 billion. They now predict an anemic growth rate of just 1%. My opinion is that this projection will prove conservative, especially for the independent distributor segment (see below).

The U.S. Print on Demand portion of the market presents additional opportunities on its own and can be the basis of a business model for both independent distributors and manufacturers. CAP Ventures projects that color POD will grow to \$42.4 billion in 2008 from \$22.7 billion in 2003, a compound annual growth rate of 13%. The black and white portion, while not quite as strong, is forecast to grow at a rate of 11% from \$10.4 billion in 2003 to \$17.7 billion in 2008.

Direct Mail Sales for 2004 were \$52.2 billion, up 8% from 2003 sales of \$48.4 billion. They are expected to increase by 9.5% to \$57.2 billion in 2005 and US advertising spending is forecast to increase by 6.4% in 2005 to \$280.6 billion. These projections were reported by Universal McCann in Pulp & Paper Week last month. They are clearly well above our economic growth though there are also more conservative estimates around. The DMA last year talked in terms of 6 to 7% growth and CAP is projecting 5 to 6%. The point is - whoever the source, the growth forecast is optimistic and this will lead to new and continued opportunities.

The Market and Independent Distributor Growth Outlook –

As indicated above, the forecasts are all positive. It is our feeling that the prospects are even stronger for the independent segment of the market. Why? Because!

Because there are several additional factors that should be considered:

1. The majors are shrinking. With consolidation there are fewer large players to serve the needs of the very large customers. While there are a few major direct companies such as Moore that have wide web, high speed (1800 to 2000 ft/min) presses there are independent manufacturers with wide presses that can help the distributor compete in very high volume applications.

Equally important is that the ultimate customer wants to have a competitive environment and will be more receptive to new suppliers. The independent distributor can bring both product and solutions due to the wide range of sources at their disposal.

2. With this continued consolidation comes uncertainty on the part of their sales forces. There have been layoffs and many excellent salespeople are leaving. These sales people are either joining distributors or Regional Directs, are going into business for themselves or are joining organizations such as ProForma or American. Many of these reps were involved with these large customers and are in a position to continue those contacts due to their unique relationships and knowledge of the larger clients.
3. While web commerce can be an alternative to paper based solutions, more frequently we find that a paper document is also available. To offset pressure on the printed document there are many new opportunities for growth. These include 1:1 marketing, print on demand and direct mail. Direct mail is being used to drive prospects to the web.

The following statistics, based on a survey of Outsource Providers developed by Interquest in 2004, are interesting and serve to support the premises shared in this report:

- A. Seventy six percent (76%) of respondents expect their transactional print volume to increase over the next three years. Most of the increase will come from transactional printing service bureaus as compared to corporate users.
- B. Transactional printing service bureaus feel that they will see growth over the next three years while corporate users are only forecasting 3% per year.
- C. Direct Mail printers expect growth of 4 to5% over the next few years
- D. Growth Opportunities – “Transactional printing service bureaus see the growth coming from statements-particularly those being used as 1:1 marketing tools. They also see opportunities in Internet presentment, color personalized direct mail, and print-on-demand.”
- E. Transactional Service Bureaus’ print volume breakdown by industry sector:
 - Finance Insurance – 67%
 - Telcos – 18%
 - Government – 5%
 - Healthcare – 4%
 - Utilities – 2%
 - Other – 4%
- F. Respondents report that 68% of the total transactional print volume in printed Continuous while 32% is cut-sheet.

- G. Seventy-three percent of transactional print volume is printed in duplex mode and the balance simplex. A statistic that surprised me as most backers are static and it may be more cost effective to preprint these.
- H. Ninety-five percent of transactional print volume is monochrome (black ink).
- I. Most finishing (87%) is finished off-line as opposed to in-line.

The Products –

Both jumbo rolls and cut sheets are growth products for a number of market segments, but are particularly strong for financial, insurance and direct marketing applications. Typically the rolls are 50” and delivered on 3”, 5” or 6” cores. The larger diameter cores serve to decrease the curl of the paper as it gets closer to the core. Each roll contain up to 46,000 11 inch forms.

The rolls are processed on high speed continuous printers such as Océ and IBM. The output from these printers can either be cut sheet or in rolls for further processing on finishing equipment and / or inserters. High speed ink jet printers such as the Kodak Versamark require roll input.

Cut sheet applications can start as sheets or as rolls. The rolls can be loaded on to a roll feed device such as the one made by Roll Systems for input through an auxiliary in-feed into a high speed sheet printer such as the Xerox 6180. This saves the time necessary to load the in-feed trays.

Jumbo roll applications for cut sheet printers have been limited to monochrome applications (black or with highlight color). Under development by Xerox and Roll Systems is a roll feeder for the new high speed Xerox color printer, the IGen3. The question when it comes to color is how many applications will require preprinting. Considerations will be the cost of toner and whether or not perforations, die-cuts or back printing are required in advance of laser imaging. The preprinting of a static backer saves money by avoiding the click charge for duplex imaging.

The trend in rolls is toward pinless feeding. That is, rolls that are delivered without line holes. Most applications require limited color. Direct mail typically requires 3 to 4 colors, but for many applications, especially those with 4 color process printing, 5 to even 10 color printed using dryers may be required.

Strange Stock –

Strange stock is a term I was exposed to some time ago while doing some development work as part of partner program with one of the large printer manufacturers. It refers to stock that has added value features that caused the product not to lay flat or to make it difficult to rewind. This would include special die cut stock, integrated labels and cards, tipped or blown on cards, etc.

This stock would be processed using special infeed devices such as the Xerox Tiltatron which helps to level uneven forms, but still falls way short of reaching tray capacity. The stock may go thru a by pass and delivered so as to avoid conventional stacking.

It is possible to deliver strange stock in rolls, but it requires special handling and careful blocking on the skids so that the rolls are reasonably tight and do not telescope. This is necessary to assure trouble free feeding.

Pressure Seal mailers can be a problem since the pressure that is experienced in rewinding can cause blocking, i.e. the plies to stick together on the roll creating feeding problems. This can be avoided by using one of the special patterns of the pressure seal cohesive such that the cohesive on one ply does not prematurely come into contact with the cohesive on another ply.

Recent Trends - There has been a trend recently to also use a wider range of substrates as well as stock with a higher and lower caliper that, heretofore, was not considered acceptable. We also see more rolls delivered on their side as larger installations add roll handling equipment. This helps to reduce required storage space.

Advantages of Roll Stock –

- Increased efficiency
- Printers require less frequent loading
- Reduce waste
- Saves time

Applications –

- Transactional – Statement Processing
 - Invoices
 - Past Due Notices

- Marketing and Sales – Promotions
 - Fund Raising
 - Self Mailers
 - Loyalty Programs – CRM
 - Membership
 - Sales
 - Events

- Security
 - Letters
 - Notices
 - ID Cards
 - POD – Print on Demand

Roll Handling - By way of example, I am including the roll procedures developed by Maggio Data Forms to insure delivery of product that will meet the stringent requirements of high speed printers.

Maggio Data Forms –

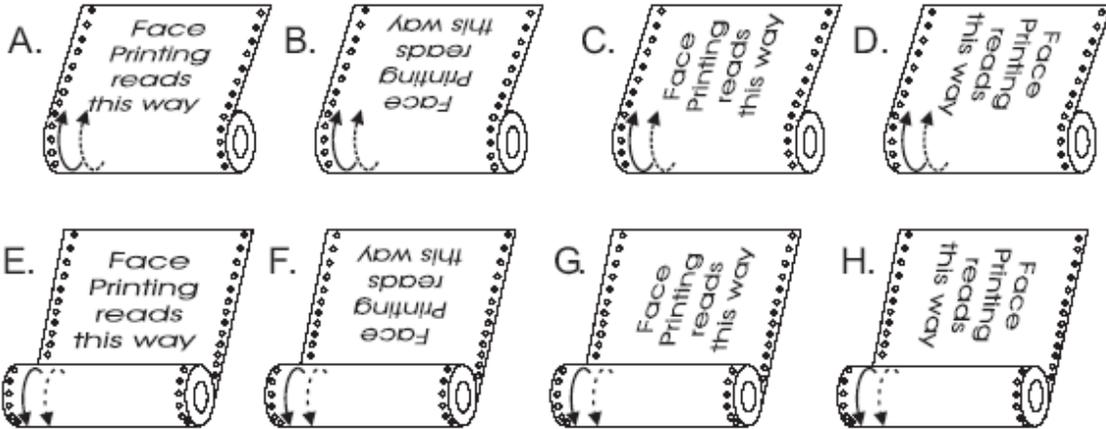
Procedures for roll to roll skid packaging:

- 1) The roll is produced and wound on the rewind of the press.
- 2) Cardboard headers are placed on both sides of the roll.
- 3) Before being removed from the rewind the roll is wrapped with stretch wrap.
- 4) The roll is then rolled on to a skid.
- 5) The roll is chucked on both ends to prevent rolling of the skid.
- 6) Foam and plastic protectors are placed in the core and on the top of the roll to protect the edges.
- 7) If multiple rolls are going on the skid the rolls are banded to each other.
- 8) The roll(s) are banded to the skid through the cores and around the runners of the skid.
- 9) The rolls are labeled with qty, weight, job number and roll number.
- 10) The entire skid is stretched wrapped and place in the warehouse to wait for pick-up.

To Proceed With Job # _____ All 3 Sections Must Be Complete.

This is the way the forms will feed into
the Customer's Printer.

1. Please Choose Unwind Direction (Must Circle One)



2. Indicate Perfing (Must Check One)

- Marginal Perfing
- Between Set Perf (s)
- Extra Wheel Perf (s)
- Extra Cross Perf (s)
- None

3. Core Size (Must Check One)

- 3 inch Core
- 5 inch Core
- 6 inch Core

Special Instructions: _____

Authorized Signature _____ Date _____