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# STATE OF THE CANADIAN PRINTING INDUSTRY



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Canadian Printing  
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Association Canadienne  
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# State of the Canadian Printing Industry 2011

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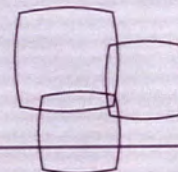
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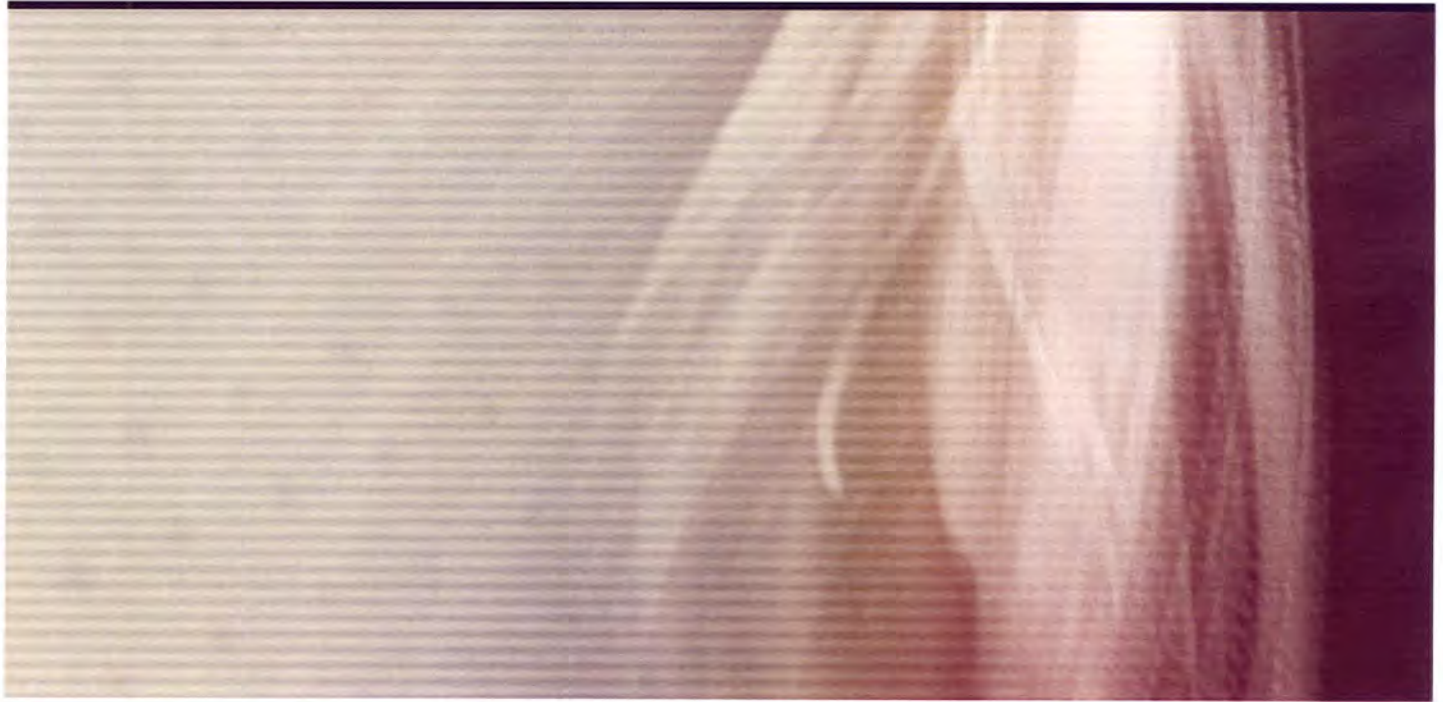


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## Executive Summary

The Canadian printing industry has undergone significant upheaval as a result of the recent global recession and market forces driven by technological change. This structural change to the industry is resulting in its contraction and consolidation. Post-recession, the North American printing industry is expected to be smaller, both in terms of the number of firms and domestic market size. To remain competitive, the remaining printers must adapt their business strategies and take advantage of new technologies.

Industry Canada has partnered with the Canadian Printing Industries Association to analyze aspects of the commercial printing industry in Canada. This report summarizes the results of a March 2011 survey of Canadian printing company executives. The survey explored the industry's economic, management and technology issues, and sought to determine the degree to which Canadian printers are adopting new value-added business strategies and technological innovations. Additional analysis from Printing Industries of America reports and other research was also incorporated into this report.

The report also offers insights on printing industry market trends and metrics, major technological capital investments, and business conditions, and also includes a discussion of key printing industry trends.

## Key Findings

Over the last few years, digital and ancillary services have gained a greater share of the printing market at the expense of offset printing. Primary reasons for this gain include improvements in digital technologies, the increased targeting and personalization of printed material, and the expansion of the typical printer's business model to include additional related services. Another indication of digital print's growth is that more and more print work — or jobs — now combine both conventional and digital technologies.

In terms of business models, more than 40% of printers identified themselves as general commercial printers, with the remaining printers identifying themselves as niche printers by product segment (e.g., magazines) (21%), communications providers offering a complete set of value-added ancillary services (16%) or vertical niche printers focusing on a particular market segment (11%).

Canadian printers employ a broad cross-spectrum of printing processes and services. Sheetfed printing is the top printing process employed by Canadian printers in terms of sales followed by digital printing. The pattern of market segments served by Canadian printers remained fairly stable from 2006 to 2011, with general commercial printing declining slightly and quick printing increasing somewhat, as measured by share of total sales. Similar trends are projected through 2013.

Printing is generally a local and regional business, with a significant dependence on a few large customers. The five largest customers of respondents typically account for almost half of all sales dollars. Due to changes in customers' marketing and promotion tactics, average run lengths of print jobs are declining.

The primary source of competition for most printers is another local printer. Already established printers remain the highest degree of competitive pressure, followed by digital displacement of print and new entrants to the market.

Another changing dynamic that is affecting printers is the expansion of the print market space from printed product to various ancillary services. The three most commonly offered services are professional creative design, mailing management and kit fulfillment. Revenues from ancillary services have grown more than revenues from traditional printing services.

As for major technological capital investments, printers must continually invest in new technologies. Almost 60 percent of respondents invested in digital technologies in 2009–2010, consistent with the shifting market dynamics towards greater use of digital print due to consumer demand and improved quality. Many Canadian printers have made major capital investments in workflow automation and process automation technologies to improve productivity.

Printers are feeling pressure due to competition from digital media, declining printing prices and increasing costs (e.g., materials and labour). As a result, printers' profits and employment levels have declined in the last few years. The top three priorities for investments over the next two years are adding/replacing equipment, sales force development, and marketing and advertising.

# 1. Introduction

As a result of the recent global recession and the effects of emerging digital technologies — both competitive and supportive — the Canadian printing industry is experiencing an era of significant structural change. The number of players has shrunk through consolidation and closures and, post-recovery, the market size of the North American printing industry is expected to be smaller. For the remaining firms, the ability to remain competitive will involve adopting current business models and exploiting new technologies.

To make that shift, firms need new technologies — digital printing, integrated systems, customer interface software, variable data printing technologies, post-press automation, etc. — and the skilled employees to utilize them. Competitive firms are successfully using these technologies to evolve their businesses to meet the 21st century market.

## 2. Methodology

In March 2011, a survey of Canadian printing company executives was conducted, which explored:

- ⊕ business structure
- ⊕ sales trends by printing process and market segment
- ⊕ marketing practices
- ⊕ strategies and business models
- ⊕ competitive situation
- ⊕ non-print services
- ⊕ technologies
- ⊕ business conditions
- ⊕ profitability
- ⊕ employment and capital investments
- ⊕ credit conditions and issues

Over 105 Canadian printers participated in the survey, which was conducted through an online survey tool. The typical respondent employed 12 persons (median) in 2011, although all sizes of printing firms were represented. The survey addressed economic, management and technology issues, and responses focused on a variety of market segments, printing processes and geographic markets.

At the time of the survey, the North American economy was slowly recovering from the recent global recession. Print markets typically lead recessions and lag recoveries, and this recent recovery follows this pattern. This environment was reflected in the survey responses.

The objectives of the survey were to:

1. determine the degree to which Canadian printers are adopting new value-added business strategies and technological innovations
2. investigate the impacts of business processes and technological innovations of Canadian printers on mitigating market risks and creating opportunities, and assess the changes in these variables over the last few years and identify any developing trends
3. gather data for a comparative analysis of indicators (e.g., business models, adoption of new technologies, expansion of value-added services) in relation to the United States (U.S.) market<sup>1</sup>

<sup>1</sup> Based on the Printing Industries of America's fourth quarter 2010 market survey

### 3. Statistical Findings

#### 3.1 Respondent Demographics

For the most part, the North American printing industry is composed of small to medium-sized firms operating one production facility. Canadian printers who participated in the survey demonstrated the usual profile of characteristics, including the number of establishments, number of employees, and number of foreign operations.

##### Enterprise Headquarters

Over half of survey respondents' headquarters were located in Ontario, followed by Quebec (Table 1).

Table 1

LOCATION	RESPONDENTS (%)
Ontario	53.3
Quebec	15.2
British Columbia	13.3
Alberta	7.6
Manitoba	6.7
Saskatchewan	1.9
Nova Scotia	1.0
New Brunswick	-
Newfoundland and Labrador	-
Northwest Territories	-
Nunavut	-
Prince Edward Island	-
Yukon	-
Other	1.0

##### Type of Organization

Half of the respondents are general commercial printers, while quick printers are the next largest category (Table 2). This respondent profile is generally similar to that found in Printing Industries of America surveys of U.S. printers.

Table 2

TYPE OF ORGANIZATION	RESPONDENTS (%)
General commercial printer	50.9
Quick printer	14.2
Specialty printer	3.8
Prepress/premedia services provider	3.8
Trade binding	3.8
In-plant printer	3.8
Business forms printer	2.8
Newspaper printer	1.9
Book printer	1.9
Packaging printer	1.9
Graphic finishing services	1.9
Screen printer	0.9
Supplier	0.9
Other	8.5

### Number of Establishments

About eight out of ten Canadian printers operate one plant, a rate similar to American printers (Table 3).

Table 3

NUMBER OF ESTABLISHMENTS	RESPONDENTS (%)	
	2011	2006
1	79.2	80.2
2	8.5	8.3
3	3.8	2.1
4	3.8	4.2
5+	4.7	5.2

### Size (Number of Employees)

The typical respondent employed 12 persons (median) in 2011, down from 14 in 2005 (Table 4). Overall employment in the industry fell during this period due to both the recession and productivity enhancements. Respondents forecast stable employment over the remainder of 2011. A comparison with U.S. printers indicates similar expectations.

Table 4

ENTERPRISE EMPLOYMENT	NUMBER OF FULL-TIME EQUIVALENT EMPLOYEES		
	2005	2011	EXPECTED YEAR-END 2011
Minimum	1	1	1
Average	135	128	133
Median	14	12	12
Maximum	5,200	5,500	5,500

## Foreign Operations

Generally, the North American printing industry is domestically focused. The majority of Canadian respondents had only domestic operations (Table 5).

Table 5

FOREIGN OPERATIONS	RESPONDENTS (%)	
	CANADA	UNITED STATES
Yes	0.9	2.4
No	99.1	97.6

## Export Sales

Approximately 38 percent of respondents indicated they have export sales. These export sales comprise an average of 12.8 percent of these firms' total sales (median is 5%) (Table 6). These proportions are higher than U.S. printers, which reflect the tendency of Canadian printers to sell to American customers.

Table 6

EXPORT	CANADA			UNITED STATES		
	RESPONDENTS (%)	COMPANY SALES (%)		RESPONDENTS (%)	COMPANY SALES (%)	
		AVERAGE	MEDIAN		AVERAGE	MEDIAN
Yes	37.7	12.8	5.0	23.5	7.3	2.0
No	62.3	-	-	76.5	-	-

## Export Locations

The most important export destinations are the U.S., followed by the United Kingdom and Mexico (Table 7).

Table 7

EXPORT DESTINATION	NUMBER OF RESPONDENTS	EXPORT DESTINATION	NUMBER OF RESPONDENTS
United States	39	Croatia	1
United Kingdom	9	Egypt	1
Mexico	4	France	1
Bermuda	3	Haiti	1
Australia	2	Hong Kong	1
Bahamas	2	Italy	1
Canada	2	Kyrgyzstan	1
Germany	2	Luxembourg	1
Japan	2	Monaco	1
Republic of China (Taiwan)	2	Poland	1
Switzerland	2	Portugal	1
Thailand	2	Russia	1
China	1	Saudi Arabia	1
India	1	Slovakia	1
Barbados	1	Spain	1
Belize	1	Sweden	1
Bosnia and Herzegovina	1	Ukraine	1
British Virgin Islands	1		

## 3.2 Trends and Expectations by Process and Market Segment

Sales trends of Canadian printers reflect the recession and recovery underway. Patterns vary somewhat by process and market segment, but are in line with American print market trends.

### Printing Processes — 2006, 2011 and expected in 2013

Canadian printers employ a broad cross-spectrum of printing processes and services. Sheetfed printing is the top printing process employed by Canadian printers in terms of sales (Table 8). However, the proportion of total sales derived from sheetfed operations has fallen significantly since 2006. Conversely, digital printing has grown as a proportion of sales.

Table 8

PRINTING PROCESS	ESTABLISHMENT SALES THAT ARE GENERATED FROM EACH PROCESS (%)		
	2006	2011	EXPECTED 2013
Non-print ancillary value-added services	6.6	7.3	8.1
Sheetfed printing	43.5	36.4	31.8
Web-fed printing heatset	1.9	1.1	0.9
Web-fed printing non-heatset	4.1	4.2	3.2
Screen printing	1.7	1.7	1.5
Digital printing (toner-based)	16.4	22.0	25.4
Digital printing (inkjet high speed production)	2.1	4.3	5.8
Inkjet wide and super wide format for production	5.3	5.5	6.9
Prepress/premedia services	4.5	4.1	3.1
Thermographer	0.8	0.5	0.4
Letterpress	1.3	0.9	0.7
Gravure	-	0.1	-
Flexographic	1.3	1.2	1.1
Trade binding	2.0	2.4	2.0
Graphic finishing	4.6	3.8	3.2
Loose-leaf manufacturing	0.2	0.2	0.9
Other	3.6	4.2	5.1

### Print Market Segments — 2006, 2011 and expected in 2013

In general, a fairly stable pattern of print market segments served by Canadian printers has emerged from 2006 to 2011. General commercial printing has declined slightly, while quick printing has somewhat increased, as measured by share of total sales (Table 9). Similar trends are projected through 2013.

Table 9

MARKET SEGMENT	ESTABLISHMENT SALES THAT ARE CONDUCTED IN EACH MARKET SEGMENT (%)		
	2006	2011	EXPECTED 2013
General commercial printing	37.7	35.5	33.7
Quick printing	13.9	14.6	15.9
Magazines and periodicals	3.6	3.3	3.0
Newspaper printing	1.9	1.6	1.7
Book printing	3.7	4.1	4.0
Financial/legal printing	1.2	1.6	1.8
Business forms printing	5.6	4.8	3.6
Converters/label/wrapper printing	1.7	1.3	1.1
Greeting card printing	0.3	0.5	0.6
Specialty printing	3.2	4.4	4.4
Package printing	2.8	2.8	3.6
Direct mail printing	2.3	3.4	4.7
Mailing services	1.4	2.0	2.2
Signs/signage (including business signs, banners, etc.)	5.5	6.1	6.2
In-plant printer	3.3	3.4	2.6
Supplier to the print industry	4.5	3.6	3.1
Other	7.5	7.1	7.6

### 3.3 Marketing Tactics and Metrics

Printing is generally a local and regional business, with a significant dependence on a few large customers. These tendencies are reflected in the marketing tactics and metrics of Canadian printers.

#### Dependence on Largest Customers

On average, the typical Canadian printer's largest customer in 2010 accounted for approximately 23 percent of sales (the median is slightly less at 17%), while the five largest customers together constituted almost half of annual sales dollars (Table 10). These figures generally correspond to U.S. trends.

Table 10

CUSTOMER	2010 (% OF SALES)				2006 (% OF SALES)			
	MIN	AVERAGE	MEDIAN	MAX	MIN	AVERAGE	MEDIAN	MAX
Largest customer	1.0	23.1	17.0	90.0	1.0	24.5	20.0	90.0
Five largest customers	2.0	48.2	41.0	100	10.0	49.6	45.0	100

## Value of Print Jobs

Average run lengths of print jobs are declining, as printing customers adjust their marketing and promotion tactics — primarily through increased targeting and personalization of printed material. In terms of price, survey respondents reported an average job value of more than \$43,200 for 2010, up almost nine percent from 2006 (Table 11). The median price of a print job was much less (\$1,000), since the average is driven up by less frequent but extended-run jobs.

Table 11

DOLLAR VALUE	ENTERPRISE AVERAGE DOLLAR VALUE OF PRINT JOBS (\$)	
	2010	2006
Minimum	25	20
Average	43,231	39,783
Median	1,000	1,000

## Domestic Sales Focus

More than five out of ten printers surveyed have a local market focus of 259 square kilometres (100 square miles) or less. At the other end of the spectrum, approximately 16 percent of Canadian printers focus on customers across the country (Table 12). Compared to U.S. printers, more Canadian respondents (10%) focus on local market sales, while 20 percent more U.S. printers have a national sales focus.

Table 12

DOMESTIC SALES FOCUS	RESPONDENTS (%)	
	CANADA	UNITED STATES
Local—less than 259 square kms (100 square miles)	52.9	38.7
Sub-regional—260 to 649 square kms (101–250 square miles)	13.5	8.3
Regional—650 to 1,295 square kms (251–500 square miles)	17.3	17.9
National—across the country	16.3	35.1

## Customers' Market Focus

Over six out of ten Canadian printers stated that their customers have a local market focus. In contrast, less than 3 percent of respondents indicated that their customers focus on foreign countries (Table 13).

Table 13

CUSTOMERS' MARKET FOCUS	RESPONDENTS (%)
Local	64.7
Sub-regional	8.3
Regional	9.7
National	13.2
International	2.9
Do not know	1.2

## Active Customer Accounts

Most Canadian printers had more than 51 active customer accounts on average in 2010 (Table 14). Of course, this number correlates with order size and the overall size of the printer, and reflects the “job shop” nature of print demand. American printers displayed similar tendencies, with approximately 65 percent of firms reporting 51 or more active customers on average.

Table 14

NUMBER OF ACTIVE CUSTOMERS	RESPONDENTS (%)	
	CANADA	UNITED STATES
Fewer than 5	2.8	4.3
6 to 10	0.9	2.1
11 to 20	7.5	2.1
21 to 50	16.0	27.7
51+	72.6	63.8

### 3.4 Strategic Focus and Business Models

Over the last decade, printers have generally adopted a more strategic business focus. They have accomplished this by shifting from the industry's traditional production-centred business model to one that is more customer- or market-focused. As the process diagram below illustrates, printers are evolving by offering additional services and communications solutions as well as printed products (Figure 1).

Figure 1



Another key development in the area of business models is the strategic implementation of profitable commercial strategies based on specialization or diversification of products and services solutions.

#### ⊕ Specialization

Printing firms that specialize in a particular print market segment, such as labels/wrappers, direct marketing, or packaging, generally have higher profit rates than more generalist firms. Printers may also specialize by focusing on a certain customer segment or vertical market, such as hotels/resorts or automobile retailers. Some printers even combine these two approaches as a specialized hybrid, targeting a particular customer segment with a specific product offering.

#### ⊕ Diversification

Printing firms that provide additional value-added ancillary services generally have higher profits than firms that produce only printed products. Offering extra services that are supplementary to the printed product, such as creative design, database management, mailing, fulfillment, and inventory management, can add to a printer's bottom line.

Integrating these two strategic options into a specialized diversification strategy enhances profitability by enabling printers to decrease costs and increase selling prices.

In implementing specialization and diversification, printers select and design business models for their organizations. Common business models in the printing industry include:

- ⊕ Niche printer specializing in a narrow print product segment, such as direct mail or labels/wrappers
- ⊕ Niche printer specializing in a narrow vertical market segment or specific industry, such as travel, entertainment or health care
- ⊕ General commercial printer offering a wide variety of printed products and services to a general customer base
- ⊕ Communications provider offering a complete set of value-added services such as printing, database management, fulfillment, or mailing

## Canadian Printer Business Models — 2006 and 2011

At the time of the survey, about four out of ten Canadian printers identified themselves as general commercial printers in terms of their business strategies (Table 15). The other main choices of strategies are: niche product printer (20.7%), communications provider (16%) and vertical niche printers (11.3%). This pattern is generally similar to the U.S., as no significant difference is found between Canada and the U.S. in the breakdown of business models. However, one key dissimilarity exists: Canadian printers that focus on a product niche or vertical market segment are more likely to offer ancillary services than their U.S. counterparts.

Table 15

ENTERPRISE LEVEL BUSINESS MODEL	RESPONDENTS (%)		CHANGE (%)
	2006 STRATEGY	2011 STRATEGY	
Niche printer by product segment (e.g., book, magazine, newspaper) focusing solely on printed products	10.8	2.8	-8.0
Niche printer by product segment focusing on printed products and value-added ancillary services that are in line with printed product offerings	14.7	17.9	3.2
Niche printer by narrow vertical market segment/industry (e.g., gaming industry, hotels, advertising agencies, auto industry) focusing solely on printed products	2.9	2.8	-0.1
Niche printer by narrow vertical market segment/industry focusing on printed products and value-added ancillary services that are in line with printed product offerings	5.9	8.5	2.6
General commercial printer offering a wide variety of printed products and services (includes advertising printing, business cards, stationery, catalogs, and directories) to a general customer base	46.1	42.5	-3.6
Communications provider offering a complete set of value-added ancillary services including printing, database management, fulfillment, mailing	9.8	16.0	6.2
Other	9.8	9.4	-0.4

Generally, the pattern of business strategies for Canadian printers was similar to that found in 2006. Again, the top choice was the general commercial printer strategy. However, the industry has somewhat shifted away from the general commercial printer strategy. In particular, the communications provider strategy has gained a larger following.

## 3.5 Competitive Situation

As is the case in most industries, printers are constantly searching for customers and market share. Search efforts typically entail evaluating numerous issues, such as the appropriate geographic location to target, the relative size of competitors, and other competitive pressures.

### Relative Size of Competition

Generally, a business enterprise might prefer to be larger than its competitors in order to gain a size and competitive advantage. In the printing industry, however, this typical business characteristic is not as prevalent (Table 16).

Table 16

COMPETITORS	RESPONDENTS (%)		
	MOST OFTEN (1)	OFTEN (2)	LEAST OFTEN (3)
Printers larger than their enterprise	43.8	28.6	27.6
Printers smaller than their enterprise	16.2	38.1	45.7
Printers of similar size	40.0	33.3	26.7

Note: Ranked on a scale of 1 to 3 (1=highest level of competitive pressure, 3=lowest level of competitive pressure)

## Location of Competition

The primary source of competition for most printers is another local printer (Table 17). The second-most likely source of competitive pressure is a regional printer, followed by a national printer. International printers are less likely to be viewed as competition by most printers. This finding is expected, considering that more than 50 percent of respondents reported that their focus is on customers in the local area and also that most of their customers' business (65%) is also local.

Table 17

SOURCE OF COMPETITION	RESPONDENTS COMPETING WITH THESE TYPES OF FIRMS (%)			
	MOST	SOME	LITTLE	LOWEST
Local printers	65.7	16.2	8.6	9.5
Regional printers	16.2	50.5	27.6	5.7
National printers	10.5	24.8	57.1	7.6
International printers	7.6	8.6	6.7	77.1

## Competitive Pressures

In Canada, traditional competition (other established printers that respondents claim to have traditionally competed with) remains the main source of competitive pressure, followed by digital displacement of print (Table 18). The U.S. is similar, with the highest degree of competitive pressure coming from other established printers (69%). However, a higher of U.S. printers (28%) report increased competition from digital displacement than those in Canada (19%).

Table 18

SOURCE OF COMPETITIVE PRESSURE	CANADA			UNITED STATES		
	RESPONDENTS (%)			RESPONDENTS (%)		
	HIGHEST LEVEL 1	MID-LEVEL 2	LOWEST LEVEL 3	HIGHEST LEVEL 1	MID-LEVEL 2	LOWEST LEVEL 3
Traditional competition (other established printers traditionally competed with)	67.6	21.0	11.4	68.9	23.6	7.4
New market entrants (printers newly formed or who expanded operations geographically into the region)	13.3	45.7	41.0	11.5	24.5	63.3
Digital displacement (e.g., online advertising and media, and e-book readers)	19.0	33.3	47.6	27.7	41.8	30.5

Note: Ranked on a scale of 1 to 3 (1=highest level of competitive pressure, 3=lowest level of competitive pressure)

## Changes in Competitive Pressures in the Past Five Years — Markets and Mix

The competitive mix appears to be changing. Indeed, almost half of survey respondents reported that conditions have changed in the past five years (Table 19). During the survey year, the main changes in competitive mix included sustained downward pressure on pricing, increased adoption of digital printing, and shortened run lengths. One interesting finding is that both larger regional/national and smaller local printers reported the other infringing on their territory. Smaller shops are now able to offer their services to a larger geographic area through online marketing, while some smaller digital shops report that larger players are purchasing digital presses and infringing on their market by selling digital jobs as loss leaders. The competitive mix and pressure continues to increase in the industry.

Respondents reported that over the past five years, the number of small printers has decreased due to bankruptcies and mergers/acquisitions. Digital printing is gradually displacing lithography, and its quality continues to improve. Larger players are competing for a smaller overall market, since total dollar spend on print is declining due to other forms of media infringing on print. This results in prices continuing to experience downward pressure. Many respondents reported the same change in competitive mix for both the past year and past five years.

Table 19

CHANGE IN COMPETITIVE MIX	RESPONDENTS (%)	
	CHANGED OVER THE PAST YEAR	CHANGED OVER THE PAST 5 YEARS
Yes	46.7	64.8
No	53.3	35.2

### 3.6 Non-Print Ancillary Services

Another changing dynamic that is impacting printers is the expansion of the print market space from printed product to various ancillary services, as printers adjust their strategic focus and business models — specializing in core print product but expanding into ancillary services. Some common benchmarks that track this trend include the proportion of sales from ancillary services, the type of services offered, and profit impacts from services.

#### Proportion of Sales from Ancillary Services

As printers have entered this new market space, their revenues from various ancillary services have grown more than their revenues from traditional printing services. The proportion of printers' sales from ancillary services is considerably varied. While a great deal of printers are still entirely dependent on sales of print products and services, many others rely on ancillary services for more than 20 percent of their total sales. An average of 14.4 percent of survey respondents stated that ancillary services accounted for more than 20 percent of their sales (the median is 10%), while the U.S. average is 12.6 percent (the median is 5%) (Table 20).

Table 20

	AVERAGE ESTABLISHMENT SALES FROM ANCILLARY VALUE-ADDED SERVICES (%)	
	CANADA	UNITED STATES
Average	14.4	12.6
Median	10.0	5.0

#### Ancillary Services Offered

Canadian printers currently offer a broad range of ancillary services. The three most commonly offered services are professional creative design (50.9%), mailing management (40.6%), and kit fulfillment (31.1%) (Table 21). The U.S. shares the same top three services, but in a different order: mailing fulfillment (47.4%), kit fulfillment (44.5%), and professional creative design (38.7%). Many firms plan to invest in new ancillary services within the next 24 months. The most likely new services for both Canada and the U.S. are web-to-print e-commerce style storefronts for print procurement and mailing management. For more details on ancillary services, please refer to the Annex.

Table 21

ANCILLARY SERVICE	RESPONDENTS (%)	
	CURRENTLY OFFERED	PLAN TO INVEST IN THE NEXT 24 MONTHS
Digital studio photography	9.4	2.8
Professional creative design	50.9	14.2
Digital database management	13.2	10.4
Digital asset management	7.5	8.5
Digital database archiving	7.5	4.7
Mailing management	40.6	17.0
Kit fulfillment	31.1	3.8
Logistics management	18.9	10.4
CD/DVD services	17.0	0.9
Cross-media marketing services or support	7.5	11.3
Web-to-print e-commerce style storefront (print procurement)	17.0	18.9
Web-to-print e-commerce branded storefront (marketing/brand management/document management)	11.3	13.2
Not applicable (do not offer any ancillary services)	13.2	38.7

### How Long Ancillary Services Have Been Offered

While many Canadian printers have offered these various ancillary services for some time, the actual length of time varies widely (Table 22). Cross-media marketing services or support, on average, has been offered for less than one year. No respondents reported offering this service for more than five years. At the other end of the spectrum, professional creative design has been offered on average for more than five years (72%).

Table 22

ANCILLARY SERVICE	LENGTH OF TIME SERVICE OFFERED RESPONDENTS (%)			
	> THAN 1 YEAR	1 TO 2 YEARS	2 TO 5 YEARS	OVER 5 YEARS
Digital studio photography	30.0	10.0	20.0	40.0
Professional creative design	3.8	7.5	17.0	71.7
Digital database management	21.4	7.1	42.9	28.6
Digital asset management	12.5	25.0	25.0	37.5
Digital database archiving	12.5	12.5	25.0	50.0
Mailing management	9.3	20.9	32.6	37.2
Kit fulfillment	6.1	24.2	18.2	51.5
Logistics management	27.8	16.7	16.7	38.9
CD/DVD services	5.3	10.5	42.1	42.1
Cross-media marketing services or support	50.0	25.0	25.0	-
Web-to-print e-commerce style storefront (print procurement)	16.7	33.3	11.1	38.9
Web-to-print e-commerce branded storefront (marketing/brand management/document management)	15.4	38.5	23.1	23.1

## Share of Sales of Ancillary Services

The share of sales is increasing for most ancillary services (Table 23). For example, cross-media marketing services or support is reported to be increasing as a share of sales by 75 percent of respondents who currently offer the service, despite this service's seemingly disappointing effect on sales and profitability. Although the sample size for this category is too small to draw any significant conclusions, those firms that have offered the service for at least one year are still on average trying to determine how to profit from doing so.

Table 23

ANCILLARY SERVICE	AS A SHARE OF RESPONDENTS' BUSINESS (% OF SALES)		
	INCREASING	DECREASING	NO CHANGE
Digital studio photography	60.0	10.0	30.0
Professional creative design	37.7	22.6	39.6
Digital database management	38.5	23.1	38.5
Digital asset management	28.6	42.9	28.6
Digital database archiving	12.5	37.5	50.0
Mailing management	61.4	9.1	29.5
Kit fulfillment	62.5	6.3	31.3
Logistics management	57.9	-	42.1
CD/DVD services	36.8	15.8	47.4
Cross-media marketing services or support	75.0	-	25.0

## Ancillary Services – Effect on Sales

Respondents were asked to evaluate their actual ancillary service sales compared to their expectations, and, for the most part, sales have been as expected (Table 24). Two services exceeded overall expectations:<sup>2</sup> kit fulfillment (9.1%) and logistics management (5.3%). Two other services appear to have had an overall lower than expected<sup>3</sup> average effect on sales: digital database archiving (-25.0%) and cross-media marketing services or support (-12.5%).

Table 24

ANCILLARY SERVICE	EFFECT ON SALES RESPONDENTS (%)				
	HIGHER THAN EXPECTED	AS EXPECTED	LOWER THAN EXPECTED	TOO SOON TO TELL	DO NOT TRACK
Digital studio photography	10.0	60.0	10.0	20.0	-
Professional creative design	9.3	53.7	16.7	3.7	14.8
Digital database management	-	35.7	21.4	14.3	28.6
Digital asset management	12.5	62.5	12.5	12.5	-
Digital database archiving	-	25.0	50.0	12.5	12.5
Mailing management	15.9	47.7	15.9	11.4	6.8
Kit fulfillment	15.2	60.6	6.1	9.1	9.1
Logistics management	10.5	57.9	5.3	21.1	-
CD/DVD services	10.5	57.9	15.8	5.3	10.5
Cross-media marketing services or support	12.5	12.5	37.5	37.5	-

<sup>2</sup> Exceed expectations = increase more than expected - lower than expected

<sup>3</sup> Meet expectations = (increase higher than expected + as expected) - lower than expected

## Ancillary Services - Impact on Profits

Ample evidence shows that incorporating value-added ancillary services to the sales mix increases profits. However, when evaluated against printers' expectations on profit impacts, the results range widely. All services but digital database archiving (-25.0%) are at least meeting profit expectations<sup>4</sup> (Table 25). Only kit fulfillment (3.0%) is currently exceeding profit expectations.<sup>5</sup>

Table 25

ANCILLARY SERVICE	EFFECT ON PROFITABILITY							
	RESPONDENTS (%)							
	HIGHER THAN EXPECTED	AS EXPECTED	LOWER THAN EXPECTED	TOO SOON TO TELL	DO NOT TRACK	NOT PERMITTED TO PROVIDE	EXCEED EXPECTATIONS INDEX	MEET EXPECTATIONS INDEX
Digital studio photography	10.0	50.0	10.0	30.0	-	-	-	50.0
Professional creative design	11.1	33.3	20.4	7.4	27.8	-	-9.3	24.1
Digital database management	-	28.6	21.4	14.3	35.7	-	-21.4	7.1
Digital asset management	-	62.5	25.0	12.5	-	-	-25.0	37.5
Digital database archiving	-	25.0	50.0	12.5	12.5	-	-50.0	-25.0
Mailing management	13.6	36.4	15.9	18.2	15.9	-	-2.3	34.1
Kit fulfillment	15.2	48.5	12.1	9.1	15.2	-	3.0	51.5
Logistics management	10.5	52.6	10.5	21.1	-	5.3	-	52.6
CD/DVD services	10.5	36.8	21.1	5.3	26.3	-	-10.5	26.3
Cross-media marketing services or support	-	25.0	25.0	50.0	-	-	-25.0	-
Web-to-print e-commerce style storefront (print procurement)	11.1	55.6	16.7	16.7	-	-	-5.6	50.0
Web-to-print e-commerce branded storefront (marketing/brand management/document management)	23.1	46.2	23.1	7.7	-	-	-	46.2

## Web-to-Print Branded Storefronts

Survey respondents with web-to-print storefront technology were asked various questions about their tactics and experience. Generally, Canadian printers are about half as likely as American printers to charge for set-up or maintenance (Table 26).

Table 26

PRICING AND CHARGES	RESPONDENTS (%)	
	CANADA	UNITED STATES
Do not charge for set-up or maintenance	46.2	22.2
Do not charge for set-up but do charge for maintenance	7.7	38.9
Charge for initial set-up but no ongoing maintenance charge	30.8	27.8
Other*	15.4	11.1

\* Canadian respondents who selected other charged for both the initial set-up and an ongoing maintenance fee, while American respondents charged both a set-up and ongoing maintenance fee or charged for this service on a case by case basis.

<sup>4</sup> Meet expectations index = (increase higher than expected + as expected) - lower than expected

<sup>5</sup> Exceed expectations index = increase higher than expected - lower than expected

## Sales through Storefront

On average, about a quarter of total sales come through the storefront (Table 27). The median percentage is 16 percent. These rates are higher compared to American printers (the average is 18.8%, while the median is 5.0%).

Table 27

STOREFRONT SALES	CANADA		UNITED STATES	
	AVERAGE (%)	MEDIAN (%)	AVERAGE (%)	MEDIAN (%)
E-commerce storefront sales (Print procurement)	11.3	5.0	10.3	3.5
Branded e-commerce storefront sales (Marketing/brand management/ document management)	15.3	10.0	16.6	5.0
<b>Total</b>	<b>23.5</b>	<b>16.0</b>	<b>18.8</b>	<b>5.0</b>

## Impact on Sales

Generally, respondents reported increased sales from web-based storefronts — either from new customers or increased sales to current customers (Table 28). These findings mirror U.S. trends (see Annex for a comparison of Canada to the U.S.).

Table 28

WEB-BASED STOREFRONTS' EFFECT ON SALES	RESPONDENTS (%)	
	CANADA	UNITED STATES
Changed how customers order but no effect on business volume (\$ sales)	35.0	25.0
Current customers ordering greater volume due to improved convenience	25.0	28.1
Enabled companies to market to new clients and increase sales volume	55.0	59.4
Other*	-	6.3

\* American respondents specified that it is too early to tell how it will affect company sales because they just started offering the service

## 3.7 Major Technological Capital Investments

Printers must continually invest in new technologies, even as they make adjustments to their strategic and marketing approaches. To gain insight into this issue, respondents were asked about their investments in several technology categories (Table 29).

A total of 17 percent of respondents reported no major capital investments in new technologies in 2009 and 2010. Almost 60 percent of respondents invested in digital technologies, consistent with shifting market dynamics towards greater use of digital print due to increasing consumer demand and improved quality. Almost a third of respondents invested in new binding and finishing technologies. With increased competition, flat to decreasing industry sales, and downward pressure on pricing, a key strategy to increase profitability is to become more productive. This explains why more than 26 percent of printers have made major capital investments in workflow automation and process automation technologies.

Table 29

TECHNOLOGY	INVESTMENTS IN THE PAST 24 MONTHS
	RESPONDENTS (%)
Digital printing technologies	59.4
Prepress technologies	45.3
Binding and finishing technologies	31.1
Workflow automation/process automation investments	26.4
Sheetfed printing press technologies	16.0
Web offset printing press technologies	1.9
No major capital investments in technology	17.0
Other	6.6

### Effect of Technology Investments on Return on Investment

Table 30 examines reported return on investment (ROI) vs. expectations. The two highlighted columns show a quick synopsis of the overall figures. For example, digital printing technologies investments exceeded expectations<sup>6</sup> 12.7 percent of the time. While binding and finishing technologies investments exceeded expectations only 3 percent of the time, they at least met expectations<sup>7</sup> 81.8 percent of the time, which is the highest rating for that index. Workflow automation/process automation investments had the lowest index readings.

Table 30

TECHNOLOGY	EFFECT ON RETURN ON INVESTMENT								
	RESPONDENTS (%)								
	HIGHER THAN EXPECTED	AS EXPECTED	LOWER THAN EXPECTED	TOO SOON TO TELL	DO NOT TRACK	NOT PERMITTED TO PROVIDE	OTHER	EXCEED EXPECTATIONS INDEX	MEET EXPECTATIONS INDEX
Prepress technologies	8.3	66.7	4.2	8.3	10.4	2.1	-	4.2	70.8
Digital printing technologies	19.0	54.0	6.3	9.5	9.5	1.6	-	12.7	66.7
Sheetfed printing press technologies	11.8	58.8	-	11.8	5.9	-	11.8	11.8	70.6
Web offset printing press technologies	-	-	-	-	-	-	-	-	-
Binding and finishing technologies	6.1	78.8	3.0	6.1	6.1	-	-	3.0	81.8
Workflow automation/process automation investments	10.7	28.6	10.7	21.4	14.3	10.7	3.6	-	28.6

### Effect of Technology Investments on Sales

Surprisingly, many investments were made with little expectation of increasing sales (Table 31). For example, more than 40 percent of respondents reported investing in prepress technologies with no expected increase in sales, while only 9.5 percent of respondents made investments in digital printing technologies with no expected effect on sales. Net of those who reported not meeting expectations, digital printing investments at least met expectations<sup>8</sup> for 49.2 percent of respondents.

<sup>6</sup> Exceed expectations index = higher than expected - lower than expected

<sup>7</sup> Meet expectations index = (higher than expected + as expected) - lower than expected

<sup>8</sup> Meet expectations index = (increase more than expected + as expected) - less than expected

Table 31

TECHNOLOGY	EFFECT OF THE INVESTMENT ON ESTABLISHMENT SALES							
	RESPONDENTS (%)							
	INCREASED MORE THAN EXPECTED	INCREASED AS EXPECTED	LESS THAN EXPECTED	NO EXPECTED EFFECT ON SALES	TOO SOON TO TELL	DO NOT TRACK	NOT PERMITTED TO PROVIDE	OTHER
Prepress technologies	6.3	20.8	-	43.8	12.5	10.4	-	6.3
Digital printing technologies	7.9	50.8	9.5	9.5	15.9	1.6	4.8	-
Sheetfed printing press technologies	5.9	41.2	5.9	29.4	5.9	-	-	11.8
Web offset printing press technologies	-	-	-	-	-	-	-	-
Binding and finishing technologies	-	30.3	9.1	33.3	18.2	3.0	3.0	3.0
Workflow automation/process automation investments	3.6	17.9	7.1	17.9	25.0	14.3	10.7	3.6

### Reasons for Investing in Technology

For all categories, the main reason for investing in different technologies was to increase productivity (Table 32). A significant number of respondents also reported that they invested in digital printing technologies to improve customer service/customer experience (57.1%) and enter new markets (41.3%). Workflow automation/process automation was invested in to increase productivity (64.3%), improve customer service/customer experience (50%), and increase automation to reduce manual labour (46.4%). Workflow and process automation investments are expected to continue to increase as more printers invest in web-to-print and digital presses. Demand for digital printing continues to grow and workflow and process automation can help reduce costs, which can lead to profitable growth. Workflow and process automation investments also improve productivity for traditional ink-on-paper printing.

Table 32

TECHNOLOGY	MAIN REASONS FOR INVESTING IN TECHNOLOGY						
	RESPONDENTS (%)						
	INCREASE PRODUCTIVITY	INCREASE AUTOMATION TO REDUCE MANUAL LABOUR	ENTER NEW MARKETS	IMPROVE CUSTOMER SERVICE/ CUSTOMER EXPERIENCE	KEEP UP WITH CUSTOMERS	INCREASE CAPACITY TO KEEP UP WITH GROWTH/EXPECTED DEMAND	OTHER
Prepress technologies	70.8	35.4	25.0	37.5	31.3	20.8	8.3
Digital printing technologies	69.8	27.0	41.3	57.1	34.9	39.7	3.2
Sheetfed printing press technologies	52.9	35.3	23.5	41.2	23.5	29.4	-
Web offset printing press technologies	-	-	-	-	-	-	-
Binding and finishing technologies	69.7	30.3	27.3	51.5	21.2	12.1	9.1
Workflow automation/process automation investments	64.3	46.4	17.9	50.0	10.7	14.3	10.7

### 3.8 Investment Areas in the Next Two Years

The following section highlights the planned major technological investments over the next two years in the following areas: prepress, digital printing, sheetfed press, web offset press and binding and finishing technologies.

## Prepress Technologies

Approximately six out of ten Canadian printers do not plan to invest in prepress technology in the next two years (Table 33). For those respondents who do plan to invest, web-based job submissions and PDF workflow are the top priorities.

Table 33

PREPRESS TECHNOLOGIES	PLANNED MAJOR INVESTMENTS
	RESPONDENTS (%)
No planned prepress technology investments	59.4
PDF workflow	17.0
Proprietary colour management	0.9
Icc-based colour management	4.7
Device link profiles colour management	4.7
Hard copy proofing	3.8
Digital soft proofing on monitor for colour accuracy and content	12.3
Automated preflight applications	10.4
Web-based job submission	18.9
Web-based relighting	5.7
Automated workflow solutions, such as rules based automation	8.5
Other	1.9

## Digital Printing Technologies

Over half of survey respondents have no plans to invest in digital printing technologies in the next two years (Table 34). For those that do, the two most popular targeted investment areas are toner-based presses and wide-format inkjet.

Table 34

DIGITAL PRINTING TECHNOLOGIES	PLANNED MAJOR INVESTMENTS
	RESPONDENTS (%)
No planned investments in digital printing technologies	56.6
Wide-format inkjet up to 44" (for production and not proofing)	9.4
Very-wide-format inkjet printing over 44" (for production not proofing)	8.5
In-line coating on digital press	4.7
Toner-based colour 30-60 PPM press	4.7
Toner-based colour 61-90 PPM press	3.8
Toner-based colour 90+ PPM press	7.5
Toner-based monochrome 30-60 PPM press	0.9
Toner-based monochrome 61-90 PPM press	4.7
Toner-based monochrome 91+ PPM press	10.4
Inkjet (high-speed production) colour 30-60 PPM press	-
Inkjet (high-speed production) colour 61-90 PPM press	3.8
Inkjet (high-speed production) colour 91+ PPM press	1.9
Inkjet (high-speed production) monochrome 30-60 PPM press	-
Inkjet (high-speed production) monochrome 61-90 PPM press	1.9
Inkjet (high-speed production) monochrome 90+ PPM press	1.9

## Sheetfed Press Technologies

In general, sheetfed technology is not a targeted investment over the next two years; more than nine out of ten printers are of this mindset (Table 35).

Table 35

SHEETFED PRESS TECHNOLOGIES	PLANNED MAJOR INVESTMENTS
	RESPONDENTS (%)
No planned sheetfed press technology investments	91.5
Computer-to-plate on press	2.8
Automatic plate mounting	0.9
Semi-automatic plate mounting	-
Automatic roller washers	1.9
Automatic blanket wash systems	0.9
Automatic impression cleaner	0.9
Independent unit drives	0.9
Closed-loop colour control (in-line)	1.9
Closed-loop colour control (off-line)	0.9
Non-integrated scanning densitometer	-
Automatic feeder and delivery set-up	-
Coater unit(s)	2.8
Temperature controls for ink rollers	0.9
Static control systems	1.9
Automatic loading of job data using JDF or PPF	1.9
High fidelity printing with more than 5 colours	0.9
Multi unit perfecting for single pass printing	0.9
Stochastic screen	-
Automated defect detection and sorting on press	0.9
Ultra violet/electron beam curing of inks	0.9
Other	2.8

## Web Offset Press Technologies

Similar to sheetfed, very few printers are planning to invest in new web offset technology in the next two years (Table 36).

Table 36

WEB OFFSET PRINTING PRESS TECHNOLOGIES	PLANNED MAJOR INVESTMENTS
	RESPONDENTS (%)
No planned web offset printing press technology investments	94.3
Automatic loading of job data using JDF or PPF	0.9
Automated defect detection and sorting on press	1.9
Ultra violet/electron beam curing of inks	1.9
Zero makeready web press	-
Automatic plate mounting	0.9
Automatic roller washers	-
Automatic blanket wash systems	-
Automatic impression cleaner	-
Closed loop colour control (in-line)	-
Closed loop colour control (off-line)	-
Non-integrated scanning densitometer	-
Temperature controls for ink rollers	0.9
Inkjet head mounted on offset web (high-speed monochrome or colour)	-
Other	1.9

## Binding and Finishing Technologies

Two out of ten printers forecast investments in binding and finishing technologies in the next two years. The most likely investments in this area are digital and inkjet in-line finishing (Table 37).

Table 37

BINDING AND FINISHING TECHNOLOGIES	PLANNED MAJOR INVESTMENTS
	RESPONDENTS (%)
No planned binding and finishing technology investments	80.2
Automated makeready using JDF or PPF for cutter	4.7
Automated makeready using JDF or PPF for stitcher	1.9
Automated makeready using JDF or PPF for folder	2.8
In-line finishing applications — offset	1.9
In-line finishing applications — digital	6.6
Large format inkjet finishing (cutters/plotters)	6.6
Other	5.7

## 3.9 Process Automation Issues

One particular area of technological investment that printers commonly target is process automation — improving the efficiency of their printing process from prepress to post-press.

Approximately one in three Canadian printers has either already implemented process automation or is in the process of doing so (Table 38). Another one in five is in the planning stage to implement process automation. These implementation rates are about 10 percent lower than those in the U.S.

Table 38

IMPLEMENTATION OF PROCESS AUTOMATION	RESPONDENTS (%)	
	CANADA	UNITED STATES
Yes, we have automated processes installed and in operation	18.9	28.8
Yes, we are in the process of installing and implementing process automation	14.2	14.1
No, but we are in the planning stage	20.8	25.9
No, and do not expect to	46.2	31.2

### Reasons for Not Implementing Process Automation

Firms that have not yet implemented process automation cite a wide range of reasons for not doing so, including simply not having considered it, seeing no benefit/not being aware of the benefits, and lacking knowledge of process automation (Table 39). This is similar to American printers.

Table 39

REASONS FOR NOT INVESTING IN PROCESS AUTOMATION	RESPONDENTS (%)	
	CANADA	UNITED STATES
Have not considered it	34.7	37.7
See no benefit/not aware of benefits	32.7	28.3
Lack of knowledge of process automation	28.6	32.1
Money/cost of implementation	26.5	37.7
Lack of trained staff/experts	6.1	18.9
Complexity	4.1	13.2
Other	6.1	5.7

### Automation of Operations

Canadian printers have already automated a number of their operations. The top four automation targets have been customer interfaces, estimating, management reporting, and job planning/scheduling (Table 40). This is not significantly different from U.S. printers.

Table 40

ASPECTS OF OPERATIONS THAT ARE AUTOMATED	RESPONDENTS (%)	
	CANADA	UNITED STATES
Customer interface/web-to-print/web portal	21.7	21.4
Estimating	17.0	19.1
Job planning/job scheduling	15.1	20.2
MIS prepress	14.2	18.5
Pressroom	8.5	15.0
Postpress finishing	4.7	5.8
Distribution	8.5	5.2
Customer reporting	12.3	14.5
Management reporting	17.0	19.7
Materials handling/logistical operations	7.5	8.1
Other	0.9	0.6

## Job Definition Format

Survey respondents were asked, "Is Job Definition Format used by any of the systems you've automated?" Almost four out of ten respondents answered yes (Table 41). These rates almost double those of U.S. printers.

Table 41

JOB DEFINITION FORMAT USAGE	RESPONDENTS (%)	
	CANADA	UNITED STATES
Yes	37.1	22.5
Not Sure	11.4	23.9
No	51.4	53.5

*Note: Based on respondents who reported implementing process automation*

Although the sample size of printers in both Canada and the U.S. that use Job Definition Format (JDF) is rather small, one conclusion can be drawn: most enterprises that use JDF do so to connect devices within a department, or two or more departments within a plant (Table 42). Complete system integration — from customer order to delivery or end-to-end workflow between multiple plants — is not yet widely used in either country.

Table 42

PURPOSE OF JDF USAGE	RESPONDENTS (%)	
	CANADA	UNITED STATES
Connect two or more devices in a department	53.8	25.0
Connect two or more departments within a plant	23.1	56.3
Automate the entire plant operation from customer to delivery	15.4	6.3
Automate more than one plant and workflow between plants	-	-
All of the above plus automation at or with the customer	7.7	12.5

## Staff Knowledge

The level of printing firm staff knowledge of Job Definition Format (JDF) is relatively low. Almost 70 percent of respondents rated their staff as not knowledgeable about JDF (Table 43). This is similar to American responses.

Table 43

STAFF KNOWLEDGEABLE CONCERNING JDF	RESPONDENTS (%)	
	CANADA	UNITED STATES
Yes	31.1	34.4
No	68.9	65.6

## Plans to Automate Other Aspects of Operations

The survey found that 43.4 percent of respondents expect to automate any (or additional) aspects of their operations, compared to 59.5 percent of American respondents (Table 44).

Table 44

PLANS TO AUTOMATE OTHER ASPECTS OF OPERATIONS	RESPONDENTS (%)	
	CANADA	UNITED STATES
Yes, in this fiscal year	11.3	22.1
Yes, in the next two years	18.9	22.7
Yes, but in long-range planning	13.2	14.7
Not sure	24.5	20.9
No	32.1	19.6

### 3.10 Investment Priorities

For the most part, investment rankings of Canadian printers are generally similar to American printers (Table 45). Canadian and American printers share the same view on the top priority investment areas (new equipment and sales force development), but differ in their rankings of subsequent investment priorities. American printers ranked marketing and advertising (14.5%) and web-to-print/digital storefronts (13.8%) higher than Canadian printers (10.4% and 8.5%, respectively), while printers in Canada placed greater priority on training (7.5%) than those in the U.S. (2.6%). For more details on respondents' ranking of investment priorities, see Annex.

Table 45

HIGHEST PRIORITY INVESTMENT IN THE NEXT TWO YEARS	RANKING (%)		
	CANADA	UNITED STATES	DIFFERENCE
Adding new equipment/equipment replacement	29.2	28.9	0.3
Sales force development	16.0	16.4	-0.4
Marketing and advertising	10.4	14.5	-4.1
Automation	9.4	9.2	0.2
Mergers and acquisitions	9.4	6.6	2.8
Web-to-print/digital storefronts	8.5	13.8	-5.3
Training	7.5	2.6	4.9
Hiring/staff expansion	4.7	2.6	2.1
New service offerings (such as adding mail list management or digital printing)	4.7	4.6	0.1

### 3.11 Business Conditions

The past few years have been challenging for print markets. Survey respondents were asked about their business environment over the past few years and the major drivers of change (Table 46). Canadian printer responses generally correspond to those of the U.S. This finding is not surprising, given the fairly close integration of the printing industries within the two countries (see Annex for further details concerning business conditions).

Table 46

BUSINESS CONDITIONS	ALL RESPONDENTS (%)
<b>Sales:</b> % change (2010 vs. 2009)	4.4
<b>Sales:</b> % change (2006 vs. 2005)	9.3
<b>Sales Expectations:</b> % change 2011 vs. 2010	7.2
<b>Profitability:</b> Profit as a % of sales (2010)	9.3
<b>Profitability:</b> Profit as a % of sales (2006)	10.1
<b>Profitability in fourth quarter 2010 vs. third quarter 2010</b>	
Increasing	37.6
Decreasing	23.8
No Change	38.6
<b>Index</b>	<b>13.9</b>
<b>Printing Prices:</b> % change January 2011 vs. January 2010	-1.4
<b>Wages/Salaries:</b> % change in 2010 vs. 2009	2.9
Expectations for second quarter 2011	1.1
<b>Paper Prices:</b> % change in 2010 vs. 2009	3.5
Expectations for second quarter 2011	2.2
<b>Employee Health Benefits:</b> % change January 2011 to January 2010	1.2
Expectations for second quarter 2011	0.6
<b>Energy/Utilities:</b> % change in 2010 vs. 2009	6.0
Expectations for second quarter 2011	4.0

#### ⊕ Sales

Printers' sales in both Canada and the U.S. increased in 2010 compared to their 2009 lows. On average, Canadian printers reported sales increases of 4.4 percent despite continued declining printing prices (-1.4%). Expectations are for sales to continue to improve over 2011; on average, respondents expect sales to increase by 7.2 percent. A total of 62 percent of respondents reported sales increasing in 2010 and 73 percent of respondents expect sales to improve in 2011.

#### ⊕ Profitability

Generally, printers' profits in both Canada and the U.S. have declined over the last few years due to both the recession and competition from digital media. These pressures are reflected in the survey findings. Profit rates as a percentage of sales are down from 2006, but appear to be stabilizing.

#### ⊕ Prices and Cost

In today's market environment, printers are being pressured from two sides. Customers are reacting to the prices set by printers with considerable pushback, while costs for various materials and labour from suppliers are on the rise. The survey data reflect these two trends, with respondents describing declining printing prices and increases in cost for various line items as part of the current business environment.

## Employment

Two major forces have combined over the last few years to induce printers to reduce headcount: sales pressures from the difficult economy, and productivity improvements from technology. However, survey respondents have experienced generally stable employment levels over the past year and expect this trend to continue in 2011 (Table 47).

Table 47

EMPLOYMENT LEVELS	RESPONDENTS REPORTING (%)	
	THIRD QUARTER TO FOURTH QUARTER 2010	EXPECTED 2011
Increase more than 10%	5.8	8.7
Increase 5 to 10%	1.0	9.7
Increase less than 5%	6.8	17.5
No change	67.0	51.5
Decrease less than 5%	7.8	8.7
Decrease 5 to 10%	2.9	2.9
Decrease more than 10%	8.7	1.0
<b>Index</b>	<b>-5.8</b>	<b>23.3</b>

### Capital Spending Trends

Sales and pricing pressures together make investment decisions extremely difficult for printers. However, to remain competitive, printers must continue to invest. About half of survey respondents reported no change in their investment spending in 2010 compared to 2009 levels (Table 48). However, more respondents increased investment spending than decreased it (16.8% more reported increases compared to decreases). Expectations for 2011 are for a slight increase in capital spending, with a four percent increase in the 2011 expectations index compared to the 2010 actual index (21.2% – 16.8% = 4.4% increase).

Table 48

CAPITAL SPENDING	CHANGE IN 2009–2010 (%)	EXPECTED CHANGE IN 2010–2011 (%)
Increase more than 10%	15.8	10.1
Increase 5 to 10%	10.9	10.1
Increase less than 5%	6.9	17.2
No change	49.5	46.5
Decrease less than 5%	5.0	7.1
Decrease 5 to 10%	3.0	3.0
Decrease more than 10%	8.9	6.1
<b>Index</b>	<b>16.8</b>	<b>21.2</b>

### Credit Conditions

Credit upheavals over the past few years have also been troublesome for printers. Challenges encountered include access to working capital and funds for investment. However, most printers reported they do not see a negative (or positive) impact (Table 49). Approximately one in three reported a negative impact. Credit conditions have had a more damaging effect on American printers with 42 percent reporting a negative impact.

Table 49

IMPACT OF CURRENT CREDIT CONDITIONS	RESPONDENTS (%)	
	CANADA	UNITED STATES
Significant negative impact	7.9	17.3
Moderate negative impact	21.8	24.7
Neither positive or negative impact	62.4	52.5
Moderate positive impact	6.9	4.3
Significant positive impact	1.0	1.2
<b>Index</b>	<b>-21.8</b>	<b>-36.4</b>

## 4. Overview of Key Trends and Implications

As the survey findings indicate, Canadian print markets are notably segmented and diversified in both technical processes and business conditions. They also remain under considerable stress, even as the North American economy and print markets recover from the global recession.

### 4.1 Key Trends

The most significant issue facing the printing industry is the role print will play in the increasingly digital environment. Will print products and services be able to hold or grow sales and market share, or will those decline? Will printers be able to change their strategies and business models to adjust to the evolving environment? The answers to these questions will determine the future of print.

To examine the core drivers of **why** print and **what** is printed, the source of demand — the functionality of print — must be examined.

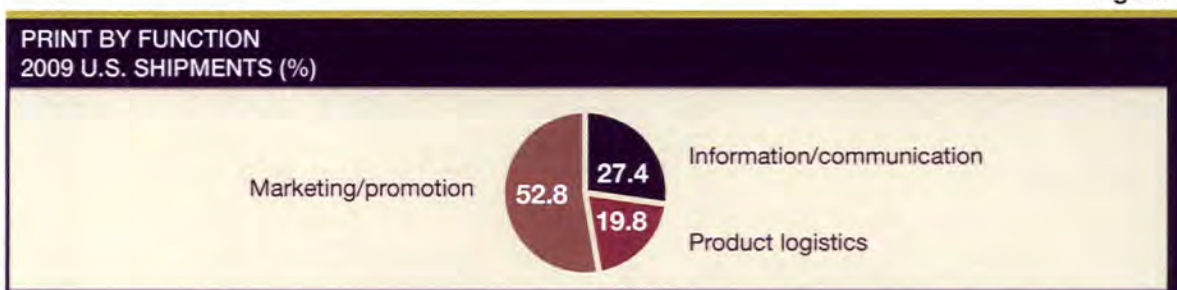
Although many print products and services provide multiple functions, data on shipments and plants can be categorized into three major functions:

- ✦ Print intended to **inform or communicate** factual and editorial information, such as magazines, newspapers, books and reports
- ✦ Print that provides **product logistics** for manufactured products — packaging, labels, wrappers and product user manuals
- ✦ Print intended to **market, promote or sell** various products, services, political candidates, positions, or ideas — marketing and promotional print such as catalogues, direct mail and brochures

Of these three functions, only one — print logistics — is not subject to competition and substitution by digital media. Conversely, print's inform/communicate function is subject to the highest risk of substitution from digital media. Print as a marketing, promotion and sales medium appears to be in the middle.

According to a Printing Industries of America analysis, the functional breakdown of U.S. print markets in 2009 (Figure 2) was as follows:

Figure 2

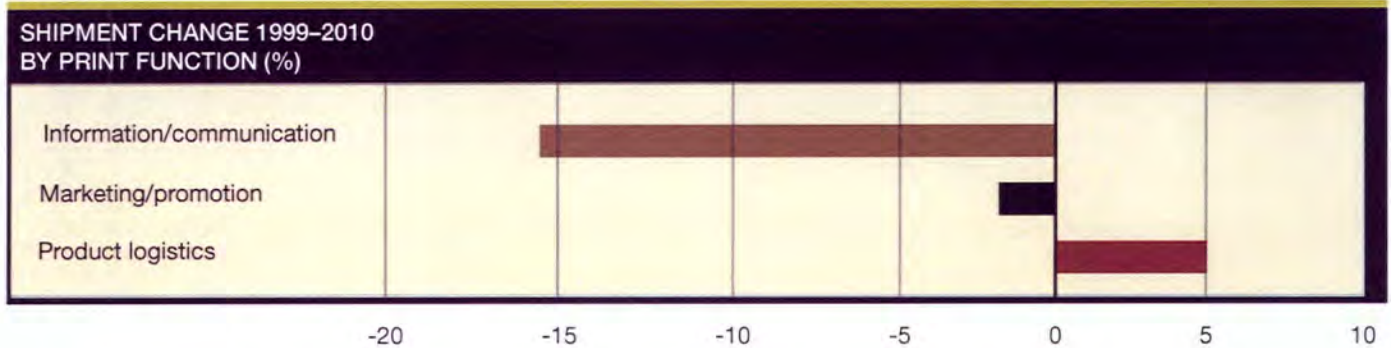


Print as a marketing/promotional medium remains the primary function, accounting for just over half of all shipments. The inform/communicate function is second largest (27.4%), while product logistics account for 19.8 percent. Most likely, given the integration of Canadian and American print markets, the numbers for Canada are similar.

A look back at the past ten years reveals significant differences in shipment trends for each function (Figure 3). It should be noted that this time frame encompasses the period of the global recession, thus the numbers are not representative of a more positive period. The inform/communicate function shows the largest decline in nominal shipments — down 15.7 percent or approximately 1.5 percent per year, on average. Marketing/promotion print has remained fairly stable with a decline of just 1.8 percent over the 10-year period. In contrast, product logistics shipments have grown by 5.1 percent.

This pattern conforms to the earlier observation that of the three functions, only product logistics is not subject to competition and substitution by digital media, while the inform or communicate function is subject to the highest risk. Also in line with previous observations, print as marketing, promotion, and sales media falls in the middle in terms of competitive substitution.

Figure 3

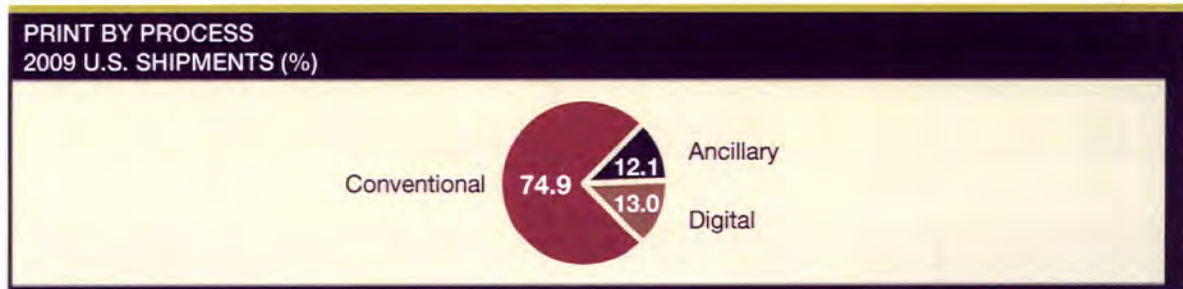


As for print processes, Printing Industries of America's tracking of North American print markets reveals that, for the past decade, digital print (toner-based and inkjet) has grown at the expense of traditional ink-on-paper print. Furthermore, printers' shipments of ancillary services such as mailing, fulfillment, warehousing, database management and other services have also grown faster than traditional ink-on-paper shipments.

Printing Industries of America's most recent detailed analysis of U.S. print markets demonstrates that conventional ink-on-paper (including sheetfed lithographic offset, web offset, letterpress, gravure, and flexography) remains the dominant print process, accounting for almost 75 percent of total revenues (Figure 4). Digital technologies and ancillary services account for the remaining sales, about 25 percent of total sales.

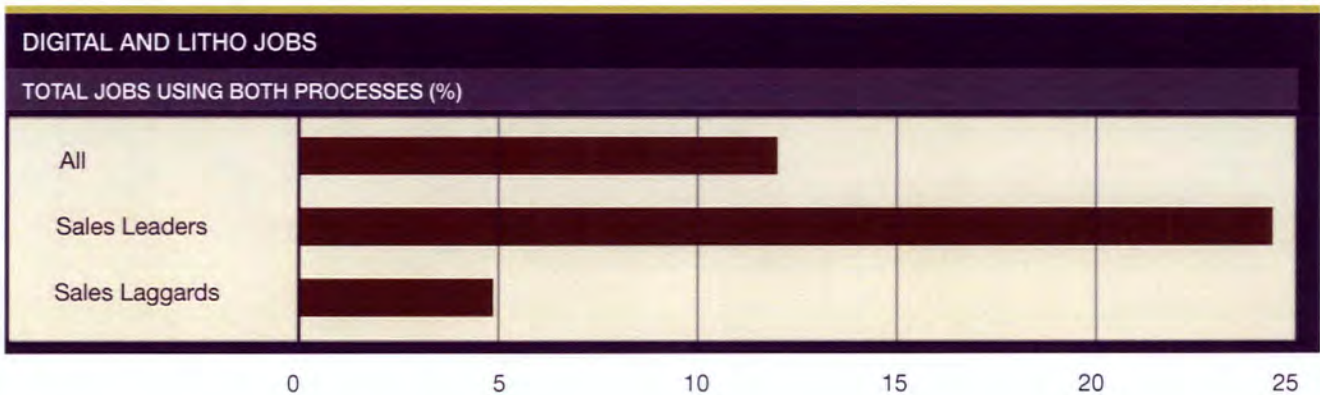
Over the last few years, digital and ancillary services have gained at the expense of offset printing. This shift is due primarily to improvements in digital technologies, increased targeting and personalization that have reduced run lengths, and expansion of the typical business model to include additional related services.

Figure 4



Another indication of the growth of digital printing is that more and more print work — or jobs — now combine both conventional and digital technologies. Approximately one in ten jobs is now so composed, and sales leaders (printers in the top quartile of sales growth) are even more inclined to combine the two technologies in individual jobs (Figure 5).

Figure 5



According to recent surveys, new digital print jobs come from three sources: transfers from conventional jobs, new jobs from existing customers, and new jobs from new customers (Figure 6). Regardless of the origin of digital printing growth, new digital technology is not only replacing conventional technology but is also creating entirely new printing demand.

Figure 6



Another key trend is the ongoing restructuring of printing firms and plants. As printing firms go out of business through liquidations, mergers, consolidations and bankruptcies, the number of firms sharing the market is dwindling. Thus, even in periods of declining total industry sales, surviving firms may see increased sales.

This outcome is demonstrated in the chart below reflecting U.S. trends from 1999 to 2009 for remaining plants (Figure 7). Sales growth rates by plants for all functions were healthy over this period.

Figure 7



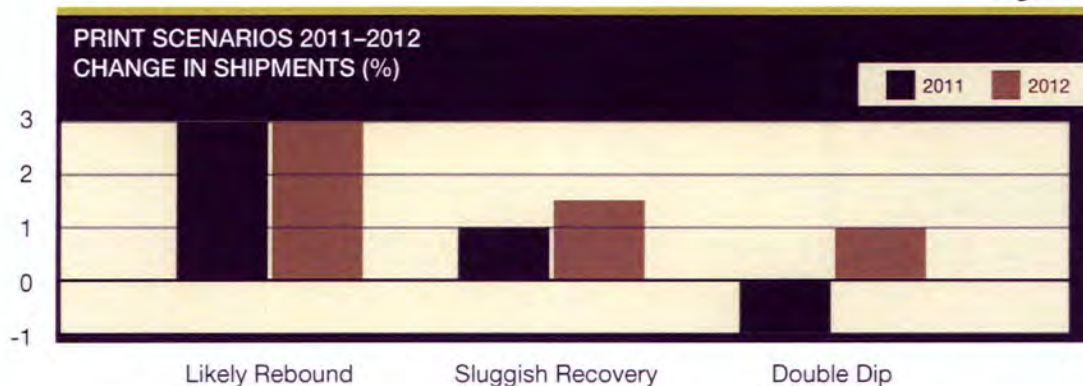
## 4.2 The Next Two Years

The outlook for the North American economy for 2011 through to 2013 predicts modest to fairly robust growth. In fact, inflation-adjusted Gross Domestic Product (GDP) will likely grow by 3.3 percent in 2011 — the highest rate since 2004, when it grew 3.6 percent. Looking further out to 2012, Printing Industries of America forecasts inflation-adjusted GDP to grow 3.7 percent — the highest annual growth rate since 2000 (4.1%).

Other less likely scenarios include a sluggish recovery and a return to recession (“double dip”). While less likely, these scenarios should be considered as possible alternatives for planning purposes, if conditions change. The fact that the economy has gained traction and has achieved a growth rate above the less than two percent “stall speed” is a strong sign that the risk of a quick return to recession has decreased.

If the most likely economic outlook unfolds as projected, the printing industry is heading into an ideal situation of the economic cycle — the mature recovery phase. If the economy performs as projected, print markets should grow by approximately three percent in 2011 and 2012, based on the typical lag between the economy and print markets in recovery periods (Figure 8). However, even with the recovery achieved in 2010 and the projected dollar volumes of 2011 and 2012, printing shipments will remain below pre-recession levels.

Figure 8



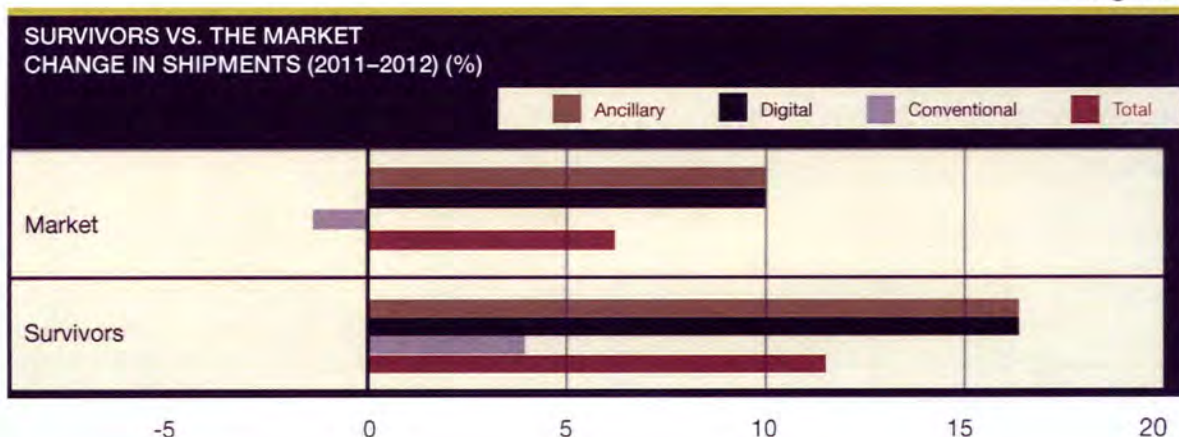
### Printing Prices

Printers will face continued conflicting pressures with cost increases from suppliers and price sensitivities from customers. Most likely, printing prices will remain fairly stable, with some passing on of cost increases.

### Survivors' Sales

Over the past few decades the number of printing plants in North America has decreased, as the industry has restructured in response to both declining demand and increased productivity from technological change. As a result, surviving plants have experienced sales increases — even in years with decreasing total print sales — as they capture the market share of exiting plants (Figure 9). This conflicting pattern will continue.

Figure 9



## Printers' Profits

Printing firms' profits tend to lag both print sales and the economy. As the economy continues to recover, print profits should continue to rebound over the next two years. Printing Industries of America's projections estimate that overall industry profit rates will rebound to approximately two percent and profit leaders' rates to over nine percent in 2011, and to three percent and ten percent, respectively, in 2012.

## 4.3 Emerging Risks and Challenges

As discussed so far in this report, the outlooks for the overall economy and print markets are generally optimistic; however, numerous risks do exist that can have profound effects on print markets and printing firms.

### Risk: Inflation Escalates

Overall inflation currently remains in check, but signs of price escalation are increasing — particularly with food and industrial commodities, including oil (see below). In fact, price escalation is the primary economic risk factor for the next two years.

#### ✦ Impact on Print Markets and Printers

Input prices are likely to rise over the near term, as are wage and salary pressures later on. Paper, ink and other materials comprise about 30 percent of costs and could escalate. As well, as the cost of fuel goes up, delivery costs will rise substantially. Printers need to be prepared for this, and focus on waste and spoilage and other efficiencies to reduce materials cost. Delivery surcharges may also reappear.

Printers must remain cautious in their spending, continue to conserve cash, and thoroughly evaluate possible investments. However, at the same time, they must remain focused on building a sustainable business model and invest in training and education for their key staff.

### Risk: Oil Price Shock

In addition to fuel price implications discussed above, oil price escalation caused by both inflation pressures and, more significantly, the changing values of currencies, is a significant threat. Further, escalating tensions in the Middle East are extremely worrisome. Beyond increasing inflation lies the risk of another recession caused by oil price increases that reduce consumer and business spending. The more general economic result could be a return to recession combined with inflation.

#### ✦ Impact on Print Markets and Printers

Printers should not become overly entrenched with the recovery and increased print sales. The recovery could crash from an "oil shock." Firms should remain cautious on spending and investments.

### Risk: Interest Rates Rise Substantially

If prices begin rising beyond current rates and inflation expectations increase accordingly, interest rates will also rise. Rising interest rates could begin to slow the pace of expansion and even lead to a slowdown in economic activity.

#### ✦ Impact on Print Markets and Printers

Again, caution is in order regarding spending, cash outlays, and investment.

### Risk: Economic Decline

Although the North American economy has achieved growth rates above the two percent "stall speed" over the past few quarters of 2010, the issue of sustainability remains. In particular, any of the above disruptions could destabilize the trajectory of the economy and send it back into recession.

#### ✦ Impact on Print Markets and Printers

Printers will have to be flexible, careful about long-term commitments, and use caution regarding spending and investments.

While the outlook is for the economic recovery to gain momentum over the next two years and pull print markets along, a number of potential challenges lie ahead that could be disastrous. Any one of them could derail the economic recovery and if actualized, likely have a ripple effect.

Printers must remain extremely vigilant and flexible in planning and implementing programming over this tenuous period.

## 4.4 Planning Insights

Canadian printers face an interesting future, particularly in the next two years. In general, improved economic and print market conditions in North America should increase demand for print and related services from Canadian printers. Additional planning considerations include:

### ✦ Optimism with caution

While the projected path of the economy and print markets is an upswing, the future perspectives are uncertain. Canadian printers must be prepared for another downturn even as conditions improve.

### ✦ Flexibility and rapid adaptation

The economy and print markets are characterized by a certain instability. Therefore, accepting constant change is essential. Hence, market vigilance and quick decision making are crucial. The ability to spot and quickly capitalize on emerging market opportunities is more important than ever.

### ✦ Rapid transition to value added service

A key action printers can take to thrive (and in many cases survive) is to migrate the value-added benefits they offer onto a more sustainable path of non-print value-added ancillary services, solutions, and management services. Printers must focus on transitioning their product mix to include broader, value-added services.

### ✦ Promising future

Despite the abundance of negative news about sales declines, firm liquidations and bankruptcies, and other issues of the past few years, the printing sector has a role to play in the Canadian economy.

## 4.5 The Longer Run — Future of Print

As for the longer term, two possible futures can be considered. One is based on the continuation of current trends; this future anticipates the continued shrinking of the print industry's economic footprint over the coming decades. While this future is somewhat negative overall, it does have extenuating positive elements. These include the fact that the print industry's current economic footprint is large, and even with the decline, print will remain a large North American industry for many years. As industry sales shrink, the number of printing firms is also projected to dwindle at an even faster pace. And while the industry's overall economic footprint shrinks, various niche, product, and functional sectors will grow. Many industry survivors can still look forward to increasing revenues and continued opportunities.

An examination of print's life cycle shows a decidedly complex nature rather than simple maturity or decline:

- ✦ Print's overall life cycle has moved from growth, to mature, to possibly a declining position.
- ✦ A more nuanced picture emerges when life cycles are examined by process, product and function. While some of these elements of print are mature or declining, many remain in the growth phase.
- ✦ While all print sectors could be characterized as competitive, some sectors score significantly higher or lower in competitive intensity.
- ✦ On both a life cycle and competitive intensity measure, plenty of opportunity remains in the printing industry.
- ✦ Even in mature and declining sectors, management strategies and techniques exist for firms to improve their performance and succeed for a long period of time.

The other possible future for print is much more optimistic. It envisions a return to long-run growth sometime in the next decade or so. This competing future, of course, offers significant advantages. For this future to be realized, a number of conditions must come into play, including:

- ✦ postal service adjustments, with North America's two major postal services becoming more "marketing" focused
- ✦ print logistics underpin growth
- ✦ digital print continues to grow

- ✦ printers' ancillary services remain strong
- ✦ information-based print eventually stabilizes
- ✦ print becomes a premium medium and marketing-based print grows
- ✦ saturation from digital media helps print
- ✦ increased productivity and efficiencies push real printing cost down
- ✦ targeted and personalized print marketing and promotion intensifies

While all of the above factors may not come to pass, if most or even a few actually unfold, total inflation-adjusted printing shipments may actually turn around and grow again.

Regardless of the exact path, many printers will still thrive. For example, even if industry sales decline by two percent and industry firms decline by three percent, survivors will actually experience, on average, a sales increase of one percent. Sales leaders (printers in the top quartile of sales growth) could easily see annual sales increase far in excess of the average. In this example scenario, sales leaders might see sales gains of well over five percent.

Today's printing firms can be profiled in terms of their likelihood of surviving the competitive race for the future. Using Printing Industries of America's *Ratios*<sup>9</sup> data on printers' financial performance four distinct competitive classifications can be defined:

#### ✦ **SuperPrinters**

Printers in the top quartile of profitability that typically earn above six to seven percent on sales. These printers will survive and thrive.

#### ✦ **Survivors**

Printers in the third quartile of profitability that are making a profit, perhaps two to five percent on sales. These printers are not in the profit-leading group, but will likely survive.

#### ✦ **At-risk printers**

Printers in the second quartile of profitability that are barely breaking even or are losing money and have a high risk of going out of business.

#### ✦ **Expendables**

Printers in the bottom quartile of profitability that are experiencing losses on a continuing basis and will most likely go out of business.

## 4.6 Looking Forward — Competitive Strategies and Tactics

To take advantage of the opportunities discussed above, printers must make choices regarding strategies, business models, tactics and other decisions.

### Strategies and Business Models to Improve Performance

Two key strategy choices — specialization and diversification — improve profitability (as outlined in Section 3.4). Printing firms can specialize by focusing on a particular print segment (e.g., labels/wrappers), customer segment or vertical market (e.g., hotels/resorts), or even a hybrid of these targeting a particular customer segment with a specific product offering. Alternatively, firms can diversify by offering value-added services ancillary in addition to the printed product in order to increase profit. Integrating these two strategic options into a specialized diversification strategy enhances profitability by enabling printers to decrease costs and increase selling prices.

Another strategic issue involves how printers select and design business models for their organizations (niche printer specializing in a market segment, general commercial printer and communications provider offering a complete set of value-added services).

<sup>9</sup> *Printing Industries of America Ratios* are the industry's benchmarking tool for measuring individual company financial performance against industry averages and profit leaders

## Aligning Business and Sales Models

A key step for printers in implementing a successful business model is to align sales models with business models. A printer's organizational and operating structure is closely tied to the types of products and services sold — and misalignment can affect success.

Traditionally, general commercial printers have successfully employed the standard sales force model, as it aligns well with selling longer-run single print jobs. In contrast, other sales models are more appropriate for different business models. Shorter-run digital-based jobs are better aligned with a web-based sales model; in a similar manner, product and service niche providers and marketing services provider printers are better served by a solutions selling sales model.

As printers gravitate to more sophisticated business models, they must also shift to implement appropriate and consistent sales models. This usually means an entirely new sales compensation system based on different incentives and training — and perhaps even a new sales force.

## Multi-process and Hybrid Advantages

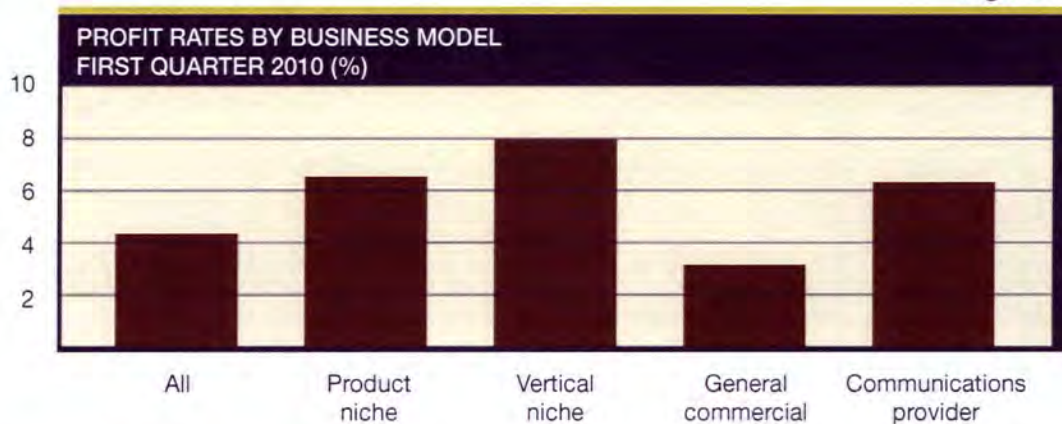
A multi-process capability — offering digital toner-based printing as well as sheetfed printing — offers a distinct sales advantage. Sales leaders (printers in the top quartile of sales growth) note a much larger proportion of their sales as coming from combination digital and sheetfed jobs, compared to all printers and sales laggards (printers in the bottom quartile of sales growth).

Another competitive advantage that printers can achieve through business model design is the hybrid advantage. Printers with business models that combine multiple printing processes (specifically lithographic printing and digital printing — toner and inkjet — plus mailing services) have demonstrated a sales advantage over single-process printers that do not offer mailing services.

## Profit Impacts

Business model choice can enhance profitability. General commercial printers are less profitable than other printers, while the most profitable printers are vertical niche printers, followed by product niche printers and communications providers (Figure 10). These latter three strategic choices are approximately twice as profitable as general commercial printers.

Figure 10



## Key Practices of SuperPrinters

Printers in the top quartile of profitability — superprinters — employ various tactics that improve their bottom line. In brief, these practices include:

### ⊕ Striving for Manufacturing Efficiency

Superprinters produce more efficiently. Typically, they are approximately three percent more efficient than other printers in producing the actual printed product, and this affects the bottom line. Sources of manufacturing efficiency include using appropriate technology, placing an emphasis on workflow efficiency, reducing production headcounts to right-size operations to seasonal sales patterns, and benchmarking against industry leaders.

### ✦ **Enforcing Support Efficiency**

Superprinters are also more efficient in support activities — factory, administrative and selling support. The difference here is even more significant than in manufacturing efficiency: they are 12 percent more efficient in this area. Again, sources of this efficiency include using technology, reducing support headcounts to right-size the organization, and benchmarking.

### ✦ **Being a Learning Organization**

Superprinters spend more than other printers in only one area: education and training. They spend more than twice the percentage of payroll on training and education. Further, they provide training and education to all types of employees — production, technical, administrative, sales and management.

### ✦ **Sharing the Wealth**

They are more likely to offer bonuses and profit-sharing programs. And, profit leaders are more likely to include all types of employees in these programs.

### ✦ **Moving to Ancillary Services**

An emerging key to profitability is the provision of ancillary services. Ancillary services account for approximately 10 percent of total print revenues and are projected to account for a larger share in the coming years. Some estimates claim that for every marketing dollar spent on print, another five dollars are devoted to ancillary services. Printers looking for growth are increasingly focusing on these ancillary services. By combining ancillary services with a specialized print focus, superprinters have a strategy of a “specialized yet diversified” value provider.

## **Pricing Power**

For some time, the printing industry has seen a disparity between two competing views of pricing. In summary, these views are:

### ✦ **Demand or market-based pricing**

In this view, demand is the focus of pricing and printers feel prices should be set at “what the market will bear.”

### ✦ **Cost-based pricing**

This view of pricing holds that printers need to price from a “cost plus” approach. Key to this approach is an accurate assessment of true cost, which is then combined with a reasonable mark-up for profits.

Which approach is best? The answer is “both.” The two approaches should actually be combined to attain effective pricing. More importantly, to increase profits, printers must practice power pricing. Many firms compete on price. Profit leading firms compete for price. They specifically seek to augment their business volume by developing the ability to charge higher prices than their competitors, with power pricing.

Shown in other published work by Printing Industries of America, a one-percent increase in price outscores similar percentage changes in sales or cost in terms of profit impact. In fact, the impact on profit of a one-percent increase in price is approximately three times greater than cutting costs of materials or increasing sales.

## 5. Final Remarks

While Canadian printers face numerous challenges in both the short and long term, significant opportunities do exist. Those Canadian printers that understand the challenges and make the difficult choices of strategy selection and tactical implementation can position their firms to take advantage of the coming opportunities.

Canadian printers are extremely varied in terms of size, printing processes and technologies, service offerings and business models. The North American printing industry does not have a “one size fits all” approach to success; however, distinct strategies and tactics can be deliberately selected that are most likely to correlate with future strength and survival.

At the core of print’s survival lies the functionality of print:

- ⊕ Print intended to inform or communicate factual and editorial information;
- ⊕ Print providing product logistics to manufactured products; and
- ⊕ Print intended to market, promote or sell various products or services.

Canadian printers need to evaluate their product and service offerings in light of these functions and determine their immediate and future market opportunities and threats.

The ongoing restructuring of printing firms and plants is another key trend affecting printers. As printing firms go out of business due to liquidations, mergers, consolidations and bankruptcies, the market is shared by a dwindling number of firms. Thus, even in periods of declining total industry sales, the industry may see increased sales and profits.

Within this dynamic macro environment, printers must make key strategic decisions to improve performance and profitability, and to increase their chances for future survival. Firms can specialize by focusing on a particular market segment. Alternatively, firms can diversify by offering additional value-added services ancillary to the printed product in order to increase profit.

Printers must also adopt appropriate business models for their organizations. The most common business models are as follows:

- ⊕ Niche printer specializing in a narrow print product segment such as labels/wrappers;
- ⊕ Niche printer specializing in a narrow vertical market segment or specific industry such as travel and entertainment; and
- ⊕ Communications provider offering a complete set of value added services including printing, database management, fulfillment and mailing.

The appropriate organizational and operating structure to successfully sell print products and services is very much tied to the types of products and services sold, and to the business model employed. Superprinters<sup>10</sup> employ various tactics that improve their bottom line. These include: efficient production and administrative support processes, focus on education and training, offer bonuses and profit-sharing programs, and provide ancillary services.

*Canadian printers that focus on these strategies and tactics should be able to manage a successful transition to the future.*

<sup>10</sup> Printers in the top quartile of profitability

## Annex: Tables

### 1. Business Models

#### Canada vs. U.S. Print Markets

Table 1A

BUSINESS MODEL THAT BEST DESCRIBES CURRENT STRATEGY (2011)		
BUSINESS STRATEGY	RESPONDENTS (%)	
	CANADA	UNITED STATES
Niche printer by product segment (including book, magazine, newspaper, or general commercial) focusing solely on printed products	2.8	7.1
Niche printer by product segment focusing on printed products and value-added ancillary services that are in line with the printed product offerings	17.9	10.7
Niche printer by narrow vertical market segment/industry (gaming industry, hotels, advertising agencies, or auto industry) focused solely on printed products	2.8	5.3
Niche printer by narrow vertical market segment/industry focused on printed products and value-added ancillary services that are in line with the printed product offerings	8.5	6.5
General commercial printer offering a wide variety of printed products and services (includes advertising printing, business cards, stationery, catalogs, and directories) to a general customer base	42.5	41.4
Communications provider offering a complete set of value-added ancillary services including printing, database management, fulfillment, and mailing	16.0	17.8
Other	9.4	11.2

### 2. Non-Print Ancillary Value-Added Services

#### Canada vs. U.S. Print Markets

Table 2A

NON-PRINT ANCILLARY VALUE-ADDED SERVICES THAT PRINTERS CURRENTLY OFFER AND EXPECTED FUTURE INVESTMENTS				
ANCILLARY SERVICE	RESPONDENTS (%)			
	CANADA		UNITED STATES	
	CURRENTLY OFFER	PLAN TO INVEST IN THE NEXT 24 MONTHS	CURRENTLY OFFER	PLAN TO INVEST IN THE NEXT 24 MONTHS
Digital studio photography	9.4	2.8	3.5	2.3
Professional creative design	50.9	14.2	38.7	9.8
Digital database management	13.2	10.4	19.1	9.2
Digital asset management	7.5	8.5	9.2	8.1
Digital database archiving	7.5	4.7	8.1	7.5
Mailing management	40.6	17.0	47.4	13.3
Kit fulfillment	31.1	3.8	44.5	6.4
Logistics management	18.9	10.4	11.0	2.9
CD/DVD services	17.0	0.9	14.5	2.3
Cross-media marketing services or support	7.5	11.3	15.6	9.2
Web-to-print e-commerce style storefront (print procurement)	17.0	18.9	15.6	15.6
Web-to-print e-commerce branded storefront (marketing/ brand management/document management)	11.3	13.2	11.0	13.3
Not applicable (do not offer any ancillary services)	13.2	38.7	11.0	43.9
Other	15.1	9.4	17.9	8.7

Table 2B

LENGTH OF TIME NON-PRINT ANCILLARY VALUE-ADDED SERVICES OFFERED IN CANADA				
ANCILLARY SERVICE	RESPONDENTS (%)			
	LESS THAN 1 YEAR	1 TO 2 YEARS	2 TO 5 YEARS	5 PLUS YEARS
Digital studio photography	30.0	10.0	20.0	40.0
Professional creative design	3.8	7.5	17.0	71.7
Digital database management	21.4	7.1	42.9	28.6
Digital asset management	12.5	25.0	25.0	37.5
Digital database archiving	12.5	12.5	25.0	50.0
Mailing management	9.3	20.9	32.6	37.2
Kit fulfillment	6.1	24.2	18.2	51.5
Logistics management	27.8	16.7	16.7	38.9
CD/DVD services	5.3	10.5	42.1	42.1
Cross-media marketing services or support	50.0	25.0	25.0	-
Web-to-print e-commerce style storefront	16.7	33.3	11.1	38.9
Web-to-print e-commerce branded storefront	15.4	38.5	23.1	23.1

Table 2C

LENGTH OF TIME NON-PRINT ANCILLARY VALUE-ADDED SERVICES OFFERED IN THE U.S.				
ANCILLARY SERVICE	RESPONDENTS (%)			
	LESS THAN 1 YEAR	1 TO 2 YEARS	2 TO 5 YEARS	5 PLUS YEARS
Digital studio photography	-	33.3	16.7	50.0
Professional creative design	3.0	12.1	18.2	66.7
Digital database management	9.1	24.2	27.3	39.4
Digital asset management	12.5	18.8	31.3	37.5
Digital database archiving	7.1	21.4	14.3	57.1
Mailing management	1.2	8.5	31.7	58.5
Kit fulfillment	1.3	16.9	27.3	54.5
Logistics management	16.7	11.1	22.2	50.0
CD/DVD services	-	12.5	45.8	41.7
Cross-media marketing services or support	29.6	33.3	37.0	-
Web-to-print e-commerce style storefront	11.1	40.7	33.3	14.8
Web-to-print e-commerce branded storefront	5.9	23.5	64.7	5.9

Table 2D

NON-PRINT ANCILLARY VALUE-ADDED SERVICES EFFECT ON SALES IN CANADA						
ANCILLARY SERVICE	RESPONDENTS (%)					
	INCREASE MORE THAN EXPECTED	AS EXPECTED	LOWER THAN EXPECTED	TOO SOON TO TELL	DO NOT TRACK	NOT PERMITTED TO PROVIDE
Digital studio photography	10.0	60.0	10.0	20.0	-	-
Professional creative design	9.3	53.7	16.7	3.7	14.8	1.9
Digital database management	-	35.7	21.4	14.3	28.6	-
Digital asset management	12.5	62.5	12.5	12.5	-	-
Digital database archiving	-	25.0	50.0	12.5	12.5	-
Mailing management	15.9	47.7	15.9	11.4	6.8	2.3
Kit fulfillment	15.2	60.6	6.1	9.1	9.1	-
Logistics management	10.5	57.9	5.3	21.1	-	5.3
CD/DVD services	10.5	57.9	15.8	5.3	10.5	-
Cross-media marketing services or support	12.5	12.5	37.5	37.5	-	-

Table 2E

NON-PRINT ANCILLARY VALUE-ADDED SERVICES EFFECT ON SALES IN THE U.S.						
ANCILLARY SERVICE	RESPONDENTS (%)					
	INCREASE MORE THAN EXPECTED	AS EXPECTED	LOWER THAN EXPECTED	TOO SOON TO TELL	DO NOT TRACK	NOT PERMITTED TO PROVIDE
Digital studio photography	-	83.3	16.7	-	-	-
Professional creative design	4.5	59.7	16.4	7.5	11.9	-
Digital database management	6.1	42.4	27.3	12.1	3.0	9.1
Digital asset management	12.5	31.3	43.8	12.5	-	-
Digital database archiving	14.3	35.7	14.3	14.3	14.3	7.1
Mailing management	11.1	67.9	11.1	2.5	7.4	-
Kit fulfillment	13.2	52.6	17.1	10.5	6.6	-
Logistics management	10.5	47.4	15.8	15.8	10.5	-
CD/DVD services	8.3	45.8	20.8	12.5	12.5	-
Cross-media marketing services or support	7.4	33.3	29.6	29.6	-	-

Table 2F

NON-PRINT ANCILLARY VALUE-ADDED SERVICES EFFECT ON PROFITABILITY IN CANADA						
ANCILLARY SERVICE	RESPONDENTS (%)					
	INCREASE MORE THAN EXPECTED	AS EXPECTED	LOWER THAN EXPECTED	TOO SOON TO TELL	DO NOT TRACK	NOT PERMITTED TO PROVIDE
Digital studio photography	10.0	50.0	10.0	30.0	-	-
Professional creative design	11.1	33.3	20.4	7.4	27.8	-
Digital database management	-	28.6	21.4	14.3	35.7	-
Digital asset management	-	62.5	25.0	12.5	-	-
Digital database archiving	-	25.0	50.0	12.5	12.5	-
Mailing management	13.6	36.4	15.9	18.2	15.9	-
Kit fulfillment	15.2	48.5	12.1	9.1	15.2	-
Logistics management	10.5	52.6	10.5	21.1	-	5.3
CD/DVD services	10.5	36.8	21.1	5.3	26.3	-
Cross-media marketing services or support	-	25.0	25.0	50.0	-	-
Web-to-print e-commerce style storefront	11.1	55.6	16.7	16.7	-	-
Web-to-print e-commerce branded storefront	23.1	46.2	23.1	7.7	-	-

Table 2G

NON-PRINT ANCILLARY VALUE-ADDED SERVICES EFFECT ON PROFITABILITY IN THE U.S.						
ANCILLARY SERVICE	RESPONDENTS (%)					
	INCREASE MORE THAN EXPECTED	AS EXPECTED	LOWER THAN EXPECTED	TOO SOON TO TELL	DO NOT TRACK	NOT PERMITTED TO PROVIDE
Digital studio photography	-	33.3	33.3	16.7	-	16.7
Professional creative design	4.5	29.9	23.9	17.9	22.4	1.5
Digital database management	3.0	39.4	18.2	21.2	15.2	3.0
Digital asset management	13.3	40.0	13.3	20.0	13.3	-
Digital database archiving	14.3	21.4	21.4	21.4	14.3	7.1
Mailing management	7.8	55.8	14.3	11.7	9.1	1.3
Kit fulfillment	10.7	40.0	24.0	13.3	10.7	1.3
Logistics management	5.3	31.6	15.8	36.8	10.5	-
CD/DVD services	4.5	27.3	36.4	4.5	27.3	-
Cross-media marketing services or support	11.5	23.1	19.2	38.5	7.7	-
Web-to-print e-commerce style storefront	7.7	46.2	23.1	15.4	7.7	-
Web-to-print e-commerce branded storefront	15.8	36.8	21.1	15.8	10.5	-

Table 2H

SHARE OF SALES OF ANCILLARY SERVICES						
ANCILLARY SERVICE	CANADA			UNITED STATES		
	AS A SHARE OF YOUR BUSINESS (%)			AS A SHARE OF YOUR BUSINESS (%)		
	INCREASING	DECREASING	NO CHANGE	INCREASING	DECREASING	NO CHANGE
Cross-media marketing services or support	75.0	-	25.0	59.3	7.4	33.3
Kit fulfillment	62.5	6.3	31.3	45.3	9.3	45.3
Mailing management	61.4	9.1	29.5	63.8	11.3	25.0
Digital studio photography	60.0	10.0	30.0	-	50.0	50.0
Logistics management	57.9	-	42.1	57.9	10.5	31.6
Digital database management	38.5	23.1	38.5	60.6	6.1	33.3
Professional creative design	37.7	22.6	39.6	41.8	16.4	41.8
CD/DVD services	36.8	15.8	47.4	25.0	20.8	54.2
Digital asset management	28.6	42.9	28.6	43.8	12.5	43.8
Digital database archiving	12.5	37.5	50.0	50.0	7.1	42.9

### 3. Ranking of Investment Priorities Canada vs. U.S. Print Markets

Table 3A

INVESTMENT PRIORITIES									
RANKING	RANKING OF INVESTMENT PRIORITIES								
	CATEGORIES								
	RESPONDENTS (%)								
	A	B	C	D	E	F	G	H	I
1 (Most Important)	29.2	9.4	4.7	10.4	9.4	4.7	16.0	7.5	8.5
2	8.5	18.9	8.5	13.2	7.5	13.2	5.7	12.3	12.3
3	9.4	10.4	13.2	19.8	2.8	14.2	10.4	10.4	9.4
4	7.5	10.4	10.4	16.0	6.6	17.0	11.3	11.3	9.4
5	14.2	14.2	10.4	10.4	10.4	9.4	15.1	11.3	4.7
6	8.5	3.8	15.1	8.5	10.4	14.2	10.4	17.9	11.3
7	8.5	8.5	9.4	16.0	7.5	15.1	13.2	11.3	10.4
8	5.7	11.3	16.0	3.8	12.3	8.5	11.3	15.1	16.0
9 (Least Important)	8.5	13.2	12.3	1.9	33.0	3.8	6.6	2.8	17.9

CANADA									
RANKING	CATEGORIES								
	RESPONDENTS (%)								
	A	B	C	D	E	F	G	H	I
1 (Most Important)	29.2	9.4	4.7	10.4	9.4	4.7	16.0	7.5	8.5
2	8.5	18.9	8.5	13.2	7.5	13.2	5.7	12.3	12.3
3	9.4	10.4	13.2	19.8	2.8	14.2	10.4	10.4	9.4
4	7.5	10.4	10.4	16.0	6.6	17.0	11.3	11.3	9.4
5	14.2	14.2	10.4	10.4	10.4	9.4	15.1	11.3	4.7
6	8.5	3.8	15.1	8.5	10.4	14.2	10.4	17.9	11.3
7	8.5	8.5	9.4	16.0	7.5	15.1	13.2	11.3	10.4
8	5.7	11.3	16.0	3.8	12.3	8.5	11.3	15.1	16.0
9 (Least Important)	8.5	13.2	12.3	1.9	33.0	3.8	6.6	2.8	17.9

UNITED STATES									
RANKING	CATEGORIES								
	RESPONDENTS (%)								
	A	B	C	D	E	F	G	H	I
1 (Most Important)	28.9	9.2	2.6	14.5	6.6	4.6	16.4	2.6	13.8
2	17.1	11.8	8.6	14.5	5.9	7.2	13.2	11.8	9.2
3	4.6	14.5	10.5	14.5	3.9	9.9	15.8	14.5	11.2
4	10.5	9.2	6.6	15.1	6.6	17.8	11.8	11.8	13.8
5	8.6	11.2	13.2	11.2	5.9	13.8	17.1	13.2	5.9
6	9.2	5.3	13.8	13.2	7.9	11.2	7.9	22.4	9.2
7	5.3	18.4	12.5	9.2	9.9	17.1	9.2	13.8	3.9
8	3.9	14.5	23.7	4.6	16.4	11.2	5.3	6.6	13.8
9 (Least Important)	11.8	5.9	8.6	3.3	36.8	7.2	3.3	3.3	19.1

#### 4. Process Automation Canada vs. U.S. Print Markets

Table 4A

CAPTURING COSTING DATA DIRECTLY FROM DEVICES ON THE SHOP FLOOR TO A PRINT MIS OR OTHER CENTRAL DATA STORE		
CAPTURING DATA	RESPONDENTS (%)	
	CANADA	UNITED STATES
Yes	51.4	47.9
Not Sure	5.7	6.8
No	42.9	45.2

Table 4B

JOB MESSAGING FORMAT USED BY ANY OF THE AUTOMATED SYSTEMS		
USE OF JOB MESSAGING FORMAT	RESPONDENTS (%)	
	CANADA	UNITED STATES
Yes	8.6	16.9
Not Sure	31.4	26.8
No	60.0	56.3

## 5. Business Conditions

Table 5A

BUSINESS CONDITIONS IN PERCENTAGE CANADA VS. U.S. PRINT MARKETS				
INDICATOR	CANADA		UNITED STATES	
	(%)		(%)	
	ALL RESPONDENTS	WEIGHTED AVERAGE	ALL RESPONDENTS	WEIGHTED AVERAGE
<b>Sales:</b> % change (2010 vs 2009)	4.4	3.2	1.9	5.0
<b>Sales:</b> % change (2006 vs 2005)	9.3	6.3	3.5	3.3
<b>Sales Expectations:</b> % change 2011 vs 2010	7.2	5.4	5.5	4.9
<b>Profitability:</b> Profit as a % of sales (2010)	9.3	8.2	4.8	4.1
<b>Profitability:</b> Profit as a % of sales (2006)	10.1	9.3	7.2	7.4
<b>Profitability in Q4 2010 vs Q3 2010:</b>				
Increasing	37.6		43.5	
Decreasing	23.8		37.0	
No Change	38.6		19.5	
<b>Index</b>	<b>13.9</b>		<b>6.5</b>	
<b>Printing Prices:</b> % change January 2011 vs January 2010	-1.4	-2.5	-0.7	-0.9
<b>Wages/Salaries:</b> % change in 2010 vs 2009	2.9	2.2	-0.3	0.5
Expectations for second quarter 2011	1.1	0.9	1.0	1.1
<b>Paper Prices:</b> % change in 2010 vs 2009	3.5	2.4	4.4	5.3
Expectations for second quarter 2011	2.2	1.5	4.0	4.2
<b>Employee Health Benefits:</b> % change January 2011 to January 2010	1.2	1.5	8.6	7.4
Expectations for second quarter 2011	0.6	0.9	6.7	5.7
<b>Energy/Utilities:</b> % change in 2010 vs 2009	6.0	5.9	3.9	2.2
Expectations for second quarter 2011	4.0	2.2	3.3	2.9
<b>Employment:</b> % change in employment				
<b>From Q3 2010 to Q4 2010 % of respondents reporting</b>				
Increase more than 10%	5.8		5.4	
Increase 5 to 10%	1.0		7.8	
Increase less than 5%	6.8		14.4	
No Change	67.0		53.9	
Decrease less than 5%	7.8		10.8	
Decrease 5 to 10%	2.9		4.2	
Decrease more than 10%	8.7		3.6	
<b>Index</b>	<b>-5.8</b>		<b>9.0</b>	
<b>Expectations for 2011</b>				
Increase more than 10%	8.7		3.6	
Increase 5 to 10%	9.7		11.4	
Increase less than 5%	17.5		28.1	
No Change	51.5		41.3	
Decrease less than 5%	8.7		7.8	
Decrease 5 to 10%	2.9		3.0	
Decrease more than 10%	1.0		4.8	
<b>Index</b>	<b>23.3</b>		<b>27.5</b>	

Table 5B

CANADIAN BUSINESS CONDITIONS BY SIZE (NUMBER OF EMPLOYEES) IN PERCENTAGE						
BUSINESS CONDITIONS	ALL RESPONDENTS (%)	NUMBER OF EMPLOYEES (%)				WEIGHTED AVERAGE (%)
		1-9	10-19	20-60	60+	
<b>Sales: % change (2010 vs 2009)</b>	4.4	3.9	8.5	1.8	3.0	3.2
<b>Sales: % change (2006 vs 2005)</b>	9.3	11.3	13.8	3.8	5.8	6.3
<b>Sales Expectations: % change 2011 vs 2010</b>	7.2	9.1	7.1	5.8	4.9	5.4
<b>Profitability: Profit as a % of sales (2010)</b>	9.3	12.1	7.8	6.5	8.3	8.2
<b>Profitability: Profit as a % of sales (2006)</b>	10.1	11.8	9.0	9.1	9.2	9.3
<b>Profitability in fourth quarter 2010 vs third quarter 2010</b>						
Increasing	37.6	25.6	33.3	50.0	60.0	
Decreasing	23.8	30.2	23.8	12.5	20.0	
No Change	38.6	44.2	42.9	37.5	20.0	
Index	13.9	-4.7	9.5	37.5	40.0	
<b>Printing Prices: % change January 2011 vs January 2010</b>	-1.4	-0.7	-1.2	-1.9	-2.9	-2.5
<b>Wages/Salaries: % change in 2010 vs 2009</b>	2.9	3.4	2.9	3.5	1.8	2.2
Expected 2 <sup>nd</sup> quarter of 2011	1.1	1.2	0.1	2.8	0.6	0.9
<b>Paper Prices: % change in 2010 vs 2009</b>	3.5	4.1	4.7	2.2	2.2	2.4
Expected 2 <sup>nd</sup> quarter of 2011	2.2	2.6	2.1	1.9	1.2	1.5
<b>Employee Health Benefits: % change January 2011 to January 2010</b>	1.2	1.4	2.0	-1.1	2.0	1.5
Expected 2 <sup>nd</sup> quarter of 2011	0.6	0.3	0.3	1.5	0.8	0.9
<b>Energy/Utilities: % change in 2010 vs 2009</b>	6.0	6.7	6.0	5.1	5.9	5.9
Expected 2 <sup>nd</sup> quarter of 2011	4.0	6.2	3.7	2.4	1.7	2.2
<b>Employment: % change in employment</b>						<b>Weighted Index</b>
<b>From 3Q 2010 to 4Q 2010 % of respondents reporting</b>						
Increase more than 10%	5.8	7.0	5.0	5.9	4.5	
Increase 5 to 10%	1.0	2.3	-	-	-	
Increase less than 5%	6.8	-	-	11.8	22.7	
No Change	67.0	76.7	70.0	41.2	63.6	
Decrease less than 5%	7.8	-	10.0	23.5	9.1	
Decrease 5 to 10%	2.9	2.3	-	11.8	-	
Decrease more than 10%	8.7	11.6	15.0	5.9	-	
Index	-5.8	-4.7	-20.0	-23.5	18.2	9.0
<b>Expectations for 2011</b>						
Increase more than 10%	8.7	16.3	5.0	-	4.5	
Increase 5 to 10%	9.7	4.7	5.0	17.6	18.2	
Increase less than 5%	17.5	7.0	20.0	23.5	31.8	
No Change	51.5	67.4	50.0	41.2	27.3	
Decrease less than 5%	8.7	-	10.0	17.6	18.2	
Decrease 5 to 10%	2.9	2.3	10.0	-	-	
Decrease more than 10%	1.0	2.3	-	-	-	
Index	23.3	23.3	10.0	23.5	36.4	32.3

Table 5C

CAPITAL SPENDING IN PERCENTAGE — CANADA VS. U.S. PRINT MARKETS				
CAPITAL SPENDING	CHANGE IN 2009-2010 (%)		EXPECTED CHANGE IN 2010-2011 (%)	
	ALL RESPONDENTS		ALL RESPONDENTS	
	CANADA	UNITED STATES	CANADA	UNITED STATES
Increase more than 10%	15.8	16.6	10.1	14.8
Increase 5 to 10%	10.9	7.1	10.1	10.7
Increase less than 5%	6.9	13.0	17.2	29.0
No Change	49.5	42.6	46.5	32.5
Decrease less than 5%	5.0	4.7	7.1	4.7
Decrease 5 to 10%	3.0	3.0	3.0	3.0
Decrease more than 10%	8.9	13.0	6.1	5.3
<b>Index</b>	<b>16.8</b>	<b>16.0</b>	<b>21.2</b>	<b>41.4</b>

Table 5D

CANADIAN CAPITAL SPENDING AND CREDIT CONDITIONS BY SIZE (NUMBER OF EMPLOYEES)						
INDICATOR	ALL RESPONDENTS (%)	NUMBER OF EMPLOYEES (%)				WEIGHTED INDEX (%)
		1-9	10-19	20-60	60+	
<b>Capital Spending: % change in capital spending</b>						
<b>Compared to previous year (2010 vs 2009)</b>						
Increase more than 10%	15.8	9.5	20.0	17.6	23.8	
Increase 5 to 10%	10.9	14.3	5.0	11.8	9.5	
Increase less than 5%	6.9	7.1	5.0	5.9	9.5	
No Change	49.5	54.8	45.0	41.2	47.6	
Decrease less than 5%	5.0	2.4	10.0	5.9	4.8	
Decrease 5 to 10%	3.0	2.4	5.0	5.9	-	
Decrease more than 10%	8.9	9.5	10.0	11.8	4.8	
<b>Index</b>	<b>16.8</b>	<b>16.7</b>	<b>5.0</b>	<b>11.8</b>	<b>33.3</b>	<b>27.8</b>
<b>Expectations for future capital spending 2011 vs 2010</b>						
Increase more than 10%	10.1	4.9	15.8	5.9	19.0	
Increase 5 to 10%	10.1	9.8	-	17.6	14.3	
Increase less than 5%	17.2	22.0	15.8	11.8	14.3	
No Change	46.5	51.2	47.4	47.1	33.3	
Decrease less than 5%	7.1	2.4	5.3	5.9	19.0	
Decrease 5 to 10%	3.0	4.9	-	5.9	-	
Decrease more than 10%	6.1	4.9	15.8	5.9	-	
<b>Index</b>	<b>21.2</b>	<b>24.4</b>	<b>10.5</b>	<b>17.6</b>	<b>28.6</b>	<b>25.8</b>
<b>Credit Conditions: Impact of current credit conditions</b>						
Significant negative impact	7.9	9.3	5.3	17.6	-	
Moderate negative impact	21.8	20.9	31.6	23.5	14.3	
Neither positive or negative impact	62.4	65.1	47.4	52.9	81.0	
Moderate positive impact	6.9	4.7	15.8	-	4.8	
Significant positive impact	1.0	-	-	5.9	-	
<b>Index</b>	<b>-21.8</b>	<b>-25.6</b>	<b>-21.1</b>	<b>-35.3</b>	<b>-9.5</b>	<b>-14.7</b>