The Chinese Printing Market: The Next Big Opportunity for Digital Printing & Workflow?
Introduction

The Chinese economy continues to show high growth rates. Real GDP growth in China for 2004 was estimated at 9.1%. The printing industry in China is growing at a much higher rate than more mature economies such as North America, Japan, or Western Europe. Estimates of growth in printing revenue vary, but they averaged 19% per year between 1999 and 2004.

This growth in the Chinese market presents significant opportunities and threats. For equipment and supplies vendors, this growth represents an opportunity for incremental growth. For print service providers, it represents new competition and new opportunities for partnerships.

InfoTrends has performed some initial market research in China and is now launching what is perhaps the most comprehensive study of the Chinese production printing market and the opportunity for digital printing technology ever undertaken. In addition to evaluating the current state of the Chinese market, this landmark study will provide a forecast through 2010 that is consistent with our existing market forecasts. This study will enable subscribers to gain a solid understanding of China’s market structure and opportunity. It will enable you to make more informed decisions about China in the years ahead.

This study examines the full range of the production printing opportunities in China. InfoTrends’ definition of a production printing environment is one where there is a dedicated staff that primarily prints the work of others. This includes the commercial printing market, from small quick printers to large commercial printers. It includes digital printing, copy shops, quick printers, in-plant operations, and specialists such as book or forms printers.

This comprehensive study will include data from production printers in China that will capture current state and future plans. The study will provide qualitative data on the growth of the market, brand preferences, and purchase intentions for a variety of equipment and services that are outlined below.

The study will include surveys with over 400 production print providers, who will complete an extensive survey. The results will provide insight into the speed and nature of the migration to modern printing equipment and integrated workflows, the adoption of CTP, and the opportunity for digital printing. It will provide a forecast for digital equipment, software and professional services, and market sizing data that is consistent with existing InfoTrends forecasting.

Project Objectives

This study is a continuation of our coverage of the global production printing market and our work in China. The market opportunity in China is broader than just the “digital printing” market, as the industry structure and requirements of the Chinese market require greater quantification to better understand the market opportunities in China.

InfoTrends’ study will address the following questions:

- What is the structure of China’s Printing Industry? How does it compare to that of other geographies?
- What is the current state and future potential for digital printing equipment in China?
- How have print providers performed since 1999? What are projections through 2010?
- What services do they offer today and what are their plans for the next few years?
- What are the existing and future revenue sources?

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1 CIA World Fact Book
• Who do print providers serve? What domestic and international clients do they have?
• What existing equipment do they own? What are future equipment acquisition plans for digital equipment, software, workflow, computer to plate, presses, and finishing?
• What is the appropriate value proposition for digital printing processes in China?
• What can accelerate the adoption of digital printing technology in China?
• What workflow infrastructure do print providers currently have and what are their future plans?
• How much do they value labor savings improvements?
• How important are industry standards to these service providers?
• What are the business ownership patterns? How will these change?
• How much do these firms buy from others in the trade?
• Who do they buy from? What are their preferences for domestic brands?
• What trends do they see in procurement of paper? Who specifies paper? What grades do they buy?
• By segment, how is a typical plant equipped, and what are the primary brands they have installed?
• Who are the preferred vendors for prepress, printing, and workflow products?

The Chinese Production Printing Opportunity

InfoTrends uses a consistent methodology in tracking establishments. To remain consistent with other standardized market data sources, our definitions of the industries and types of establishments are based almost directly on the U.S. Department of Commerce industry classification standards. The goal is to align the Chinese printing industry structure with existing classifications utilizing The North American Industrial Classification System definitions.

An establishment is a single physical location at which business is conducted. It is not necessarily identical to a company or an enterprise, which may consist of one or more establishments. This definition contrasts with firm or company, which define all establishments at all locations under common control.

Our definition of a production printer is an establishment with dedicated staff that is primarily engaged in providing printing services for others. This definition includes a wide range of printers. We will examine and classify a broad range of segments, including:
• Litho commercial printers
• Copy centers/quick printers
• Digital print specialists
• In-plant printers including data centers
• Business forms printers
• Book printers
• Flexographic printers
• Gravure printers
• Prepress services
• Packaging printers
• Other commercial printers
This study will reconcile Chinese data in terms of the number of establishments, type of print provider, number of employees per establishment, and total revenues. Very little data is currently available to accurately evaluate existing claims of around 95,000 printing companies producing $34 billion (U.S.) in revenue in China.

**Building on Market Data**

This study builds on previous InfoTrends market research reports and research conducted by others who cover the Chinese market, including:

- Chinese Government Statistics
- KeyinPrint Media China (An InfoTrends Partner)
- The Printing Technology Association of China

InfoTrends will utilize the data gathered in previous China studies led by our Associate Consultant Chen Dali as well as our ongoing coverage of the printing market to develop trending data as appropriate.

**Providing Detailed Information**

Detailed information will be provided by region within China. InfoTrends has used the following regional segmentation:

- Northern region: Beijing city, Tianjin city, HeBei province, ShanXi province, Inner Mongolia autonomous region, Heilongjiang province, Jilin province, and Liaoning province
- Southeastern region: Shanghai city, Jiangsu province, Zhejiang province, Anhui province, Fujian province, Jiangxi province, and Shandong province
- Southern region: Guangdong province, Guangxi autonomous region, and Hainan province
- Central region: Henan province, Hubei province, and Hunan province
- Western region: Shanxi province, Gansu province, Qinghai province, Ningxia autonomous region, Xinjiang autonomous region, Chongqing city, Sichuan province, Yunnan province, Guizhou province, and Tibet autonomous region

Financial data will be provided in U.S. dollars as well as Yuan.

The report will use InfoTrends’ existing equipment segmentations, including:

- Computer to plate
  - 2-up, 4-up, 8-up and over 8-up formats
- Offset Presses
  - 2-up, 4-up, 8-up and over 8-up formats
  - Sheet and web fed
- Digital Printing Equipment
  - Mid Range Black & White Cut Sheet Printers 40 – 70 ppm
  - High Speed Black & White Cut Sheet Printers 80-105 ppm
  - High Speed Black & White Cut Sheet Printers 106+ ppm
  - High Speed Black & White Roll Fed Printers 80+ ppm
Focused  Responsive  Credible  Visionary

- Segment 5 Black & White Copiers 70-90+ ppm
- Segment 6 Black & White Copiers 91+ ppm
- Color Copier/Printers up to 23 ppm
- Color Copier/Printers 24-40 ppm
- Color Copier/Printers 41-59 ppm
- Color Printers 60+ ppm
- Direct-To-Press Devices
- Digital Duplicators

• Top Print Providers

The report will contain detailed information about the top print providers in China, analyzing contact data, size, and focus.

**Who Should Subscribe?**

**Print Equipment Vendors and Suppliers**

- Digital printing solutions suppliers
- Supplies companies (including paper, ink, plate, and other graphic arts suppliers)
- Finishing and mailing equipment vendors
- Computer-to-Plate solutions providers
- Offset press equipment vendors

**Software Solutions Providers to the Graphic Arts Industry**

- Front-end software providers
- Content technologies providers
- Job submission and production tools providers
- Print and print management tools providers
- Print e-business infrastructure providers
- Variable data tools

**Commercial and Quick Printers Interested in Developing a Chinese Production Printing Strategy**

**Financial Institutions**
How This Study Can Benefit Your Organization

The study profiles the Chinese Production Printing market opportunity and evaluates current requirements and emerging trends. The results of this study provide information to help you:

• Size the production printing market now and in the future
• Size the digital printing and workflow opportunity (current market and forecast)
• Prioritize product and market opportunities
• Effectively identify opportunities in China
• Understand how the market is currently segmented and how it will likely change
• Understand the trends impacting the market
• Identify new business opportunities
• Support strategic planning for products and services
• Improve sales and marketing activities in key market segments and regions within China
• Better understand cultural differences in conducting business in China
• Understand the purchasing process and preferences of the China market
• Understand customer perceptions, brand preferences, and requirements

Critical Results of the Study

To achieve the objectives described above, InfoTrends will survey over 400 production print providers in China and provide statistically valid data on the following topics:

• Company size (revenue, employees)
• Industry focus (type of print provider)
• Print page volumes
• Business ownership
• Key financial metrics (budget, revenue, etc.)
• Equipment configuration and workflow
• Applications produced and volumes
• Work purchased from trade services
• Status of existing sales and marketing resources
• Domestic and foreign markets
• Investment plans
• Brand preferences
• Paper purchasing trends and preferences
• Page migration trends by type of print technology (i.e. digital migration)
• Importance of workflow and automation
• Importance of competition with print providers in Japan, North America, and Western Europe
A Detailed Market Forecast

Consistent with its existing forecasting methodology, InfoTrends will develop a market forecast through 2010 for digital equipment, software, and services. We will ascertain:

- The size of the Chinese print production software market for 2006 by product category
  - Production Class Creative Applications
  - Offset Workflow Management Software
  - Digital Workflow Management Software
  - Hybrid Offset/Digital Workflow Management Software
  - Print Controllers and RIPs
  - Print-Specific Business Management Applications
  - Variable Data Design/Production Applications
  - Print e-Business Software
  - Datastream Transformation Software
  - Mail Preparation Software
  - Prepress Point Solutions

- Revenue by end-user environment
  - Creative/Graphic Design/Advertising
  - Commercial & Transaction Print, including Quick printing, Digital printing, Prepress service, Data centers, In-plants
  - Publishing - Magazines, Newspapers, Books
  - Packaging
  - Other

- A forecast for year-over-year growth of this market through 2010 by product category and type
  - ASP Model
  - Maintenance Fee
  - Professional Services
  - Hardware Bundled

- Describe key trends impacting the print production software market in each category

- Present market insight on a range of print service provider topics, including brand awareness, standards implementation, and technology adoption rates.

- The size of China’s print production digital printing market for 2006 by product category as shown above

- A forecast by environment, see Appendix A for more information on Graphic Arts, Data Center, and Reprographic Environments
Market Research

In addition to a comprehensive survey of over 400 print providers, this research will include in-depth discussions with key printers, distributors, hardware & software vendors, and industry leaders to understand the dynamics of this unique market. These discussions will cover current and future plans, and include their views on critical industry topics such as competition, business ownership, and business focus.

Unlike other studies that rely on panels or specific segments of the market, this study will deploy a wide random survey of the industry that provides statistically relevant data by subsegment (i.e. establishment size, type of printer). The research will define the Chinese Production Printing opportunity and identify the trends that are impacting this market. It will develop an accurate picture of the market in the future.

Desk Research

InfoTrends will conduct an unprecedented amount of secondary research that thoroughly examines existing information on the commercial printing market. InfoTrends will utilize a wide variety of sources, including:

- Industry trade associations and trade publications
- Government Agencies
- Published industry reports
- Web sites
- Vendor white papers
- User groups
- Research reports

InfoTrends will also work with existing research partners in China to leverage our ongoing coverage of this market.

Survey of Print Providers (400)

A statistically valid survey of senior management personnel within the Chinese production printing market is critical in assessing the current state and strategic direction for these operations, including scope, size, organizational trends and strategies, and perceptions on unmet market needs and emerging opportunities. These in-depth surveys will address significant subsegments such as commercial printers, quick printers, specialty printers, and in-plant printers and will provide reliable data on these subsegments.

Personal Interviews with Industry Leaders (15)

An essential element of this project is extensive primary research that addresses issues that previous industry analysis did not cover. The primary research includes a series of in-depth personal interviews with leading printers, government officials, and the industry pundits in China. These interviews help inform the broad-based survey and also provide additional insight.
Personal Interviews with Manufacturers and Distributors (30)

An essential element of this project is extensive primary research that addresses issues that previous industry analysis did not cover. The primary research includes a series of in-depth personal interviews with leading manufacturers and distributors in China. These interviews help provide a “top down” view of the market and the forecast.

Analysis and Project Deliverables

This study will include extensive analysis of our desk research, personal interviews, and the survey data used to develop a comprehensive understanding of the opportunities and issues presented by the Chinese production printing market. The research will clearly define and detail this market, evaluating market size and potential moving forward.

Subscribers will receive a combination of reports, presentation materials, and data for senior management, product managers and planners, and sales and marketing executives. The material includes:

- An executive summary that addresses key issues, findings, and overall recommendations
- A detailed written report with a PowerPoint presentation for internal communication of the research results (includes Conclusions and Recommendations, Industry Data, and Survey Data).
- A data book of the survey research for additional analysis of key questions and market segments with extensive cross-tabulations.

Project Schedule

InfoTrends will launch this study in the second quarter of 2006 and will publish the findings in the summer of 2006.

Advantages for Early Subscribers

Early subscribers will have significant opportunities to direct the survey and cross-tabulations. They will also receive a substantial discount.

Technology, Service, and Supplies Providers - Primary business is printing equipment manufacturer, software and systems vendor, paper manufacturer, equipment and supplies distributor, or provider of facilities management/outsourcing services.

☐ Early subscriber (before 4/15/06): $16,995
☐ Subscriber (after 4/15/06): $19,850
☐ Personal presentation: $2,500 plus travel expenses at cost

Commercial Printers - Primary business is printing, these vendors do not sell hardware or software solutions to the trade.

☐ Early subscriber (before 4/15/06): $6,995
☐ Subscriber (after 4/15/06): $8,995
☐ Personal presentation: $2,500 plus travel expenses at cost
Terms and Conditions

Liability for Advice

Although reasonable efforts will be made by InfoTrends to ensure the completeness and accuracy of the information contained in written and oral reports in connection with the proposed study, no liability can be accepted by InfoTrends for the results of any actions taken by the client in connection with such information, opinions, or advice.

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Confidentiality

InfoTrends will use its best efforts to ensure that any confidential information obtained about the client and its business during the course of the proposed study is not, unless agreed otherwise in advance, disclosed to any third party without the prior written permission of the client. InfoTrends retains the right to reuse any non-proprietary information as part of its ongoing analysis of the print buyer market.

Timely Delivery

InfoTrends will take all reasonable steps to ensure that the time scales called for by the proposed study are met in accordance with the agreed schedule, but no liability can be accepted for the consequences of delays, howsoever caused.

Terms

One half of the fee is due upon initiation and the second half is due upon report delivery.
Appendix A, Details on Environments & Forecast

**Graphic Arts** Graphic arts environments are those where the primary business objective is to produce printed products. These establishments are operated on a print-for-pay basis (e.g. commercial printers, quick printers, service bureaus, or digital service providers), and also include those where printing is considered a cost center (e.g. corporate reproduction groups, in-plant print departments, or marketing communication departments). These user environments typically have dedicated, skilled operators using a variety of hardware and software tools to produce visually refined, high-resolution, formatted, completely finished documents. Today, companies in graphic arts environments dominate the print-on-demand market.

**Data Center/Information Technology** environments primarily use digital printing to support information-processing functions. These groups are also known as data centers, print centers, and MIS or IT printing departments. Also part of this group are for-profit companies like direct mail firms and “data center service bureaus,” which perform the same functions on a for-profit basis. The documents produced in these environments may include internal communications such as the printing of company reports or account summaries, and external communications such as customer invoices, statements, and letters. Such printing is often termed “mission-critical,” meaning that the company cannot function without these documents. While document appearance is important to these users, other factors most often dominate their priorities, including schedules/timeliness, security, tracking, data accuracy, and cost.

In this forecast, the Reprographics environment is segregated as a process provided by analog light-lens, standalone digital copiers, and some multifunctional copiers. These products, which can be found in print-on-demand, general office, and many other environments, have very different workflow and operating conditions compared with digital network connected print-on-demand products. Nevertheless, because the revenue and value of print produced by such products is considerable and some of this revenue is displaced by print-on-demand processes, this is an important area to include in our forecast. We project that the transfer of revenues from these products into digital print-on-demand solutions will continue throughout the forecast period due to key advantages that POD provides, including higher process productivity, lower overall costs, improved process scalability, lower waste, fewer reworks, and the ability to personalize or use variable data. Perhaps the most important distinction is that POD is more linked to the document lifecycle and provides more opportunity to add value to documents than reprographics environments that primarily only “copy” the documents they receive.

Forecast year-over-year growth of this market through 2010 by product category and type

- Placements: total machines installed of a given equipment type during a one-year period. The number includes new equipment as well as fully refurbished equipment that is sold as new.
- Installed base: total machines installed and operating in the market. The installed base is adjusted where applicable to account for machines removed or retired from the market.
- Average installed base: this provides a time-averaged figure for the number of systems actually in use during a given year. This figure is calculated by adding the installed base at the end of the current year with that at the end of the prior year, then dividing the sum by two. This figure is used to calculate total print volume and supplies consumption.
- Impressions/machine/month: the average monthly print volume (AMPV) per machine in terms of A4 equivalent impressions. Process color is counted as one impression (not four), and spot color pages are counted as one impression (not two). Black & white is counted as one impression. Two-sided black & white printing is counted as two impressions. An 11” x 17” (A3) two-sided black & white page is counted as four impressions. The monthly volume figure reported in the tables is calculated by dividing total annual impressions for the average installed base by the average installed base of machines.
Annual impressions: the total number of impressions, in billions, produced by the installed base of machines during the year. This figure takes into account the installed base for each machine type, that each machine type has different annual print volumes, that not all machines have been installed for the entire year, and that end-users take time to build their monthly volume on new machines.

Revenue All revenue figures are expressed in terms of real U.S. dollars and in Yuan

Average equipment price: the average price of machines purchased, determined by dividing the annual equipment revenues by the number of machines sold that year. All leased machines are counted as sales. The values reflect a typical configuration, and represent achieved or “street” prices. This is further discussed in each respective section.

Annual equipment revenue: the annual revenue derived from equipment sales for all products within the product category. System upgrades and add-ons are excluded.

Annual supplies revenue: the annual revenue derived from sales of consumables purchased above and beyond service contracts to operate the machines during the year. Typical supplies include toner and developer/carrier. Other items, such as photoconductors and fusing assemblies, may or may not be included in this figure, depending on whether they are typically part of the service contract or whether they are replaced by the end-user. Note: the supplies revenue DOES NOT include paper or other substrates.

Annual service and meter revenue: the total value of service, support, and meter charges (where applicable) paid by the installed base for these machines during the year. Meter or click charges are per-page fees levied by the equipment supplier as part of the service costs.

Retail Value of Print Average retail value per image: the average value for all pages produced within the product class expressed in terms of single-sided, 8½” x 11” (A4) equivalent sheets. Sheets produced in print-for-cost environments (e.g. in-plant print shops, internal corporate copy centers, or MIS print centers) are factored into the average by valuing them at a percentage of the equivalent commercial retail price. These discounted “prices” reflect the lack of profit margins that many in-plants realize relative to the retail street price in a commercial setting. Prices include printing and directly related charges, such as RIPing and basic pre-flight file inspection. Authoring, document creation, personalization, and extra charge post-press operations such as finishing, packaging, or fulfillment are not included. Retail value of print: the total value of print produced by all establishments. Data centers, in-plants, and other departments that provide support services for corporate, government, and institutions are included, factoring the value of pages as described above.

Compound Annual Growth Rate (CAGR) CAGR is the compound annual growth rate from 2003 to 2008. The values shown in the charts do not include inflation. A 3% rate of inflation over the forecast period would increase the CAGR by three percentage points.