



Inkjet Printing – Technology Landscape & Trend Analysis

Case Study

Client	End-to-end systems provider for the printing industry
Industry	Printing industry
Products	Offset printing press, and prepress and post prepress equipment

Context

- The client wanted to assess the technological landscape for inkjet printing with an aim to validate its technology roadmap and identify potential loopholes. Further, the client also wanted to gather insights on technological trends and activities of suppliers to gauge the pulse of the market and study potential product developments.

Key Business Questions

- What technology options are available for high-quality commercial printing applications?
- What are the key technological and supplier trends in the inkjet printing market?
- What are the potential gap areas that the client should focus on?

Engagement Scope

1

Technology Landscape

- What technology options are available for high-quality commercial printing applications?
- What is the development status of identified technologies?

2

Product Landscape and Ecosystem Analysis

- What are some of the key products available in the market?
- What are the key specifications of the identified products?
- What is the price point of printheads used in such products?
- Who are the key players active in the technological domain? What are their activities?

3

Trend Analysis

- What are the innovation, research, and commercialization trends in inkjet printing technology?
- What are some of the incremental improvements in the inkjet printing technology?
- Which are the areas focused by key suppliers and technology developers?

Research Methodology

Secondary Research

- Conducted desk research to understand the technological landscape of inkjet printing
- Referred to paid databases and analyzed patents and scientific publications related to inkjet printing technology

Primary Research

- 20+ telephonic interviews with manufacturers, suppliers, and industry experts to validate research findings and fill-in information gaps

Benefits to Client

- Based on the study output and recommendations, the client validated the hypothesis of its technology roadmap and acquired a better outlook on emerging trends.
- The study enabled:
 - Alignment of the client's development activities based on emerging trends and technological advancements
 - Identification of key development areas in inkjet printing technology
 - In-depth insights on upcoming technologies, key products, price points, and activities within the inkjet printing ecosystem

Sample Analysis

1 Technology Landscape

This slide provides an overview of inkjet technologies. It includes a 'Definition' section, 'Applications' such as 'Industrial manufacturing' and 'Consumer electronics', and a 'Technological Innovation (1/8)' section. The innovation section lists various technologies like 'AAAR', 'HP', and 'Fujifilm' with their respective features and key specifications.

2 Product Landscape and Ecosystem Analysis

This slide focuses on key products and the manufacturer ecosystem. It features a comparison of 'memjet' and 'Fujifilm' products, detailing their resolution, ink volume, and other specifications. Below this, a diagram titled 'Inkjet print head Manufacturers based on technology focus' maps various manufacturers (Canon, Lexmark, HP, FUJIFILM, EPSON, RICOH, XAAR) to their specific technological strengths.

3 Trend Analysis

This slide analyzes trends in inkjet printheads. It includes 'Example 1' and 'Example 2' of incremental innovations. A central diagram, 'Trend in Inkjet Printheads for adopting MEMS for manufacturing Printheads', shows the evolution from 'Basic MEMS' to 'Single Layer MEMS' and 'Fully Integrated MEMS' across different resolutions (300, 600, 1200, 2400 dpi) and years (2010, 2015, 2020).

Thank you

North America

55 Madison Ave, Suite 400
Morristown, NJ 07960
USA
T: +1 212 835 1590

Europe

328-334 Graadt van Roggenweg
4th Floor, Utrecht, 3531 AH
Netherlands
T: +31 30 298 2108

United Kingdom

5 Chancery Lane
London EC4A 1BL
United Kingdom
T: +44 207 406 7548

Asia Pacific

Millennium Business Park
Sector 3, Building # 4, Mahape
Navi Mumbai 400 710
India
T: +91 22 6772 5700