

DIGITAL PRINTING- “CURRENT MARKET SCENARIO IN NAVI MUMBAI REGION”

Sandeep Ramraje¹

Abstract

This paper is describing the concept of digital printing technologies. It compares the advantages and disadvantages of analog and digital methods. It goes on to describe current scenario of digital printing technology in the printing industry in Navi Mumbai region.

Printing industries are increasingly adopting digital technologies to complement or replace analog ones. This paper will also give a brief idea about who are the key players in the market and growth of digital printing in the recent years.

The main objective of this paper is to identify the benefits of digital printing process over analog printing process and its cost effectiveness.

Key word: Digital Printing Process, Analog Printing Process

Introduction

The growth of digital printing technology has brought technical advancements, more options, and exciting new features to today’s commercial printing. It's also brought some confusion. An understanding of the advantages and disadvantages of digital printing and how those compare to traditional offset lithography is critical in making the right choice.

Digital printing refers to methods of printing from a digital-based image directly to a variety of media. It usually refers to professional printing where small-run jobs from desktop publishing and other digital sources are printed using large-format and/or high-volume laser or inkjet printers. Digital printing has a higher cost per page than more traditional offset printing methods, but this price is usually offset by avoiding the cost of all the technical steps required to make printing plates. It also allows for on-demand printing, short turnaround time, and even a modification of the image (variable data) used for each impression. The savings in labor and the ever-increasing capability of digital presses means that digital printing is reaching the point where it can match or supersede offset printing technology's ability to produce larger print runs of several thousand sheets at a low price.

According to the smitherspira digital printing market analysis shows that the industry has been growing with a compound annual growth rate of 7.4% and will reach to \$ 187.7 billion in 2018.

¹ Assistant Professor, YMT College of Management Email: ramrajesandeep@gmail.com

The share of the digital printing in total market has been growing with 1.08% per year and will grow to 20.6% in 2018, with inkjet growing faster than electro-photography. All the other printing processes will see fall in their market value, particularly web offset process.

Objectives

- To identify the growth of digital printing over the conventional printing process in the Navi Mumbai region.
- To know the reasons for the shift of printers from conventional printing process to digital printing process.
- To know the economical benefits of the digital printing over conventional printing.
- To identify the less time consuming printing process.

Advantages

- Shorter turn-around.
- Every print is the same. More accurate counts, less waste and fewer variations, due to not having to balance ink and water during press run.
- Cheaper low volume printing. While the unit cost of each piece may be higher than with offset printing, when setup costs are included digital printing provides lower per unit costs for very small print runs.
- Variable Data Printing is a form of customizable digital printing. Using information from a database or external file, text and graphics can be changed on each piece without stopping or slowing down the press.
- Works on a wide range of printing surfaces including paper, wood, cloth, metal, leather, rough paper and plastic.

Disadvantages

- The unit cost goes down as the quantity goes up.
- Quality and cost-effectiveness in high volume jobs. While today's digital presses are close to the cost/benefit ratio of offset for high quality work, they are not yet able to compete with the volume an offset press can produce.
- **Digital printing** supports limited prints which can vary from six to six thousand but after a certain count it don't support. So for bulk and much larger order the **Digital printing** machines don't support and as a result it becomes a bad investment for huge printing.
- Some digital printing machines have high maintenance costs.

Research methodology

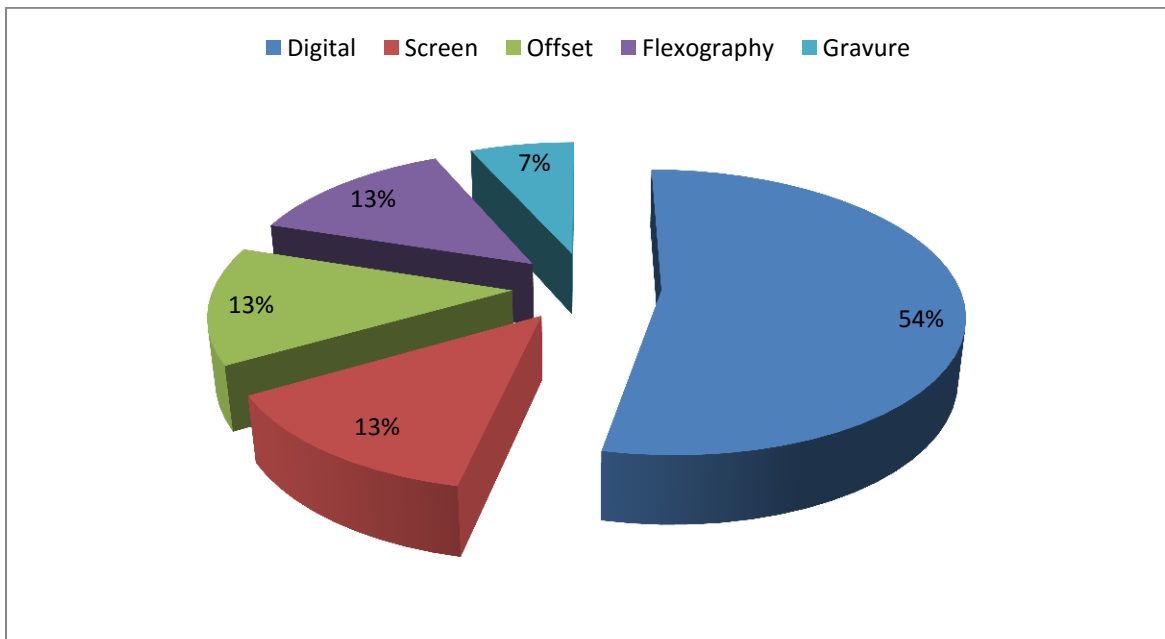
The data collection methodology used here in this survey is primary data collection method, where different questionnaire are asked to different printers to identify the various responses of printers from the different parts of Navi Mumbai region.

To know the growth of digital printing over the conventional printing I did survey of printers who has shifted their business from conventional printing process to digital printing technology.

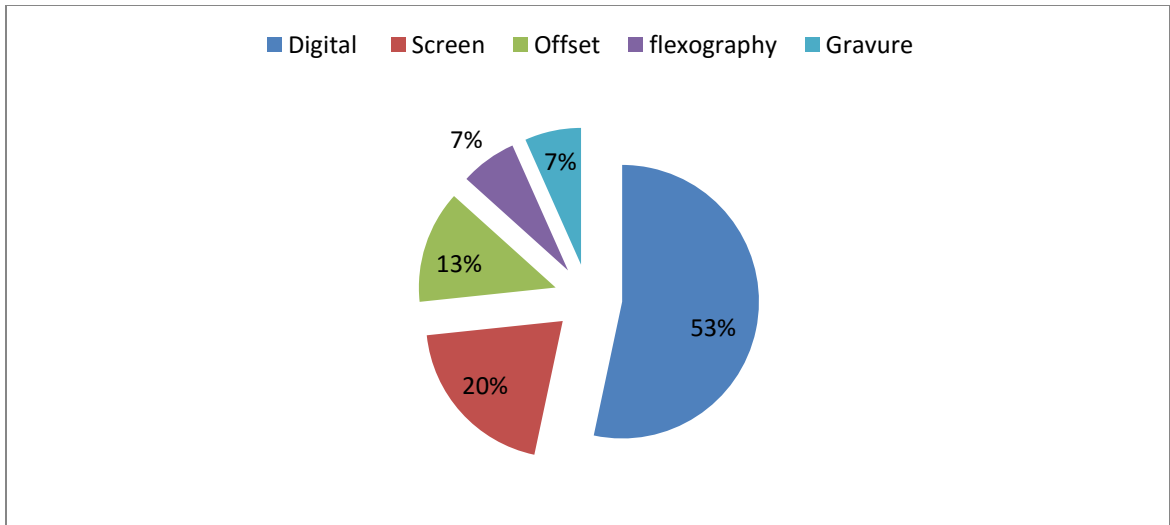
The sample size of the survey is 15 printers from different region of the Navi Mumbai.

During the survey I asked different questionnaire to all above said number of printers which helped me to come to some conclusion. The following are the different questionnaires and their interpretation that shows the current growth of the digital printing in Navi Mumbai region.

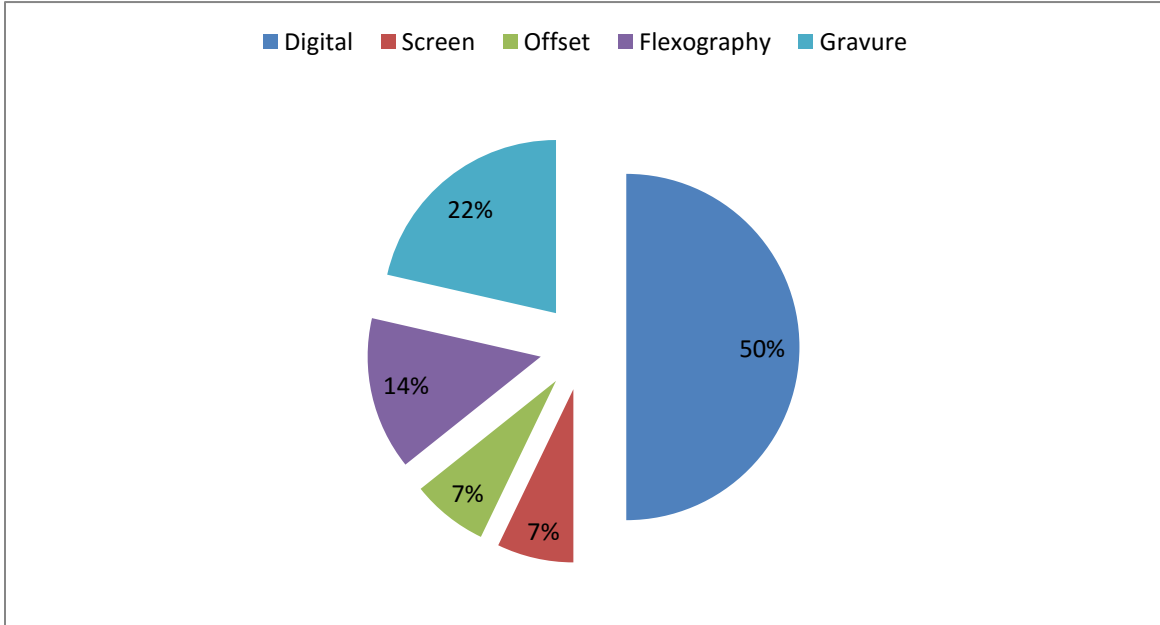
Data Interpretations



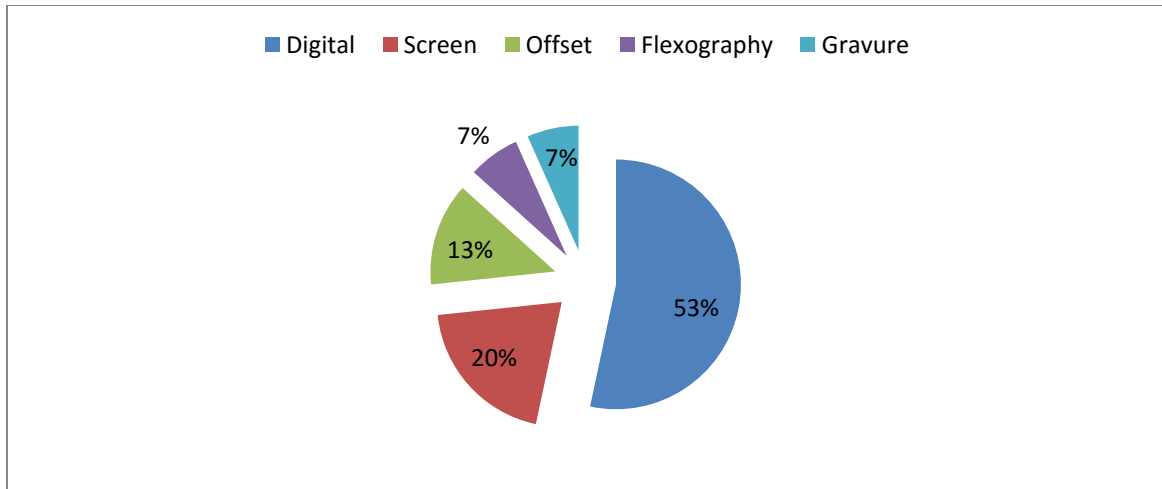
At present out of 15 printers, 54% of printers are using Digital Printing Process. Offset, Screen and Flexography printing processes are used by 13% printers each and 7% printers using Gravure Printing Process.



From the above graph we get to know that 53% of printers says that digital printing process is most economical because of its various advantages like less initial investment requirement, eliminates excessive work so increases the profit margins, less manpower requirement etc. 20% printers says screen printing process is economical, 13% gives preference to offset because of its quality and speed of printing and 7 % says gravure printing processes is economical as it is suitable to produce large volume jobs.



Any printer's main job is to print a good quality job and according to the survey 50% of printers says that digital printing process gives best quality printing as compared to all printing processes, 22% says gravure gives good quality, 14% says flexography and remaining 7 % says offset and screen respectively



Make ready time is preparing your machineries and equipments for printing and time required to make your machinery and equipment ready for printing is make-ready timing. According to the survey 53% of printers says that Digital Printing Processes takes minimum time for make-ready as it eliminates all the different steps of exposing films, developing film, plate making, washing plates etc. 20% says Screen Printing Process requires less time, 13% of the printers says offset needs less time while 7% says that gravure and flexography each takes minimum time for make-ready.

More than 74% of the printers told that they were using conventional printing process but now they have shifted from conventional printing process to digital printing process because of different advantages of digital printing process such as less initial investment, less manpower is required, best quality printing, less make-ready time, less amount of space is required, etc and various disadvantages of conventional printing processes such as high amount of initial investment, huge make ready timing specifically gravure and flexography printing process, higher amount of exposure to solvent in case of gravure, flexography and screen printing process, etc.

Conclusion

Since there is emerging trend of digital printing as it is most cost effective and time saving as well, so there will be demand for the digital printing as compare to the conventional printing technology. Many market leaders in the conventional printing process are now switching to digital printing market as there is immense scope and huge market to grow inside the industry.

Large amount of development and innovations in the digital printing technology has lead to rapid growth of the digital printing industry all across the world.

According to the survey and the response collected from different printers there are various reasons behind the growth of digital printing process in the market in Navi Mumbai region and in the near future digital printing may replace the conventional printing processes due to its various characteristics.

References

1. Shelagh Vainker in Anne Farrer (ed), "Caves of the Thousand Buddhas", 1990, British Museum publication
2. <http://www.smitherspira.com>
3. ^ Jump up to:^a ^b "Great Chinese Inventions". Minnesota-china.com.
4. **Jump up**^a Rees, Fran. Johannes Gutenberg: Inventor of the Printing Press
5. **Jump up**^a "Online Gallery: Sacred Texts". British Library.