

**INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH
TECHNOLOGY****COMPARATIVE STUDY OF PRINT QUALITY OF DIFFERENT PRINTING
PROCESSES FROM PEOPLE'S VIEW****Ms. Pinki***

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ABSTRACT

The focus of this paper is to study the choice of people regarding the print quality produced by different printing. A test chart was prepared that contains the different types of images and then printed through offset, inkjet, screen and digital printing processes. And then survey was conducted on hundred peoples to find out the printing process that gives best impact of print quality on human mind.

Keywords: Different, Cyan.**I. INTRODUCTION**

Printing is a process for reproducing text and images using a master form or template. Modern large-scale printing is typically done using a printing press, while small-scale printing is done free-form with a digital printer. Though paper is the most common material, it is also frequently done on metals, plastics, cloth, and composite materials. On paper it is often carried out as a large-scale industrial process and is an essential part of publishing and transaction printing. And the perception of colour depends on the source of light, environment and illuminated objects, and varies from individual to individual. Colours affect different people in different ways. These emotions (happy vs. sad) were similar across age groups. Colours could help create attention, convey messages, and create feelings that might increase purchase probability.

Properties of various printing process:

There are a wide variety of technologies that are used for printing purpose. Objective of this research is to find out the choices of diff age group people. Offset printing consist high image quality, and produces sharp and clean images, longer printing plate life because no direct contact between plate and printing substrate. It is cheapest method of producing high quality commercial printing. Offset printing provides better results for more complex artwork, such as photographs, gradations, or images using percentage of colours. Complex images as well as solid colours reproduce boldly under 4-color process offset printing.

Screen printing is the only one which can personalize a wide variety of items, from textiles to ceramics. Unlike other printmaking techniques, such as intaglio or relief, screen printing allows many prints to be created before a re-application of ink is necessary, which makes screen printing very useful commercially. Solid colours using 4-color process artwork do not print as well in screen as in offset. Photos and high resolution details do not show up well.

Digital Printing

Originally invented as a pre-press digital proofing system, it was designed to emulate the final printing press results giving customers an idea of what their final printing press project would look like. The process eventually evolved into an alternative printing solution. A lot of people favour digital printing because they are more familiar with the process. Almost everyone one has owned a colour printer at some point in their lives. They are small compact and available at many office supplies stores. 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. The savings in labour and

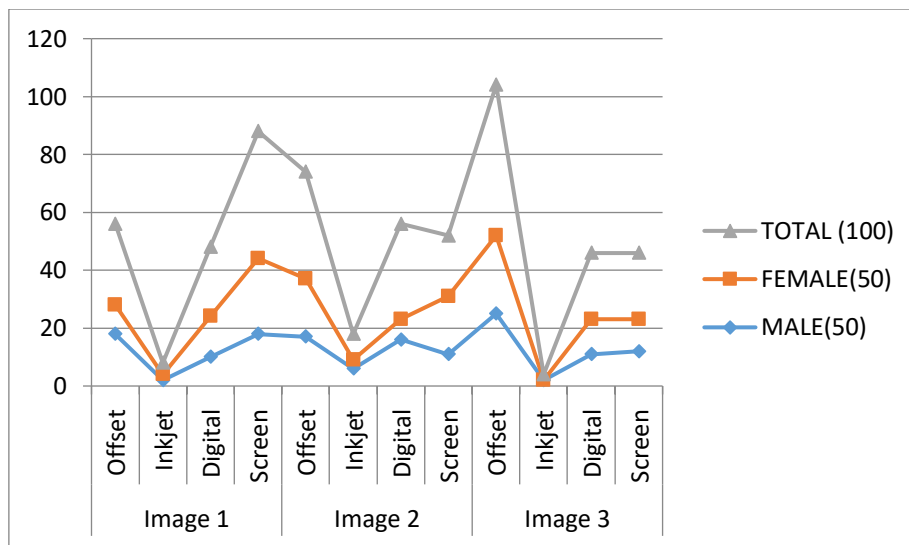
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the ever-increasing capability of digital presses means that digital printing is reaching the point where it has ability to produce larger print runs of several thousand sheets at a low price.

II. RESEARCH METHODOLOGY & DATA ANALYSIS

A test chart was prepared that is suitable for the survey and printed in CMYKRGB Colours And then the printing was done by different printing processes such as offset printing, inkjet printing, screen and digital printing processes.

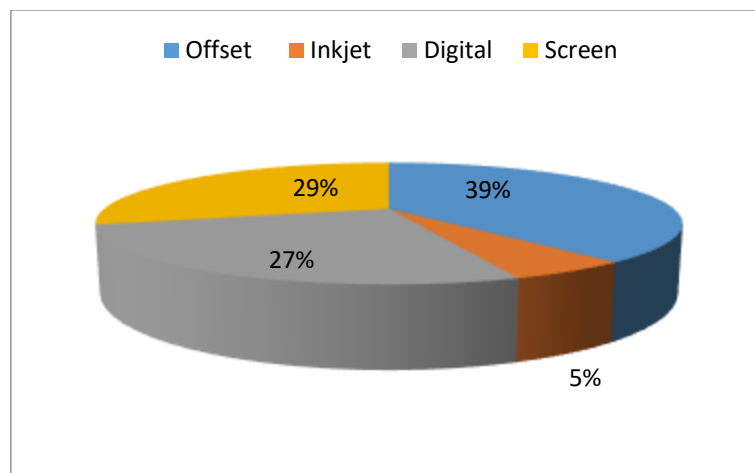
In survey the target audience age was 20-25. Survey was conducted on total no of hundred people out of which fifty male and fifty females were included. This test chart was shown to the different people according to their age group and their choice of colour by different processes was marked and then collected data analysed.



Choice of Different Images Printed by diff. printing processes

III. CONCLUSION

This research paper has presented an overview about the preference of people about print quality and from the analysis many interesting facts were observed .it was found that out of this processes that were tested, offset printing gives the best impact than digital, inkjet and screen printing process. 39% of people like offset printing, and 5.5% of people like inkjet printing, digital printing liked by 26.66% of people and 29.33% people like screen printing.



People's preference regarding print quality



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