

# The Research Report of Employment Trends in Printing Industry for Prepress

Weera Chotithammaporn

**Abstract**—This research aims to study employment trends in printing industry for prepress support by Suan Sunandha University Fund. The objectives of this research are to explain the trends of the employment in Thai Printing Industry for prepress in Bangkok and the description of different personnel that prepress entrepreneur need and also the problems of employment.

The population of prepress entrepreneurs is about 100 organizations in the area of Bangkok. The questionnaires has been taken and analyzed with SPSS program by using the average percentage and standard deviation.

This research is multiple case studies. The conceptual framework is developed on the basis of the open systems theory.

The research result show that

1. The most of prepress entrepreneur have trend to choose the employee by any sex, the age 25-29 years old, bachelor degree and have 1-2 years experience.
2. The most problems are the understanding in job, communication/relation and the understanding in new technology.
3. The trends aims to employment in 1-3 years have 57.8% for prepress industry in Bangkok.

This research suggests that:

1. Thai printing industry for prepress in Bangkok need quality employee that expert in printing technology.
2. Prepress entrepreneur should have agreement to development with university for practice the employee.
3. Prepress entrepreneur should support personal to fulfill the knowledge.

**Keywords**—Printing Industry, Prepress.

## I. INTRODUCTION

THE production processes in the publishing industry are divided into three stages [1]: stage before printing (prepress) process printing (press) and after printing (post press), which all three phases are the processes for the production of publications of all types, whether would be printed with any system. Prepress is the first step of the publication process. Starting from the original copies and perform the steps to process the plate and then ready to brings up the print publications - this steps are involved with the performance of technologies such as the computer used for layout, design and making the plate. Therefore, better understanding must be developed to keep up with the advancement of technology. In prepress business of publishing in Thailand, characteristics are divided into two types:

first type is Artwork Design and second type is Film, Color Dividing and Making Plate.

This research can help to behold the entrepreneurs in the prepress publishing industry's employment's trends, including personal qualifications. This will allow the institution or training center of prepress publishing design instruction make plans for students in order to comply with the needs of the prepress publishing business. This will allow the production to have even more effectively staff. It is also avoiding the waste of education and can be applied to actual practice.

## II. RESEARCH OBJECTIVES

1. To study the trend of employment in printing industry for prepress.
2. To study the characteristics of the personnel in printing industry for prepress in the establishment/business.

## III. RESEARCH SCOPE

This research studies only about the establishment prepress publishing industry in Bangkok, by using a database establishment from the industry publications published by Printing Association Thailand.

### A. Population and Representative Sample

1. Population referred to 100 organizations of prepress entrepreneurs in Bangkok [2].
2. Representative referred to at least 80% of prepress entrepreneurs in Bangkok.

### B. Variable of the Study

1. The independent variables' characteristics, including gender, age, education and the experience of the personnel.
2. The dependent variable including hiring demand.

## IV. EXPECTED OUTCOMES

1. Be able to know desirable characteristics in employment prepress section.
2. Be able to know the employment prospects of the prepress publishing industry.
3. Be able to use the information in the planning or developing personnel in order to fulfill the requirements of the prepress publishing industry.

## V. RESEARCH TOOLS

Tools that are used in this research, consisted of observational research by questionnaire, were divided into 3 sections.

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1. The status of Prepress Publishing industry.
2. Employment required and contributions of employees.
3. Jobs demand and competence of personnel needs.

## VI. STATISTICS

To complete this research, researcher used the percentage, standard deviation, T-test-number, variance, F-test and employed SPSS/PC (Statistical Package for the Social Science) for analysis.

After verifying the validity of 90 copies of the questionnaire, results can be summarized as follows.

## VII. STATUS OF PREPRESS BUSINESS

In authorized capital of prepress business, researcher found that among 42 of the authorized capital of prepress business is mostly fewer than 5 million baht (THB), calculated as equal as 46.67. 8 companies possessed 8.89%. Authorized Capital 5 - 10 million, is more than 10 million baht in registered capital in 10 companies - 11.11%. And there are not providing details of the number 30 –equal 33.33%.

Types of Prepress business can be described as follows; 26 of the companies or 28.89% represent craft designs. The 56 companies or 62.22% are film shooting, color separated; make photographic film companies. The number of 7 businesses described their jobs as following: designed artwork, color separated, film shooting and plate- were ranged in 7.78%. Only 1 business did not clarify the detail which ranged in 1.11%.

In aspect of duration, 64 prepress establishments representing 71.11% of all prepress firms have mostly been existed more than six years. 13 of prepress firms which were 14.44% of all establishments have operated for 1-3 years. No details of 12 or 13.33% of prepress firm. Last but not least, 3 of them or 1.11% hold business for 4-6 years already.

In the area of personnel on prepress establishment indicate that mostly, groups of 6-25 people has been employed in 42 places calculated as 46.67%. Numbers of 1-5 people worked in 17 companies are calculated as 18.89%. A total of 51 people or more were occupied by 14 publishing, are calculated as 15.56%. Number of 26-50 people worked at 11 places is calculated as 12.22%. 6 of them did not declare any workers' status - representing 6.67%.

The number of personnel on prepress establishment categorized by education show that 69 workplaces provide no details. However, there was one prepress firm which has a total of 35 people with primary school as educational background. Also, 68 people in 9 prepress establishments hold certificate of secondary school. At the same time, there were 74 people in 14 places finished from vocational institute. Other 71 people of 17 companies hold High Vocational Certificate/Diploma. 41 people who had bachelor's degree are employed in 18 prepress companies and 5 people who are employed by 3 publishing had postgraduate degree.

## VIII. EMPLOYMENT TREND IN PREPRESS BUSINESS

Researcher found that 52 companies which still have available vacancies representing 57.78% of them. Only 1.11% of them no need any new employees. And no information is declared by 37 companies – it is 41.11%.

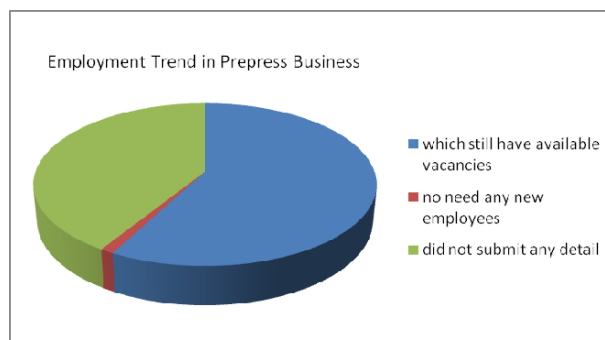


Fig. 1 Employment Trend in Prepress Business

With regards to effect of gender in prepress business, it can be pointed out that 55.56% or 50 companies did not specify any gender required for employment. Nevertheless, there were 3 places (3.33%) preferring male workers, while there were no statistics on companies that specifically favored female workers. And 37 companies (41.11%) did not submit any detail.

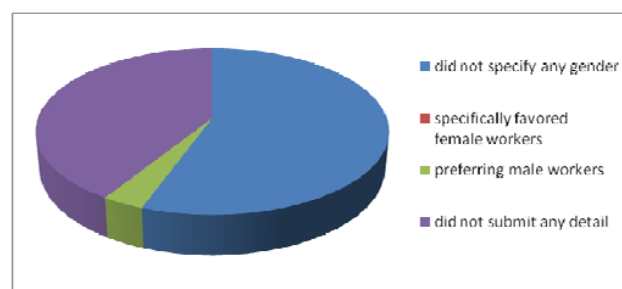


Fig. 2 With Regards to Effect of Gender in Prepress Business

## IX. THE PERSONAL REQUIREMENTS OF PRINTING INDUSTRY FOR PREPRESS ESTABLISHMENTS

Researcher found that majority of group: age from 25 to 29 years old was the most wanted for hiring in 45.65% or 41 companies. 41.11% or 37 places provided no details in this area. 13.33% or 12 companies preferred a group with 20-24 year old.

Results of education levels needed in the industry show that only one company required educational background in High school level. On the other hand, 5 companies needed 5 staffs with Vocational Certificate graduated. 14 companies hired 23 workers with High Vocational Certificate/Diploma. Lastly, there were 12 prepress establishments requiring 12 employees with bachelors' degree and 3 companies hired post graduated for 3 positions.

In aspect of work experiences, 53.44% of 49 businesses indicated that job experiences were needed to enter to the

business. Only 1.11% or one business establishment expressed no interest in job experience. Still 43.44% or 40 companies provided no details.

#### X. THE POSITION REQUIRED IN THE ESTABLISHMENT

In area of job positions, researcher found that the prepress industry mostly required Artwork Designers, Macintosh Technicians for 28 positions; Plate Technicians, Color Divided supervisor, Color divided officers for 8 positions; Graphic Designers 6 positions and 5 for Marketing positions.

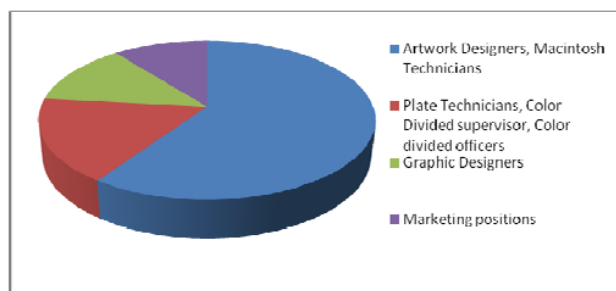


Fig. 3 The Position Required In The Establishment

#### XI. CAPABILITY OF PERSONNEL TO ESTABLISHMENTS

In case of capability, researcher found that Prepress Printing Establishments mainly required employees that possessed the knowledge of MAC & PC for 28 positions. Also, they needed Design and Computer to Plate for 8 workers, Photoshop & Illustrator, 6 positions and Image Setter for 6 positions.

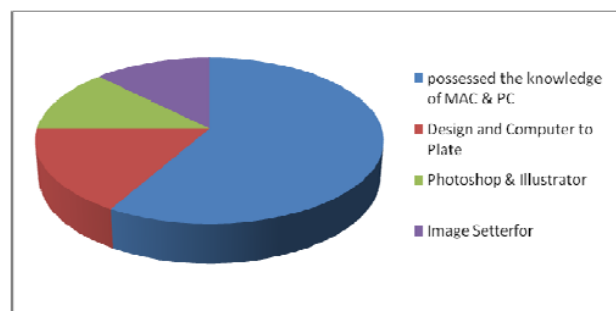


Fig. 4 Capability of Personnel to Establishment

#### XII. ADDITIONAL COMPETENCE OF THE PERSONNEL AT THE ESTABLISHMENT

In aspect of additional competence, researcher found that 60% or 54 businesses establishments require employees with the abilities regarding to computer use. Also, English communication skills were needed in 13 places (14.44%). The interpretation of the color was needed in 8 places (8.89%). There were 15 companies or 16.67 % that provided no details in the area.

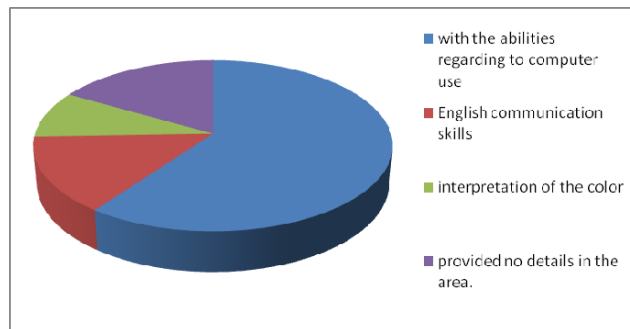


Fig. 5 Additional Competence of the Personnel at the Establishment

#### XIII. EMPLOYMENT ISSUES OF ESTABLISHMENT, MORE LIKELY TO FACE

1. Failure to understand the details of the job.
2. Unaware of new technology in the use of the Prepress Industry.
3. Lack of work experience.
4. Lack of good communication between colleagues.

#### XIV. RECOMMENDATIONS

1. The Printing Industry for Prepress Most requires qualified staff for employment. Therefore recruited from schools that teach the particular subjects in printing schools that send employees to workshops - to bring new technologies to improve their performance.
2. The companies should arrange with the school to apprenticeship the students studying in related fields to be trained and practiced using specialized equipment. And also be able to communicate for the purposes of the work performed to meet the needs of customers.
3. The companies should establish the support's staff to have further knowledge by coordinating with educational institutions for training period to introduce the employees with new technology and improve the skills.

#### XV. CONCLUSION

The research results show that:

1. The most of prepress entrepreneurs have trend to choose the employee without considering of any gender, the age 25-29 years old, bachelor degree and with 1-2 years of experience.
2. The biggest problems are to understand during work: communication, relations and the understanding of new technology.
3. The trends aim to employment in 1-3 years - 57.8% for Prepress industry in Bangkok.

This research suggests that:

1. Thai Printing Industry for Prepress in Bangkok need quality employee that expert in printing technology.
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Due to the results on employment trend in prepress area of printing industry, researcher found that the prepress firms required prospect employees with the following conditions. Firstly, there was no preference in gender but employees must have about 1-2 years of work experiences with at least vocational degree or bachelor's degree. Secondly, vacancy positions in recent years were artwork designers, MAC technicians with competency on MAC&PC plus technological knowledge on prepress, press, and postpress including ability in design complied with programs such as computer to plate, Photoshop, illustrator, Image Setter. Thirdly, besides capabilities are particularly required in printing areas. Employers in the business also demand prospect employees to have skill on computer, English, color reading in order to systematically understand root of problems and found solutions to technical obstacles in prepress business. In addition, there was a suggestion indicating that the relationship between printing industry and educational institutes should be established in order to create a network and create understanding environment among the stakeholders.

Researcher realized that this research was compatible with the work of Noppawan Wilawan [3] who found out that age and gender excluding educational background affected trend on employment. The results also complied with work of Chanin Wasrinont [4] regarding the fact that job experience was the important factor in possibility to be employed. Additionally, such outcomes were in accordance with Piya Najaras's work [5]: gender and age did not affect employment trend. Still, the results were not in the same way with Sophon Muneejinda's work [6] regarding garment sector which indicated that job experience was not the factor for employers to consider about employment. Anyway, the work also stated that the experiences increased the possibility of prospect employees to be hired.

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#### REFERENCES

- [1] Weera Chotithammaporn. 2555. Basic Printing Technology. P70-75.
- [2] Printing Institute of Thailand. 2012. Printing Industry Year Book B.E. 2012-2013. P135-144.
- [3] Noppawan Wilawan. 2551. Research report on Need Fulfillment of industries regarding local labor in Chachengsao Provinces. Thesis M.A.(Environment) Thammasat University. Pages 149.
- [4] Chanin Wasrinont. 2543. Research report on the study of industrial labor market in Sakol Nakorn Province. Thesis (M.A.(Environment)) Thammasat University. Pages 110.
- [5] Piya Najaras. 2544. Report on factor affecting need of economics' graduate students in Mueng Chaing Mai District. Thesis (M.Econ.) Chiang Mai University. P42-45.
- [6] Sophon Muneejinda. 2548. Research report on trend of employment in garments' industry. Thesis (M.A.(Environment)) Thammasat University. Pages 81.