"Demand analysis of diploma in engineering (Printing) in current Job Market of Bangladesh."

Conducted by

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Acknowledgement

Bangladesh's greatest strength is its people. These people will become the great capital of our country if they become skilled. The World Bank, United Nations Development Programme (UNDP), United Nations Educational, Scientific and Cultural Organization (UNESCO) all suggest frequently that Bangladesh urgently needs to utilize its over-crowded population and large labor market.

Besides entering regular job market, technically skilled people can successfully create employment to become solvent. This is why promotion and spread of technical education is very essential in a country with this large population, where unemployment has long been a big challenge for policymakers.

Diploma in engineering (printing) is one of the TVET formal course conducted by BTEB. It is very sophisticated & diversely used technology. But there is no data about the Job market status of the diploma engineering printing graduates.

Thus, we initiated to conduct a research on "Demand analysis of the printing graduates in the present Job Market" to know the employment status of the printing graduates, to what extent the levels of job satisfaction of the graduates have, and what are the levels of satisfaction of the employer with performances of the graduates, after an invitation for a research proposal from the directorate of technical education.

The research applied survey design methodology. Primary data were collected using structured questionnaires. A total of two set questionnaires along with guidelines were developed for data collection from Diploma in engineering printing Graduates and employers. As a part of methodology, we use different statistical tools for our analysis. First of all, we use Statistical Program for Social Science software (IBM SPSS Statistics 25) to input data and henceforth, the findings. Secondly, descriptive statistics to fulfill the objectives of the study.

The report on "Demand analysis of the printing graduates in the present Job Market" comprises of the Educational background & job market of graduates as well as employer's satisfaction level. The recommendations were made on the basis of the findings. I hope this report can be used primarily by the institute, existing students of Graphic Arts Institute & graduates. Secondly & primely this report can be used as basis for TVET planning and future investment by the Government, NGOs, and private sectors as well as development partners in Bangladesh.

Analyzing of the printing graduates in the present Job Market I would like to express my special gratitude to Mr. Rawnak Mahmud, former Director General, Directorate of technical

I also gratitude to my honorable engr. Niher Ronjon Das, principal, Graphic Arts Institute, for his extreme support in institution, in data collection & valuable advice in this research work. Without his support I couldn't continue this study.

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List of Acronym

HRM: Human Resource Management.

LFS: Labor Force Survey.

BSCIC: Bangladesh Small and Cottage Industries Corporation.

TVET: Technical and Vocational Education and Training.

NIP: National Industry Policy

MoU: Memorandum of Understanding.

BBS: Bangladesh Bureau of Statistics.

WB: World Bank.

GAI: Graphic Arts Institute.

SSC: Secondary School Certificate.

DPP: Development Project Proposal

HSC: Higher Secondary Certificate.

BTEB: Bangladesh Technical Education Board.

CtP : Computer to Plate.

ICT: Information and Communication Technology.

ILO: International Labor Organization.

DTE: Directorate of Technical Education

EU: European Union

Gob: Government of Bangladesh

HCDP:21 Human Capital Development Program for Bangladesh 2021

HSC(Voc): Higher Secondary Certificate (Vocational)

MIS: Management Information System

Moe: Ministry of Education

NSDA: National Skill Development Authority

NSDC: National Skill Development Council

RQs: Research Questioners

HE: Higher Education

Definitions

Employment: Employment is the state of having paid work, the action of giving work to someone, a person's trade or profession, the utilization of something, a relationship between two parties. In some types of employment, employees may receive assistances in addition to payment.

Self-employment: Self-employment means working for oneself as a freelance or the owner of a business rather than for an employer. A person is self-employed if s/he run her/his business for themselves and take responsibility for its success or failure. One can be both employed and self-employed at the same time, for example if he/she work for an employer during the day and run their own business in the evenings.

Full-Time Employment: Full-Time employment is a monetary situation in which all available labor resources are being used in the most efficient way possible. Full employment represents the highest amount of skilled and unskilled labor that can be employed within an economy at any given time. It is to say, paying job that comprises 40-48 hours of work in a week can be said Full-Time Employment.

Part-Time Employment: A part-time employee is an individual who works less than a specified number of hours during a standard work week. They work in shifts. The shifts are often rotational. In many cases, workers are considered to be part-time if they commonly work a minimum of 20 hours & fewer than 30 hours per week. A part-time employee and workers are expected to keep on on call for additional shifts or seasonal overtime.

Unemployment: unemployment is the situations of someone with working age but having no job, looking for work in the past four weeks, and are currently available for work.

Unemployment Rate (%): Unemployment rate usually measured by dividing the number of unemployed people by the total number of people in the workforce, unemployment serves as one of the indicators of an economy's status. Percentage of total workforces who are jobless and are looking for a paid job.
Unemployment rate = (Total unemployment /Total labor force) × 100

Graduates: Here graduate means those who passed diploma in engineering in printing technology from Graphic Arts Institute, Dhaka.

Management: Management is the act of getting people organized to achieve desired goals and objectives using available resources competently and effectively. That is Management is Planning, organizing, staffing, leading or directing, and controlling an organization (a group of one or more people or entities) or effort for the purpose of accomplishing a goal.

Operation: Those who are involved in operation are called the glue that holds an organization together. They are responsible for production, process, delivery product, press operation etc.

Marketing: Marketing is the activity of communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.

Private Organization: A private company is a firm held under private ownership, rather than the government. Most private sector organizations are run with the intention of making profit.

NGO: A non-governmental organization (NGO) is a non-profit & voluntary group that functions independently of any government. NGOs are lively in humanitarianism or the social sciences. That's why sometimes it's called civil societies.

Private limited company: A private limited company, or LTD, is a type of privately held professional entity. This type of business entity limits owner liability to their dividends & confines shareholders from publicly trading shares. The benefit of having a private limited company is that there is limited liabilities, On the other hand, shares can only be sold to shareholders in the business that means that it can be tough to liquidate them.

Public Limited company: Public Limited company is business which is independent private with a large number of shareholders. whose possession is organized via shares of stock which are envisioned to be freely traded on a stock exchange or in over-the-counter markets.

Public company: A Publicly traded company, publicly held company, publicly listed company is a company which is controlled by the government with a limited number of shareholders. Public companies over a certain size must be listed on an exchange.

Corporation: A corporation is a legal entity that is separate and distinct from its possessors & its associates. Corporations can enter contracts, credit and borrow money, sue and be sued, letting employees, own properties, and pay excises. Sometimes it is called as a "legal person."

Foreign Ownership Company: Foreign Ownership Company is a business or natural resource in a country by individuals who are not citizens of that country or by companies whose headquarters outside that country. foreign ownership can happen when a local property is acquired by a overseas individual.

A Multinational Company (MNC): A multinational company (MNC) or worldwide enterprise has facilities and other assets in at least one country other than its home country. A multinational company normally has offices and/or factories in diverse states/countries and a

centralized head office. These companies, also known as international, stateless, or transnational corporate organizations.

Industry Category: National Industry Policy (NIP) 2016 of Bangladesh state industry as all the activities associated with production and services. Industries are mainly classified as (a) Manufacturing industry: goods manufacturing, processing, accumulating etc. and (b) Non-manufacturing industry or service sector: Facility provided using permanent capitals like equipment's, apparatuses, technology etc. NIP 2016 outlines the all of the industries as large, medium, small, micro & cottage. Those classification are formed on the basis of workforce contribution or capital investment, which are summarized as following.

Category of Industry	Manufacturing Industry	Non-manufacturing Industry/services
Large	>300	>120
Medium	121-300	51-120
Small	31-120	16-50
Micro	16-30	<16 (Max. 15)
Cottage	<16 (Max. 15)	-

Executive Summary

Bangladesh has a large youthful population and rapidly growing labor market. Its total population is 161.3 Million, Economically Active Labor Force (15+ years) is 109.1 Million, employed population is 60.8 Millions & unemployed population is 2.68 Million (BBS-2017). With this large number of people, Bangladesh is countering labor market imbalance, reported by the financial express on 28th September 2019.(The financial express, 29/09/2019)

According to the Labor Force Survey (LFS) of the Bangladesh Bureau of Statistics (BBS), the share of the formal sector in total employment was 13.7 per cent in 2010; and this rose to only 14.9 per cent in 2016-17. Now Bangladesh should address to increase the employ urgent. If we can use this large amount of youth energy it will be easy to reach our short & long-term goals. (BBS-LFS;2016-2017, The daily star-08-03-2015).

Technically skilled people can make employment easily. In the advancement of the technology, no technology is fulfilled without the use of Printing & packaging. We know Use of Printing & packaging is required every sphere of our life. It is considered as an emerging technology for employment opportunity. However, there is no research-based evidence for ensuring the usefulness of the Diploma in engineering printing technology. Therefore, with the help of DTE we take initiative to trace out employment situation of the Diploma in engineering printing graduates.

Objectives of the research

As a single institute of Diploma in Engineering Printing in Bangladesh, there is no research-based documents for ensuring the usefulness of the Diploma in Engineering Printing graduates. Therefore, I took initiative in order to trace out the employment status, employer satisfaction, job market situation regarding printing graduates.

The main aim of my study is "to get the present job market demand of Diploma in Engineering printing graduates in Bangladesh".

Specific Objectives of the research is as following.

1. To identify the employment status of the graduates.

2. To measure the satisfaction level of the graduates towards their curriculum & job.

3. To measure the satisfaction level of the employers toward graduate's performance.

4. To get the job demand of Diploma in Engineering Printing graduates.

Research methodology

We have chosen "Survey Design" method to make this research work more effective. For sample method selection we have chosen two different sample method one for employer (purposive sampling) and other for graduates (simple random).

For this purpose, sampling was done according to simple random sampling. we used an online calculator and the statistical formula of simple random sampling. After providing Margin of Error (ME) = 5%, Confidence Level (CL) = 95%, Response Distribution (RD) = 50%, thus Total Population Size (TPS) raised= **360**, the Sample Size (SS) stood at **186.**

On the other hand, a report shows that, about 7000 printing industries are located in Bangladesh. But these industries are not categorized well. However, to measures employer satisfaction we have used purposive sampling method. We have visited industry especially located in Savar, Ashulia, Gazipur, Narayangonj & Dhaka. According to the number of manpower our industry selection is as following; 07 large size printing industries, 04 Medium size printing industries, 04 small size printing industries 05 micro size printing industries. That's, in this aspect total sample size is **20**. After all we have able to collect data from number of 31 industries correspondingly.

Key findings

The data collected contained factual information about the graduates & employers as well as their personal perceptions and assessments. All the findings produced from this data set pertinent to the study are reported in three corresponding chapters. The key findings of the study are presented under following titles:

1. Employment status & type of the graduates.
2. Satisfaction level of the graduates regarding their curriculum & job.
3. Employers satisfaction level regarding Diploma in Engineering Printing graduates.
4. Job demand in relation to job status of graduates and satisfaction level of employers.

Graduates employment status & type;
- 7.5% that is number of 14 graduates is unemployed.
- 10.8 percent are self-employed.
- 77.4 % were employed.
- 6.5 percent is pursuing Higher Study.
- Only one unemployed graduate is seeking for job others mentioned different reasons (Family problem, have to look after parents' properties etc.) for not doing job.
- 94.4% of the graduates are employed in private sector.
- 4.2% in public organization.
- 1.4% work at NGO.

Graduates' remarks on their Job;
- 55% the graduates are completely satisfied regarding senior's/supervisory officer's behavior.

- Graduates evaluate 3.23 that is very satisfied regarding Support of appointing authority.
- Graduates mark 2.57 that is somewhat satisfied on their salary status.
- Graduates comments 3.16 on their Job environment.
- Graduates mentioned 3.30, very satisfied, on their job availability.
- All over we get mean value 3.13 that is moderately satisfied on their job satisfaction.

Satisfaction level of the graduates about their academic background;
- Graduates are very satisfied with ptg curriculum & exam system conducted by BTEB.
- 64.5% & 25.1% stated completely & very satisfied consecutively about their educational environment.
- Graduates mark 3.27 that is very satisfied on their practical knowledge gathered in institute.

Employers' satisfaction regarding printing graduates;
- Employers are very satisfied regarding ptg graduates' Behavior with junior/Senior/ contemporary official.
- Employers evaluate 2.71 that is somewhat satisfied regarding graduates' Practical knowledge.
- Employers are somewhat satisfied regarding graduate's services.
- Employers found unsatisfied in government organization & multinational organizations on this issue.
- Employers evaluate graduate's punctuality marking as 2.9.
- Employers are not very satisfied considering ptg graduates rather they are somewhat satisfied.

job demand in relation to current job status & Satisfaction level of graduates & employers.
- Graduates are very satisfied & marked 3.34 out of 4 regarding their job availability.
- 94.1 % of the graduates say their educational background support them in their earning.
- 100% job provider are interested to recruit more diploma in engineering printing graduates.
- Almost all employers stated graduates can increase productivity.
- Graduates job demand somewhat as per graduate's salary status.
- Experts reports graduates job responsiveness is in somewhat stages.
- *Employers & TVET experts evaluations stands 3.02 that is job demand in moderate stage.*
- Finally, almost all employers & TVET experts says job demands for the skilled people not only for the graduates.

Employers & TVET experts observations on the graduates;

➢ Among 7598 employees of 31 printing industries only 1.8% are from diploma in engineering printing background.

➢ 96.8% employers stated graduates can crease productivity.

➢ 33% employers say graduates need to develop their practical knowledge.

➢ All employers are interested to recruit more graduates.

➢ Mean value stands 3.50 that is job demand moderately, on Job demand for the graduates.

➢ Employers reports graduates sometimes lack of communications skills.

➢ Experts reports 2.73 that is somewhat serve the demand to employers.

➢ TVET expert & employers state graduates should develop their practical knowledge, serve as per demand, to be more responsive.

Recommendation for the students & graduates.

➢ "To be up to date to the emerging technology in the job market".

➢ Graduates have to do their job as per employer's demand.

➢ Require job demand depends on their individual skills.

➢ Demand the salary as they deserve.

➢ Need to develop their job responsibility.

➢ Require to improve punctuality in service.

➢ Need to grow professionalism in job.

Recommendation for the institute.

➢ Institute have to contact with industry & take steps to incorporate the latest technology to curriculum.

➢ Institutions and industries or employer's linkage should be strengthened so that the TVET program is offered according to the human resource demand of the employers.

➢ Incorporating teaching factory concept.

➢ It is recommended to establish functional placement and counseling unit or any other such mechanism in each institute and in the TVET as well to support graduates linking with job market.

➢ Hiring industry expert to council the graduates.

➢ To arrange career counseling class in regular basis.

Recommendation for practice.

➢ Promoting participation and attainment in technical education in Bangladesh is important both from the perspective of fostering the future potential for innovation and economic growth.

- Increase awareness of industry people and general people about the mentioned technology. Consequently, industry will get more skilled & trained workforce.
- Recommended to ensure that the curriculum is fully implemented. Specially to ensure adequate opportunities for the students as foreseen by the curriculum.
- To focus on practical knowledge in class room.

Endorsement for the DTE, BTEB & policymakers.
- Based on data analysis and findings, following recommendations are made:
- Indorsed to trace out the graduates in a regular basis to update the market demand.
- Establishing more institute or adding technology according to job market demand or employers needs in the existing institutes.
- Formulate recruitment rule and priority given to the diploma engineering (printing) graduates in recruitment, attractive salary & promotion in various private & government organizations.
- Widen the higher education field for the mentioned technology.
- Enlisting suitable job in local and overseas employment market with ensuring decent salary and proper working environment for the graduates.
- To increase provision of financial support for self-employment.

CHAPTER-ONE. INTRODUCTION OF THE STUDY

1.1 Introduction

1.2 Statement of the problem

1.3 Important Rationale of the study

1.4 Audiences of the study

1.5 Purpose and Research Questions of the study

1.6 Outline of the Report

Chapter-One: Introduction of the Study

This chapter includes introduction of the study, Statement of the Problem, Important Rationale of the study, Audiences of the study, Purpose and Research Questions of the study, Scope and Limitations of the study, Outline of the Report.

1.1 Introduction

Graphic Arts Institute is only one Diploma in Engineering Printing Technology institute in Bangladesh. It is established in Dhaka in 1967.The institute was started with 25 seats in printing technology. But at present, this institute has over 1148 students in two shifts (Morning and Evening). There are three departments as Printing technology, Graphic design and Computer technology. Every year 400 students admitted in this institute. Since 1967, the institute started with a three years Diploma (with six semesters) degree in printing technology, offered by the Bangladesh Technical Education Board. However, the course is rearranged from the session (2001-2002) with four-year Diploma (eight semesters).(GAI-Web page-2020)

Now on, Bangladesh has a large youthful population and rapidly growing labor market. Its population is 161.3 Million, Economically Active Labor Force (15+ years) is 109.1 Million, employed population is 60.8 Millions & unemployed population is 2.68 Million (BBS-2017). With this enormous populations Bangladesh is countering labor market imbalance reported by the financial express on 28th Sept. 2019. (ceicdata.com; 1December 2020, BBS-2017).

In the advancement of the technology, no technology is fulfilled without the use of Printing & packaging. Use of Printing & packaging is required every sphere of our life. At present printing sector became an important part of the national economy of our country. It is considered as emerging technology for employment opportunity. The current market size of the printing industry is over 4000 crore a year. Moreover about 3.00 lac people engaged in this area which is contributing a lot for resolving unemployment problem of the nation. (printechbangladesh.com Home page, 2020)

To meet up increasing demand of modern society printing industries are well equipped and capable to print quality packaging accessories for garments sector, medicine boxes for pharmaceutical companies both in home and abroad. For such increasing production demand, we need printing & packaging expert for employment to develop our economy. With this context, Graphic Arts Institute, this formal educational institution provides 4-year Diploma in Engineering in Printing Technology course. The main purpose/objective of the study is to determine the present demand of Diploma in Engineering (Printing) graduates in Bangladesh. (thetextiletoday, BOP reports, July 26, 2017)

1.2 Statement of the Problem

Unemployment is a major problem in Bangladesh. Some studies revealed that the rate of unemployment in Bangladesh grows faster than the employment potential. According BBS-4.30% of total labor force are unemployed. Every year thousands of students are coming out the colleges and universities. Majority of them remain unemployed which is about **(47%)**. The key strategy of 'Vision-2021' is to provide higher quality, competency, skilled and nationally and internationally demanding workforce through TVET sector development. It is one of the main strategies of Human Resource Management (HRM) of the Government of Bangladesh.

Printing is a specialized technology where employers recruit the Printing experts in RMG, Textiles & Ceramics industries, print media, packaging industries, advertising farms, publication houses, fashion design, pharmaceutical industry etc. Although, usage of printing has a large field but we don't have any information about employability in this field in the context of Diploma in Engineering (Printing) graduates.

1.3 Research Gap

Graphic Arts Institute data base presents 360 students passed in providan 2010 on Diploma in Engineering Printing technology. Although this technology has a high use in all sphere of life, but we have not got any specific data regarding the employment status of the graduates of Printing Technology in Diploma in Engineering level of Bangladesh. This study therefore aims to get the job market scenario of the TVET graduates especially Diploma in Engineering (Printing) graduates. It is to say that present government is also work for development of the skill workforce. (Graphic Arts Institute -Registrar Data Base)

However, if Diploma in Engineering Printing technology is demand driven then the institute and curricula of the courses should be assessed for making it up-to-date to make it job market standard. Thus, we need to collect data about the mentioned graduates & analyzing the data to measure the demand of the Diploma Engineering Printing graduates in present job market of Bangladesh to provide suggestions for policy guide-lines & stakeholders.

1.4 Audiences of the study

Respondent are mainly in two categories (i.e. Existing students/graduates/Parents and management level in TVET/Policy maker). Parents & existing students will know the alumni's' worked places, how is graduates' job environment, what accent these graduates demand in job market, how did graduates satisfy the services. Fresh graduates will able to collaborate with their senior alumni, serve in different industries. Teachers are remarkable viewers of this study in Institutional management level. Teachers will know about market demand technology, & lacking of the graduates, thus they can help to incorporate the latest technology to the curriculum. BTEB, DTE & concern ministry all will able to take steps to make the required policy to full fill the job market demand.

1.5 Purpose and Research Questions of the study

We have an institutional objective that is to create a positive and inspirational learning environment in which students will learn industry skills, ensuring they have the best possible chance of employment in Graphic Arts Industry. (GAI Job Placement Brochure)

According to the institutional objective, there is no research-based documents found for ensuring the usefulness of the Diploma in Engineering Printing graduates. Therefore, I took initiative in order to trace out the printing graduate's employment status & employer satisfaction as well as their performance level at workplace. In this aspect DTE support me every step.

The main aim of my study is "to get the present job market demand of Diploma in Engineering printing graduates in Bangladesh". Specific Objectives of the research is as following.

1. To identify the employment status of the graduates.

2. To measure the level of satisfaction of the graduates.

3. To measure the level of satisfaction of the employers toward graduate's performance.

4. To get the job demand of the Diploma in Engineering (Printing) graduates.

As per the objective of the study the questions of this work are as following.

1. What is the employment status of TVET (printing) graduates?
2. What is the satisfaction level of Diploma in Engineering printing graduates?
3. What is the satisfaction level of employer in context of TVET (printing) graduates?
4. What is the job demand in relation to current job status and satisfaction level of graduates and employers?

1.6 Outline of the Report

After this study we will get the information about demand of Diploma in Engineering (printing) graduates, in the present job market of Bangladesh. For this purpose, to collect data two set of semi structured questioners are formed for graduates & employer, as sample with annexure. In this demand analysis work we will get the demand of Diploma in Engineering (printing) graduate's satisfaction level of employer & the graduates. The outline of the report is mentioned below sequentially

Chapter one presents introduction of the study, Statement of the Problem, Important Rationale of the study, Audiences/ Respondent of the study, Purpose and Research Questions of the study, Scope and Limitations of the study, Outline of the Report.

Chapter two includes Literature Review regarding this study. This chapter focuses on related data & information collected from different literature, online news, govt. policy, Journal etc.

Chapter three contains method of the study. It contains both type of data that's quantitative and qualitative. However, this chapter includes strategy of data inquiry, sampling, sample size

determination, respondents' selection, source of data, methods of data collection, tools of the data collection, data collection status, data analysis technique.

Chapter four presents the results of the study instruments maintaining the study objectives, that is; employment status of the graduates, satisfaction level of Diploma in Engineering (Printing) graduates with their job & the satisfaction level of employer in context of Diploma in Engineering (Printing) graduates, finally job demand in relation to current job status & Satisfaction level of graduates & employers. However, various results & notes regarding above issues are reported consequentially in this chapter.

Chapter five includes all the findings produced from this data set pertinent to the study are reported in the previous corresponding chapter-4. Recommendation & core findings from this study are summarized here.

Chapter six, finally includes the research implications for researchers & conclusion part.

CHAPTER-TWO: LITERATURE REVIEW

2.1 Bangladesh is growing fast in 'All Over Printing'

2.2 The Future of Digital Textile Printing & Graduates' passions

2.3 Related associations' data

2.4 Government's steps

CHAPTER-TWO: LITERATURE REVIEW

Although no straight document for this study found, moreover, this chapter includes related data & information collected from different literature, online news, govt. policy, Journal etc. Although, we could not find any particular research work on job opportunities for Diploma in Engineering Printing graduates in Bangladesh, some international organizations conducted some researches on this field though in different view. But, considering our country, the present topic is considered as an innovative and a virgin area of intervention. In order to develop the conceptual framework of the study I have discussed with stakeholder & analyze some books, Online reports, different websites, government policy papers, annual reports and employment related booklets, leaflets etc. The reviewing articles are given in the annexure. In addition to study the above documents I also study placement brochure, Institutional annual reports, catalogue etc. Some type of related descriptive information is mentioned given after this section found in our review.

2.1 Bangladesh is growing fast in 'All Over Printing'

Online news portal, textile today, make a report on *Bangladesh is growing fast in 'All Over Printing'*. Where it is said that "Another name of possibilities for the country's growing textile industry is 'All Over Printing' (AOP)". This topic mainly focused on textile printing sector which is one type of job sector for the mentioned graduates. Here following skills are included required for them; Screen print, rotary/flat-bed screen, digital ink jet, sublimation (transfer) ink jet print etc. (textiletoday.com.bd- July 26, 2017)

This report also includes about digital printing in AOP. Where currently, 60 percent of digitally printed textiles are produced in Bangladesh, India, Indonesia, Pakistan and Vietnam. Due to the increase in demand, many of the factories in Bangladesh are opening digital printing section along with conventional unit. New jobs are also being created in the different houses with attractive salary. (textiletoday.com.bd- July 26, 2017)

Figure 2.1 Projected Digital AOP Clothing Market Size in Value in billion USD
(Source: textiletoday.com.bd- July 26, 2017).

2.2 The Future of Digital Textile Printing & Graduates' passions

Here also reported through a UK-based market research firm Smithers Pira, "The Future of Digital Textile Printing to 2021", that is the future of digital textile printing to 2021 confirms that 'industry segment will continue to see double digit strong growth across the 2016-2021 period''. It also reported "*students are choosing now the printing sector as profession*. It's too much a challenging sector like medical or journalism. But if anyone is persistent towards the goal, he/she will be successful in this sector soon''. (smithers.com: 04/26/2019)

Besides, there is a lack of adequate technology and skilled manpower in the country's textile printing industry according to the needs. For this reason, *a lot of orders are refused every year in Bangladesh*. Many foreign experts are directly or indirectly involved in this sector. *Other disadvantages are the inadequate opportunities for research and development, insufficient gas, electricity, improved infrastructure etc.* (textiletoday.com.bd- July 26, 2017)

Refat Jahan, Senior Executive of a reputed textile company named Hams Group (printing marketing) said, "Now the demand & popularity of all over print is increasing. But the number of technical personnel in this sector is not very much." It is to mentioned that various international organizations like Smithers Pira, printing news etc. are working for reporting various latest & upcoming printing technologies. (textiletoday.com.bd- July 26, 2017)

2.3 Related associations' data

I studied about BGAPMEA (Bangladesh Garments Accessories & Packaging Manufacturers & Exporters Association) represents about 1800 export-oriented garments accessories & packaging industries in the country. This association is a fellow of the Asian Packaging Federation (APF) & the World Packaging Organization (WPO).(BGAPMEA: Home page-2020)

Bangladesh Mudran Shilpa Samity (Printing Industries Association of Bangladesh) directly worked for printing & packaging industry in Bangladesh. It is an important platform and national organization of the entrepreneurs of printing & packaging sector with proper recognition of its past history in the Federation of Bangladesh Chamber of Commerce & Industry (FBCCI). (BMSS: Home page-2021)

2.4 Government''s steps

Bangladesh government now highlights printing & packaging sectors this part proved. Export import policy 2015-2018 of Bangladesh includes printing and packaging sector as a Special Development sectors in section 3.5.02.07. It is to mention that the one of the key objectives of National Education Policy of Bangladesh: 2010 is to establish much closer linkages between Human Resource Management (HRM) and job opportunities. To enrich printing sector government took up a project to shift around 3,500 printing presses in capital Dhaka to a specialized zone in Keranigonj. Thus, state-owned Bangladesh Small and Cottage Industries

Corporation has developed BSCIC Printing Industrial Estate at a cost of Tk 1.4 billion.(Bdnew24.com: 03/29/2016)

Last of all I have got a study on "Graphic Arts Technology and Job Opportunity: A Case Study of Graphic Arts Institute, Dhaka." which is prepared by Dr. Md. Omar Faruque, additional secretary, Technical and Madrasah Education Division, Ministry of Education. "The study reveals that the Diploma Engineers passing from the Graphic Arts Institute, Dhaka are almost employed in different sectors particularly in private sector with handsome salary." It also presents "Graphic Design and Printing is a specialized and sophisticated technology which has a great prospect and potentiality for income generation and job opportunity in home and abroad."(A case study on Graphic Arts Technology: Dr. Md. Omar Faruque, additional secretary, TMED)

CHAPTER-THREE. METHODOLOGY OF THE STUDY

3.1 Strategy of Inquiry

3.2 Data source & Tools matrix

3.3 Research Design

3.4 Sample and Sampling

3.4.1 Sample size resolve using statistical formula

3.5 Data Collection Tools

3.6 Use of data collection tools

3.7 Data collection status

3.8 Data Analysis Technique

3.9 Ethical consideration

Chapter-Three: Methodology of the Study

This is a mixed method study. It contains both type of data that's quantitative and qualitative. However, this chapter includes strategy of data inquiry, sampling, sample size determination, respondents' selection, source of data, methods of data collection, tools of the data collection, data collection status, data analysis technique.

3.1 Strategy of Inquiry

We have chosen "Survey Design" method to make this research work more effective. The overall data inquiry process is mentioned by the data table mentioned below.

Table 3.1 Strategy of Inquiry

Research Questioners	Strategy of Inquiry (Type of Data to Addressed the RQ)	Overall Strategy of Inquiry
RQ1:	Mixed method	Mixed Method Design Sequential.
RQ2:	Mixed method	
RQ3:	Mixed method	
RQ4	Mixed method	
RQ5	Mixed method	

3.2 Data source & Tools matrix

Data sources are selected mainly in two categories (i.e. graduates and employers). To measure demand analysis TVET experts & students are also took as data sources. Primary data were collected using semi-structured questionnaires. TVET experts interviewed conducted to fill the data gap as per study questioner. We also arrange focus group discussion with the existing graduates, employers & Graduates to input their opinion in this aspect. Please see details questionnaire and guidelines in Annexure. The following table presents the data sources as per RQs.

Table 3.2 Data source & Tools matrix

RQs	Data source	Tools
RQ1: What is the satisfaction level of Diploma in Engineering (Printing) graduates with their curriculum?	Graduates, Students	-Semi-structured questionnaire. -FGD.
RQ2: What is the satisfaction level of Diploma in Engineering (Printing) graduates with their job?	Graduates.	-Semi-structured questionnaire. -FGD.
RQ3: What is the satisfaction level of employer in context of Diploma in Engineering (Printing) graduates?	Employers.	-Semi-structured questionnaire. -FGD.

RQ4: What is the employment status of Diploma in Engineering (Printing) graduates?	Graduates, Employers.	-Semi-structured questionnaire. -FGD.
RQ5: What is the job demand in relation to current job status & Satisfaction level of graduates & employers?	Employers, TVET Experts,	-Semi-structured interviews.

3.3 Research Design

Data sources are selected mainly in two categories. The graduates were selected by simple random sampling method. Here it's to say that to avoid the biasness we select the graduates within the following way. Firstly (360/186) = 1.9 that's 2:1 per graduates. Thence I choose the graduates one after one as their serial no as provided by BTEB. On the opposite hand, the employers were selected by purposive sampling method which is categorized in step with the number of employees of them. We also collect data as per category of industry ownership like public, private ltd, individual ownership, NGO etc.

3.4 Sample and Sampling

As we have time constrain with some limitations, we beset a specific Curriculum named 2010 for graduates' selection. It is to mention that, Graphic Arts Institute it the only institute which has already produced **360** Diplomas in Engineering printing graduates from 2015 to 2018. To determine the employment status & satisfaction level of printing graduates, I have worked with the students under this single curriculum -2010.

For this purpose, I have used simple random method. I used an online calculator and the statistical formula of simple random sampling. After providing Margin of Error (ME) = 5%, Confidence Level (CL) = 95%, Response Distribution (RD) = 50% and Total Population Size (TPS) = **360**, the Sample Size (SS) stood at **186.**

On the other hand, a report shows that, about 7000 printing industries[1] are located in Bangladesh. But these industries are not categorized well. However, to measures employer satisfaction we have used purposive sampling method. We have visited industry especially located in, Savar, Gazipur, Ashulia, Narayangonj & Dhaka. According to the number of manpower our industry selection is as following; 07 large size printing industries, 04 Medium size printing industries, 04 small size printing industries 05 micro size printing industries. That's, in this aspect total sample size is **20**. However, after all we have collect data from number of 31 employers, which are from public, private & NGO institutions.

Data were collected in different category to achieve the research objective. this information are mentioned below.

Table 3.3 Sample and Sampling

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[1] http://printechbangladesh.com/readmore.html

Data Source	Sample Size	Sampling
Graduates	186	Simple random sampling.
Employers	31	Convenient.
Students	17	Convenient
TVET experts	04	Convenient

3.4.1 Sample size resolve using statistical formula

Sample is the part of the population that helps us to draw inferences about the population in a certain period. Collecting information about the all population is not possible in a research work further it is time consuming and expensive. Thus, we have to determine an appropriate sample size so that we can make implications about the population based on that sample. Here we use statistical formula of simple random technique for determining the sample size as follows;

Sample Size

$$ss = \frac{Z^2 * (p) * (1-p)}{c^2}$$

$$ss = \frac{1.96^2 * .5*(1-.5)}{(.05)^2}$$

$$=384.16$$

Where: Z = Z value (e.g. 1.96 for 95% confidence level)

p = percentage picking a choice, expressed as decimal

(.5 used for sample size needed)

c = confidence interval, expressed as decimal

(e.g., .04 = ±4

Correction for Finite Population

$$ss = \frac{ss}{1+ \frac{ss-1}{pop}}$$

Where: SS= Sample Size

pop = population

$$\text{Corrected ss} = \frac{384.16}{1+\dfrac{384.16-1}{360}}$$

that's sample size is =**186**

3.5 Data Collection Tools

In this section data collection tools & short description about the tools are mentioned here. Data were mainly collected in two ways through semi structured questioners & focus group discussion.

Table 3.4 Data Collection Tools

Data Source	Data Collection Tools
Graduates	Semi structured Interview
	FGD (focus Group Discussion).
Employers	Semi structured Interview
	FGD (focus Group Discussion).
Students	FGD (focus Group Discussion).
TVET experts	Semi structured Interview

Semi structures questioners for the graduates are attached with annexure-1, here primarily some qualitative data like graduate's name, address, roll, passing year etc. were collected in first part secondly quantitative data regarding graduate's satisfaction level on their curriculum are collected. After that finally data collected to measure graduate's satisfaction level regarding job satisfaction.

Semi structures questioners for the employers are attached with annexure-2, here firstly some descriptive data collected like employer's name, address, contact no, type etc. Secondly employer's satisfaction level & their comment regarding recruiting Diploma in Engineering printing graduates are discussed here.

FGD (focus Group Discussion) arranged to collect descriptive type data to measure graduates demand in present job market. Three type of data sources (students, graduates, employers) were present in his discussion. A Semi structures interviewed also occurred with the number of four TVET experts to measure graduates job market demand.

3.6 Use of data collection tools

The main sources of our data collection are the employers & graduates. To collect data, I had to visited in different printing industry located in Savar, Ashulia, Tongi, Gazipur, Narayanganj & Dhaka. I have collected data by following ways.

- Online (google form).
- E-mailing.
- Face to face (individuals).
- Mobile communication(telephoning).
- Focus Group Discussion.

The table 3.5 reports the number of data collection & data collection method of the respondents.

Table 3.5 Data collection tools used the following way.

Description	Frequency	Percent
Face to Face	53	28.5
Google form	99	53.2
Mobile communication	28	15.1
E-mail	6	3.2
Total	186	100.0

Year wise data respondents are presented in figure 3.1. We see most of the target populations passed in 2015, 2016 & July 2018 are collected by face to face & online.
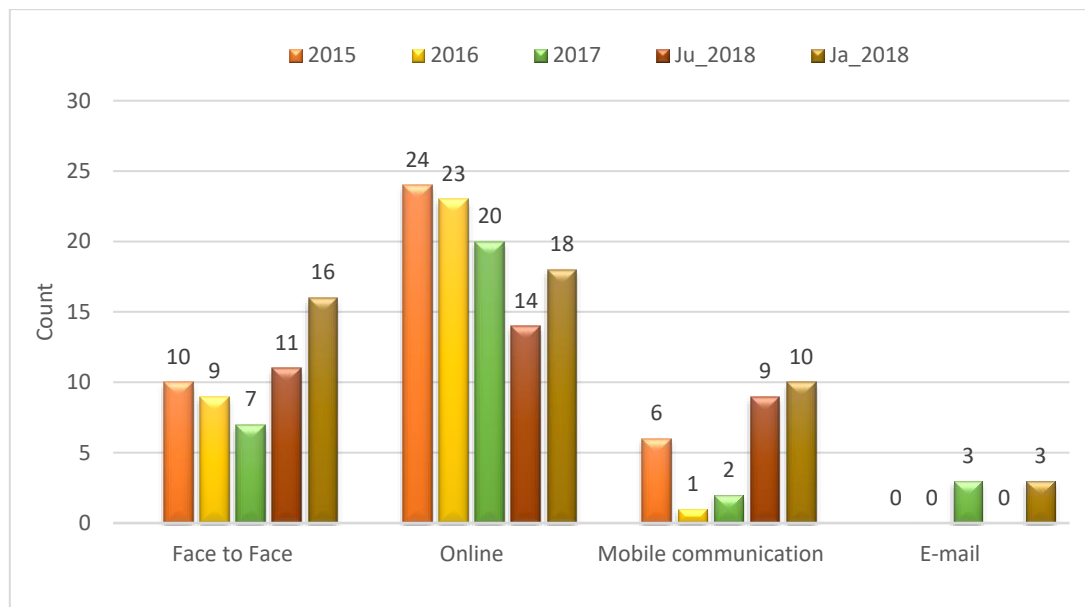
Figure 3.1 Year wise data collection tools used the above way.

Figure 3.2 illustrates about data collection type for the employers. It is to mentioned that After covid-19 situations only number of 04 organizations provide information by emailing.
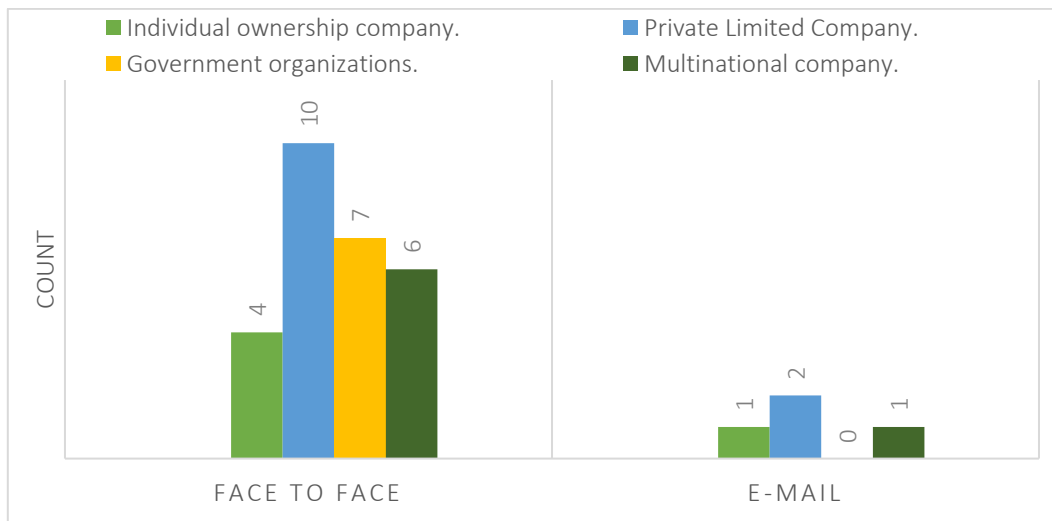
Figure 3.2 Data respondents (employers)

Maximum data were collected from large type of industry table 3.6 reports & no information collected from cottage type of industry.

Table 3.6 Data collection type as per industry size.

Industry Type (as per Industry workforce)	Direct Interview	Online	Total
Large	14	3	17
Medium	4	0	4
Small	5	1	6
Micro	4	0	4
Total	27	4	31

3.7 Data collection status

With the help of almighty creator, we abled to collect data about 100% effectively. Data collection status is reported in Table 3.7 which shows that we had a minimum of 100% responses from the graduates and more than determined sample size from the employers.

Table 3.7 Data collection status

Type	Category	Target Number	Achieved Number	Grand Total Achieved	Data collection.
Graduates	Passing year from 2015-2018	186	186	186	100%
Employer	large	07	17	31	155%
	medium	03	04		
	Small	04	06		
	micro	06	04		
	Cottage	00	00		

Students	2nd to 8th sem.	17	17	17	100%
TVET experts	Govt. institution	04	04	04	100%

3.8 Data Analysis Technique

Data was processed through SPSS-25 version & MS Excel application software. At this point, firstly a code book was prepared to encode the data set to SPSS as per questioners set. After that data inputted to the program. It is to mentioned that data were cross checked frequently by different way to adjust the data validity. To check this data set firstly hardcopy of the information scrutinized & than the softcopy also rechecked. After entering the information to SPSS data had to be cleaned.

Analyzing the cleaned the data set we formed different table & figure as per our requirements. Some figure & table had to manipulated in power point & word software. Figure 3.3 shows a brief of data analysis process.

Figure 3.3 Flowchart of data analysis.

3.9 Ethical consideration

There are broad ethical areas that need to be measured in our research. The following issues are the most important consideration in our dissertations:
- ✓ I & me associates did not subject to harm in any ways whatsoever.
- ✓ Full consent obtained from the participants prior to our study.
- ✓ The protection of the privacy of our participants has ensured.
- ✓ Adequate level of confidentiality of the research data has be ensured.
- ✓ Any deception or exaggeration about the objectives of the research avoided.
- ✓ Affiliations in forms, sources of funding, as well as any possible conflicts of interests are declared.
- ✓ Any type of communication has been done with honesty and transparency.

✓ Any type of misleading information, as well as representation of primary data findings in a biased way has been avoided.

✓ No information presents against law of our beloved country.

CHAPTER-FOUR. RESULTS OF THE DATA ANALYSIS

4.1 Results & Recommendation: Employment *status of TVET (Printing) graduates*

4.2 Results & Recommendation: Satisfaction level of the (Printing) graduates.

4.3 Results & Recommendation: Satisfaction level of employer regarding TVET (Printing) graduates

4.5 Results & Recommendation: Graduates' *job demand in relation to current job status & Satisfaction level of graduates & employers*

4.5.6 TVET experts' & employers' opinion.

Chapter-Four: Results of the Data Analysis

This chapter presents the results of the study instruments maintaining the study objectives, that is; employment status of the graduates, satisfaction level of Diploma in Engineering (Printing) graduates with their job & the satisfaction level of employer in context of Diploma in Engineering (Printing) graduates, finally job demand in relation to current job status & Satisfaction level of graduates & employers. However, various results & notes regarding above issues are reported here consequentially.

4.1 Results: Employment status of TVET (Printing) graduates.

To measure the employment status of the graduates we collect data from both graduates & employers. However, the following tables, figure & information of this area will present the employment status of the graduates.

4.1.1 Employment scenario of the graduates.

Figure 4.1.1 illustrates the Employment status regarding Diploma in Engineering Printinggraduates.Employee are catagoriesed in three types that's; Employee from Diploma in printing Engineering, Employee from others, employee from foreign. Figure 4.1.1 represents maximum employees are not from Diploma in Engineering printing background. Some employee in management, operation & marketing is from foreign. A little portion of the employee are from Diploma in Engineering printing.
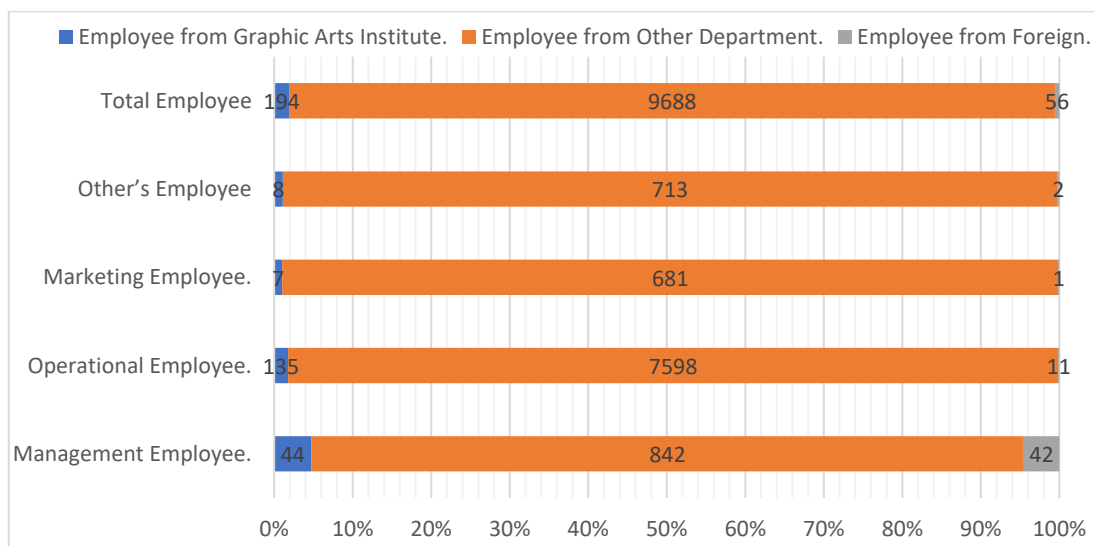
Figure 4.1.1 Employment status concerning Diploma in Engineering Printing graduates.

Figure 4.1.1 shows that among 7598 employees only 1.8% are from Diploma in Engineering printing background where .58% are from foreign. Employers also mentioned they require educated manpower because it is easier for them to deal with educated people.

4.1.2 Graduates' Employment type.

95% of the Diploma in Engineering printing graduates are employed in private sector where only 4% in public organization Figure 4.1.2 reports. Graduates have a large job field in NGO & public sector as well. The following figure express the employment status of the Diploma in Engineering printing graduates.
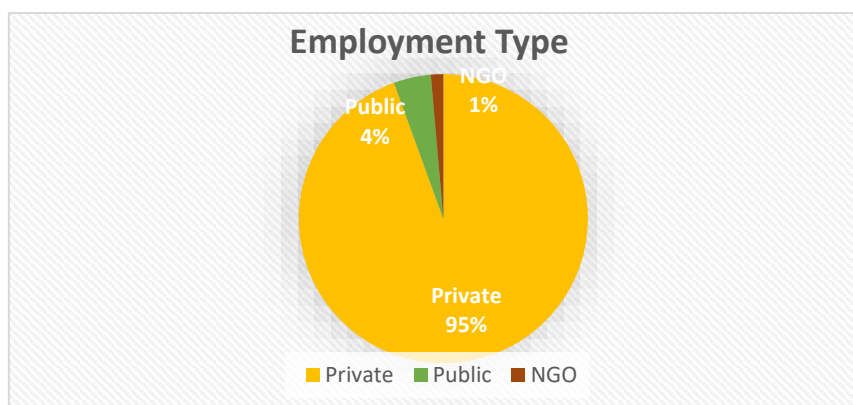
Figure 4.1.2 Employment type of Diploma in Engineering Printing graduates

We got information most of the employed graduates are working at large type industry. Organizations size wise employed graduates are described in the following table.

Table 4.4.1 Distribution of Employed Graduates

Sl No	Types of Industry	Frequency	%
1	Large	102	70.8
2	Medium	21	14.6
3	Small	7	4.9
4	Micro	3	2.1
5	Cottage	11	7.6
	Total	144	100.0

4.1.3 Graduates' Employment status.

Table 4.1.1 Reports that only 7.5% of the graduates was unemployed. Where 75.3% were employed & 6.5 percent is engaged with Higher Study. This data proves the high employability of the printing graduates comparatively to the national employability.

Table 4.1.1 Graduates employment status.

SL. NO	Description	Frequency	Percent
1	Employed	144	77.4
2	Self employed	16	8.6
3	students at higher study.	12	6.5
4	Un-employed.	14	7.5
5	Total	186	100.0

The following figure shows the year wise employment status of the Diploma in Engineering printing graduates. Here, no graduates of 2015 are at higher study. Number of un-employed graduates is about equal every year. Most of the graduates passed in recent years are pursuing higher studies.
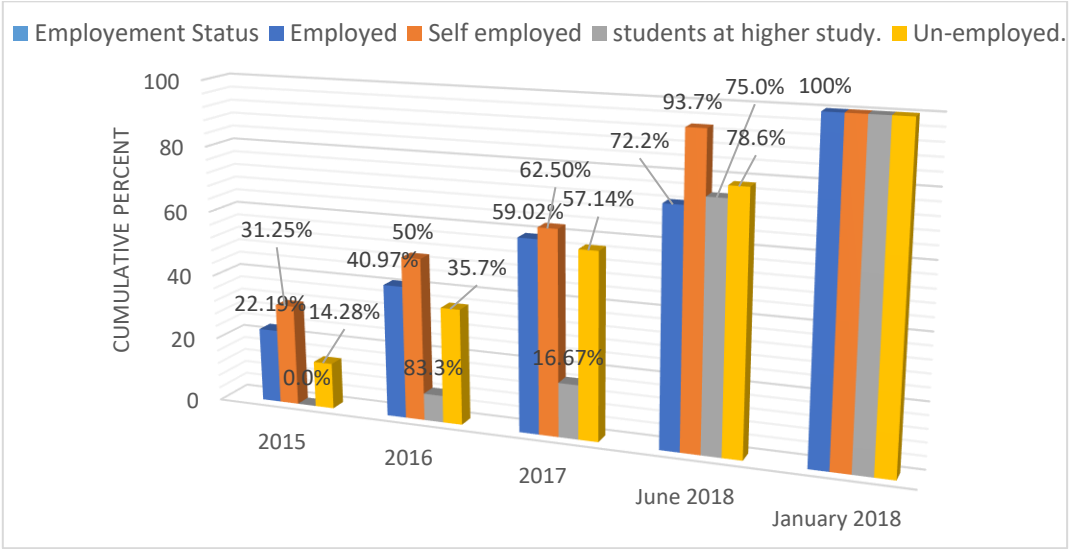
Figure 4.1.3 Employment status of the graduates

Most of our unemployment graduates that is 4.3% said they are in family problem like parent's sickness, have to look after family assets etc. 1.1% graduates told they had lost their job due to Covid-19. .5% graduate said they are busy with politics. After all we see only .5% graduate is now getting preparation for job. This report proves a few printing graduates are in unemployment where they have some clear reasons too.

We can also compare the information of the unemployment causes by passing year of the graduates as following. No graduates found unemployed passed in 2015 except 1.1%. These graduates say the causes for their unemployment is as being house wife.
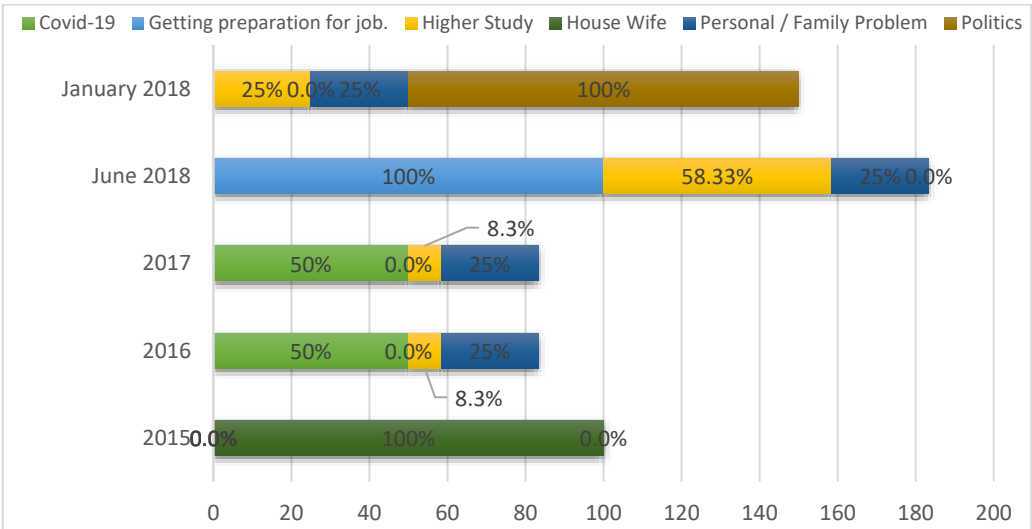
Figure 4.1.4 Causes of unemployment (Year wise)

4.2 Results: Satisfaction level of graduates regarding academic system

We collect data from 186 Diploma in Engineering printing graduates those who passed in 2015-2018 education year. To measure the satisfaction level of Diploma in Engineering (Printing) graduates firstly, we get the satisfaction level about graduates' curriculum, educational environment & practical knowledge they learned at institute. It is to mentioned that about all comments are measured within 0 to 4 scale. Where 0 means Not satisfied & 4 presents completely satisfied.

4.2.1 Graduate's observance on their curriculum.

Figure 4.1.1 presents graduate's view regarding their Diploma Engineering ptg. curriculum. 59.6% & 29.4% graduates mentioned completely satisfied & very satisfied consecutively. Where we got the mean value 3.40 which is very close to the highest value. That is most of the graduates are very satisfied with Printing curriculum provided by BTEB.

Figure 4.2.1 Satisfaction level regarding curriculum of Printing graduates

4.2.2 Graduate's views on their exam system.

Graduates remarks regarding Diploma in Engineering exam system is as following. Most of graduates were satisfied with their exam system the figure 4.1.2 proves. The mode value of the figure is completely satisfied which carry the maximum value 4 & standard deviation is .908.
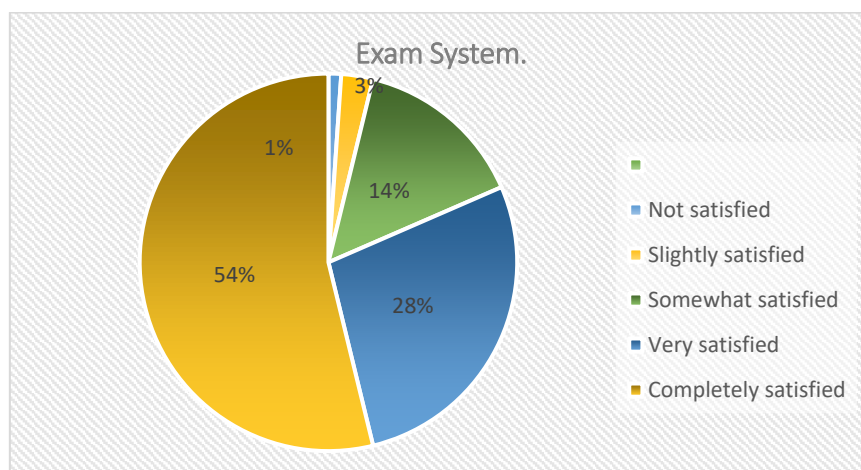
Figure 4.2.2 Satisfaction level regarding exam system of the graduates

4.2.3 Graduates remark on their educational environment.

Graduates annotations regarding educational environment is as following. A large number of Printing graduates that is 64.5% & 25.1% stated completely & very satisfied consecutively about their educational environment. On average graduates evaluate 3.48 regarding this issue.
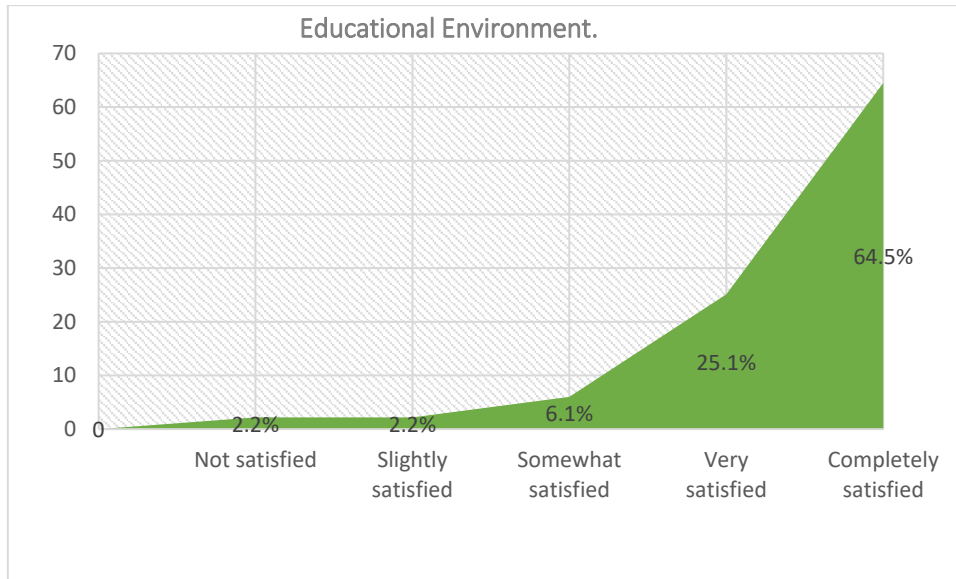
Figure 4.2.3 Satisfaction level regarding educational environment of the graduates

4.2.4 Remark on practical knowledge learned in the courses.

figure 4.1.4 illustrates graduates work at cottage & micro organizations are happier than work at large type industry. Graduates mark 3.27 that is very satisfied on this issue. 3.7% graduates work at multinational organizations are not satisfied & slightly satisfied repeatedly with the practical knowledge learned in institute. Institute should focus on job oriented practical knowledge more.

Figure 4.2.4 Satisfaction level regarding practical knowledge learned at institute

4.2.5 Diploma in Engineering (Printing) graduates pursuing higher study.

The table show most of the printing graduates' study at Computer Science & Engineering in country. Where only 1.6% graduates' study at printing technology at a foreign university in India.

Table 4.2.1 University Name where pursuing Higher Study

University Name	Frequency	Percentage
B. Tech. Guru Jamb Eshwar University of Science & Technology	3	25.0
BAF, University of Development Alternative.	1	8.3
B.Sc. in CSE, Bangladesh University.	5	41.7
B.Sc. in ME, City University.	1	8.3
Nanjing Tech University (China), B.Sc. in Civil Engineering.	1	8.3
Nanjing Tech University (China), B.Sc. in Digital Media	1	8.3
Total	12	100.0

The remarkable issue of this table no graduates found in relevant education in country. Graduates say they have no opportunity of relevant educational upgradation in country. 20% graduates found in Partially Relevant educations where 71.4% found in irrelevant educations in country.
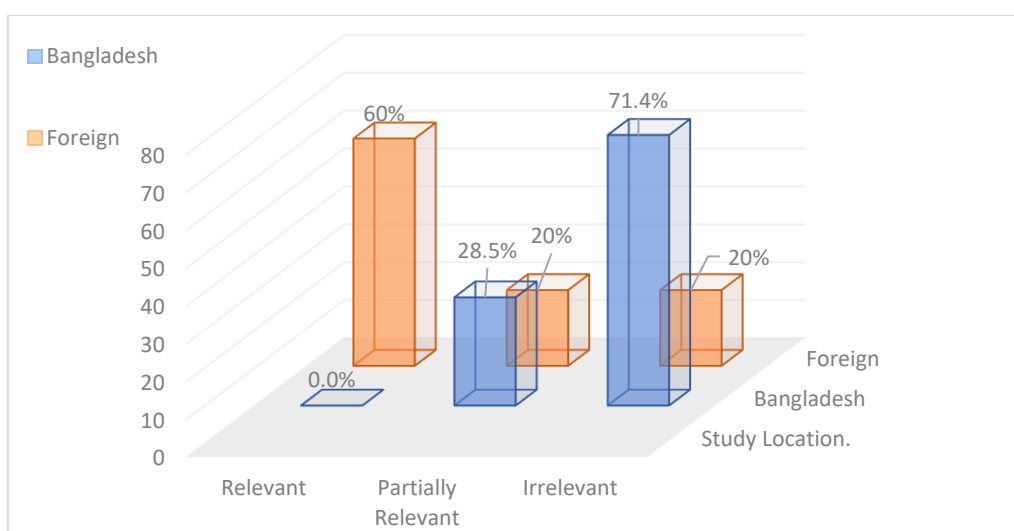
Figure 4.2.5 Higher study relevancy indicator.

4.2.6 Graduates satisfaction regarding Academic system.

After above discussion to measure the satisfaction level of Diploma in Engineering (Printing) graduates with their curriculum, we get 3.35 that is graduates are very satisfied on this issue. The table 4.2 illustrated the mean value regarding job satisfaction of the graduates. It is mention that graduates are not very happy on their salary status table 4.2 reported.

Table 4.2.2 Mean value regarding academic system

	Frequency	Minimum	Maximum	Mean
Curriculum	184	0	4	3.40
Exam System	184	0	4	3.30
Educational Environment	183	0	4	3.48
Practical Knowledge learned at institute.	183	0	4	3.23
			Mean value	**3.35**

N.B.   0 = Not satisfied, 1= Slightly Satisfied, 2= Somewhat Satisfied, *3=Very satisfied*
   4= completely satisfied

The following table shows us the accumulated of graduates' comments on academic system in brief.

Table 4.2.3 Satisfaction level regarding academic system

Factors of Satisfaction	Distribution of Employed Graduates opinion (%)					
	Not satisfied	Slightly satisfied	Somewhat satisfied	Very satisfied	Completely satisfied	N/A
Curriculum	2.2	3.3	6.0	29.3	59.2	0.0
Exam System	1.1	2.7	14.7	27.7	53.8	0.0
Educational Environment	2.2	5.9	6.0	25.1	64.5	2.2
Practical Knowledge learned at institute.	2.7	4.4	9.8	32.8	50.3	0.0
Average	2.05	4.075	9.125	28.725	56.95	0.55

4.3 Results: Satisfaction level of the graduates regarding their jobs.

This part will discover the job satisfaction level of the Diploma Engineering printing graduates. Here data were accumulated in different categories as like Salary status, Support of appointing authority, Job environment, Senior's behavior etc. All comments are measured within 0 to 4 scale. Where 0 means Not satisfied & 4 for completely satisfied.

4.3.1 Graduates' statement on their senior's/supervisory officer' behavior.

Graduates satisfaction level regarding senior's/supervisory officer behavior are illustrated at Figure 4.3.1. Graduates mark 3.30 on this issue. That's graduates are very satisfied on their supervisory officer behavior.
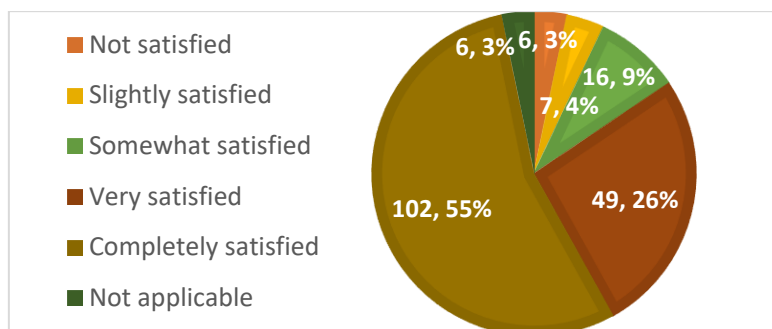
Figure 4.3.1 Satisfaction level regarding Senior's behavior.

4.3.2 Graduates remark on their Job environment.

Most of the graduates doing job at private organizations said completely satisfied about their job environment. 50% graduates from public organizations said very satisfied on this issue. Graduates satisfaction level in this issue is 3.16.
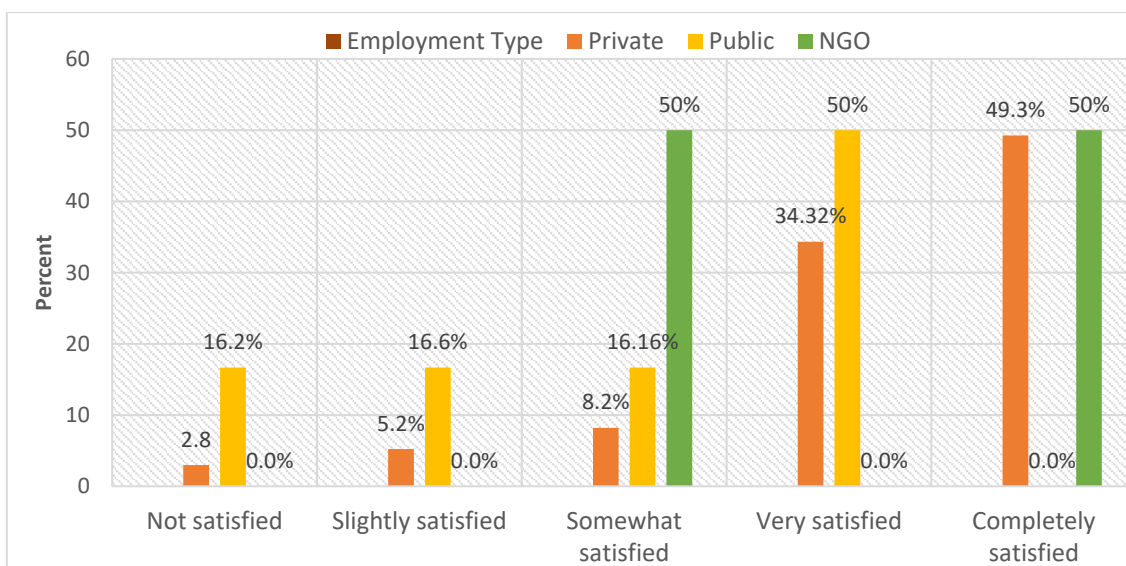
Figure 4.3.2 Satisfaction level of Printing graduates with respect to job environment.

4.3.3 Graduates' comment on their Salary status.

Organizations ownership wise satisfaction level regarding salary status of the graduates are figured below. We see private service holder is happier than govt. service holder about their salary status. Graduates mark 2.57 on this issue & where standard deviation is 1.28. This report also means graduates are not very satisfied but more than slightly satisfied in this issue.
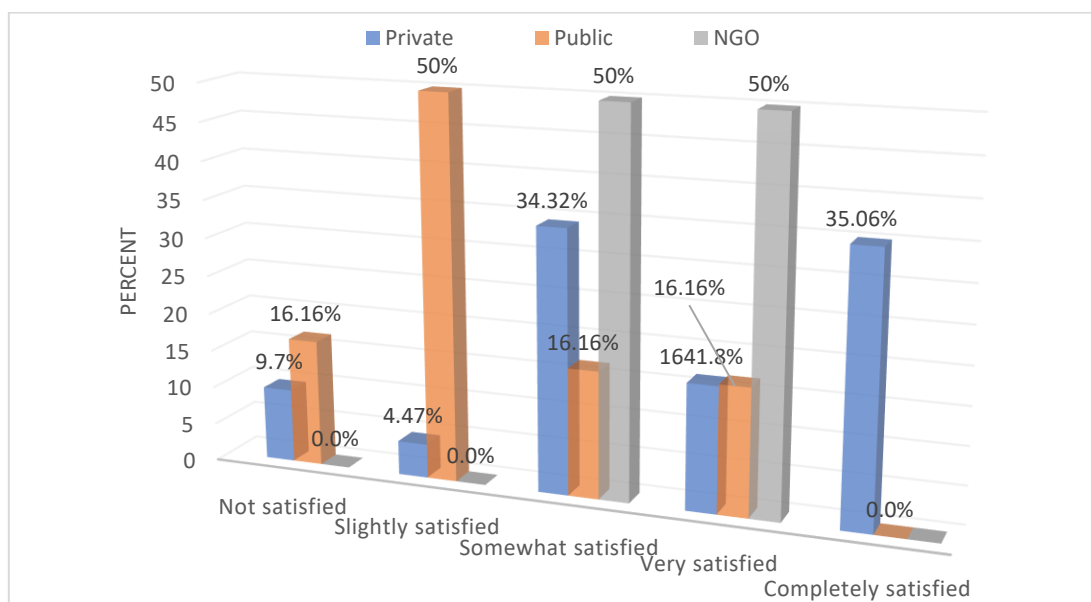
Figure 4.3.3 Satisfaction level regarding salary status of the graduates.

4.3.4 Graduates remark on their Support of appointing authority.

Employment type wise graduates' satisfaction regarding support of appointing authority are illustrated here. All graduates doing job at NGO are very satisfied where serve at private & public organizations have different view. 50% graduates servicing in public organizations are slightly satisfied. However, graduates evaluate 3.23 that is very satisfied in this issue.
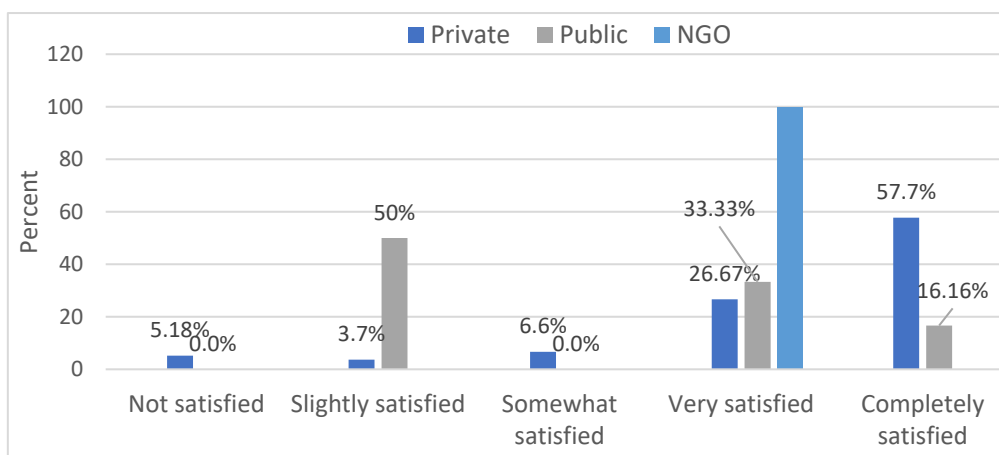
Figure 4.3.4 Satisfaction level regarding Support of appointing authority of the graduates.

4.3.5 Graduates job satisfaction

After above discussion to measure the satisfaction level of Diploma in Engineering (Printing) graduates with their job, we get 3.13 that is graduates are very satisfied on this issue. The table 4.3 illustrated the mean value regarding job satisfaction of the graduates. It is mention that graduates are not very happy on their salary status table 4.3 reported.

Table 4.3.1 Descriptive Statistics of job satisfaction of the graduates

	N	Minimum	Maximum	Mean
Job Availability	143	0	4	3.30
Salary Status	142	0	4	2.57
Support of Appointing Authority	143	0	4	3.23
Job Environment.	142	0	4	3.16
Senior's Behavior.	143	0	4	3.29
contemporary's Behavior.	144	0	4	3.21
			Mean Value	**3.13**

N.B.   0 = Not satisfied, 1= Slightly Satisfied, 2= Somewhat Satisfied, *3=Very satisfied*
4= completely satisfied

Short description of the graduates' job satisfaction level is shown in the following data table.

Table 4.3.2 A brief description of data regarding job satisfaction level of the graduates.

Factors of Satisfaction	Distribution of Employed Graduates (%)				
	Not satisfied	Slightly satisfied	Somewhat satisfied	Very satisfied	Completely satisfied

Job Availability	4.2	4.2	7.0	26.6	58.0
Salary Status	9.99	6.3	33.8	16.9	33.1
Support of Appointing Authority	4.9	5.6	6.3	28.0	55.2
Job Environment	3.5	5.6	9.2	34.5	47.2
Senior's Behavior	2.8	4.2	9.1	29.4	54.5
contemporary's Behavior	2.1	2.1	17.4	29.9	48.6
Average	4.58	4.67	13.80	27.55	49.43

4.4 Results: Satisfaction level of employer regarding TVET Diploma in Engineering (Printing) graduates.

To measure the employer satisfaction regarding Diploma in Engineering (Printing) graduates firstly, we accumulate the information about graduates' Behavior with junior official, Behavior with senior/controlling official, Practical knowledge, Printing graduate's services, Salary demanded & Punctuality from the respective employer. We also arrange FGD with graduates & employers to rich our information concerning this issue. The following data will prove the satisfaction level of the employers regarding the graduates.

Here data were collected from 31 printing industries. These industries are of different categories which are following as mentioned in the figure 4.4 from which data were collected. Most of the large type of industry are from multinational & Private limited company. Data were also collected from large, medium, small & micro category industry of public ownership.
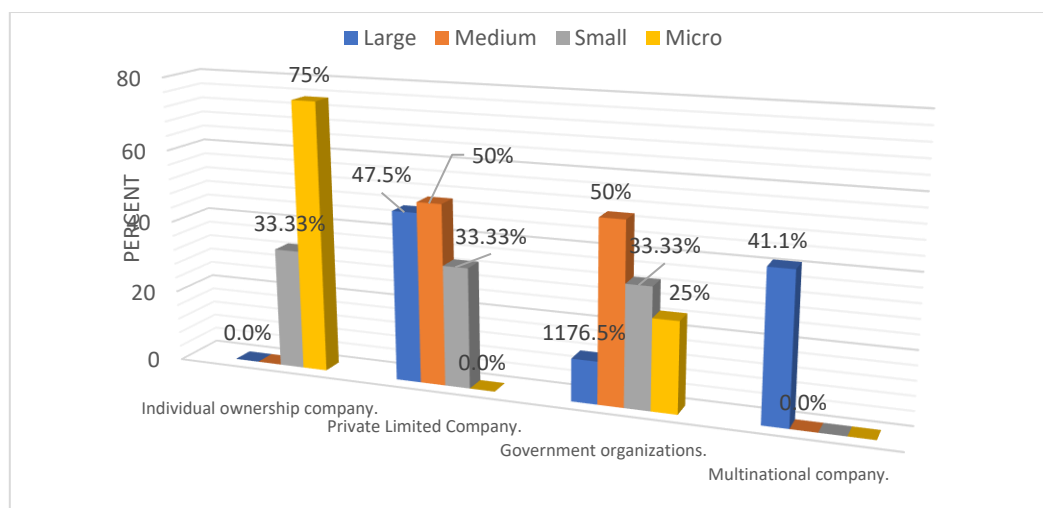
Figure 4.4 Type of industry regarding ownership

Figure 4.3 explores most of the data that's 54.8% are collected from large size of industries. After that 19.4% data are collected from small size of industries. Where cottage type of printing industry is not found.

4.4.1 Employers' remarks on graduates' Behavior with junior official.

The figure 4.4.1 illustrate no organizations is unsatisfied on this issue. Yet a large number of multinational firms found somewhat satisfied. Onward Employers mark graduates 3.13 on

Behavior with junior official. That are overall employers are very satisfied on graduates' Behavior with junior official.
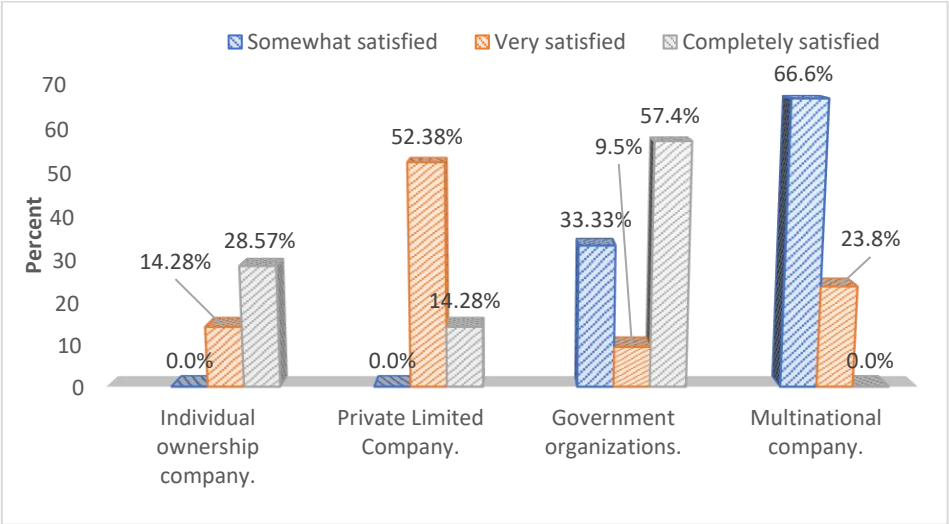
Figure 4.4.1 Employers' comments regarding graduates' Behavior with junior official.

4.4.2 Employers' view regarding graduates' behavior with senior official.

Ownership wise organizations view are illustrated in figure 4.4.2. No employers left comment as unsatisfied here. Although no multinational organizations said as completely satisfied on this issue. Overall employers said very satisfied by marking 3.16.
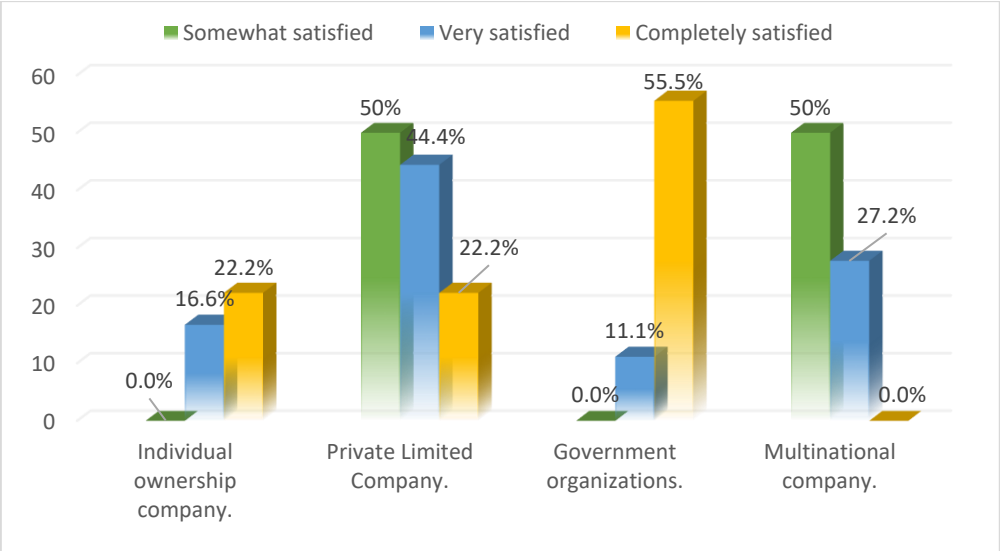
Figure 4.4.2 Employers' view about graduates' Behavior with senior official.

4.4.3 Employers' comments about graduates' Practical knowledge.

At this time, we see all unsatisfied originations are from Individual ownership. Private ownership firms & govt. organizations mentioned 33% & 67% completely satisfied consecutively. Employers evaluate 2.71 that is somewhat satisfied regarding graduates' Practical knowledge. It is clear that graduates' need to improve practical knowledge to reach the very satisfaction level of the employers.
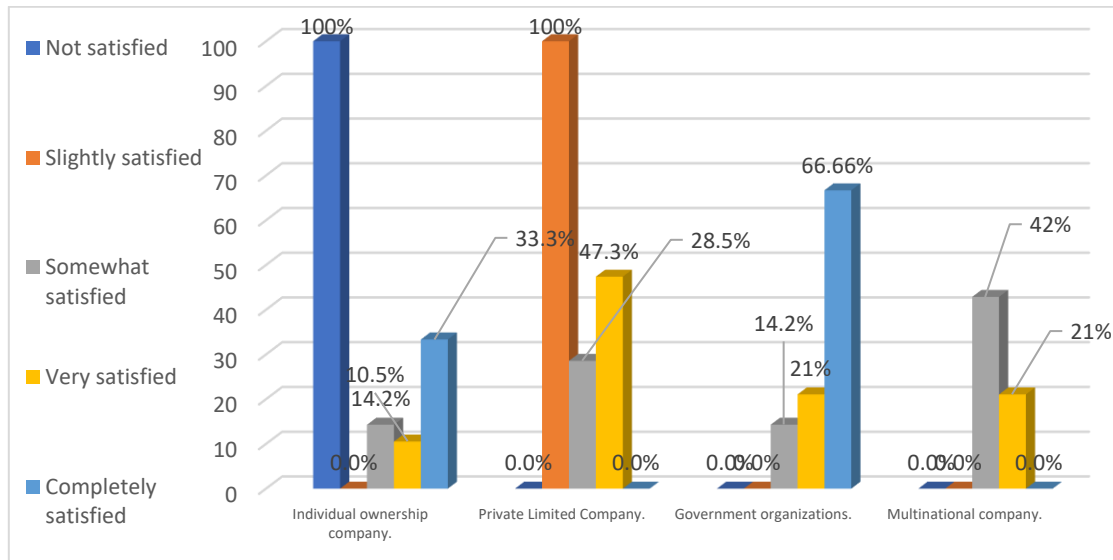
Figure 4.4.3 Employers' evaluation regarding graduates' Practical knowledge.

4.4.4 Employers' observations concerning graduates' Behavior with contemporaries.

Employers' annotation regarding the graduates Behavior with their contemporary is as following. No employer comments as not satisfied & slightly satisfied in this issue. Employers mark 3.10, that is very satisfied, on graduates' Behavior with their contemporary.
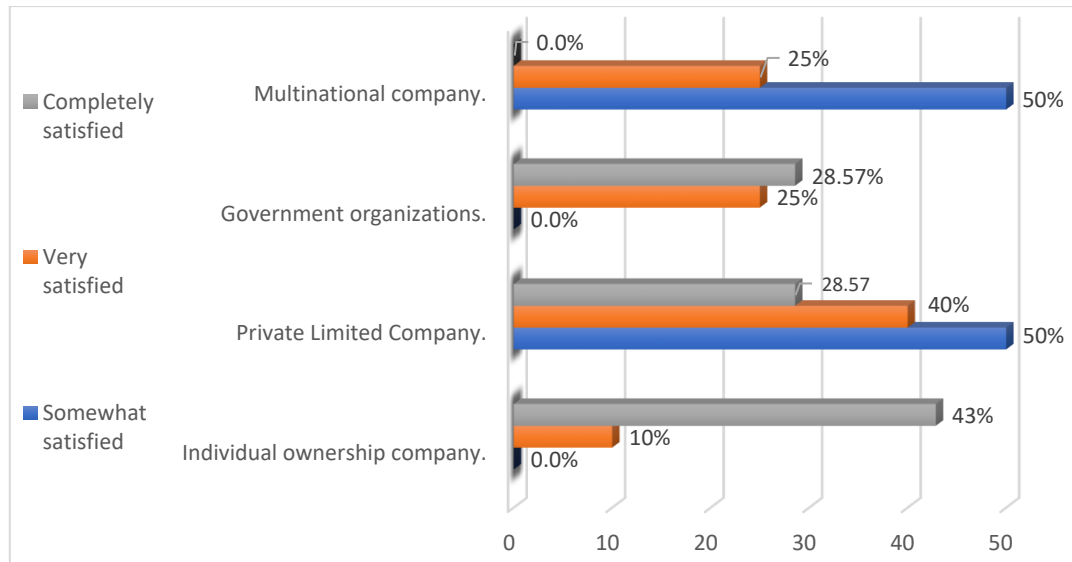
Figure 4.4.4 Remarks regarding graduates' Behavior with contemporary.

4.4.5 Employers' remarks regarding graduates' services.

Figure 4.4.5 reports that no employer found those who are not/slightly satisfied regarding graduates' services. 50% of Individual ownership & public organizations mentioned completely satisfied in this matter. Mean value of the view is 2.81. However, graduates' services should improve to reach very satisfied level of the employers.
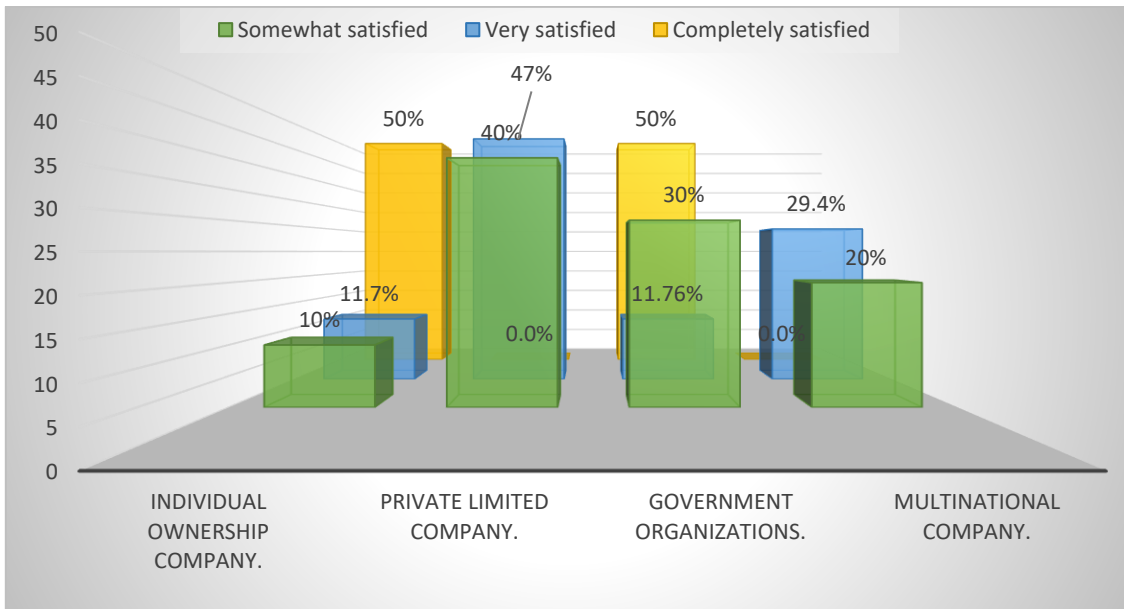
Figure 4.4.5 Employers' remarks regarding graduates' services

4.4.6 Employers' notes regarding graduates' Salary demand.

Satisfaction level of the employer's graduates' Salary demand is illustrated at 4.3.6. Employers are not satisfied are from government organization & multinational organizations only. Employers evaluate 2.81 in this area. Graduates should demand the salary as per skills, & thus graduates need motivation in this field also.
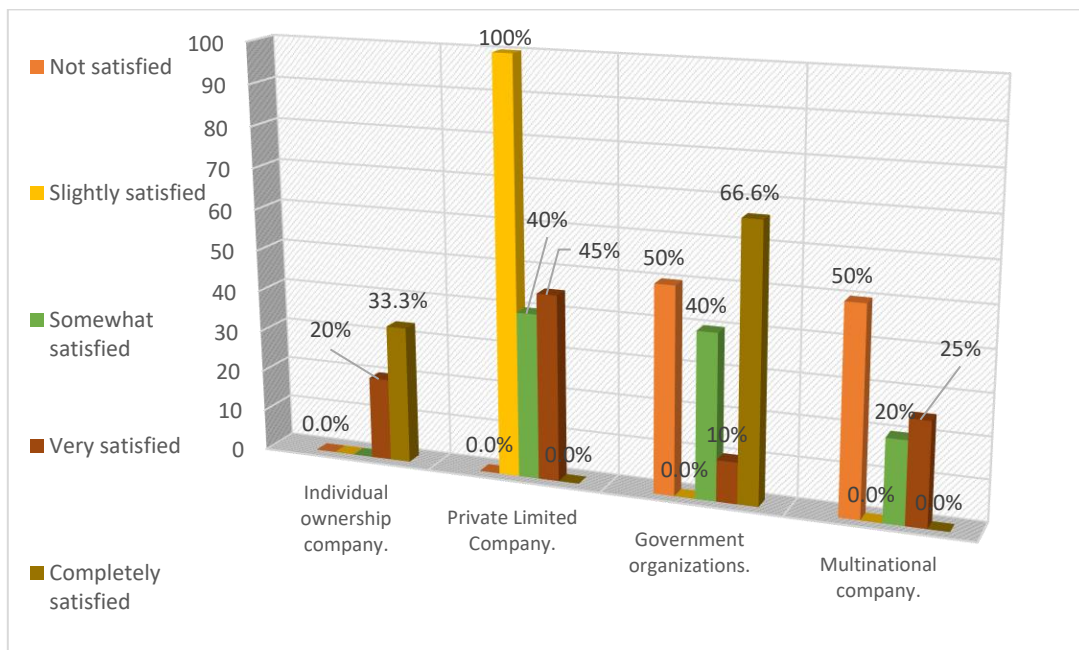
Figure 4.4.6 Employers' remarks concerning Printing graduates' salary demand.

4.4.7 Employers' annotations regarding graduates' punctuality.

Figure 4.4.7 proves no employer found as not/slightly satisfied regarding Printing graduates' Punctuality. Employers evaluate graduate's punctuality marking as 2.9. Graduates have to be more punctual at their job field.
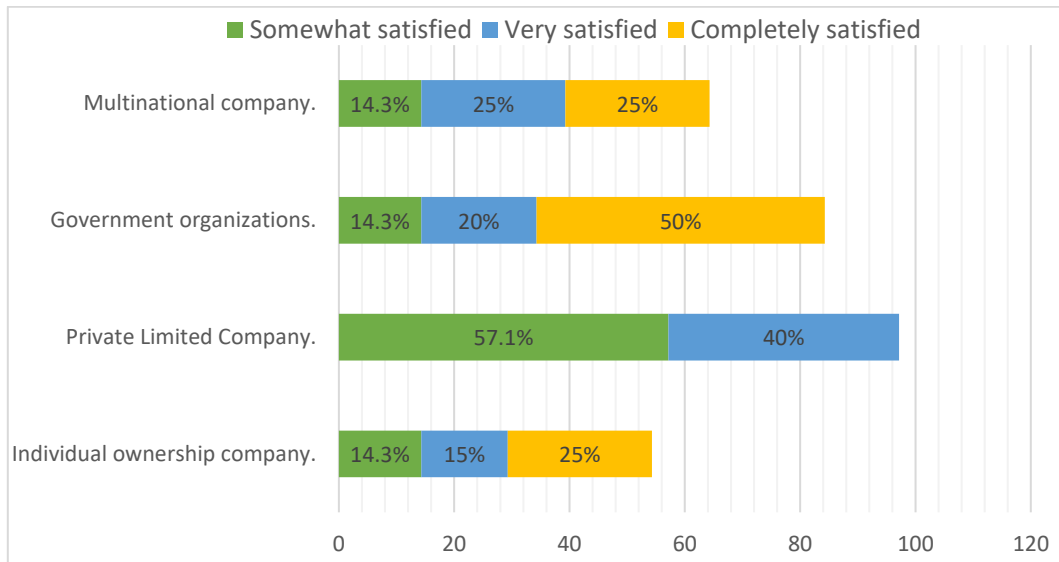
4.4.8 Employer satisfaction regarding graduates.

Employers are not very satisfied regarding graduates Specially graduates need to improve their practical knowledge, services & punctuality. Graduates also should demand the salary as the deserve as per skills. Though, Employers mentioned graduates can increase their productivity.

Table: 4.4.1 Descriptive statistics of employer satisfaction

Employers satisfaction	Frequency	Mean value
Graduates' Behavior with Senior Official	31	3.16
Graduates' Behavior with Junior Official	31	3.13
Graduates' Behavior with contemporary	31	3.10
Graduates' Practical Knowledge	31	2.71
Printing Graduates' Services	31	2.81
Graduates' Punctuality	31	2.90
Graduates' Salary Demand	31	2.68
All over mean value		**2.93**

N.B. 0 = Not satisfied, 1= Slightly Satisfied, 2= Somewhat Satisfied, **3= Very satisfied**

    4= completely satisfied

Employers' opinion of satisfaction level regarding Diploma in Engineering Printing graduates are described in the table 4.4.2

Table: 4.4.2 Descriptive statistics of employer satisfaction

Factors of Satisfaction	Distribution of employer's comments (%)				
	Not satisfied	Slightly satisfied	Somewhat satisfied	Very satisfied	Completely satisfied
Behavior with Senior Official	0.0	0.0	12.9	58.1	29.0
Behavior with Junior Official	0.0	0.0	9.7	67.7	22.6
Behavior with contemporary	0.0	0.0	12.9	64.5	22.6

Practical Knowledge	3.2	3.2	22.6	61.3	9.7
Graduates' Services	0.0	0.0	32.3	54.8	12.9
Graduates' Punctuality	0.0	0.0	22.6	64.5	12.9
Graduates' Salary Demand	6.5	3.2	16.1	64.5	9.7
Average	1.39	0.91	18.44	62.20	17.06

4.5 Graduates' job demand in relation to current job status & Satisfaction level of graduates & employers.

Graduates remark on job availability, support in earning, employer's observation on graduate's service, productivity, satisfaction level & job market demand of the graduates are stated here. After that, we will able to measure the job demand of Diploma in Engineering printing graduates in relation to current job status & Satisfaction level of the graduates & employers.

4.5.1 Graduates report on their Job availability.

The figure 4.5.1 presents employment type wise satisfaction level distribution regarding job availability of the graduates. Graduates mentioned 3.34, very satisfied, on this matter. No graduates found doing job in public & private organizations mentioned as not satisfied. Onward, graduates have a large job field.
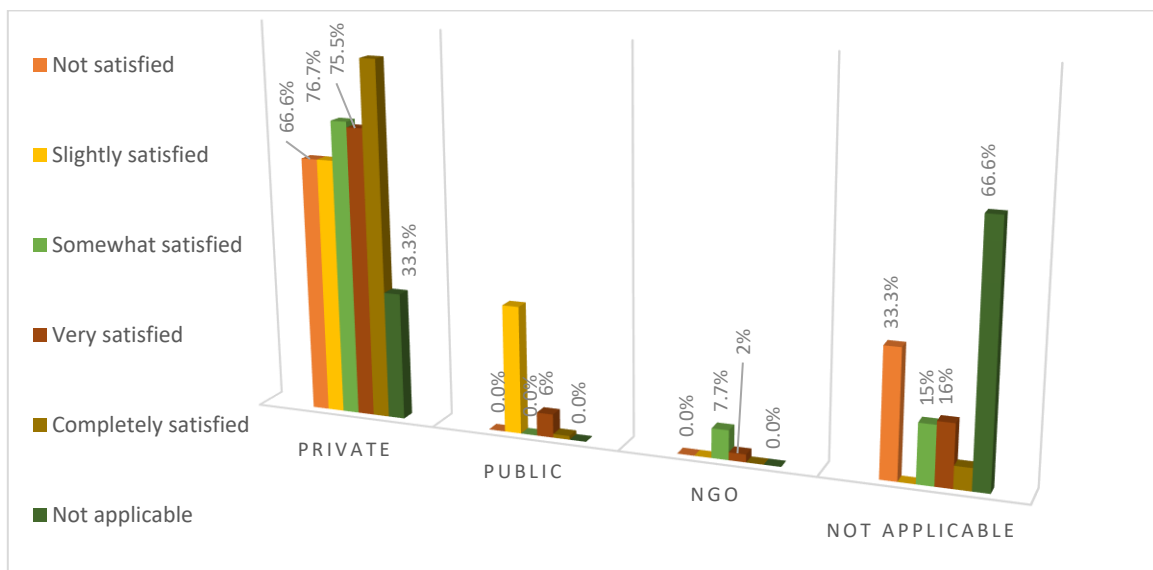
Figure 4.5.1 Satisfaction level regarding Job availability of graduates.

4.5.2 Graduates observation on "whether their educational background support in their earning."

We formed an open-ended question, with a check box, in context with support in earning of their educational background. Figure 4.5.2 illustrated that 94.1% of the graduates say their educational background support them in their earning. Left graduates stated opposite opinion.
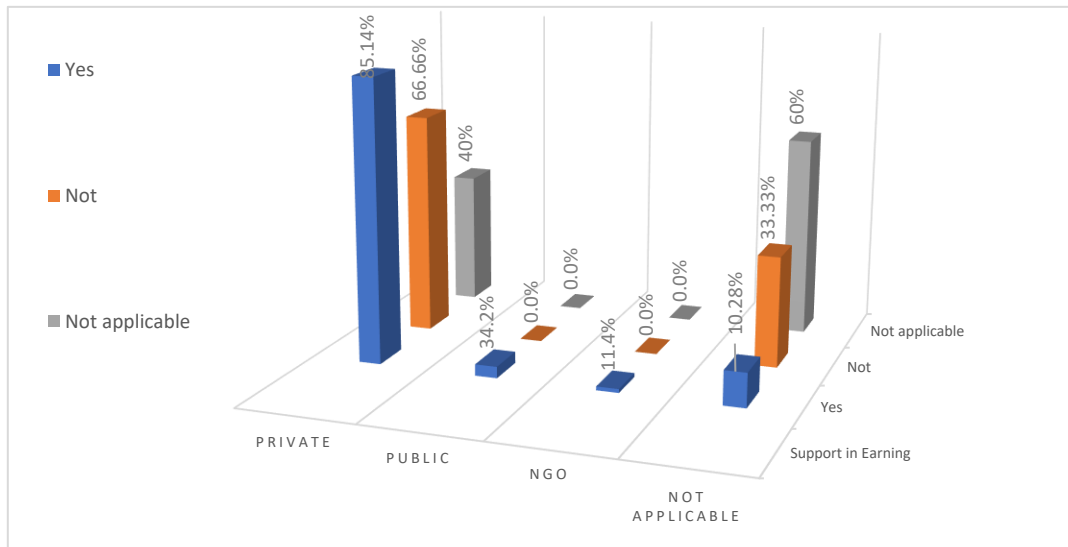
Figure 4.5.2 Graduates remark on whether educations support in earning.

4.5.3 Employers' views about recruiting graduates.

To measure graduates demand in job market employer's opinion in this issue are mentioned below. The specific question to the employers was, "whether employers are Interested to recruit more Diploma in Engineering printing graduates"? Table 4.5.1 reports that data, all of the Employers are interested to recruit more Diploma in Engineering printing graduates.

Table 4.5.1 Employers' remarks regarding recruiting graduates.

		Frequency	Percent	Cumulative Percent
Valid	Yes	31	100.0	100.0

4.5.4 Employers' observations regarding graduates' productivity.

The following figure illustrate graduate's productivity. Here we see 96.8% of the Employers says Diploma in Engineering printing graduates can increase productivity. 3.2% employers are not agreed to "Graduates Can Increase Production". As productive manpower has demand all over the job market, so this issue ensure the graduates highly demand in job market.
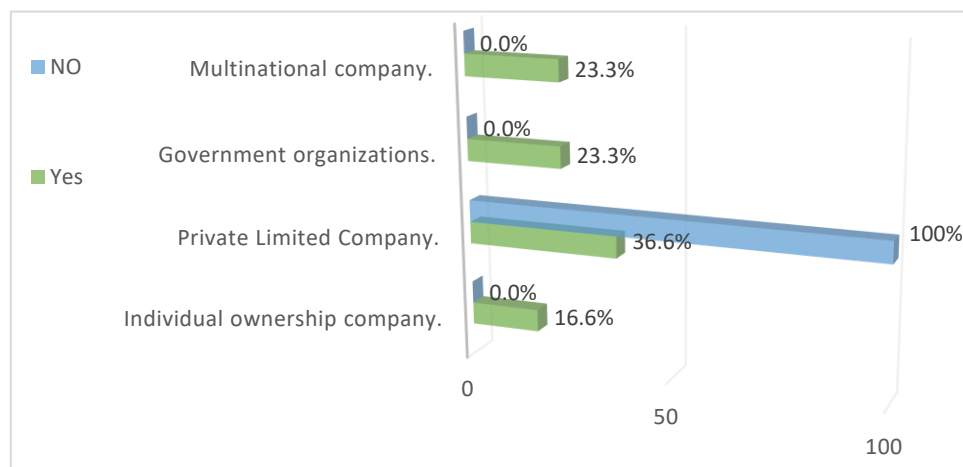
Figure 4.5.3 Employers' remarks regarding graduates' Productivity.

4.5.5 Employers' notes concerning graduate's recruitment.

An open-ended question was formed for the employer to get the information they face in recruiting Diploma in Engineering Printing graduates. We see there are 40 comments. Employers recommended to develop practical knowledge to meet market demand, not to leave after few months of the employment, to develop job responsibility. 8% employers say graduates are not available that's why they could not recruit them.
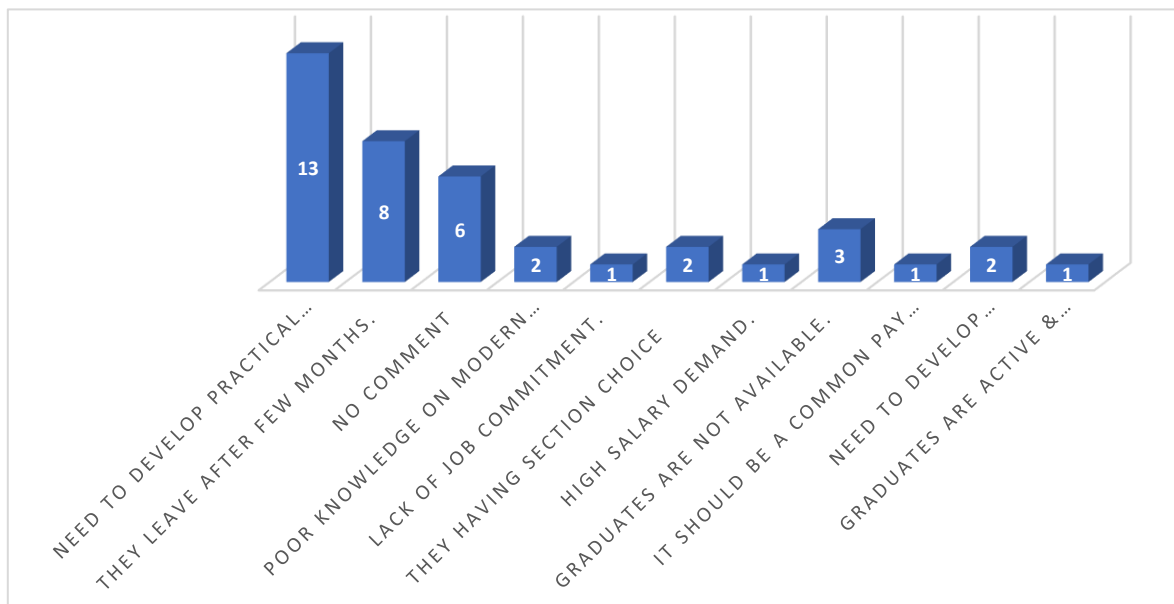
Figure 4.5.4 Employers' comments regarding the graduates' recruitment

4.5.6 TVET experts' & employers' input.2

To get the concrete scenario, in short time, of the job market of the mentioned graduates we have to make interview with the key informative persons of the respective field. In this aspect we meet 14 number of key persons from TVET experts & employers' side. Information in this context are given below.

The figure 4.5.6.1 represents the number & type of TVET experts & employers we meet. All of our TVET experts were from public organizations where most of the employers are from multinational organizations.

Experts' views are measures in a scale carrying the value beside in baccate. (1) Not at all, (2) Somewhat, (3) Moderately (4) To a very high extent.
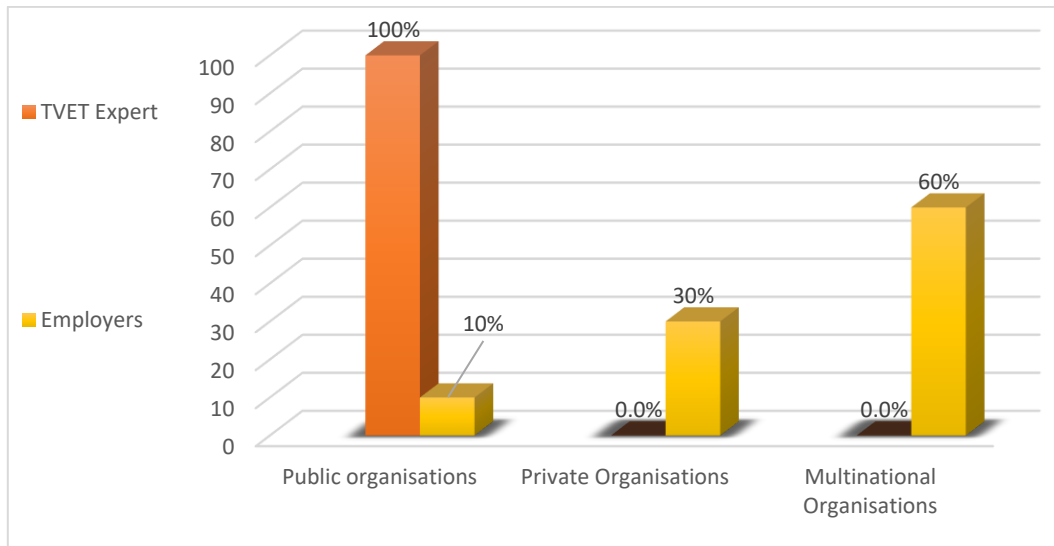
Figure 4.5.6 TVET experts & employers' responsive statistic

4.5.6.1 Job demand in relation to current employment status of the graduates.

The figure 4.5.6.1 Illustrates that most of the employers & TVET expert states that demand of printing graduates job market is to a very high extent. Mean value stands 3.50 on this issue. That is, graduates have moderately job demand in job market. Job demand are increasing in this field for skill people employers reported also.
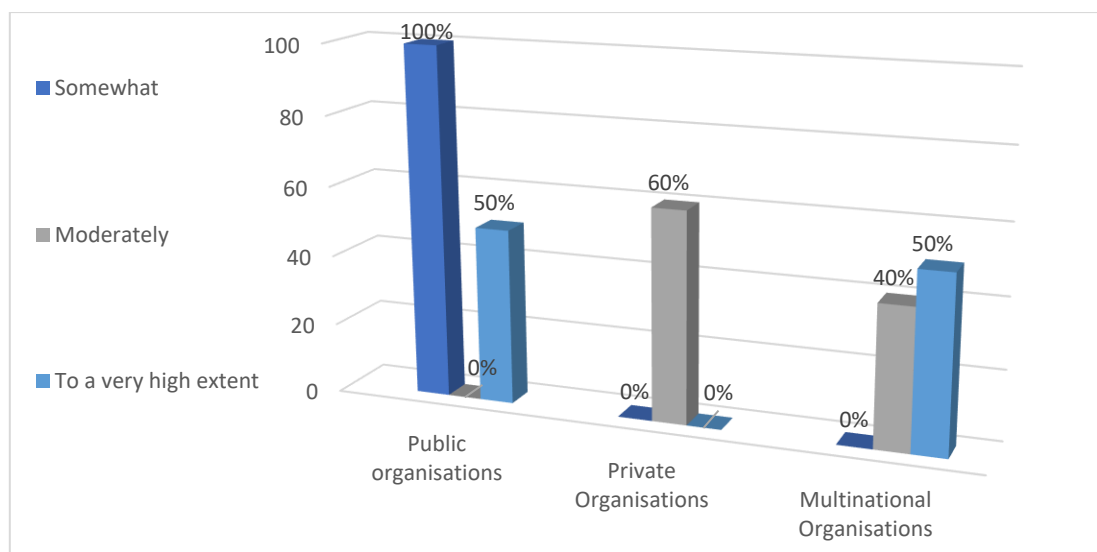
Figure 4.5.6.1 Job market demand in relation to current employment status of the graduates.

4.5.6.2 What extent jobs are available in present job market?

The figure 4.5.6.2 presents key persons comment about job availability of the graduates. key person states jobs are available in present job market moderately. Graduates may enhance their job field. TVET experts reports job are available for the skill people not for the graduates only.
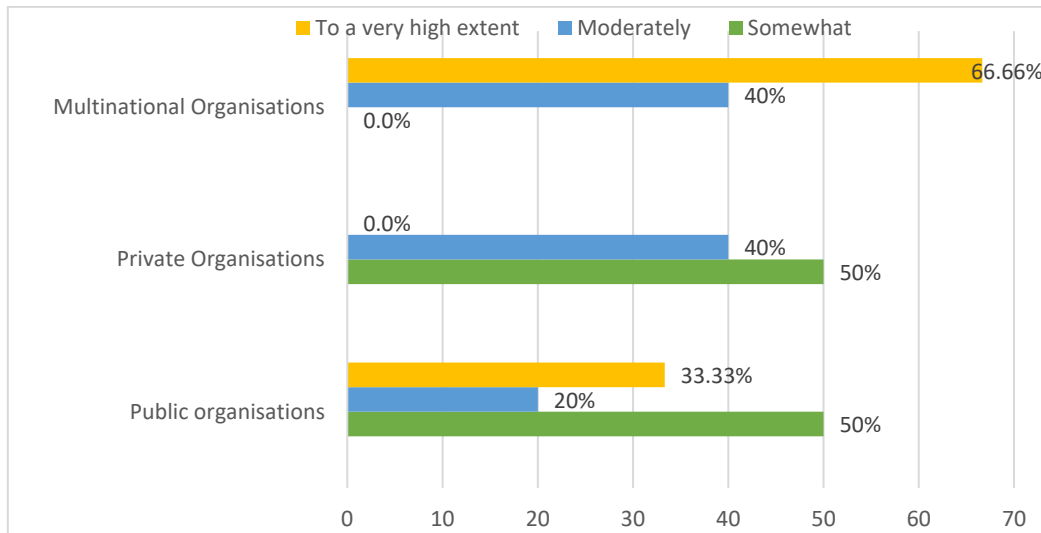
Figure 4.5.6.2 What extent jobs are available in present job market?

4.5.6.3 Multicompetence of the graduates.

Multinational organizations mentioned not at all regarding graduate's multicompetence figure 4.5.6.3 presents. Graduates have somewhat multicompetence. They need to develop other knowledge besides technical & they have to keener. Experts reports graduates sometimes lack of communications skills.
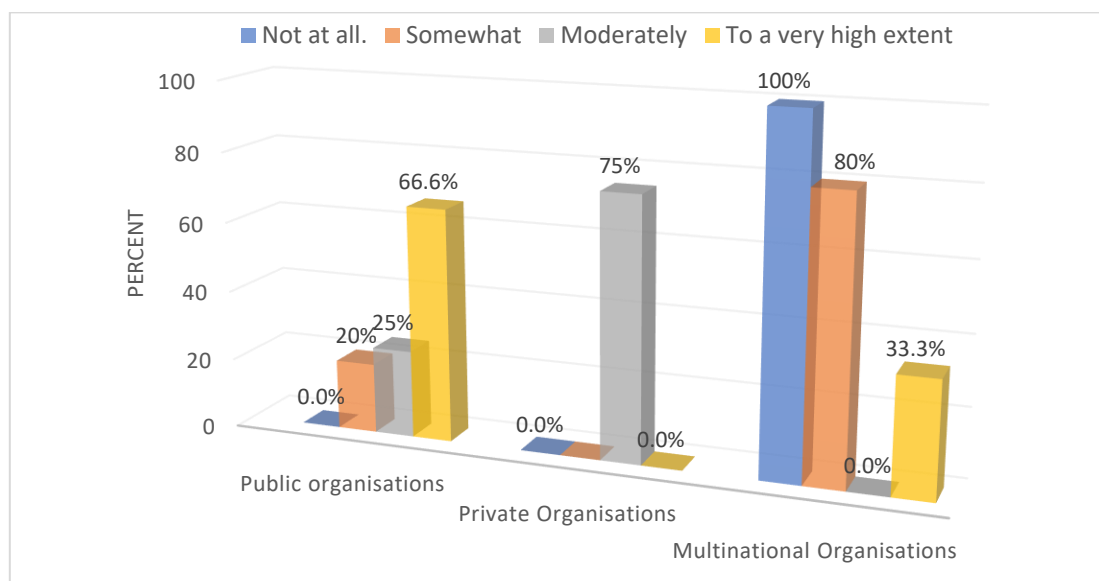
Figure 4.5.6.3 Multicompetence of the graduates.

4.5.6.4 Job demand in context of "graduate's salary status".

The figure 4.5.6.4 show the Job demand in context of "graduate's salary status". No key person mentioned not at all in this issue. Tv reports graduates job demand somewhat as per graduate's salary status. Employers said graduates expect higher salary than they deserve.
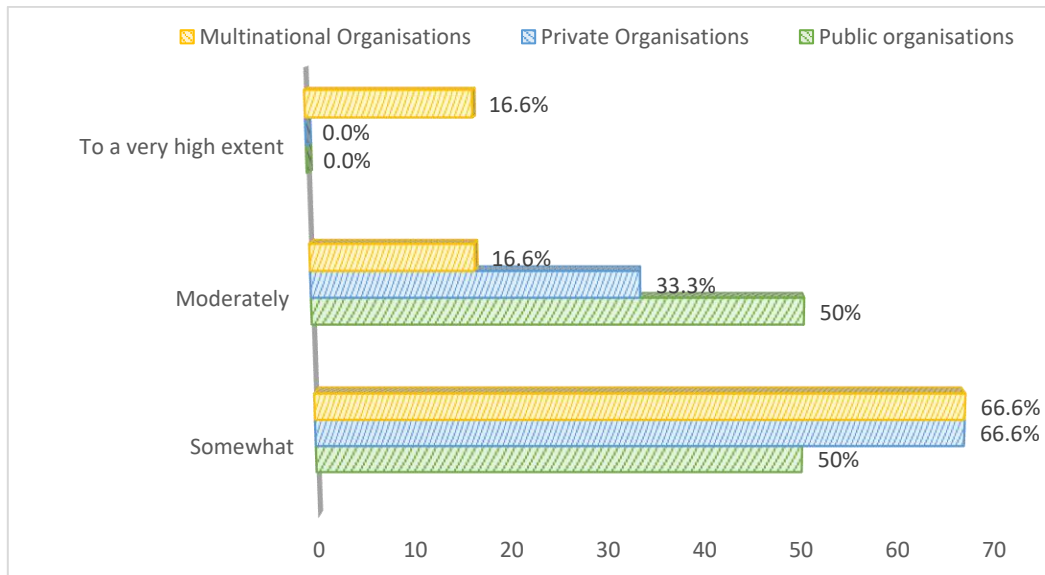
Figure 4.5.6.4 Job demand in context of "graduate's salary status".

4.5.6.5 Graduates job responsibility.

At this point the figure 4.5.6.5 shows the remarks, regarding graduate's job responsibility. KII reports graduates job responsiveness is in somewhat phases. Graduates should develop their job responsibility & they need counselling. Institute may care the graduates specially on this issue.
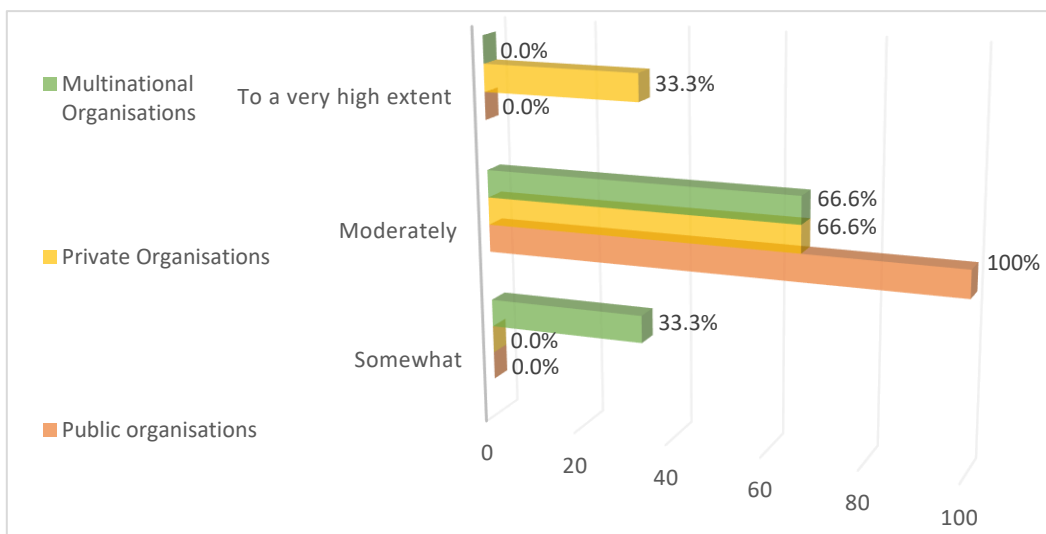
Figure 4.5.6.5 Graduates job responsibility.

4.5.6.6 Job demand at present.

According to job status & satisfaction level of graduates, employers & experts' information are summaries here.

- 🞣 Graduates are very satisfied about job availability.
- 🞣 94.1% of the graduates say their educational background support them in their earning.

- 100% Employers are interested to recruit more Diploma in Engineering printing graduates.
- 96.8% of the Employers says Diploma in Engineering printing graduates can increase productivity.

The information above proves graduates have high demand in job market. The following experts' data also show graduates have job demand moderately. It is also mentioned that graduates need develop multicompetence, skill, job responsibility & they should demand salary as their skill.

Table 4.5.2 Descriptive statistics of expert's data

	Frequency	Mean
Interest recruit printing graduates in priority basis.	13	3.54
job market demand in relation to current employment status of the graduates?	14	3.50
Graduates' Job availability in the present job market?	13	3.31
graduate's multi-competency.	13	2.69
job demand printing graduate's salary status"?	11	2.45
graduates serve employers demand	11	2.73
Graduates job responsibility.	12	2.92
All over mean value		**3.02**

N.B. 1=Not at all. 2=Somewhat, 3= Moderately, 4=To a very high extent

4.5.6.7 Imminent Required skills.

Employers from different organizations say they may recruit the following post in near future.

- Graphic Designer, Proof Reader, CtP Operator, Jr. Designer.
- Offset/Digital/ PFL Operator, Assistant/ Junior Operator, General Operator, G.T.O Operator.
- Junior Quality Assurance Officer, Production Officer, Marketing Officer, Brand Executive.
- Printing Manager, Process Manager.

4.5.6.8 Employers & TVET experts' opinion about graduates.

11 experts out of 14 say "Graduates has good demand in present job market". Other added different opinion & recommendation besides above data like as following:

Graduates Strength	Graduates Weakness
-Graduates are good at theoretical knowledge	-Not enough skills in practical knowledge.

-Graduates enjoy their job as their study is directly related to the job.	-They lack of multicompetence.
-Graduates have much opportunities in outsourcing.	-Graduates are not informed with modern technology.
	-Graduates switch their job frequently.
	-They demand salary highly.
	-A large number of graduates are lack in - digital/analog communication skills.
Graduates has large field of employment if they wish & skill.	

4.5.6.9 Employers & TVET Experts Recommendation.

- "Graduates should up to date to the emerging technology as per current job market".
- Institute should contact with the industry & should take steps to incorporate the latest technology to curriculum.
- Graduates should do their job as per employer's demand.
- Should make opportunity in government service.
- Graduates job demand depends on their individual skills not only for their certification.
- Institute should arrange guest lecture system from industry expert to UpToDate the knowledge.
- Graduates need to develop their job responsibility.
- Graduates needs career counseling.

4.6 Limitations of the study.

The major area covered in this study is to examine the status of job opportunities in different printing & packaging industries in Bangladesh. In this aspect the graduates passed from Diploma in Engineering (printing) of Providan 2010 are consider as target group. These graduates passed in 2015, 2016, 2017 & 2018 education year. This study included with field visit and discussions with the industry representative, Institutions, and stakeholders provided that a clear picture of the job market can be made. We select industry from all categories as per industry policy-2016.

Some embankment arises in this works. Those are of following type.

- Journey without experience.
- Covid-19 situations.
- Industry entrance & information for their security reasons.
- We could not reach the selected graduates rather we have to collect a few data systematic way.
- Most of the Graduates & employers are not aware to provide the data.
- Sample size selection for the employers & statistical methods.
- Target population can't be reached.
- Budgetary matter.

4.7 Lesson Learned.

There were no records found on Diploma in Engineering printing graduate's job market demand in our country. However, now we have a report in this context. We got different type of comments & opinion from the respective graduates & employers both. Especially we noticed that graduates are happy with their job market & they have a large opportunity in this area. On the other hand, a large portion of the employer say graduates having lack of practical knowledge. Moreover, all employer is eager to recruit more Diploma in Engineering Printing graduates because the employer need an educated & skill team of manpower for more productivity.

CHAPTER- FIVE. KEY FINDINGS & RECOMMENDATION

5.1 Employment status of Diploma in Engineering (Printing) graduates

5.2 Satisfaction level of the Diploma in Engineering (Printing) graduates

5.3 Satisfaction level of employer regarding TVET (Printing) graduates

5.4 Graduates' job demand in relation to current job status & Satisfaction level of graduates & employers

5.5 TVET experts' & employers' input

5.6 Employer & TVET Experts Recommendation

Chapter- Five: Key Findings & Recommendation of the study

A large data set has been accumulated through this study. All the findings produced from this data set pertinent to the study are reported in the previous corresponding chapter-4. Recommendation & core findings from this study are summarized as following.

5.1 Employment status of TVET (Printing) graduates.

The following information of this part will present the employment status like employed, unemployed, in higher study, in NEET, self-employed etc. of the graduates.

5.1.1 Diploma in Engineering (Printing) graduates' Employment status.

- Only 7.5% (14 no's) graduates is unemployed.
- 10.8 % are self-employed & 6.5 % is pursuing Higher Study.
- 77.4 % were employed.
- Only one unemployed graduate is seeking for job others mentioned different reasons (Family problem, married, have to look after parents' properties etc.) for not doing job.

5.4.2 Diploma in Engineering (Printing) graduates' Employment type

- 94.4% of the graduates are employed in private sector.
- 4.2% graduates work at public organization.
- 1.4% work at NGO.

5.4.3 Diploma in Engineering (Printing) graduates pursuing higher study

- Only Three graduates' that is 25% study at relevant subject in India.
- No graduates found in relevant education in country.

5.4.4 Employment scenario in thirty-one organizations regarding Printing graduates

- Among 7598 employees of 31 printing industries only 1.8% are from Diploma in Engineering printing background.
- where .58% are from foreign.
- Employers also mentioned they require educated manpower because it is easier for them to deal with educated people.

5.2 Satisfaction level of graduates regarding academic system

To find the employment status of Diploma in Engineering (Printing) graduates we have collected information to measure the satisfaction level of the respective graduates by checking their observance on curriculum, exam system, educational environment & practical knowledge. The core findings regarding the issues are stated below.

5.2.1 Graduate's observance on their curriculum

- Almost all graduates are satisfied in this issue.
- Graduates are very satisfied with their curriculum provided by BTEB.
- Latest printing technology, as per market demand, should include to the curriculum.

5.2.2 Graduate's comment on their exam system

- Almost all graduates are satisfied with their exam system.
- Graduates are very satisfied with their exam system at their institute.

5.2.3 Graduates opinion on their educational environment

- Almost all graduates are satisfied regarding their educational environment.
- Graduates evaluate 3.48 on this issue.

5.1.4 Respondents statements on their practical knowledge learned at institute

- Almost all graduates are satisfied about the practical knowledge they learned.
- Graduates mark 3.23 that is very satisfied on this issue
- Yet, Institute should focus on job oriented practical knowledge more.

5.1.5 Graduates satisfaction regarding curriculum

A brief of graduate's satisfaction level regarding curriculum are reported here. Graduates are very satisfied on all measures they were asked for. Although they requested to take necessary steps to incorporate the latest & demand driven technology to the curriculum. Moreover, institute should focus on practical part of the curriculum.

5.2 Satisfaction level of the graduates with their job

Key findings regarding graduate's satisfaction level regarding their job are mentioned here. In this aspect graduate's opinion regarding their supervisory officer's behavior, Support of appointing authority, Salary status etc. are included.

5.2.1 Graduates' statements on their senior's/supervisory officer's behavior

- 55% % Printing graduates are completely satisfied in this aspect.
- Graduates mark 3.29 regarding this matter.

5.2.2 Graduates remarks on their Support of appointing authority

- 50% graduates servicing in public organizations are slightly satisfied.
- All graduates doing job at NGO are very satisfied.
- Graduates evaluate 3.23 that is very satisfied regarding Support of appointing authority.

5.2.3. Graduates' comments on their Salary status

- Most of the graduates are satisfied with their salary status.
- Graduates mark 2.57 that is somewhat satisfied on this matter.

5.2.5 Graduates job satisfaction

To measure the satisfaction level of Diploma in Engineering (Printing) graduates with their job, we get mean value 3.13 that is graduates are very satisfied on this issue. It is mention that graduates are not very happy rather they are somewhat happy on their salary status.

5.3 Satisfaction level of employer regarding TVET (Printing) graduates

To measure the employer satisfaction regarding Diploma in Engineering (Printing) graduates firstly, we accumulate the information about graduates' Behavior with junior official, Behavior with senior official, Practical knowledge, Behavior with colleague, Printing graduate's services, Salary demanded & Punctuality from the respective employer. We also arrange FGD with graduates & employers to rich our information concerning this issue. The following data will prove the satisfaction level of the employers regarding the graduates.

5.3.1 Employers' remarks regarding Printing graduates' Behavior with junior official

- Onward Employers mark graduates 3.13 on Behavior with junior official.
- Employers are very satisfied on this issue

5.3.2 Employers' remarks regarding Printing graduates' behavior with senior official

- No employer comments as not satisfied.
- Overall employers said very satisfied marking as 3.16.

5.3.3 Employers' remarks about graduates' Practical knowledge

- An origination from Individual ownership found as not satisfied in this issue.
- Employers evaluate 2.71 that is somewhat satisfied regarding graduates' Practical knowledge.
- Graduates' require to improve practical knowledge to reach the very satisfaction level of the employers.

5.3.4 Employers' remarks concerning graduates' Behavior with their contemporary

- No employers supposed to not satisfied.
- Employers mark 3.10, that is very satisfied, on graduates' Behavior with their contemporary.

5.3.5 Employers' remarks regarding alumnae's services

- Employers are somewhat satisfied regarding graduate's services.
- Recommended graduates' services should improve to reach very satisfied level.

5.3.6 Employers' remarks regarding graduates' Salary demand

- Employers found unsatisfied in government organization & multinational organizations on this issue.
- Employers & Graduates both say opposite opinion in this issue.

5.3.7 Employers' remarks regarding Diploma in Engineering Printing graduates' punctuality

- Employers evaluate graduate's punctuality marking as 2.9.
- Graduates have to be more punctual at their job field.

5.3.8 Employer satisfaction regarding graduates (Printing)

- Employers are not very satisfied considering Printing graduates rather they are somewhat satisfied.
- Employers mark 2.93 on this issue.
- Recommend to improve graduates in practical knowledge, services, punctuality & to demand salary as per skill.

5.4 Employment status of TVET (Printing) graduates.

The following information of this part will present the employment status of the graduates.

5.4.1 Diploma in Engineering (Printing) graduates' Employment status.

- Only 7.5% (14 no's) graduates is unemployed.
- 10.8 % are self-employed & 6.5 % is pursuing Higher Study.
- 75.3 % were employed.
- Only one unemployed graduate is seeking for job others mentioned different reasons (Family problem, married, have to look after parents' properties etc.) for not doing job.

5.4.2 Diploma in Engineering (Printing) graduates' Employment type

- 83.3% of the graduates are employed in private sector.
- 3.2% graduates work at public organization.
- 13% work at NGO.

5.4.3 Diploma in Engineering (Printing) graduates pursuing higher study

- Only Three graduates' that is 1.6% study at relevant subject in India.
- No graduates found in relevant education in country.

5.4.4 Employment scenario in thirty-one organizations regarding Printing graduates

- Among 7598 employees of 31 printing industries only 1.8% are from Diploma in Engineering printing background.
- where .58% are from foreign.
- Employers also mentioned they require educated manpower because it is easier for them to deal with educated people.

5.5 Graduates' job demand in relation to current job status & Satisfaction level of graduates & employers

Graduates remark on job availability, support in earning, Employers observation on graduate's service, productivity, satisfaction level & job market demand of the graduates' information are mentioned here. Information found by key person interview are also included here.

5.5.1 Diploma in Engineering (Printing) graduates remark on their Job availability

- Graduates mentioned 3.34, very satisfied, on this matter.
- No graduates found serve at public & private organizations mentioned not satisfied.
- Onward, graduates have a large job field.

5.5.2 Graduates remark on "whether their educational background support in their earning"

- 94.1 % of the graduates say their educational background support them in their earning.

5.5.3 Employers' remarks about recruiting Printing graduates

- All of the Employers that is 100% job provider are interested to recruit more Diploma in Engineering printing graduates.

5.5.4 Employers' remarks regarding Diploma in Engineering Printing graduates' Productivity

- Only one employer that is 3.2 % are not agree to this point.
- 96.8% employers stated graduates can increase productivity.

5.5.5 Employers' remarks concerning Printing graduate's recruitment

- 33% employers say graduates need to develop their practical knowledge.
- 20% say graduates leave after few months.
- 8% employer say graduates are not available.

5.5.6 TVET experts' & employers' input

We have to make interview with the key informative persons of the respective field to fill the data gap. We got both quantitative & qualitative type data here. In this part we met 14 number of key persons from TVET experts (04 from public organizations) & employers (one from public, three from private organizations & 06 from multinational organizations).

5.5.6.1 Recruiting Diploma in Engineering printing graduates

- No employers or TVET experts found who left comment "not at all" on to interest to recruit more graduates.
- Mean value stands on this issue 3.02.

5.5.6.2 Job market demand in relation to current employment status

- No employers say "not at all" to this point.
- Mean value stands on this issue 3.50 that is job demand moderately.

5.5.6.3 Job availability of the graduates

- key person states jobs are available in present job market moderately.
- 42.9 % states to a very high extent in this issue.

5.5.6.4 Multicompetence of the graduates

- Graduates have somewhat multicompetence.
- Experts reports graduates sometimes lack of communications skills.

5.5.6.5 Job market demand regarding graduate's salary status

- Experts form employers part reports graduates job demand somewhat as per graduate's salary status.
- Employers said graduates expect higher salary than they deserve.

5.5.6.6 What extent serve as per demand to the employee

- Employers reports 2.73 that is somewhat serve the demand to employers.
- None mentioned as not at all.

5.5.6.7 Graduates job responsibility

- Experts reports graduates job responsiveness is in somewhat stages.
- None mentioned as not at all on this point.

5.5.6.8. Job demand in relation to current job status & Satisfaction level of graduates, employers & TVET experts

According to job status & Satisfaction level of graduates, employers & KII information are summaries here.

- Employers & TVET experts mentioned 3.02 that is Job demand moderately.
- Graduates are very satisfied about job availability.
- 94.1% of the graduates say their educational background support them in earning.
- 100% Employers are interested to recruit printing graduates.
- 97% of the Employers says graduates can increase productivity.

5.5.6.9 Approaching Required skills

Employers from different organizations say they may recruit the following post in near future.

- Graphic Designer, Proof Reader, CTP Operator, Jr. Designer.
- Offset/Digital/ PFL/ G.T.O Operator, Assistant/ Junior/ General Operator.
- Junior Quality Assurance/ Production / Marketing Officer, Brand Executive.
- Printing Manager, Process Manager.

5.5.6.10 Employers & TVET experts saying on graduates

71.4 % employers & TVET experts say "Graduates has good demand in present job market". Other says different opinion & recommendation. However, all of the views & commendation are as following:

Graduates Strength	Graduates Weakness
-Graduates are good at theoretical knowledge -They enjoy their job as their study is directly related to the job. -They have much opportunities in outsourcing.	- Graduates are not enough skills in practical knowledge. -They lack of multicompetence. -They are not known to modern technology. -Graduates switch their job frequently. -They demand salary highly. -A large number of graduates are lack in - digital/analog communication skills.
Graduates has large field of employment if they wish & become skill.	

5.5.6.11 Opinion & recommendation of the respondents attended in FGD.

Graduates' saying

- More announcement required about this institute.
- Graduates are very much interested for study upgradation but they say they have not any scope of HE in related subject in country.
- Graduates marks 3 out of 4 that is very satisfied with respect to employee behavior other than Diploma in Engineering.

- 100% graduates attended in this meeting said their job is relevant with their study.
- Latest technology should incorporate the curriculum.
- A structured salary framework should be formed for the Diploma engineer.

Existing Students' view

- Most of the students says departmental subject is more important than others subject.
- Some students say related subject is required for extra knowledge & to develop communications skills.
- Students are requesting to make the opportunity for their higher study in relevant subject.
- Students says they have to use obsolete machineries & equipment's in their lab classes.

5.6 Recommendation for the students & graduates

- "To be up to date to the emerging technology in the job market".
- Graduates have to do their job as per employer's demand.
- Require job demand depends on their individual skills.
- Demand the salary as they deserve.
- Need to develop their job responsibility.
- Require to improve punctuality in service.
- Need to grow professionalism in job.

5.7 Recommendation for the institute

- Institute have to contact with industry & take steps to incorporate the latest technology to curriculum.
- Institutions and industries or employer's linkage should be strengthened so that the TVET program is offered according to the human resource demand of the employers.
- Incorporating teaching factory concept.
- It is recommended to establish functional placement and counseling unit or any other such mechanism in each institute and in the TVET as well to support graduates linking with job market.
- Hiring industry expert to council the graduates.
- To arrange career counseling class in regular basis.

5.8 Recommendation for practice.

- Promoting participation and attainment in technical education in Bangladesh is important both from the perspective of fostering the future potential for innovation and economic growth.
- Increase awareness of industry people and general people about the mentioned technology. Consequently, industry will get more skilled & trained workforce.

- Recommended to ensure that the curriculum is fully implemented. Specially to ensure adequate opportunities for the students as foreseen by the curriculum.
- To focus on practical knowledge in class room.

5.9 Endorsement for the DTE, BTEB & policymakers.

Based on data analysis and findings, following recommendations are made:

- Indorsed to trace out the graduates in a regular basis to update the market demand.
- Establishing more institute or adding technology according to job market demand or employers needs in the existing institutes.
- Formulate recruitment rule and priority given to the Diploma Engineering (printing) graduates in recruitment, attractive salary & promotion in various private & government organizations.
- Widen the higher education field for the mentioned technology.
- Enlisting suitable job in local and overseas employment market with ensuring decent salary and proper working environment for the graduates.
- To increase provision of financial support for self-employment.

CHAPTER-SIX. IMPLICATION AND CONCLUSION

6.1 Implications for further research.

6.2 Conclusions.

Chapter-Six: Implication and Conclusion

This chapter includes research implications for researchers & conclusions.

6.1 Implications for further research.

The main purpose of this research was to develop a clear picture of the situation of labor market outcomes & demand regarding Diploma in Engineering (Printing) graduates of TVET. This research should be able to assist stakeholders in the decision-making process regarding the responsiveness of education on supply side, & to the situation of labor market on demand side. In this section, discussions of the main findings will be presented along with some relevant recommendations. Furthermore, a number of drawbacks related to the works have been identified and should be kept in mind for future study.

- Researchers can work on the employability, career stability and long-term success of the Diploma in Engineering (Printing) graduates on the labor market.
- Job market studies are recommended to conduct in a periodic manner to identify the changing needs of the labor market. Thus, it is recommended to review Curricula to furnish the market demand.
- In what extant graduates' changeover in to employment alongside the studies?
- Cross study of the Trades & others Jobs.

6.2 Conclusions

Finally, we can say if the sector can get proper patronization, investment and focus, Bangladesh will govern in the printing sector like Avery Dennison or R-Pac Bangladesh across the world. In this case, the entrepreneurs, industry owners as well as the government have to work together keeping hand on hand to reach the goal. Have to take real and effective initiatives too. After then Bangladesh will go ahead to achieve the dream of exporting 50 billion dollars by 2021.

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Annexure-1: Questioner for graduates.

Directorate of Technical Education
Research & Knowledge Management Cell.
Agargaon, Dhaka.

A report is going to determine the demand of Diploma in Engineering (Printing) graduates in Bangladesh. We are collecting individual's opinion. Your cordial cooperation is expected in this data collection.

N.B.: This information will be used only for the research work of demand analysis for the graduate mentioned above in Bangladesh.

Information collection from Diploma in Engineering (Printing) graduates (Providan-2010) in Bangladesh.

1. Name & academic identity of Diploma in Engineering (printing) graduate:

Sl .no	Description	
01	Name	
02	Roll no	
04	Session	
05	Passing Year	
06	Mobile No & mail	
08	Present address	
09	Permanent Address	

2. Employment Status (✔ Put tick mark)

Employment situation:							
Self employed		Employed.		Students (Higher study.)		Unemployed.	
Address:		Address:		Address:		Causes:	
Employer type:							
Private		Public		NGO		Others.	

3. Are you satisfied with your educational background? **(✔ Put tick mark)**

considering factors	Completely Satisfied (4)	Very Satisfied (3)	Somewhat Satisfied (2)	Slightly satisfied (1)	Not Satisfied (0)
Curriculum.					
Exam system.					
Educational Environment.					
Practical knowledge.					

4. Are you satisfied with your Job market? **(✔ Put tick mark)**

considering factors	Completely Satisfied (4)	Very Satisfied (3)	Somewhat Satisfied (2)	Slightly satisfied (1)	Not Satisfied (0)
Job Availability.					
Salary status.					
Support of appointing authority.					
Job environment.					
Senior's behavior.					
Colleague's behavior.					

5. Do you think your educational qualification supports in earning? Yes | | No |

Please write the causes if your answer is "No":

……

……

With cordial thanks	

Acknowledgement of compassionate information provider.		Acknowledgement of Information collector.	
Title	Description	Title	Description
Name:		Name:	Md. Ali Hossain
Post:		Post:	Instructor (Tech)
Organization Name & Address:		Organization Name & Address:	Graphic Arts institute Mohammadpur Dhaka-1207. 01731402303
The information given above is very true & authentic. I fill up this form willingly & consciously.		I have collected this information willingly &consciously.	
Signature with Date:		Signature with Date:	

Annexure-2: Questioner for employers.

Directorate of Technical Education
Research & Knowledge Management Cell.
Agargaon, Dhaka.

General Information
A report is going to find out employment opportunity, that's the demand of Diploma in Engineering in printing in Bangladesh. In this aspect we are collecting data different printing industries. Your cordial cooperation will help in this data collection.
N.B.: This information will be used only for the research work of demand analysis for the graduate mentioned above in Bangladesh.

Information collection from the employer of printing industries-2020

1. Name of the organization / industries:

2. Type of the organization / industries:(✔ Put tick mark)

A	Individual ownership company.		F	Corporation	
B	Joint ownership company.		G	Country ownership company.	
C	Limited company.		H	Foreign ownership company.	
D	Public Company		I	Multinational company.	
E	Private / Public Limited Company.		J	Others.	

3. Industry size:

Large (If number of Employee> 120)	Medium (If number of Employee is; 51- 120)	Small (If number of Employee is; 16- 50)	Micro (If number of Employee <16		Cottage	

4.Address:

Factory	
Corporate office	

5. Employment information of Diploma in Engineering (Printing) graduates:

Type/Post	Approved post for recruited	Employee from Graphic Arts institute.	Employee from other department.	Foreign employee
A.				
B. Operation.				
C. Marketing.				
D. others.				
Total=				

6. Are you satisfied with the Diploma in Engineering (Printing) graduates?(✔ **Put tick mark)**

considering factors	Completely Satisfied (4)	Very Satisfied (3)	Somewhat Satisfied (2)	Slightly satisfied (1)	Not Satisfied (0)
Behavior with senior official.					
Behavior with junior official.					
Behavior with colleague.					
Practical knowledge.					
services					
Punctuality.					
Salary demanded.					

7. Do you think Diploma in Engineering (Printing) graduates can increase your production?

Yes		No	

Please write your recommendation if your answer is "No":

……

……

……

8. Are you interested to recruit more Diploma in Engineering (Printing) graduates?

Yes		No	

Please write the causes from your own gen if your answer is "No":

……

……

……

9. Write your opinion you faced in recruiting Diploma in Engineering (Printing) graduates?

……

……

……

With cordial thanks

Acknowledgement of compassionate information provider.		Acknowledgement of Information collector.	
Title	Description	Title	Description
Name:		Name:	Md. Ali Hossain
Post:		Post:	Instructor (Tech)
Organization Name & Address:		Organization Name & Address:	Graphic Arts institute Sat masjid Road Mohammadpur Dhaka-1207. 01731402303
The information given above is very true & authentic. I fill up this form willingly & consciously.		I have collected this information willingly &consciously.	
Signature with Date:		Signature with Date:	

Annexure-3: Questionaries' formed for FGD.

Group: graduates;

1. Why did you get admission in TVET?
2. How did you know about Technical educations?
3. Who encouraged you to get admission in Graphic Arts Institute?
4. Are interested or admitted in higher study?
5. Why do you think your Higher study in necessary?
6. Are you employed?
7. Tell us your relative or family comments about your study & job?
8. How behave you the employee other than Diploma graduates?
   4) Completely satisfied   3) Very satisfied   2) Somewhat satisfied   1) Slightly satisfied   0) Not satisfied.
   Graduates marks 3 out of 4 that is very satisfied with respect to employee behavior other than Diploma in Engineering.
9. Did you visit any industry during your study?
10. How help you Industrial Attachment in your study?
11. How relevant your job with your study?

Group: Existing Students;

1. Why did you get admission in Graphic Arts Institute?
2. Are you happy with your curriculum?
3. Do you think Others subject is necessary for you?
4. Are you interested for higher study?
5. What do you think the equipment's you use in lab practice?
6. Are you happy with admission in Graphic Arts Institute?

4) Completely happy   3) Very happy   2) Somewhat happy   1) Slightly happy   0) Not happy.

Group: Employers;

1. What about the competence of the Graphic arts' graduates?
2. What about technological knowledge of the Graphic arts' graduates?
3. What type of problem do you face in recruiting Graphic arts' graduates?
4. What about the communications skills of the Graphic arts' graduates?
5. What about job responsibility of the Graphic arts' graduates?
6. How do you satisfy recruiting TVET graduates?
   4) Completely satisfied   3) Very satisfied   2) Somewhat satisfied   1) Slightly satisfied   0) Not satisfied.

Annexure-4: Graduates List with employers.

No	Name of the Graduates	Post	Mobile No	Job Address
1	Bikash Kumar Dey	Marketing Officer	01918380680	Shamutshuk Printers Ltd. Mohammadpur.
2	Lotus Baidya	Opearator	01916221178	Avery Dennison,Savar, Dhaka-1349.
3	Md Sumon Miah	Production Officer	01643399515	Shamutshuk Printers Ltd. Mohammadpur.
4	Md. Nazrul Islam	Store Officer	01621918915	Shamutshuk Printers Ltd. Mohammadpur.
5	Shimul Kumar Biswas	Production Officer	01643280271	Shamutshuk Printers Ltd. Mohammadpur.
6	Md. Mukter Hossain	Graphic Designer	01675909944	Daraz Banani Dhaka-1213, Bangladesh.
7	Md.Mazaharul Islam	Production Executive	01684252986	Maheen Design & Ethikhet, Naraayngong.
8	Juel ahmed	Opearator	01930557678	R-Pac Bangladesh Packaging com.Ltd, Narayangong.
9	Niranjon Baroi	Graphic Designer	01735295250	GMS Trims Ltd, Ashulia, Dhaka.
10	Kha. Shalim Hossen	Opearator	01717453528	Film cut Printing & packaging ltd,Tejgaon, Dhaka.
11	MD.Ikramul haque	Assistant Operator	01763442834	Avery Dennison,Savar, Dhaka-1349.
12	Md. Mamun Hossain	Operator	00173486564	Cheekpoint System bd Ltd., AEPZ, Naraynagong.
13	Md Abdul Ahad	Assistant Operator	01740832023	Avery Dennison,Savar, Dhaka-1349.
14	Md Rashik Islam	Assistant Operator	01740173415	Avery Dennison,Savar, Dhaka-1349.
15	Md. Ashik	Operator	01739397410	Manohar filaments bd ltd, Ashulia, Dhaka.
16	Md. Mikail Pramanik	Assistant Operator	01742560119	Avery Dennison,Savar, Dhaka-1349.
17	Amanullah	Operator	01748780685	Avery Dennison,Savar, Dhaka-1349.
18	Md Fazlay Rabby	QA Officer	01626559249	R-Pac Bangladesh Packaging com.Ltd, Narayangong.
19	Md Juyel Rana	Operator	01768899232	Cheekpoint System bd Ltd.
20	Sayef Mahmud	Graphic Designer	01677233934	New D.O.H.S, Mohakhali, Dhaka
21	Md. Helal Uddin Nayan	Assitant Operator	01773381324	Avery Dennison,Savar, Dhaka-1349.
22	Md Sezan Mahmud	Production Executive	01632920727	The Daily Star,Tejgaon, Dhaka -1215
23	Md Mostakim	Assitant Operator	01797576136	Avery Dennison,Savar, Dhaka-1349.
24	Nasir Ahmed	Operator	01634254175	Cheekpoint System bd Ltd.
25	Delower Hossain	Operator	01620858351	Unique Designers Ltd,Board Bazar, Gazipur
26	Md Abu Sayed	Assitant Operator	01682755651	Avery Dennison,Savar, Dhaka-1349.
27	Md Alamin	Assitant Operator	01987883016	Avery Dennison,Savar, Dhaka-1349.
28	Md. Zahidul Islam Biplob	Operator	01754549347	Cheekpoint System bd Ltd., EPZ, Narayanganj
29	Md. Nasimul Haque	Operator	01750293532	SML Packaging Solution BD Ltd, AEPZ, Narayangong.
30	Naimur Rahman	Junior Executive	01630453638	JMI Printing & Packaging, Sonargaon, Narayanganj.
31	Trisha Akter	Junior Instructor	01742544277	Shamoli ideal Ploitchnic Institute, Mohammadpur.
32	Sohel Rana	Operator	01726393650	Avery Dennison,Savar, Dhaka-1349.
33	Md Towhidul Islam	QC executive	01705870619	Shamutshuk Printers Ltd. Bochila, Mohammadpur.
34	Md. Abdullah Al Mamun	Sr. UX developer	01728274775	Müllackerstrasse 10- ZH Switzerland?
35	Md. Nazmul Hasan	Web Developer	01760372703	Graphic Peoples, 11-Banani, Dhaka-1211.
36	Shovo Paul	Image Editor	01927870275	Cutoutwitch,Navana,Tejgaon, Dhaka-1215.
37	Md Shahidul Islam Shishir	Graphic Designer	01828945720	Outsourcing, Oslo, Norway.
38	Md. Reaz Uddin	Color Technitian	01688505085	Avery Dennison,Savar, Dhaka-1349.
39	Sandip Saha	Graphic Designer	01923259964	Tuska Group, Gazipur, Chowrasta.
40	Md. Shemul Mia	QC executive	01737562796	Premiaflex Plastics Limited ,Sreepur-1740, Gazipur
41	Shanto Islam	Graphic Designer	01694252812	Hatim Group Company, Dhaka-1000.
42	Md. Abdulla al noman	Permit Receiver	60532524218	Md Albar Gas ltd, Dammam saudi arabia.
43	Md Mohsin Alam	Production Officer	01787702117	Exclusive Can Limited Tongi Gazipur
44	Jahid Hasan	Service Engineer	01945124678	Graphics Ltd. Tejgaon.
45	Md Robiul Islam	Graphic Designer	01773519621	Unitex Labels Ltd, Ashulia.
46	Sree Ripon Kumar	Officer QC	01775588314	Premiaflex Plastics Ltd, Mawna, Gazipur
47	Md Rasadul Karim	Graphic Designer	01713645977	X ceramics, mawana, Sreepur, Gazipur.
48	Md. Abul Bashar	Officer QC	01674928893	Robin printing &packages ltd, Gazipur.
49	Md Rafiqul Islam	Operator	01759163491	R-Pac Bangladesh Packaging com.Ltd, Gorai, Tangail
50	Md Muktar Hossain	Junior Print Officer	01747438709	Kashem industries, Gazipur.
52	Md Kawsar Ahmed	Graphic Designer	01517816706	Unimed Unihealth pharmacuticals ltd.
53	Md Farhad Hossain	Officer QC	01756339996	Akij Food&Beverage Ltd Dhamrai Dhaka
54	Md Ashikur Rahman	Junior Operator	01768571461	Avery Dennison,Savar, Dhaka-1349.

No	Name of the Graduates	Post	Mobile No	Job Location
55	Md Alamin Prodhan	Operator	01726389484	R-Pac Bangladesh Packaging com.Ltd, Gorai, Tangail
56	Mizanur Rahman	Sales	01845861167	Jamuna Future Park.
57	Most Shamima	Graphic Designer	01779932220	Gale, amtoli, Mohamkhali
58	Md. Safiqul Islam Milon	Operator	01630940007	Checkpoint, AEPZ narayangong
59	Md. Shahidul Islam	Sales Executive	01626061187	Pran-RFL Group, pallabi, Dhaka-1216.
60	Md. Imran Hossain	Operator	01703040801	R-Pac Bangladesh Packaging com.Ltd, Narayangong.
61	Md. Shahadot Islam	Operator	01767397657	R-Pac Bangladesh Packaging com.Ltd, Narayangong.
62	Nishi Mondol	Graphic Designer	01789185142	Advent Pharma Ltd., Ramna, Dhaka-1000
63	Nadia Akter	Designer Executive	01636820217	beximco industrial park,Kashimpur, Savar
64	Md. Saydozzaman Patwary	Officer QC	01833241034	Sukhtara printers limited,Company of Beximco
65	Anupam Devnath	Animator	19316195418	Outsourcing, HSR Layout, Bengaluru, Karnataka.
66	Md Ariful Hasan	Assitant Manager	01792037495	Orchid Printers Ltd Gazipur.
67	Md. Riaz Sarker	Graphic Designer	01751515798	Aristopharma Ltd. 7, Purana Paltan, Dhaka – 1000
68	Airin Akter	Quality officer	20777764602	Taska accessories, amman, jordan.
69	Protap Roy	Service Engineer	01752219733	Graphic Ltd., 225 Tejgaon 1/A, Tejgaon.
70	Milon Mia	Quality officer	01827011788	Robin printing & packages.Gazipur
71	Md Enamul Haq	Graphic Designer	01738378937	Qpale ltd, Kuratoli Kuril Vatara Dhaka
72	Mohammad Farhad	Assitant Engineer QC	01836016091	Akij Printing and Packaging Dhamrai
73	Md kaosar Ali.	Graphic Designer	01760032477	FIFOTech, Kawran Bazar, Dhaka
74	Md. Arif Mia.	Graphic Designer	01750995546	Orion Group, Dhaka-1208, Bangladesh
75	Md Jaynal Abedin.	Graphic Designer	01936784100	Brac Centre 75,Mohakhali Dhaka-1212
76	Md. Omar Faruk	Junior Executive	01737730827	Lecture publication Ltd., matuail. Jatrabari.
77	Sayed Moazzem	Office Assistant	01765005821	Dhaka Metro Politan Police.
78	Md. Mozammel	Graphic Designer	01767385205	Jenson & Nicholson Bangladesh Ltd., Chattogram.
79	Md. Shohel Rana	Assitant Operator	01729685217	Avery Dennison,Savar, Dhaka-1349.
80	Jannatul Ferdaus	Operator	01963955241	Intelligent Label Solutions Ltd.
81	Md. Abdul kader gani	Assitant Operator	01761598920	Arbab Group, Arbab printing & packaging ltd.
82	Md. Motiur Rahman	Junior Executive	01785256151	Lecture publication Ltd., matuail. Jatrabari.
83	Juel kanti Howladar	Technical Officer	01759448354	BDAC, Dhaka.
84	Md. Harun Ur Roshid	Production Officer	01751307772	Arbab Group, Simrail Road, Chittagong Road.
85	Gulam Kibria	Production Executive	01677838476	The Daily Star, 64-65 kazi Nazrul Islam Avenue
86	Md. Alamin mia rasel	Ctp Operator	01614113896	Next Accessories ltd, Shawghat, narayangong.
87	S M Halim ullah Pavel	Computer Operator	01677875030	Roads And Highways Department, Tejgaon, Dhaka
88	Md Amirul Islam Adil	Graphic Designer	01744353440	R-Pac Bangladesh Packaging com.Ltd, Gorai, Tangail
89	Md. Nasir Ahmed	Graphic Designer	01758660302	Borendra University, 529/1, , Rajshahi.
90	Md. Iqbal Hossen	Service Engineer	01745765311	Graphic Solution Ltd, Tejgaon, Dhaka.
91	Sharder. Sazzad Hossain	Graphic Designer	01761290906	LABAID Diagnostic Kalabagan, Dhaka 1205.
92	Nur-A-Asraful Khan	Graphic Designer	01686488247	Cutoutwitch,Navana, Dhaka-1215.
93	Md. Shariar Ahmed	Production Officer	01837771481	The Merchants Ltd. / Tongi, Gazipur
94	Md. Omar Faruk	Quality Executive	01766487437	The Delta Composite Knitting ltd, Dhaka.
95	Md. Arif Hossain	Quality Executive	01723165963	Square pharmaceutical ltd . Basic pabna.
96	Manoj Saha	Sr. Graphic Designer	01677077399	Eon Group Of Industries,304,Tejgaon,Dhaka
97	Nazmul Hasan	Graphic Desigenr	01671482986	Green Holiday,Mohammadpur, Dhaka.
98	Md. Shaded Hasan Shikut	Computer Operator	01754480200	palashbari govt college
99	Md. Nur Alam	Graphic Designer & IT	01715672485	Virgo Group, Dhaka-1206, Bangladesh
100	Kazi Abul Basar	Assistant Operator	01964453491	Postal Printing Press, Tongi Gazipur.
101	Md. Rony Shikder	Sales Executive	01516117878	Ridge Pvt. Ltd.Armanitola, Babubazar, Dhaka.
102	Md. Shakil Sraker	Graphic Designer	01774060010	Clipers Web, 39 koloni H No:3.
103	Md. Rubal Hossen	Team Leader	01838314973	Graphic Aid, New Eskaton, Dhaka.
104	Md. Sabuj Mia	UI/UX Designer	01780500159	Get web, Mirpur Rd, Dhaka.
105	Md. Manwar Hossain	UI/UX Designer	01766204970	Get web, Mirpur Rd, Dhaka 1207
107	Md. Nurul Islam	Graphic Designer	01982766062	BZM Graphic Ltd, Ringroad, Mohammadpur.
108	Saiful Islam Rana	Sr. Graphic Designer	01707698558	Graphic Aid, New Eskaton,Bangla Motor, Dhaka.
109	Md Shariful Islam	Graphic Designer	01707558403	Outsourcing, Sujabad, Dohopara, Bonani, Bogura.

No	Name of the Graduates	Post	Mobile No	Job Location
110	Ashad Miah	Executive Designer	01624729095	Japan Bangla Business Corpration, Tejgaon, Dhaka.
111	Md. Ariful Hasan	Production Officer	01719616091	S.R Papers Industries Ltd.,Tongi,Gazipur, Dhaka.
112	Abdur Razzak	Sr. Graphic Designer	01795710733	Cob Web Design,Lalmatia, Mohammadpur.
113	Sijanur Islam	Graphic Designer	01790477142	Bright River Bangladesh Ltd,Purana Paltan.
114	Md Harisullah	Sales Executive	01711222249	Ridge Pvt. Ltd, sobuj Masjid, Babubazar, Dhaka.
115	Md. Sumon Ahammed	Graphic Designer	01715303462	Excel Technologies Limited, Banani, Dhaka-1213
116	Md. Gaziur Rahman	Graphic Designer	01765462700	BZM Graphic Ltd, Ringroad, Mohammadpur.
117	Md. Almas Ali	Senior Designer	01977812176	Clipers Web, Shorokunjo, raybazer, 39 koloni H No:3
118	Alamgir Hossen	Graphic Designer	01744520740	Gold Sons Hotel & Resources, Gulshan-1, Dhaka.
119	Most.Zakia Shanta	Graphic Desigenr	01644440038	Cob Web Design,Lalmatia, Mohammadpur.
120	Md.Yousuf Ali	Manager	01712184991	TexitSource, Nishat Nagar, Turag, Dhaka.
121	Md Rafiqul Islam	Graphic Designer	01624791688	Creative Media Ltd, Mohammadpur,Dhaka.
122	Md. Ariful Islam Sakil	Operator	01771401112	Biman Bangladesh airlines Printing & Publication.
123	Md. Jobaidur Rahman	Graphic Designer	01796909569	Digital Graphic Studio,New Eskaton, Dhaka 1215.
124	Md Yeasin Arafat	Sr. UX developer	01767270989	Freelauncher It BD, Mirpur-02.
125	Md Shajalal Islam	Graphic Designer	01757444762	Inernational Home Ware, Banani Dhaka-1213
126	Maruf Ahamed	Graphic Designer	01846269721	Annex Communications Ltd., Dhaka.
127	Sahabuddin Shihab	Visualizer	01630850074	Liverty Media House, Dhaka Division, Bangladesh.
128	Uzzal Chandra Sarker	Output Operator	01837069395	Autograph CtP House, Motijheel, Dhaka-1000.
129	Pipasha Jaman	Assistant Teacher	01907618605	Authintic Ideal school, Tongi, Gazipur Dhaka.
130	Md. Farhad Sharif	Graphic Designer	01521317065	Bike vally, 60 ft, Agargaon, Dhaka.
131	Rashadul Alom Pabel	Executive Marketing	01638222550	Timtom Paradise, Dhanmondi 19.
132	Md. Mahidur Rahman	Graphic Designer & IT	01957525854	Beacon Consultant Pvt. Ltd., Block E, Banani, Dhaka.
133	Md. Enamul Kadir	Store officer	01305395502	Sultan market, Sreepur, kashempur, Gazipur
134	Md. Al- Amin	Manager	01941872037	Faraji Electric,Gendaria, Dhaka.
135	Md Robiul Islam	Sales	01718820787	Najnin Shopping Mall,Kalihati,Tangail
136	Asifur Rahman	Graphic Designer	01703808490	Hifi Digital, 23/a, Banani, Dhaka.
137	Abdullah Al Masum	Graphic Designer	01786952383	Own business at home
138	Md. Showkot Hossain	Assit. Marketing Manager	01935747007	Double horse machineries, Gazipur.
139	Md Khairul Islam	Web Developer	01729816914	Frelancer, sector 10, Uttora.
140	Md. Monir Hossain	Operator	01934311034	Checkpoint, AEPZ narayangong
141	Tariqul	Officers marketing	01681443367	Shamutshuk Printers Ltd. Bochila, Mohammadpur.
142	Md.Alauddin Al-Azad	Assistant Manager	01796980105	Bas printing, kashipur, Naraynangong.
143	Md. Rakibul Islam	Auditor QA	01738554159	Effilion Group, Modonpur Narayanganj
144	Md Ashraful Islam	Sr. Graphic Designer	01814913378	Online out sourcing at graphic river, fiverr
145	Ashik Islam	Accountant	01685706844	Angelic Print Sharee, 43/44 Islam Plaza, Islampur Dhaka.
146	Md. Firoz Hossain	Purchase Officer	01723977519	Richman,Hakim Tower, Link Road, Badda.
147	Kader Mostofa	Graphic Designer	01747543344	Prokash Printing & Pacaging, Katabon, bata signal.
148	Md. Riad Hossen	Owner	01723876810	North Laksam Bazar, Laksam, Cumilla.
149	Solayman	Owner	01855068867	Bakta bazar, Fulbaria, Mymensingh
150	Md. kawsar Mahamud	Owner	01672267673	Sea fish Business, Palton.
151	Md. Delowar Hossain	Managing Director	01775982447	self -employed
152	Shoriful Islam Joy	Graphic Designer	01927017055	Outsourcing, Amtol ,Mirpur Dhaka 1216.
153	Md Ali Hossain	Managing Director	01843095961	Pachtara enterprize, homna. cumilla
154	Rakibul Islam	Owner	01825359275	Design Hub, H-13,road-03,Block-B, Dhaka Uddan.
155	Mehedi Hasan	Outsourcing	01788967379	Freelancer.
156	Md. Abu Shahin	Freelancer	01761133086	Freelancer.
157	Md. Billal Hossain	Managing Director	01300670653	J star Tv, Doagong , Saidabad.
158	Rezaul Karim	Owner	01687366951	Defender It,Sanarpar, Narayangong.
159	Md. Jahirul Islam	Owner	01646309696	poultry & dairy farm business, bogra.
160	Md. Asraful Islam	Managing Director	01738718435	Alams store, Polashbari.
161	Lokman Hakim	At Higher Study	01816171813	G just Hisar Hargana.
162	Md. Galib Sarkar	At Higher Study	01714623195	Bsc in CSE, BD
163	Md Rabbi Hossain	At Higher Study	01846463052	Guru jambheshwar University, hisar

No	Name of the Graduates	Post	Mobile No	Job Address
164	Md Raju Mia	At Higher Study	01678818777	Gjust Hisar Haryana India
165	Urmi Datta	At Higher Study	01725366197	UODA, Mohammadpur.
166	Md Sumon Prodhan	At Higher Study	01851194997	Nanjing Tech University (China),B.Sc in Digital Media
167	Md Kabir Hossain	At Higher Study	01747203435	Bsc in CSE, Bangladesh University.
168	Md. Nazmul Huda	At Higher Study	01776641847	Bsc in CSE, Bangladesh University.
169	Md. Monirul Islam	At Higher Study	01912499264	Bsc in CSE
170	Md.Mahsudur Rahman	At Higher Study	01777197493	Bsc in ME, City University.
171	Natasha Akter	At Higher Study	01910541402	Bsc in CSE, Bangladesh University.
172	Dewan Tabassum Suchi	At Higher Study	01786994059	Nanjing Tech University (China),B.Sc in Digital Media
173	Md. Abdur Rashid	Unemployed	01736687994	Due to COVID-19
174	Aminul Islam	Unemployed	01675619400	Family Problem
175	Aminul Islam	Unemployed	01793336878	Family Problem
176	Md. Tawfick hasan	Unemployed	01622787441	Politics
177	Md Zillur Rahman	Unemployed	01717957924	Family Problem
178	Md Ripon Ahmed	Unemployed	01680675361	Due to COVID-19
179	Monoar Hossain Fahim	Unemployed	01630409018	Getting preparation for job.
180	Suraiya Jabin	Unemployed	01972883435	House Wife
181	Md Fahad Hossain	Unemployed	01678536877	Family Problem
182	Jahangir Alam	Unemployed	01980664697	Family Problem
183	Poroma Biswas	Unemployed	01715211420	House Wife
184	Sumona khanam	Unemployed	01786271695	Family Problem
185	Esrat Jahan	Unemployed	01718485878	Family Problem
186	Raju Moni	Unemployed	01660199041	Family Problem

Annexure-5: Employers List.

Sl No	Name of the Industry	Industry Location	Type of Industry	Size of Industry	Eager to recruit graduates
1	Shamutshuk Printers Limited.	Bosila, Mohammadpur,Dhaka.	Private Limited Company.	Large	Yes
2	Multier Print & Pack Ltd.	Bosila Gurden City, Mohammadpur,Dhaka.	Private Limited Company.	Small	Yes
3	Bangladesh printers Ltd. 111 Fakirapul, Motijheel,	111 Fakirapul, Motijheel, Dhaka-1000	Private Limited Company.	Medium	Yes
4	Abaron Printing and Packaging Ltd.	Brammankitta, Kaleirhi, Keraniganj, Dhaka.	Private Limited Company.	Medium	Yes
5	Bitmap Advertising.	9/12-Lalmatiya,Block D,Dhaka-1207	Individual ownership company.	Micro	Yes
6	Robin Printing & packs.LTD.	Tongi, Gazipur.	Private Limited Company.	Large	Yes
7	Texograph Printing and Packaging.	116/2 Naya Palton Ground floor,Dhaka-100.	Individual ownership company.	Small	Yes
8	Dot Net Limited.	24/1 Purana Paltan line,Dhaka-1000.	Private Limited Company.	Small	Yes
9	Cheekpoint System Bangladesh.	37/56 A EPZ Narayanganj.	Multinational company.	Large	Yes
10	R-PacBangladesh Packaging Co. Ltd.	Ltd Plot#38,55,AEPZ Narayangonj.	Multinational company.	Large	Yes
11	Maheen Dizayn Etiket(BD)LTD.	Sihddsirgonj, Narayangonj	Private Limited Company.	Large	Yes
12	Aveny Dennnison.	DEPZ, Nabinagar, Savar	Multinational company.	Large	Yes
13	Maxim Label & Packaging BD Pvt. Ltd.	Ashulia Bus stand, Savar, Dhaka.	Multinational company.	Large	Yes
14	GMS Trims Ltd. GMS Trims Ltd.	Sardagonj,kashimpur,Gazipur.	Private Limited Company.	Large	Yes

15	Postal Printing Press.	Tongi,Gazipur-1710.	Public Company	Medium	Yes
16	BN Printing Press.	Banani, Dhaka.	Public Company	Medium	Yes
17	A Plus Printing Press.	20 East Nondipara,Khilgaon,Dhaka	Public Company	Small	Yes
18	BTEB Press.	BTEB, Agargaon, Dhaka.	Public Company	Micro	Yes
19	REDAZ Printing & Packaging.	314/D,Elephent Road,Dhaka-1205.	Individual ownership company.	Micro	Yes
20	SML Packaging Solutions Bangladesh	AEPZ, Adpmji, Naraangonj.	Multinational company.	Large	Yes
21	Government Printing Press.	Sohid tajuddin Ahmed Sarani, Tejgaon, Dhaka.	Public Company	Large	Yes
22	Biman Printing Press	Biman printing & publication, Farmgate.	Public Company	Small	Yes
23	Lecture publications Ltd.	Matuali, Jatrabari, Dhaka.	Private Limited Company.	Large	Yes
24	Arbab Pack Ltd.	Simrail Road, Chittagong Road,Narayangong	Private Limited Company.	Large	Yes
25	Next Accessories.	Shawghat, Vulta, Rupgonj.	Multinational company.	Large	Yes
26	Sunmark Media Communication.	2/4, Block-G, Lalmatia Mohammadpur, Dhaka-1207.	Individual ownership company.	Micro	Yes
27	Texit Sourcing.	Nishat Nagar, Rajabari, Chawrasta, Turag, Dhaka.	Individual ownership company.	Small	Yes
28	Manohar Filaments Bd ltd.	C-125/5, Islampur, Nandun, Gazipur.	Multinational company.	Large	Yes
29	Xclusive Can Limited.	KaligonJ Road, Majukhan, Gazipur.	Private Limited Company.	Large	Yes
30	Epyllion Limited.	Kutubpur, Kanchpur, Narayangong.	Private Limited Company.	Large	Yes
31	Bangladesh Government Press.	Tejgaon, Dhaka-1208.	Public Company	Large	Yes

Annexure-6: List of Existing Students Attended in "Focus Group Discussion" at Graphic Arts Institute

Sl. No	Name	Roll	Department	Mobile No.	E-mail address
1	Md. Mintu Mia	925821	Printing	01773875646	mintumia5646@gmail.com
2	Jon Kumar Roy	143216	Graphic Design	01726117442	jonnlx@gmail.com
3	Juthi Jannat	143326	Graphic Design	01642399105	fatemaakterjuthi2001@gmail.com
4	Joynab Jahin	114104	Printing	01734942451	joynab.jeba@gmail.com
5	Sumaiya Akter	104543	Printing	01316902378	afrinsumaiya63@gmail.com
6	Minha Akter Esha	596199	Printing	01786726923	minhaesha790@gmail.com
7	Mitu Akter	596208	Printing	01312759973	brislymitu2002@gmail.com
8	Lamiya Akter	447879	Printing	01811694225	Not Applicable
9	Abdullah	351027	Printing	01761111456	abdullahpt2002@gmail.com
10	Habib	350991	Printing	01748223439	habibmia984@gmail.com
11	Saikot Islam	926007	Graphic Design	01705963958	mdsaikot1845@gmail.com
12	Rifatuzzaman Rifat	452048	Computer	01642319227	rifatuzzamanrifat.mail@gmail.com
13	Mir Sabbir	925968	Graphic Design	01767732585	mirsabbir1319@gmail.com
14	Md. Sohag	351059	Printing	01794906793	md.sohag0w1@gmail.com
15	Anamika Halder	925964	Graphic Design	01777562520	anamika060918.halder@gmail.com
16	Pias	143204	Graphic Design	01743830062	mdgrpias@gmail.com
17	Md. Mudassir	143204	Graphic Design	01628683201	musasser0w1@gmail.com

Annexure-7: List of Graduates Attended in "Focus Group Discussion" at Graphic Arts Institute

Sl. No	Name & Designation	Organizations name & address	Mobile No.
1	Mohammad Mainul Islam Graphic Designer	Dekko Legacy Group, 37/1, Shimanto Shambhar, 8th Floor, Road No. 2, Dhanmondi.	01623204878
2	Rezowan Hossain Graphic Designer	Aarong, Aarong Centre (Head Office), 346, Tejgaon I/A, Dhaka	01674891921
3	Md. Akram Hosen Graphic Designer	BZN Graphics, Mohammadpur, Dhaka.	01999996971
4	Nasima Alom Graphic Designer	Daffodil Technical Institute, 43/R/5-B, Indira Road, Panthapath, Dhaka.	01990912929
5	Md. Azizul Hakim Graphic Designer	Greenfield Jutex Ltd. 55/A, Gulshan-2, Dhaka.	01703084912
6	Juel Kanti Howladar Technical Officer	Bangladesh Agricultural Development Corporation, 49-51, Dilkusha, Motijheel, Dhaka.	01759448354
7	Md. Sezan Mahmud Production Executive	The Daily Star, 64-65, Kazi Nazrul Islam Avenue, Dhaka.	01723514527
8	Md. Razu Ahmed Officer Marketing	Shamutshuk Printers Ltd. Bosila, Mohammadpur, Dhaka.	01928455242

Annexure-8: List of Employers Attended in "Focus Group Discussion" at Graphic Arts Institute

Sl. No	Name & Designation	Organizations name & address	Mobile No.
1	Md. Liakot Zali Patoary CEO.	Bitmap Advertising, 9/12 (2nd Floor), Block - D, Lalmatia, Dhaka.	01847135062
2	Debashish Debnath Asst. Manager (P&I).	AKIJ GROUP, 198, Akij House, Bir Uttam Mir Showkat Sarak, Tejgaon Sarak, Tejgaon, Dhaka	01711780520
3	Md. Rezaul Karim Sub-Editor(News).	Alochito Kantho, 60/E1, Dewan Complex (6th floor), Purana Paltan, Dhaka.	01819081887
4	Md. Nazmus Sakib Founder.	XVECT, Road-01, House-23, Dhaka Real estate, Katasur Rd, Dhaka.	01763444104
5	Md. Alomgir Hossain Sr. Designer.	Ethical Drugs Limited, 15/3-A, Tallabag, Sobhanbag, Dhaka.	01714169758
6	Sagor Ahamed Team Leader.	Graphic Aid, 27/1, Standard Center, 27/1, New Eskaton Road, Dhaka.	01911503054
8	Gazi Ahmed Ullah Publisher.	Daily Shomoyer Alo, Nasir Trade Center, 89, Sonargaon Road, Bangla motor, Dhaka.	01713064347

Annexure-9: Graduates Designations.

Graduates Designations	Frequency	Percent
Asst. Engineer/Service Engineer/ Operator/ Jr. or Assist. Operator.	31	16.7
Director/Entrepreneur/Owner/Manager/Assistant Manager.	15	8.1
Marketing Officer /Delivery or Store In charge/Auditor / Planner /Team Leader.	12	6.5
Sr. or Jr. Graphic Designer/Visualizer/UI-UX Designer/Web Developer/Image Editor.	65	34.9
Permit Receiver /Team Leader /Color Technician/CtP Operator/Junior Instructor.	7	3.8
Production Officer/ Quality Assurance Officer/Sales Executive.	29	15.6
Not Applicable.	27	14.5
Total	186	100.0

Annexure-10: Employers addresses of the printing graduates.

Sl. No	Employers name	Employers Address
1	Virgo Group	House # 178, Road # 02, DOHS Baridhara, Dhaka-1206, Bangladesh.
2	Digital Graphic Studio.	52/1Hasan Holdings Limited (4th floor), New Eskaton, Dhaka 1215.
3	Advent Pharma Ltd.	Address: 80, Kakrail VIP Road, Ramna, Dhaka-1000.
4	Akij Printing and Packaging Ltd.	Dhamrai, Dhaka.
5	Alams store.	Gaibandha, Polashbari.
6	Angelic Print Sharee.	43/44 Islam Plaza, Islampur Dhaka.
7	Arbab printing & packaging ltd.	Arbab Group, Simrail Road, Chittagong Road.
8	Aristo pharma Ltd.	7, Purana Paltan Line Dhaka – 1000.
9	Authentic Ideal school	Tongi, Gazipur, Dhaka.
10	Autograph CtP House	120 Arambagh, 1st Floor, Motijheel, Dhaka-1000.
11	Avery Dennison (Paxar bangladesh Pvt. Ltd)	167-169, DEPZ Ext. Area, Savar, Dhaka-1349.
12	Bangladesh Agricultural Development Corporation	49-51 Dilkusha, Krishi Bhaban, Motijheel, Dhaka.
13	BAS printing	kashipur, Naraynangong.
14	Beacon Consultant Pvt. Ltd	Level 4, House 80, Road 17A, Block E, Banani, Dhaka 1213.
15	Beximco	Beximco industrial park, Kashimpur, Savar
16	Bike vally	60 ft, Agargaon, Dhaka.
17	Biman Bangladesh airlines Printing & Publication	Kazi Nazrul Islam Avenue, Firmgate, Dhaka.
18	Borendra University	529/1, Kazla, Motihar, Rajshahi-6204.
19	BRAC	Brac Centre 75, Mohakhali Dhaka-1212.
20	Bright River Bangladesh Ltd	166 Syed Nazrul Islam Sharanee, Purana Paltan, (Al-Razi Complex).
21	BZM Graphic Ltd	Ringroad, Mohammadpur.
22	Cheekpoint System bd Ltd.	AEPZ, Adomjee, Narayanganj.
23	Clippers Web	Shorokunjo, raybazer, 39 koloni H No:3.
24	Cob Web Design	Lalmatia, Mohammadpur.
25	Creative Media Ltd.	B-block, Lalmatia, Mohammadpur, Dhaka.
26	Cutoutwitch	Navana, DH Tower, Plot#6,Panthpath, PS:Tejgaon, Dhaka-1215.
27	Daraz	Asfia Tower, House # 76, Block # E, Road # 11,Banani Dhaka-1213, Bangladesh. (Adjacent to Banani-11 Domino's Pizza).
28	Defender It	Sanarpar, Narayangong.
29	Design Hub	H-13,road-03,Block-B, Dhaka Uddan.
30	Dhaka Metro Politan Police.	36 Minto Road, Dhaka.
31	Double horse machineries	Tongi, Gazipur.
32	Effilion Group	Modonpur, Narayanganj (H.No 227/A Nina Kabbo (Level-10; Level-12; Level-13, Dhaka- 1208).
33	Eon Group of Industries	304, Tejgaon, Dhaka.
34	Excel Technologies Limited	House # 13, Road # 07 Block # F, Banani, Dhaka-1213.
35	Exclusive Can Limited	Tongi Gazipur.
36	Faraji Electric	Gendaria, Dhaka.
37	FIFOTech	Software Technology Park, Janata Tower, Kawran Bazar, Dhaka.
38	Film cut Printing & packaging ltd.	Silk Web Group, 158/3, Tejgaon, Dhaka.
39	Gale	Amtoli, Mohakhali.
40	Get web	Rupayan Shelford, 17th Floor, 23/6 Mirpur Rd, Dhaka 1207.
41	GMS Trims Ltd.	Jamgora, Ashulia. Dhaka.
42	Gold Sons Hotel & Resources,	47, Nassa Heights, Gulshan South Avenue, Gulshan-1, Dhaka.
43	Graphic Aid	New Eskaton,Bangla Motor, Dhaka.
44	Graphic Ltd.	225 Tejgaon 1/A, Tejgaon.
45	Graphic Peoples	11-Banani, Dhaka-1211.
46	Graphic Solution Ltd	House No-28, Road No-1, Sector-6, Uttara, Dhaka-1230

Sl. No	Employers name	Employers Address
47	Green Holiday	Mohammadpur, Dhaka.
48	Hatim Group Company	Al-Razi Complex,(13th floor), 3/1/D, 166-167, Dhaka-1000.
49	Hifi Digital	23/a, Banani, Dhaka.
50	Annex Communications Ltd.	House- 500/A Flat- 2B (2nd floor) Road- 7, Dhanmondi R/A Dhaka.
51	Inernational Home Ware	Banani, Dhaka-1213.
52	Intelligent Label Solutions Ltd.	House 30, Lake Drive Road, Sector 7, Uttara, Dhaka 1230.
53	Jamuna Future Park.	Ka-244, Pragati Sharani, Kuril.
54	Japan Bangla Business Corporation.	Tejgaon, Dhaka.
55	Jenson & Nicholson Bangladesh Ltd.	70, East Nasirabad Industrial Area,Chattogram- 4209.
56	JMI Printing & Packaging	Plot # A-17, BSCIC I/A, Kanchpur, Sonargaon, Narayanganj.
57	Kashem industries Ltd.	Baimail, Gazipur, Dhaka.
58	LABAID Diagnostic	Kalabagan, House-66, Mirpur Road, Kalabagan 2nd Ln, Dhaka 1205.
59	Lecture publication Ltd	Matuail. Jatrabari.
60	Liverty Media House	Rangs Paramount, House #11, Road #17, Floor #9, Banani C/A 1213.
61	Maheen Design & Ethikhet.	Sanarpar, Narayngong.
62	Manohar filaments bd ltd	Ashulia, Dhaka.
63	Md Albar Gas ltd	Dammam,Saudi Arabia.
64	Müllackerstrasse	10 8152 Glattbrugg – ZH Switzerland.
65	Next Accessories ltd	Shawghat, Bhulta, Rupganj, Narayanganj-1462.
66	Graphic River	Online out sourcing at graphic river, fiverr.
67	Orchid Printers Ltd	32/A,33 Mymensingh Lane Banglamotor,Dhaka.
68	Orion Group	153-154 Tejgaon Industrial Area Dhaka-1208, Bangladesh.
69	Pachtara enterprize	Homna. Cumilla.
70	Palashbari govt college	PALASHBARI, GAIBANDHA.
71	Postal Printing Press	BISIC, Tongi Gazipur.
72	Pran-RFL Group	House-9,road-3,block-A,bawniabadh,mirpur-11,pallabi,dhaka-1216.
73	Premiaflex Plastics Limited	Proshika Road, Mawna chowrasta, Sreepur-1740, Gazipur
74	Prokash Printing & Pacaging	Katabon, bata signal.
75	Qpale ltd	Kuratoli Kuril Vatara, Dhaka.
76	R-Pac Bangladesh Packaging com. Ltd-1	Adomji, AEPZ, Narayangong.
77	R-Pac Bangladesh Packaging com. Ltd-2	Momin Nagar,Gorai,Tangail.
78	Richman	Hakim Tower, Link Road, Badda.
79	Ridge Pvt. Ltd	Armanitola, sobuj Masjid, Babubazar, Dahak.
80	Roads And Highways Department	Tejgaon, Dhaka.
81	Robin printing &packages ltd	Mymonsing road, Gazipur.
82	S.R Papers Industries Ltd.	Tongi, Gazipur, Dhaka, Bangladesh.
83	Shamoli ideal Ploitchnic Institute	Mohammadpur, Dhaka.
84	Shamutshuk Printers Ltd.	Bochila, Mohammadpur.
85	SML Packaging Solution BD Ltd,	Adomji, AEPZ, Narayangong.
86	Square pharmaceutical ltd.	BISIC. Pabna.
87	Sukhtara printers limited	Jhohur Chanda, Kuturia Ashulia, Savar, Dhaka.
88	Taska accessories	Amman, Jordan.
89	TexitSource	Plot: 08, Road: 02, Word: 02, Block: C, Nishat Nagar, Turag, Dhaka.
90	The Daily Star	64-65 kazi Nazrul Islam Avenue Dhaka -1215.
91	The Delta Composite Knitting ltd	50, Purana Paltan Lane (4th Floor), Paltan, Dhaka- 1000.
92	The Merchants Ltd.	Address: Kabi Jashimuddin Road, Pagar, Tongi, Gazipur.
93	Timtom Paradise	Dhanmondi 19.
94	Tuska Group	Gazipur, Chowrasta.
95	Unik designers ltd	Gazipur.

Sl.	Employers name	Employers Address
96	Unimed Unihealth pharmaceuticals ltd.	Satmasjid Road, Mohammadpur, Dhaka.
97	Unique Designers Ltd	Kolemsher K.B Bazar, Board Bazar, Gazipur.
98	Unitex Labels Ltd	Bara Rangamatia, Ashulia, Savar, Dhaka.
99	X ceramics	Baherar Chala, Notun Bazar, mawana, Sreepur, Gazipur.

Annexure-11: Questioner for TVET Experts & employers.

Directorate of Technical Education

Research & Knowledge Management Cell.

Agargaon, Dhaka.

A report is going to determine the demand of Diploma in Engineering (Printing) graduates in Bangladesh. We are collecting individual's opinion. Your cordial cooperation is expected in this data collection.

N.B.: This information will be used only for the research work of demand analysis for the graduate mentioned above in Bangladesh.

1. What is the job market demand in relation to current employment status of Diploma in Engineering printing graduates? (all)

   (1) Not at all.   (2) Somewhat (3) Moderately (4) To a very high extent.

2. What extent jobs for Diploma in Engineering printing graduates are available in the present job market? (all)

   (1) Not at all.   (2) Somewhat (3) Moderately (4) To a very high extent.

3. What do you think about Diploma in Engineering printing graduate's multi-competency? (all)

   (1) Not at all.   (2) Somewhat (3) Moderately (4) To a very high extent.

4. What do you think about job market demand in context of "Diploma in Engineering graduate's salary status"?

   (1) Not at all.   (2) Somewhat (3) Moderately (4) To a very high extent.

5. What do you think about the Diploma in Engineering printing graduates job responsibility? (all)

   (1) Not at all.   (2) Somewhat (3) Moderately (4) To a very high extent.

6. What type of skills (Printing) will be required in near future? (employers)

7. Please give any other opinion regarding the job market demand of the Diploma Engineering printing graduates. (all)

Annexure-12: TVET Experts & employers interviewed.

Sl. No	Name & Designation	Organizations name & address	TVET Experts / Employers
1	Md. Akkas Ali Sheikh Director (PIU)	Directorate of Technical Education, Agargaon, Dhaka.	TVET Expert
2	Syed Abdul Aziz Principal	Jashore Technical School & College, Jashore.	TVET Expert

3	Molla Mohammad Golam Mostofa Chief Instructor (Tech)	Graphic Arts Institute Mohammadpur.	TVET Expert
4	Biplab Bikash Paul Choudhury In-Charge	Research and Knowledge Management Cell, DTE.	TVET Expert
5	Mannan Kabir Assistant Manager (Press)	Postal Printing Press BISIC, Tongi, Gazipur.	Employers
6	Md. Rajaul Karim Assistant Manager (Production),	Paxar Bangladesh Ltd. DEPZ, Savar.	Employers
7	Engr. Sahin Sardar Director	Sunmark Media Communications. Mohammadpur.	Employers
8	Md. Yousuf Ali Operation Manager	Texit Sourcing Tongi, Gazipur.	Employers
9	Abrur Rouf Assistant Manager (HR) & Admin	Maxim label & Packaging Bangladesh, Ashulia.	Employers
10	Abdur rab Assistant Manager (HR) & Admin	Manohar filaments (BD) Ltd, Gazipur.	Employers
11	Md. Mahmudul Hasan Manager (production),	ITL(Intelligent Label Solutions), Maona, Gazipur.	Employers
12	Md. Ferdush Alam Assistant Manager (HR) & Admin	Checkpoint Systems Bangladesh Ltd. AEPZ, Narayangonj.	Employers
13	Md. Rakibul Islam Executive Quality	Siegwerk Bangladesh ltd, Meghna Industrial Area, Narayangonj.	Employers
14	Md. Mohsin Alam Production Officer.	Exclusive can ltd, Tongi, Gazipur.	Employers