



Feasibility Study for B.Tech (FAT) & M.Tech (TM)

A Research for Indian Institute of Carpet Technology, Bhadohi

Feasibility Study
to
Evaluate the Relevance of
B.Tech Course in Fashion and Apparel
Technology
&
M.Tech in Textile Management
for
Indian Institute of Carpet Technology,
Bhadohi

Krishna Kant Bajpai
School of Management Sciences
Varanasi

Introduction:

Indian Institute of Carpet Technology (IICT) the only of its kind in Asia, has been set up by Ministry of Textiles, Govt. of India to provide much needed support to Textile, Carpet and allied Industries. The Institute is affiliated to U.P. Technical University, Lucknow and is approved by A.I.C.T.E. The institute is also a member of I.S.T.E. and CII and recognized by Textile Institute, Manchester, UK. The main thrust areas of the Institute are A) Human Resource Development B) Design Creation and Development, C) Research & Development and D) Technical Support Services to the Industry.

IICT Bhadohi is conducting B.Tech. Course in Carpet and Textile Technology from the year 2001 and eight batches have come out successfully with a total of 209 graduates in the related trade. As per informal industry feedback there is a need for qualified professional in the field of Fashion and Apparel technology, because majority of them are using people as technical professional who do not have any formal education and have acquired skill by hands on experience or by on job training by seniors.

To assess the veracity of this hypothesis a study was instituted with the organizations in textile and fabric industry, involved in various business functions ranging from manufacturing fabric, to made up dress material, printing and trading etc.

Problem Statement: Will it be feasible to start B.Tech program in Fashion and Apparel Technology and M.Tech in Textile Management at IICT Bhadohi?

Significance of the Problem (and historical background): It is observed that Industries in Varanasi, Bhadohi and other parts of the country involved in manufacturing of fabric, apparel and other related products don't have formally trained professional, and the reason is primarily non-availability of appropriate technical manpower resources. This has resulted in many cases, underutilization of true potential because there is a vast difference in skilled personnel who have got just hands on training and qualified and trained professionals.

Purpose: The purpose of this study is to assess the requirement of qualified and trained professional in the field of Fashion and Apparel Technology and get an idea whether the demand supply gap is significant enough to suggest the need for an independent program on Fashion and Apparel Technology.

Hypothesis: There is a demand supply gap for qualified professionally trained professionals in Fashion and Fabric technology and apparel industry.

Assumptions:

As the information was collected from the Owner / HR Head or Senior Manager authorized to speak to us. It was assumed that these people have complete and correct information and are sharing it with us correctly and honestly.

Limitation:

The survey is not an extensive survey and does not cover the entire nation, therefore some of the observations may be area specific and may not hold true in other parts of the country where this survey is not instituted.

Review of Related Literature:

The DPR was the guiding point to institute this survey. The observation mentioned help us form the basis to start the research and frame appropriate questions. Human Resource and Skill Requirement in textile sector (2022), a report by National Skill Development Corporation (NSDC), helped us identify the desired skill set for fashion, textile and fabric industry.

Design of Study:

Sources of Data: The primary data is collected through personal and telephonic interviews and observations is recorded in a structured questionnaire.

Sampling Procedure: The questionnaire was implemented on the database from various trade organization like EUPEA, having members from fashion, fabric and apparel industry. The survey was implemented using convenience and random sampling on the database.

Methods and Instrument of Data Gathering:

The Database from EUPEA was used to conduct random sample survey where every third organization on the list was interviewed, in case of non-availability or non-response, next organization on the list was taken up. In case of telephonic survey, convenience sampling was done.

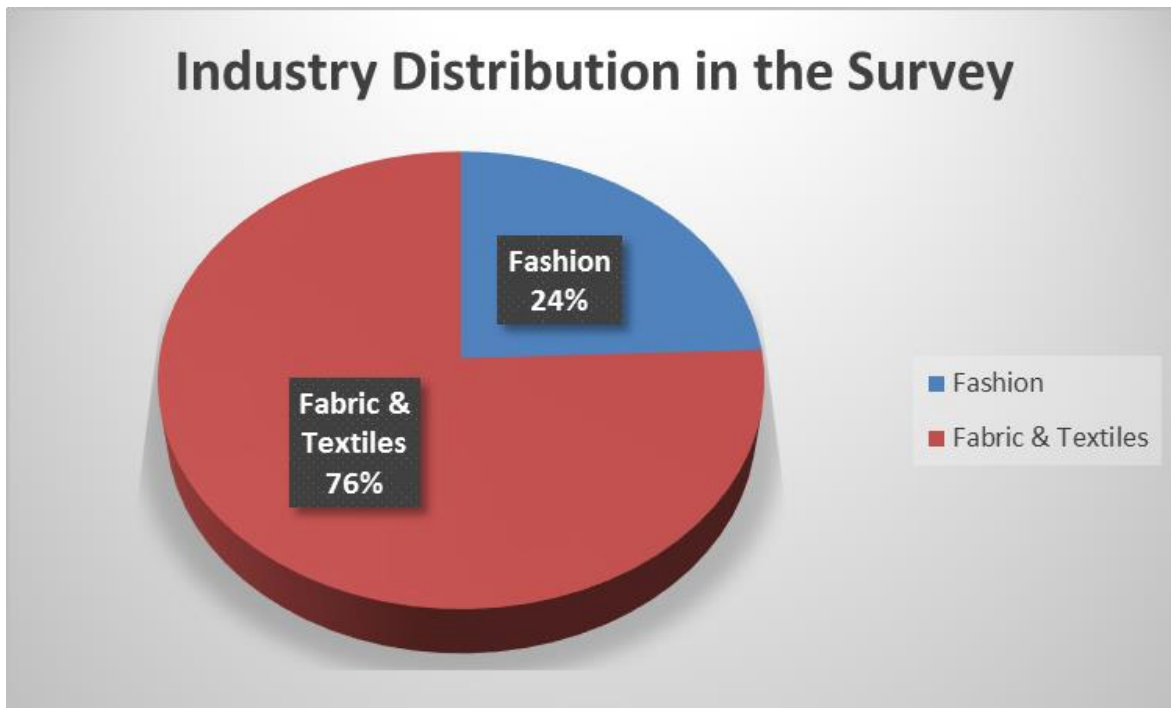
Statistical Treatment:

The data is categorized on the basis of Industry

Analysis of Data

The survey was instituted through personal, telephonic and web-administered survey on 41 respondent, which comprised of organizations operating in the area of fashion and Fabric & Textile Industry. Out of 41 respondent 10 were from fashion industry and 31 from Fabric and textile industry.

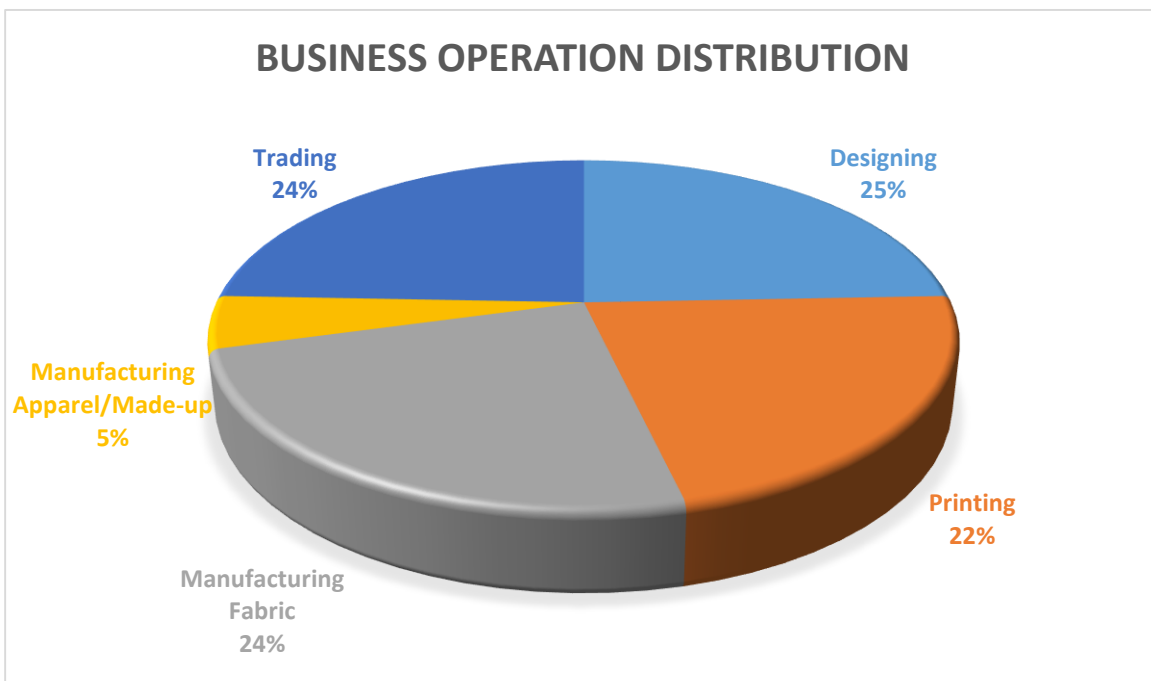
Industry	Respondent	%
Fashion	10	24%
Fabric & Textiles	31	76%
Others	0	0%
TOTAL	41	



Business Operation Distribution:

The Industry was further classified on the basis of business operations they were involved in, which were Designing, Printing (Textile and Fabric), Manufacturing Fabric, Manufacturing Apparel / Made-up and Trading (Both fabric and / or Apparel / Made-up).

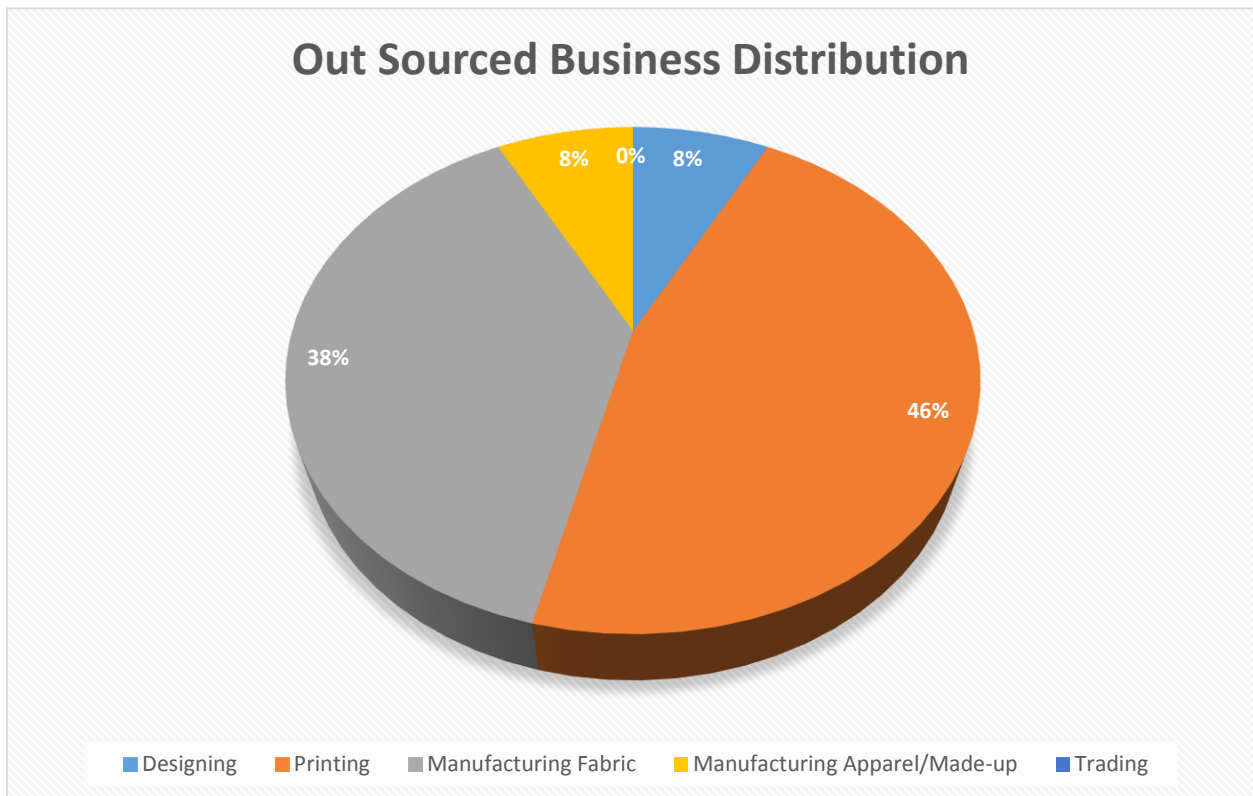
Business Operation In-House	Respondent	%
Designing	10	24%
Printing	9	22%
Manufacturing Fabric	10	24%
Manufacturing Apparel/Made-up	2	5%
Trading	10	24%
TOTAL	41	



Outsourced Business Operations:

Some respondents (32%) were involved in other related business operations also, which they outsourced. They procure order and then sublet to others. Major outsourced ventures were in the area of Printing and Fabric Manufacturing, which constituted 84% of outsourced work.

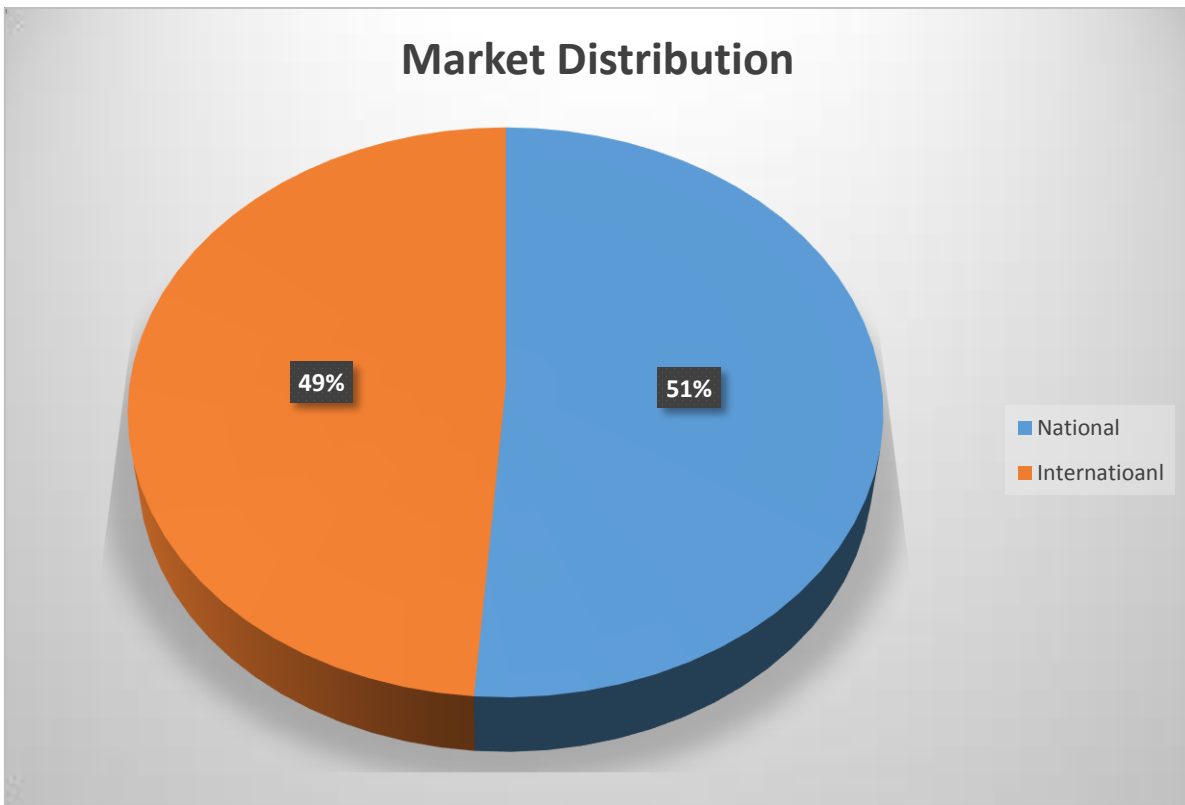
Business Operation Out Sourced		32%	
	Designing	1	8%
	Printing	6	46%
	Manufacturing Fabric	5	38%
	Manufacturing Apparel/Made-up	1	8%
	Trading	0	0%
	TOTAL	13	



Market Distribution:

49% respondents were catering to International and 51% catered to National Market, some respondent catered both, but we have considered the market which constituted bulk of their business.

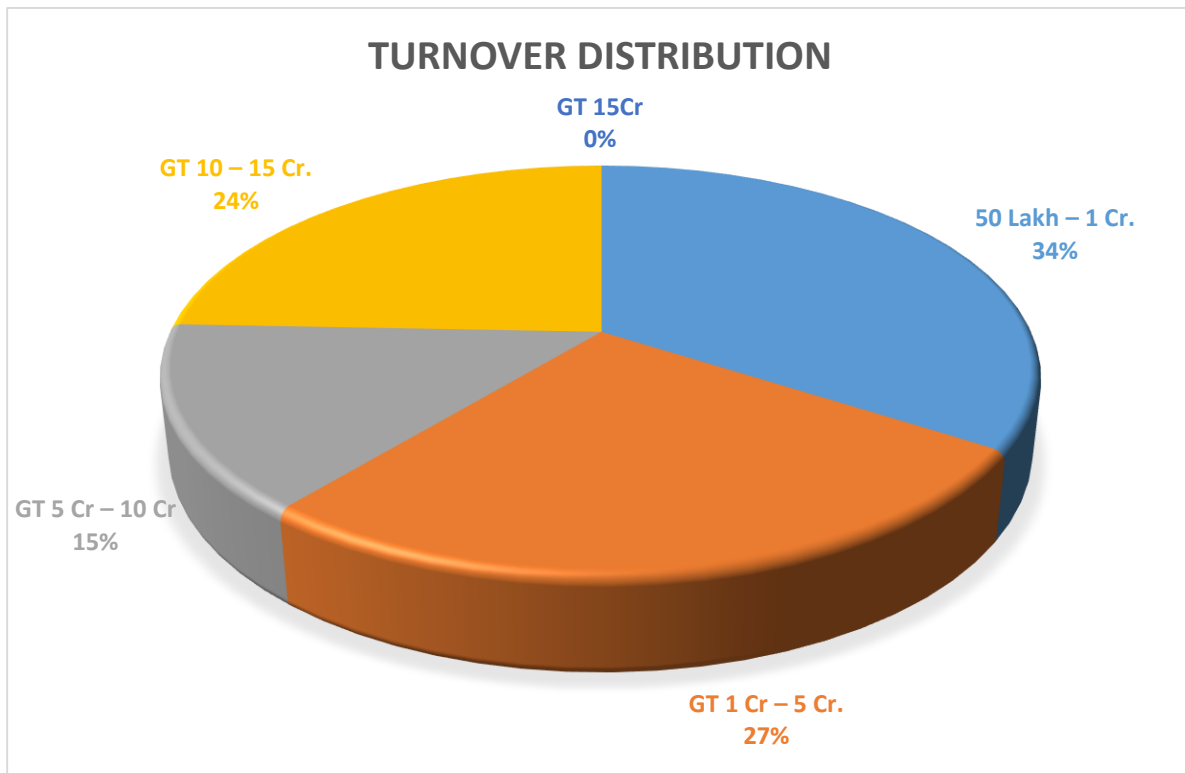
Market	Respondent	%age
National	21	51%
Internatioanl	20	49%
	41	



Turnover Distribution

Financial Turnover	Respondent	%age
50 Lakh – 1 Cr.	14	34%
GT 1 Cr – 5 Cr.	11	27%
GT 5 Cr – 10 Cr	6	15%
GT 10 – 15 Cr.	10	24%
GT 15Cr	0	0%
TOTAL	41	

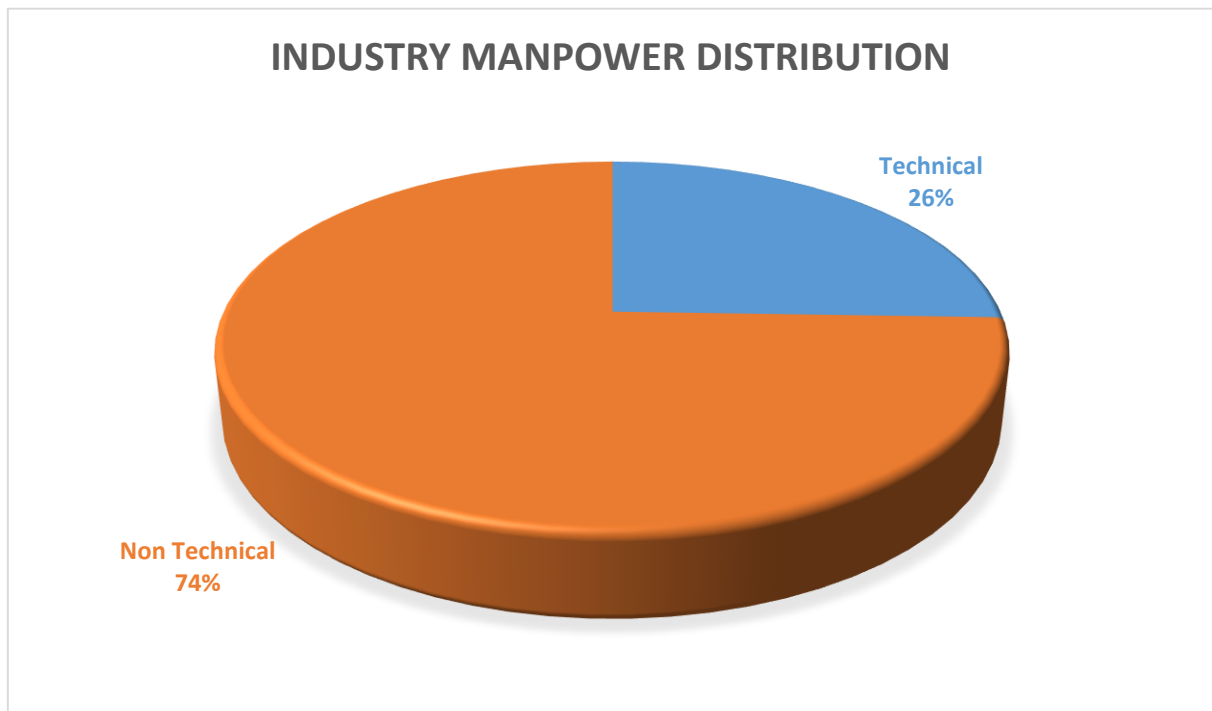
Out of selected lot, 61% had their turnover 5Cr. Or less and 24% fall between the ranges of 10 to 15 Cr.



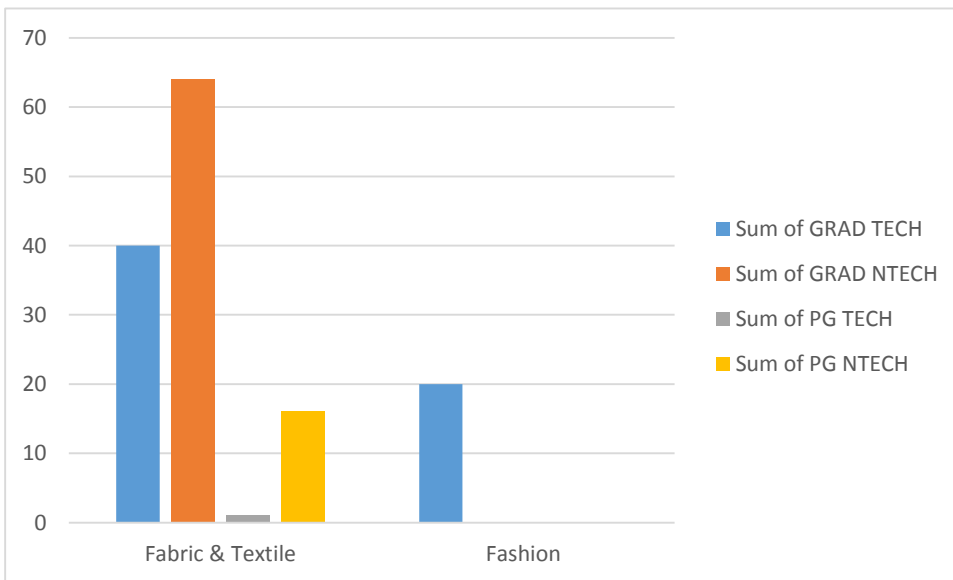
Existing Manpower:

We found that Technical /Skilled Manpower constituted only 26% of total manpower which is significantly low keeping in view of technical nature of the industry.

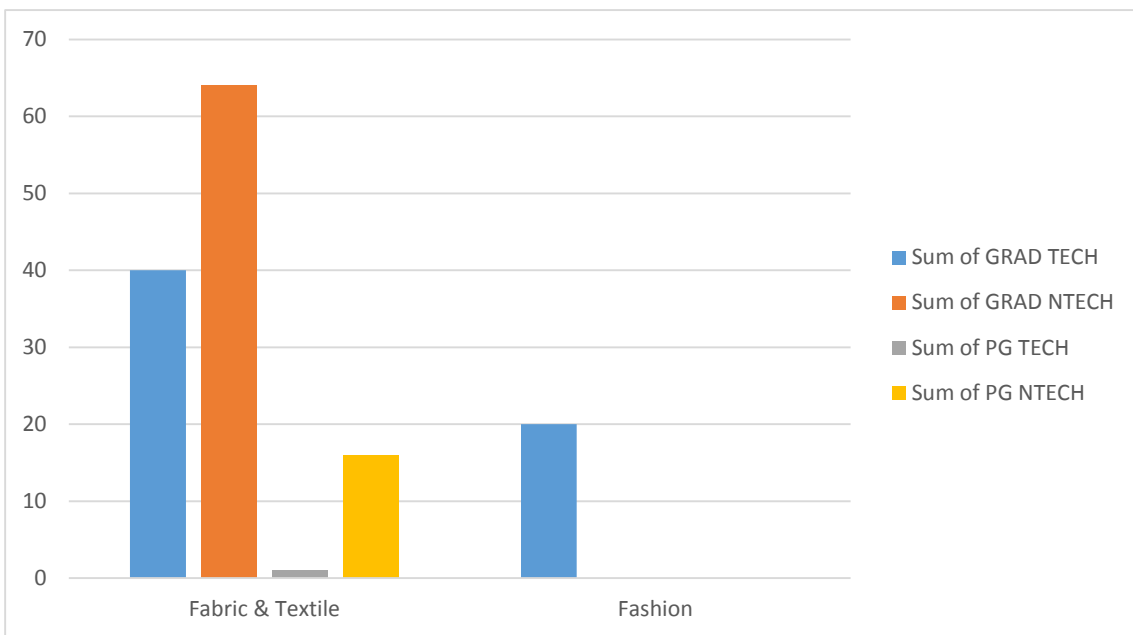
Existing Manpower	Respondent	% age
Technical	114	26%
Non-Technical	333	74%
TOTAL	447	



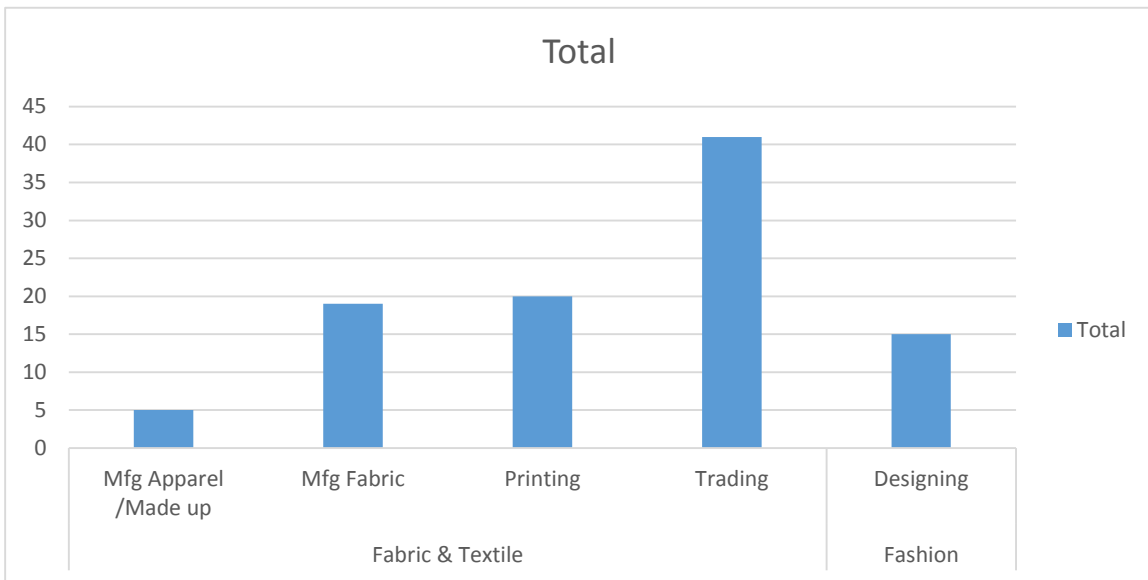
Row Labels	Sum of Existing_Manpower_Tech	Sum of Existing_Manpower_NTech
Fabric & Textile	94	303
Fashion	20	30
Grand Total	114	333



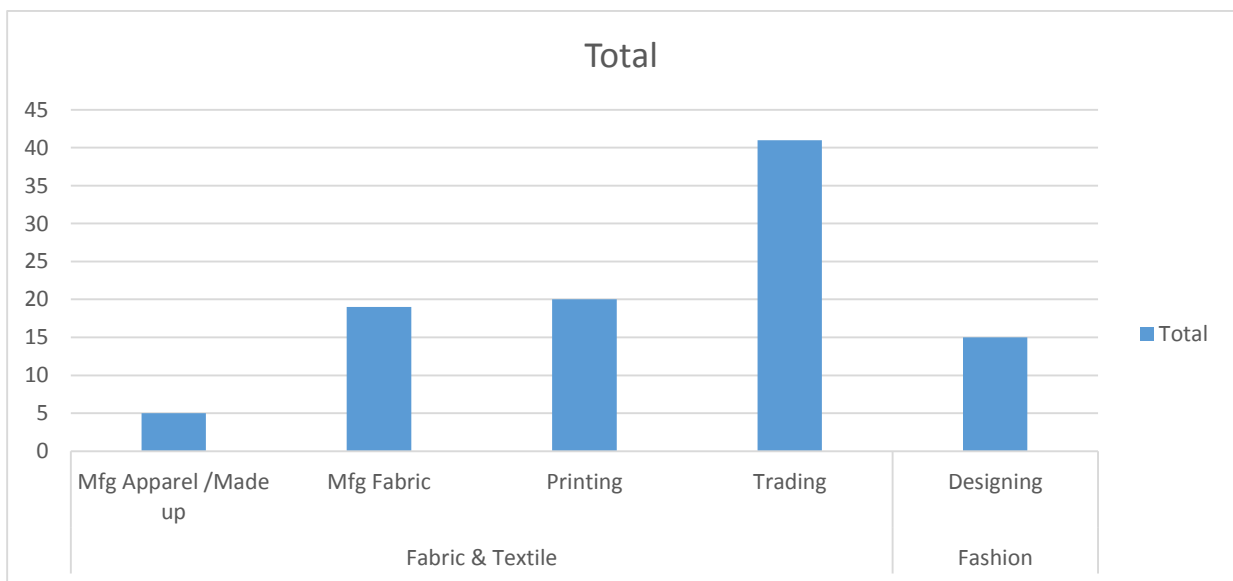
Row Labels	Sum of Existing_Manpower_Tech	Sum of Existing_Manpower_NTech
Fabric & Textile	94	303
Mfg Apparel /Made up	5	16
Mfg Fabric	65	135
Printing	15	72
Trading	9	80
Fashion	20	30
Designing	20	30
Grand Total	114	333



Row Labels	Sum of GRAD TECH	Sum of GRAD NTECH	Sum of PG TECH	Sum of PG NTECH
Fabric & Textile	40	64	1	16
Fashion	20	0	0	0
Grand Total	60	64	1	16

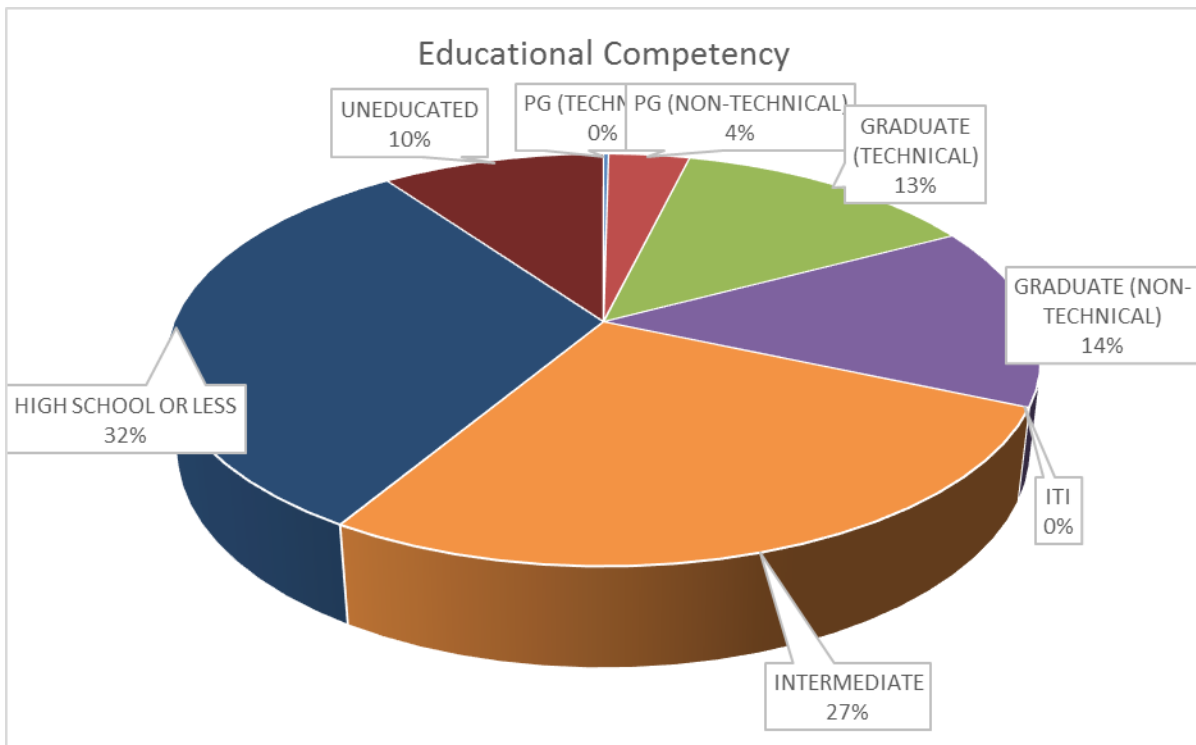


Row Labels	Sum of ITI	Sum of INTER	Sum of HS OR LESS
Fabric & Textile	0	111	131
0	0	43	21
Mfg Apparel /Made up	0	3	1
Trading	0	40	20
1	0	6	2
Mfg Apparel /Made up	0	6	2
2	0	12	33
Printing	0	12	33
3	0	25	40
Mfg Fabric	0	25	40
(blank)	0	25	35
Mfg Fabric	0	25	35
Fashion	0	10	10
1	0	10	10
Designing	0	10	10
Grand Total	0	121	141



Educational Competency

Manpower Competency		
PG (TECHNICAL)	1	0%
PG (NON-TECHNICAL)	16	4%
GRADUATE (TECHNICAL)	60	13%
GRADUATE (NON-TECHNICAL)	64	14%
ITI	0	0%
INTERMEDIATE	121	27%
HIGH SCHOOL OR LESS	141	32%
UNEDUCATED	44	10%
TOTAL	447	



Employee Turnover (Technical & Non-Technical) :

Employee Turnover is not a major issue as per the 73% respondents Technical Staff had less than 10% turnover and for Non-Technical staff 66% respondents felt it is between 10-15%.

EMPLOYEE TURNOVER TECHNICAL		
LT 10%	30	73%
10-15%	11	27%
GT 15-20%	0	0%
GT 20%	0	0%
TOTAL	41	

EMPLOYEE TURNOVER NON TECHNICAL		
LT 10%	14	34%
10-15%	27	66%
GT 15-20%	0	0%
GT 20%	0	0%
	41	

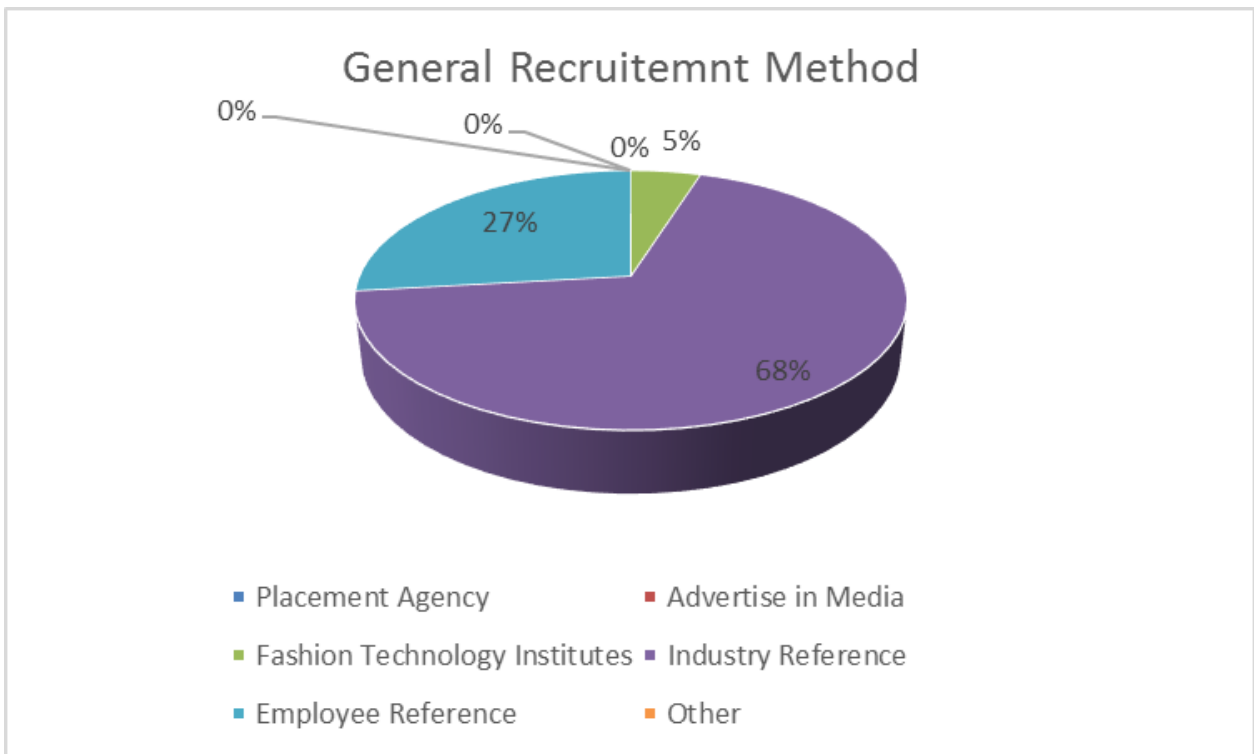
EMPLOYEE TURNOVER NUMBERS		
Technical		
	2012	30
	2011	30
	2010	47
Non-Technical		
	2012	73
	2011	42
	2010	77

EMPLOYEE RECRUITMENT NUMBERS		
Technical		
	2012	40
	2011	46
	2010	26
Non-Technical		
	2012	62
	2011	93
	2010	84

Recruitment Method:

Only 5% of respondents opted Fashion Technology Institutes as source for recruitment. Majority depended on Industry or employee references.

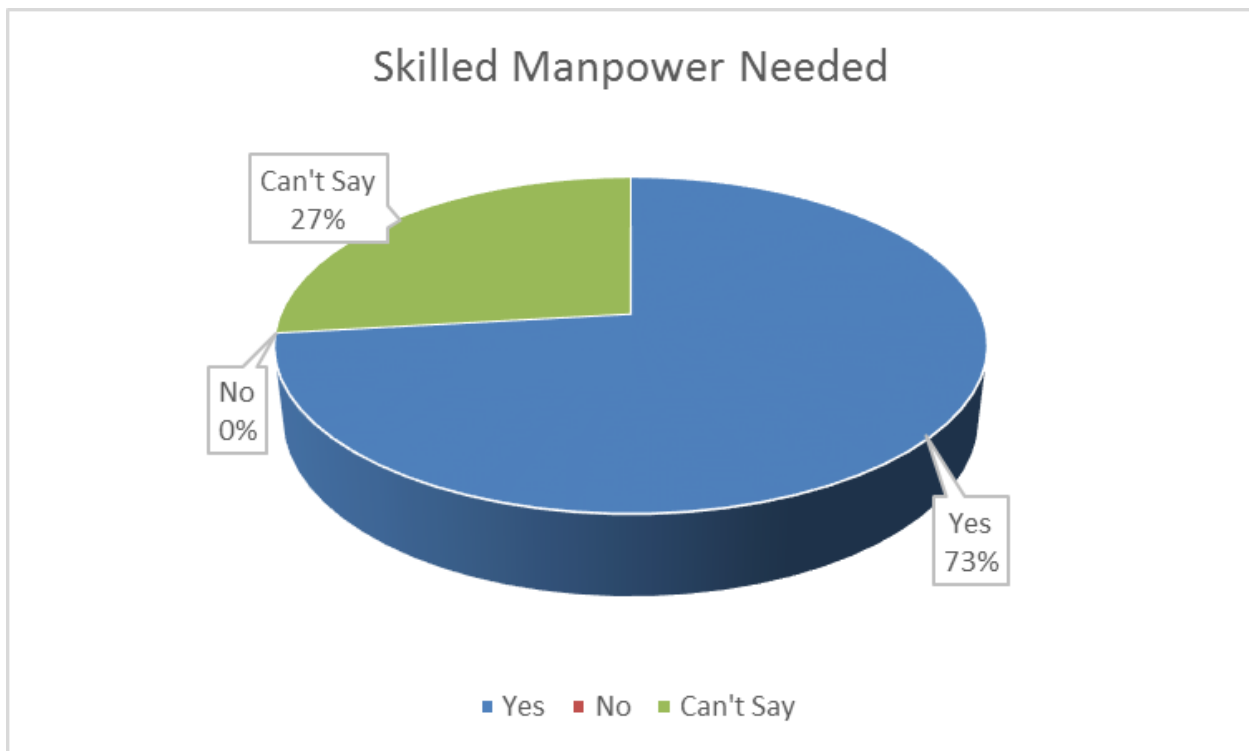
RECRUITMENT METHOD	Respondent	%age
Placement Agency	0	0%
Advertise in Media	0	0%
Fashion Technology Institutes	2	5%
Industry Reference	28	68%
Employee Reference	11	27%
Other	0	0%
TOTAL	41	



Willingness to hire skilled manpower:

73% respondents said YES emphatically when asked, if there is need for skilled manpower and out of 11 respondent who were not sure, 10 were involved in Trading and 1 was into manufacturing of Garments and Apparels.

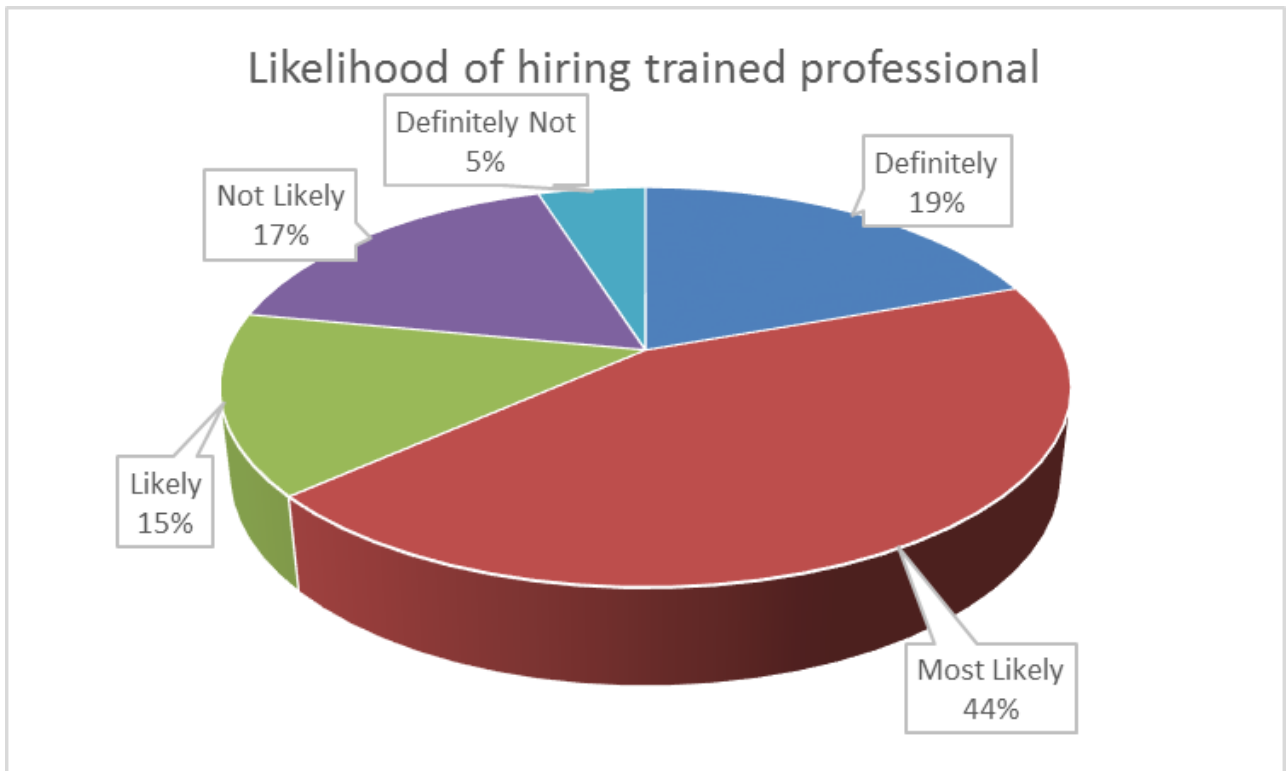
Skilled Manpower Needed?			
Yes	30		73%
No	0		0%
Can't Say	11		27%
TOTAL	41		



Likelihood of Hiring Trained Professional:

Respondents were asked that if professionally trained skilled manpower is made available to them, what will be their willingness to hire them, 89% responded from likely to definitely, and 11% (9 Respondent) said they are unlikely or will not hire such professionals, as expected all these 9 respondent were into trading.

Likelihood of hiring Trained Professional		Respondent	%age
1	Definitely	8	20%
2	Most Likely	18	44%
3	Likely	6	15%
4	Not Likely	7	17%
5	Definitely Not	2	5%
	TOTAL	41	



Skill Set Preference:

Respondents were asked what skill set people they shall be needing for their organization in NEAR FUTURE, as follows:

S.No.	Skill	Level	Ranking
1	Procurement	Purchase Manager / Purchase Associate / Executive	
2	Merchandising	Sr./ Jr. Merchandiser/ Merchandiser Executive	
3	Design	Designer	
4	Production	Production Manager / Line Supervisor /Floor Supervisor/Operator	
5	Quality	Quality Control Executive	
6	Sales	Sales Manager / Executive	

Based on their responses, following skill set preference grid is designed

Skill Set	1	2	3	4	5	6	Preference
Procurement	0%	24%	24%	51%	0%	0%	4
Merchandising	0%	0%	24%	0%	76%	0%	5
Design	46%	29%	0%	0%	24%	0%	1
Production	29%	46%	0%	0%	0%	24%	2
Quality	0%	0%	51%	49%	0%	0%	3
Sales	24%	0%	0%	0%	0%	76%	6

Which places, Design, Production, Quality, Procurement, Merchandising and Sales in order of preference.

Preference Grade:

Skill Set	Preference
Design	1
Production	2
Quality	3
Procurement	4
Merchandising	5
Sales	6

Summary and Conclusions:

The research was instituted to evaluate: will it be feasible to start B.Tech program in Fashion and Apparel Technology and M.Tech in Textile Management at IICT Bhadohi. The study started with the hypothesis that there is a demand supply gap for qualified professionally trained professionals in Fashion and Fabric technology and apparel industry.

Major Findings:

There is lack of qualified professionals, though the industry is managing with whatever professionals are available but they would welcome, if qualified and trained professionals are made available. The top three desired skill sets are Design, Production and Quality. These findings are in congruence with the research hypothesis about demand-supply gap. **The findings confirmed to the facts stated in the DPR.**

Conclusion:

Going by the research findings and market survey, it can safely be stated that it would be good for the industry if a professional program is launched to train students in the desired skill set.

Recommendations for Further Investigation:

A more detailed and geographically diversified survey is needed to incorporate industry relevant content in course curriculum to bring out industry worthy professionals from the Institutes of higher education in the field of Fashion, Textile and Fabric Technology.