

Skill Enhancement Through Training for Employees in the Commercial Printing Industry

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Abstract

In the present scenario, employee training is considered as the source of gaining a competitive advantage. Employee training refers to the process of increasing the knowledge and skills of the workforce to enable them to perform their jobs more effectively. Skills enhancement is all about getting the skills you need to succeed at work. Skill enhancement is required in specific technical skills and essential skills. The technical skills and knowledge needed for work are changing all the time now, and therefore, everyone needs to be learning throughout their careers to stay relevant and competitive. The aim of this research was to study the enhancement of skills through training at different levels of employees in the commercial printing industry. The paper described and explored that training in any of these areas will help to develop skills that will enhance their effectiveness at different levels of employees in the commercial printing industry. The hypotheses were formulated to determine the association between training needs and enhancement of skills at different levels of employees in the commercial printing industry. Data was collected using questionnaires and interview. The research paper concluded that different levels of employee skills can be enhanced through training in the commercial printing industry.

Keywords : enhancement of skills, training, level of employees, commercial printing industry

JEL Classification : F23, J80, J83

Paper Submission Date : August 17, 2015 ; **Paper sent back for Revision :** December 11, 2015 ; **Paper Acceptance Date :** December 25, 2015

Continual change is an obvious in modern economic life. Trade barriers are reducing and new markets are opening up. Competition among firms is becoming increasingly severe. Demand for expertly trained workers is rising day by day. Advanced methods of communication are sending information to all parts of the globe with progressively greater speed and ease (Canadian Printing Industries Sector Council, 2008).

Human resource management literature identifies and provides several approaches to training employees. Skills, knowledge, and abilities can be imparted through the use of new technologies and adapting to innovative training methods. With the increasing globalization and trade liberalization surrounded by severe competition, firms in the print-media industry are gradually renewing and re-focusing their attention on training and development. The commercial printing industry, which is a unit of the media industry and a subset of the knowledge-intensive sector, has understood the strategic importance of employee training. As a result, most of these print-media firms have recognized employee training as a crucial determinant of sustained organizational performance (Quartey, 2012).

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Competencies and skills are empirically very important issues in today's environment such as education, business organization, and practitioner groups in human resource management. Employees with outdated skills may run a high risk of becoming unemployed ; training workers is often referred to as a mechanism that can lower this risk by expanding or refreshing skills (Pawar & Raut, 2012). High unemployment and a shortage of skilled talent pool sound like contradictory concerns, yet they are co-existing realities in India. Especially, the growing job market requires new skills and better training (Miller, 2012).

Adoption of new technologies in particular is radically changing the industry's workforce. To be more precise, skills shortages are evident in two major areas: operating complex new print machinery, and understanding and leveraging the benefits spurred by the use of information technologies (CPISC, 2008).

Literature Review

The research focuses on the industries that have adopted a framework for strong, sustainable, and balanced growth for their national policies, to strengthen the ability of workers to adapt to changing market demands, and to benefit from innovation and investments in new technologies, clean energy, environment, health, and infrastructure (Somavia, 2010). To make the strategy for training, we need to develop the skills and technology roadmap which addresses three fundamental questions: Where is our industry today? Where is our industry going? How do we get there? (CPISC, 2008).

Canada's printing and graphic communications industry assessed the skills of workers in pre - press, press, and finishing & bindery to identify gaps between workers' existing and required skills, and proposed a training model that the industry can implement to meet the current needs and anticipate future needs of workers in terms of skills development and training (Sijpbeer & Derome, 2011). Role of managers are changing all time now in the printing industry due to technological developments such as computer integrated manufacturing, quality management, and multimedia application along with labour market conditions and policy regulations in this industry (Nijhof & Streumer, 1998).

Traditional manual printing presses implemented IT technology to become high technology printing processes. By doing so, they are now able to move in their production processes, and are more responsive to customers' needs (Tan & Teo, 1997). Investigating the small & medium sized printing firms with reference to implications of digital technology on the skill and training needs, the picture that emerges is one where the emphasis is on re-training due to technological change (Smallbone, Supre, & Baldock, 2000). Lewis (1996) revealed the connection between training and technological change by looking at the printing industry through the experiences of six companies, and the study revealed that these companies held training to be strategic, not just peripheral. They invested heavily in the retraining of workers using a multiplicity of strategies, including training by equipment manufacturers, on the job training, peer tutoring, teamwork, customized training at vocational colleges, and tuition reimbursement (Lewis, 1996).

In India, more than a billion people and with nearly half the population below 25 years of age, India enjoys a distinct demographic dividend, which when leveraged fully, has the potential to transform the country into an economic superpower. However, for this, the country's largely unskilled population needs to be adequately skilled to improve their productivity and match global quality standards (Ramadorai, 2013). Identification of technical competency areas and subareas is essential for first line managers in the digital printing industry for the development of an undergraduate digital imaging first-line management staff (Craft, 1998).

Objectives of the Study

↳ To assess the importance of training needs and enhancement of skills at different levels of employees in the

commercial printing industry. The study emphasizes on identification of the competence level of employees and enhancement of skills of operators and managers in the commercial printing industry.

Research Methodology

Descriptive research comprises surveys and facts findings enquiries of different types.

(1) Hypotheses

↪ **H01:** There is no association between training needs and enhancement of skills of the manager in the commercial printing industry.

↪ **H1:** There is an association between training needs and enhancement of skills of the manager in commercial printing industry.

↪ **H02:** There is no association between training needs and enhancement of skills of the pre-press operator in the commercial printing industry.

↪ **H2:** There is no association between training needs and enhancement of skills of the pre-press operator in the commercial printing industry.

↪ **H03:** There is no association between training needs and enhancement of skills of the press operator in the commercial printing industry.

↪ **H3:** There is an association between training needs and enhancement of skills of the press operator in the commercial printing industry.

↪ **H04 :** There is no association between training needs and enhancement of skills of the finishing and binding operator in the commercial printing industry.

↪ **H4 :** There is no association between training needs and enhancement of skills of the finishing and binding operator in the commercial printing industry.

(2) Data Sources : The present study is based on primary data sources. The primary data were collected through the survey method with the help of a structured questionnaire as a research instrument.

(3) Sampling Plan : The steps involved in developing a sampling plan are:

(i) Universe: Employees in commercial printing in Pune district.

(ii) Sampling Unit: Commercial printing presses in Pune district.

(iii) Sampling Method: Judgmental sampling.

(iv) Sample Size: At each level , 25 samples ; a total of 100 respondents.

Analysis and Results

The Tables 1 and 2 reveal that 84%, 60%, 92%, and 64% of the respondents were male managers, pre-press, press, and binding operators, respectively. The Tables show that a total of 84%, 68%, 80%, and 76% of the respondents were married managers, pre-press, press and binding operators, respectively. The Tables show that

Table 1. Frequency Distribution Table of Respondents

Variables	Parameters	Total Respondent Managers - 25		Total Respondent PrePress Operators - 25	
		N	%	N	%
Gender	Male	21	84	15	60
	Female	4	16	10	40
Marital Status	Married	21	84	17	68
	Unmarried	4	16	8	32
Age Group	Above 18 to 25 years	1	4	8	32
	Above 26 to 40 years	13	52	9	36
	Above 41 years	11	44	8	32
Qualifications	Below HSC	0	0	11	44
	Graduate	7	28	7	28
	Diploma / ITI	11	44	6	24
	BE //ME/MBA/Ot.	7	28	1	4
Type of Company	Private	20	80	19	76
	Government	5	20	6	24
No. of Employees	Less than 10 employees	4	16	4	16
	10 to 50 employees	17	68	16	64
	51 to 200 employees	4	16	5	20

Table 2. Frequency Distribution Table of Respondents

Variables	Parameters	Total Respondents Press Operators - 25		Total Respondent Binding Operators - 25	
		N	%	N	%
Gender	Male	23	92	16	64
	Female	2	8	9	36
Marital Status	Married	20	80	19	76
	Unmarried	5	20	6	24
Age Group	Above 18 to 25 years	6	24	7	28
	Above 26 to 40 years	11	44	11	44
	Above 41 years	8	32	7	28
Qualifications	Below HSC	12	48	18	72
	Graduate	2	8	4	16
	Diploma / ITI	9	36	3	12
	BE //ME/MBA/Other	2	8	0	0
Type of Company	Private	19	76	18	72
	Government	6	24	7	28
No. of Employees	Less than 10 employees	4	16	3	12
	10 to 50 employees	17	68	16	64
	51 to 200 employees	4	16	6	24

Table 3. Pearson Correlations Coefficient - Manager

		Manager training needs	Manager skill enhance
Manager_trainneeds	Pearson Correlation	1	.892**
	Sig. (2-tailed)		.000
	N	25	25
Manager_skill enhance	Pearson Correlation	.892**	1
	Sig. (2-tailed)	.000	
	N	25	25

** . Correlation is significant at the 0.01 level (2-tailed).

a total of 52%, 36%, 44%, and 44% of the respondents were above 26 to 40 years old and that a total of 44%, 32%, 32%, and 28% respondents were above 41 years of age in case of managers, pre-press, press, and binding operators, respectively.

The Tables show that a total of 44%, 48%, and 72% of the respondents had below HSC qualifications respectively for pre-press, press, and binding operators, respectively and a total of 44%, 24%, 36%, and 12% of the respondents possessed Diploma or ITI technical qualifications, respectively for managers, pre-press, press, and binding operators, respectively and 28% manager respondents were BE/ME/MBA/Other qualified. The Tables 1 and 2 reveal that a total of 80%, 76%, 76%, and 72% of the respondents were from private companies in case of managers, pre-press, press, and binding operators, respectively. The Tables 1 and 2 reveal that a total of 68%, 64%, 68%, and 64% of the respondents were from 10 to 50 no. of employees in the company for managers, pre-press, press, and binding operators, respectively.

Hypotheses Testing

It can be inferred from the Table 3 that the Pearson correlation coefficient, r is 0.892, and this is statistically significant ($p < 0.005$). A Pearson product-moment correlation was run to determine the relationship between an individual's managerial training needs and enhancement of skills for an effective performance. The data shows no violation of normality, linearity, or homoscedasticity. There is a strong, positive correlation between managerial training needs and enhancement of skills, which is statistically significant (Table 3 ; $r = .892$, $n = 25$, $p < .005$). Hence, the alternative hypothesis H1 is accepted. Hence, there is a strong positive association between training needs and enhancement of skills of a manager in the commercial printing industry.

It can be inferred from the Table 4 that the Pearson correlation coefficient, r , is 0.711, and this is statistically significant ($p < 0.005$). A Pearson product-moment correlation was run to determine the relationship between an individual pre press operator's training needs and enhancement of skills for an effective performance. The data shows no violation of normality, linearity, or homoscedasticity. There is a strong, positive correlation between a pre press operator's training needs and enhancement of skills, which is statistically significant (Table 4 ; $r = .711$, $n = 25$, $p < .005$). Hence, the alternative hypothesis H2 is accepted. Hence, there is a strong positive association between training needs and enhancement of skills of the pre press operator in the commercial printing industry.

It can be inferred from the Table 5 that the Pearson correlation coefficient, r is 0.811, and this is statistically significant ($p < 0.005$). A Pearson product-moment correlation was run to determine the relationship between an individual press operator's training needs and enhancement of skills for an effective performance. The data shows no violation of normality, linearity, or homoscedasticity. There is a strong, positive correlation between a press operator's training needs and enhancement of skills, which is statistically significant (Table 5 ; $r = .811$, $n = 25$, $p < .005$). Hence, the alternative hypothesis H3 is accepted. Hence, there is a strong positive association

Table 4. Pearson Correlations Coefficient - Pre-Press Operator

		Prepresstrainneeds	Prepressskillenhance
Prepresstrainneeds	Pearson Correlation	1	.711**
	Sig. (2-tailed)		.000
	N	25	25
Prepressskillenhance	Pearson Correlation	.711**	1
	Sig. (2-tailed)	.000	
	N	25	25

** . Correlation is significant at the 0.01 level (2-tailed).

Table 5. Pearson Correlations Coefficient - Press Operator

		Presstrainneeds	Pressskillenhance
Presstrainneeds	Pearson Correlation	1	.811**
	Sig. (2-tailed)		.000
	N	25	25
Pressskillenhance	Pearson Correlation	.811**	1
	Sig. (2-tailed)	.000	
	N	25	25

** . Correlation is significant at the 0.01 level (2-tailed).

between training needs and enhancement of skills of the press operator in the commercial printing industry.

It can be inferred from the Table 6 that the Pearson correlation coefficient, r , is 0.934, and this is statistically significant ($p < 0.005$). A Pearson product-moment correlation was run to determine the relationship between an individual binding operator's training needs and enhancement of skills for an effective performance. The data shows no violation of normality, linearity, or homoscedasticity. There is a strong, positive correlation between a binding operator's training needs and enhancement of skills, which is statistically significant (Table 6 ; $r = .934, n = 25, p < .005$). Hence, the alternative hypothesis H4 is accepted. Hence, there is a strong positive association between training needs and enhancement of skills of the binding operator in the commercial printing industry.

Findings

- (1) In commercial printing presses, men are employed in majority, working in different capacities.
- (2) Majority of the workforce at the level of managers and operators were married.
- (3) Except for the pre-press operator, majority of the managers, press, and binding operators were above 25 years of age.
- (4) All managers were technically qualified such as Diploma in Engineering/ITI or higher qualifications such as BE/ME/MBA.
- (5) The pre - press operators were younger in age and more women were found to be working in this profession as compared to other level of employees.
- (6) The workforce strength in private companies in Pune district was upto 50 employees.

Table 6. Pearson Correlations Coefficient - Binding Operator

		bindingtraingneeds	bindskillsenhance
bindingtraingneeds	Pearson Correlation	1	.934**
	Sig. (2-tailed)		.000
	N	25	25
bindskillsenhance	Pearson Correlation	.934**	1
	Sig. (2-tailed)	.000	
	N	25	25

** . Correlation is significant at the 0.01 level (2-tailed).

(7) There are several challenging factors for the effectiveness of managers in the commercial printing industry, such as overall technological developments, analyzing technical problems, customer relationship management, sales skills, etc.

(8) Critical operations for effectiveness of pre-press operators in the commercial printing industry are : pre-flight operations, color management skills, image manipulating skills, and file construction skills etc.

(9) At the workplace, training is required to maintain a healthy and safe working environment ; print quality inspection, trouble shooting skills, and machine maintenance skills are more important to enhance the effectiveness of the press operator in the commercial printing industry.

(10) For binding operators, training is required to operate the folding machine and hard case operations.

Conclusion and Managerial Implications

Training plays a very important role in an organization for competitive development. By training, we can enhance the skill sets of employees, and it helps to reduce the cost and time of the organization and improves the effectiveness of the employees in quality and productivity. Training gap arises due to advancement in technology, production process changes, requirement of high quality print products, and so forth. To find the performance gap is a part of professional development. Before giving training to the employees, managers need to identify the skill gaps / deficiencies of the employees according to their job requirements. By training, we can reduce the weaknesses of the employees and enhance the effectiveness of the employees. Training plays a vital role in organizational development by achieving objectives of the employees and the organization.

Limitations of Study and Scope for Further Research

This study was conducted in Pune district. The scope of this study is limited to this geographical area. The study was conducted for the commercial printing industry. Hence, the application of the outcome of this research is dependent upon the technical needs of the employees and business processes with reference to the commercial printing industry.

Future studies can conduct studies in the following areas. Studies can examine :

- (1) The determinants of training needs for employees.
- (2) Influence of technological changes and working environment on training needs.
- (3) To study the qualities required for a trainer.

(4) Evaluation of training for employees in the commercial printing industry.

(5) Suitable method of training for the commercial printing industry.

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