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- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

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**DEMOGRAPHIC CHARACTERISTICS OF EMPLOYEES IN INFORMATION TECHNOLOGY INDUSTRY IN INDIA**

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**GHARAUN**

**ABSTRACT**

Human resource is the most vital factor in the process of development of an economy or an organisation. The term human resource refers to the knowledge, skills, creativities, abilities and talents. These attributes ultimately determine the efficiency and productivity of work-force. Thus, to attain such human resource, there must be emphasis on developing and nurturing a strategy-based on human resource development practices in the information technology organisations. Information technology industry needs highly skilled, talented and well-learned human resource. The success of IT/ITES, sector is basically due to skilled, efficient and energetic human resource in Indian information technology sector. In India, the other reason for the growth of information technology industry is the availability of English language proficient labour class. India is a nation of youth and majority of Indians nearly above fifty nine percent people in the age group of 15-60 years. The present paper deals with the detailed information of personal and demographic data of the employees, about age, sex, educational qualification, nature of job, marital status, background, work-experience, monthly income and nature of appointment of employees in information technology industry.

**KEYWORDS**

Chi-Square, Demographic Data, Educational Qualification, Human Resource, Information Technology.

**INTRODUCTION**

In highly skilled intensive and knowledge intensive industries like information technology industry, human resource plays a vital role. This industry is highly competitive, dynamic and technical industry, whose growth and development depends upon its human resource much more strongly than other resources. This industry needs highly skilled, talented and well-learned human resource. The quality of products and services both depend upon the quality of human resource, which needs continuous and multiple-skill training. Thus, to attain such human resource, there must be emphasis on developing and nurturing a strategy-based on human resource development practices in the information technology organisations. For the success of information technology organisations, it is necessary that right person must be placed at right job and his potential must be enhanced through multiple and continuous training. Thus, this sector must give more emphasis on the development of human resources by prevailing upon different aspects of human resource development practices in their organisations. The success of IT/ITES, sector is basically due to skilled, efficient and energetic human resource in Indian information technology sector. In India, the other reason for the growth of information technology industry is the availability of English language proficient labour class.

**REVIEW OF LITERATURE**

Ganesan, P., V. Samuel Rajkumar and V. Saravanan (2002), studied the 'Determinants of Employee Relations Climate in Public Sector Undertakings.' The objectives of the study were to analyse the employees' relations climate and to identify the various employee attitudes. In the category of education - majority of employees are diploma holders, in the category of age - majority of employees are in the age of 51 years and above, in case of marital status - majority of employees are married, in case of experience - majority of employees have experience upto 10-13 years. The study revealed that by improving factors like working conditions, level of supervision, communication and worker's participation etc., a conducive climate can be achieved.

Kandu, Subhash C., Divya Malhan and Pardeep Kumar (2007) conducted a study on, 'Human Resource Management Practices in Shipping Companies: A Study.' The main objective of the study was to assess the human resource management practices being practiced in shipping companies. The present study is based on primary data gathered with the help of questionnaire comprising of three sections. The first section contained ten background questions and second section contained 22 statements about the human resources management practices. The third section contained 45 statements related to employee service orientation. Out of the sample of 250 respondents, 90 respondents were from Indian and 160 from multinational shipping companies. All respondent employees/officials were of Indian origin. However, all respondents were males in the sample, out of which 45.6 percent were married. The officers surveyed were comparatively younger. The average experience of the officers/employees was 8.29 years and average experience in the shipping company when they are surveyed was 4.25 years. The fresh officers were 54.40 percent, those who have changed the company two times 24.00 percent and those who have changed the company more than two times 18.80 percent and 2.80 percent did not report about the status of change. Data regarding 22 human resource statements was analyzed with the help of correlation and factor analysis. Study showed the correlations of 22 variables were almost significantly correlated.

Katuwal, Shyam Bahadur and Gurpreet Randhawa (2007) examine, 'Some Personnel Attributes in Association with Job Satisfaction of Industrial Workers of Nepal.' The present study is an attempt to assess the relation between personal attributes - age, gender, marital status, number of dependents, nature of employment, experience etc. and job satisfaction of the workers in Nepal. There is relatively positive association of job satisfaction with age, skill, permanent-employment status, experience and the worker's large additional income, whereas marital status and number of dependents have been found to be negatively associated.

**OBJECTIVES OF PRESENT STUDY**

The present paper "Demographic Characteristics of Employees in Information Technology Industry in India", deals with the detailed information of personal and demographic data of the employees about age, sex, educational qualification, nature of job, marital status, background, work-experience, monthly income and nature of appointment of employees in information technology industry. The main objective of this paper is to analysis the demographic trends in Indian information technology industry.

**RESEARCH METHODOLOGY**

The present study attempts to explore the practices of human resource development in various information technology organisations. The employees of information technology organisations covered in this study are - Tata Consultancy Services (TCS), Wipro Technologies, Infosys Technologies Ltd., Hindustan Computer Ltd. (HCL), Dell International, Birlasoft, Pyramid Consulting Inc., Quack Inc., Semi-Conductor Laboratory (SCL Ltd), Alcatel-Lucent Technologies, Attra, Kanbay International Inc. and Omnia Technologies from Delhi, Bangalore, Pune, Chandigarh, Mohali respectively. Through detail questionnaire the implementation of human resource development practices in information technology organisations, have been estimated. An effort has also been made to measure the human resource development climate in information technology organisations. The sample-size of five hundred employees has been taken in this study. The questionnaire has been divided into three parts. Part (a) includes detailed information of personal and demographic data of the employees, about age, sex, educational qualification, nature of job, marital status, background, work-experience, monthly income and nature of appointment of employees in information technology industry. Part (b) includes various aspects of human resource development - selection, training, performance and promotion, transfer,

wages and compensation, relation among employees, health and welfare policies, which are practiced in information technology industry. Part (c) consists of human resource development climate survey. It includes ten dimensions with 54 items. It observes the satisfaction level of employees with the prevailing human resource development climate in the selected organisations.

## DEMOGRAPHIC CHARACTERISTICS OF EMPLOYEES IN INFORMATION TECHNOLOGY INDUSTRY

Followings are the demographic characteristics of employees, covered in the survey -

- Age of Employees:** India is a nation of youth and majority of Indians belong to this group. In India there are nearly above fifty nine percent people in the age group of 15-60 years. They are also known as working population. Higher proportion of working young population is a good indicator for the growth of Indian economy. Young population, have good or excellent stamina to do work efficiently and effectively and they are also dynamic by nature who change, as the nature of the organisation changes.

TABLE 1: AGE OF EMPLOYEES

Age of Employee	<20yrs	20-30yrs	30-40yrs	>40yrs	Total
No. of Employees	10	359	130	1	500
Percentage	2	71.8	26	0.2	100

Source: Primary Survey

H<sub>0</sub>: No. of employees in various age groups are equal

H<sub>1</sub>: No. of employees in various age groups are not equal

Chi-square ( $\chi^2_{Test}$ ) (Calculated value) = 667.056

( $\chi^2_{\alpha}$ ) (Tabulated value)=11.3449

d.f. = 3

$\chi^2$  is significant at 1% level

Table 1 depicts that in Indian information technology industry, near about 71.8 percent employees are in the age group of 20-30 years, whereas 26 percent employees are in the age group of 30-40 years. It means that in Indian information technology industry, majority of employees are that is 97.8 percent are in the age group of 20-40 years. Data from the above table reveals that, just two percent employees are even less than the age of twenty years and point two percent employees are of more than forty years. In our survey ( $\chi^2_{Test}=667.056$ ) > ( $\chi^2_{\alpha}=11.3449$ ) means calculated value is greater than tabulated value, so null hypothesis is rejected and it is significant at 1% level. It shows that the number of employees in various age groups is not equal.

- Sex of Employees:** In information technology industry, there is majority of male employees as compared to female employees. It means that there is a wide gender gap between male and female employees.

TABLE 2: SEX OF EMPLOYEES

Sex	Male	Female	Total
No. of Employees	391	109	500
Percentage	78.2	21.8	100

Source: Primary Survey

H<sub>0</sub>: No. of employees of different sex groups are equal

H<sub>1</sub>: No. of employees of different sex groups are not equal

Chi-square ( $\chi^2_{Test}$ ) (Calculated value) = 159.048

( $\chi^2_{\alpha}$ ) (Tabulated value)=6.63490

d.f. = 1

$\chi^2$  is significant at 1% level

Table 2 reveals that near about 78.2 percent male employees are employed in information technology industry, whereas just 21.8 percent female employees are employed in this industry, which is much lower as compared to male employees. Participation of female employees is lower as compared to male employees in this industry in India, due to economic factors as well as other factors like cultural, social and ideological factors, or they also play a vital role in the determination of participation of female employees in information technology industry. Another reason may be that in information technology industry especially in BPO-ITES, there are night shifts because of 365x24x7 services of the organisations. Long-working hours are also, another hindrance, for the low participation of female employees. Survey shows that ( $\chi^2_{Test} = 159.048$ ) > ( $\chi^2_{\alpha}=6.63490$ ), the H<sub>1</sub> is accepted and Chi-square is significant at 1% level. It means the number of employees of different sex groups is not equal. There is low participation of female employees as compared to male employees in information technology organisations.

- Educational Qualification of Employees:** Education, training and skill acquisition is one of the key features of employees in the information technology industry. The information technology industry being a knowledge-based industry, entry to the labour market in this sector is restricted to the employable people with at least minimum level of education in general or technical education.

TABLE 3: GENERAL EDUCATIONAL QUALIFICATION

Edu. Qualification (General)	U.G.	Graduates	P.G.	Total
No. of Employees	2	49	44	95
Percentage	2.11	51.58	46.32	100

Source: Primary Survey

H<sub>0</sub>: No. of employees having different general education are equal

H<sub>1</sub>: No. of employees having different general education are not equal

Chi-square ( $\chi^2_{Test}$ ) (Calculated value) = 41.66

( $\chi^2_{\alpha}$ ) (Tabulated value)=9.21034

d.f. = 2

$\chi^2$  is significant at 1% level

TABLE 4: TECHNICAL EDUCATIONAL QUALIFICATION

Edu. Qualification (Technical)	BCA	MCA	B-TECH	M-TECH	MBA	Other	Total
No. of employees	100	147	89	38	29	2	405
Percentage	24.69	36.30	21.98	9.38	7.16	0.49	100

Source: Primary Survey

H<sub>0</sub>: No. of employees having different technical education are equal

H<sub>1</sub>: No. of employees having different technical education are not equal

Chi-square ( $\chi^2_{Test}$ ) (Calculated value  $\chi^2$ ) = 212.99

( $\chi^2_{\alpha}$ ) (Tabulated value)=15.0863

d.f. = 5

$\chi^2$  is significant at 1% level



In this survey, employees have been categorized into two categories of education that is general and technical education. In information technology industry most of employees are technically qualified people. Out of five hundred sample-sizes of employees, ninety five employees are with general qualification, whereas 405 employees are with technical qualification. General education includes arts, commerce and science faculty with B.A., M.A., B.Com, M.Com, B.Sc., M.Sc., etc., whereas technical education includes B.C.A, M.C.A, B-tech, M-tech, M.B.A, PGDCA, M.Sc. (IT) etc. In general education 51.58 percent, 46.32 percent and 2.11 percent employees are graduate, post-graduate and under-graduate, whereas in technical education 36.30 percent employees are MCA, 24.69 percent are BCA, 21.98 percent are B-Tech, 9.38 percent are M-tech, 7.16 percent are MBA and point forty nine percent are of other qualification like Diploma in Computer Science or P.G. Diploma in Computer Applications etc. It proves that in information technology industry most of the employees are technically skilled employees.

General education depicts,  $(\chi^2_{\text{Test}} = 41.66) > (\chi^2_{\alpha} = 9.21034)$ , so null hypothesis is rejected and alternative hypothesis is accepted. It means employees with different general education are not equal. This test is significant at 1% level. Again in technical education  $(\chi^2_{\text{Test}} = 212.99) > (\chi^2_{\alpha} = 15.0863)$ , which means number of employees having different technical education are not equal. Alternative hypothesis is accepted and it is significant at 1% level.

4. **Background of Employees:** Most of information technology organisations are located in metro cities, like National Capital Region (Delhi), Mumbai, Bangalore etc. It is because of availability of good infrastructure as well as skilled employees in these areas.

TABLE 5: BACKGROUND OF EMPLOYEES

Background	Rural	Urban	Total
No. of employees	74	426	500
Percentage	14.8	85.2	100

Source: Primary Survey

$H_0$ : No. of employees of different background are equal

$H_1$ : No. of employees of different background are not equal

Chi-square ( $\chi^2_{\text{Test}}$ ) (Calculated value) = 247.808

$(\chi^2_{\alpha})$  (Tabulated value) = 6.63490

d.f. = 1

$\chi^2$  is significant at 1% level

Table 5 shows that most of the employees engaged in information technology industry are having urban background. A majority of employees that is 85.2 percent are of urban background and on the other hand just 14.8 percent employees are of rural background. In background of employees again  $(\chi^2_{\text{Test}} = 247.808) > (\chi^2_{\alpha} = 6.63490)$ , so it is significant at 1% level.  $H_1$  is accepted which means the number of employees from different background that is from urban and rural areas, are not equal. There are majority of urban background employees.

5. **Marital Status of Employees:** Marriage is an important custom of Indian society. In traditional Indian society, people used to get married at early age but now the trend has been changed. Now, people don't believe in early age marriage. They are career conscious now. With the spread of education particularly among females, the trend of early marriage is declining and the same is reflected in our study findings.

TABLE 6: MARITAL STATUS OF EMPLOYEES

Marital Status	Married	Unmarried	Total
No. of employees	199	301	500
Percentage	39.8	60.2	100

Source: Primary Survey

$H_0$ : No. of employees of having different marital status is equal

$H_1$ : No. of employees of having different marital status is not equal

Chi-square ( $\chi^2_{\text{Test}}$ ) (Calculated value) = 20.808

$(\chi^2_{\alpha})$  (Tabulated value) = 6.63490

d.f. = 1

$\chi^2$  is significant at 1% level

Table 6 shows that just 39.8 percent employees are married and 60.2 percent employees are unmarried. It means, a majority of employees are unmarried. In marital status,  $(\chi^2_{\text{Test}} = 20.808) > (\chi^2_{\alpha} = 6.63490)$ , so it is significant at 1% level.  $H_0$  is rejected and  $H_1$  is accepted. It means that the numbers of employees having different marital status are not equal.

6. **Nature of Job of Employees:** In any type of organisations, there is need for various employees having different skills. Nature of job can be classified as follows – technical, non-technical, managerial and others like administrators, allied services providers including – clerks, peons, secretaries, P.A. and maintenances staff etc. In our study, we have even included the security staff because they are an integral part of the organisations. They are good observers as well as good informers. They also play a vital role in the security of the organisations through collecting the information and identification of the visitors. Even some time in large scale organisations visitors are also checked by security staff.

TABLE 7: NATURE OF JOB OF EMPLOYEES

Nature of job	Technical	Non-technical	Managerial	Others	Total
No. of Employees	374	95	29	2	500
Percentage	74.8	19	5.8	0.4	100

Source: Primary Survey

$H_0$ : No. of employees in different nature of jobs are equal

$H_1$ : No. of employees in different nature of jobs are not equal

Chi-square ( $\chi^2_{\text{Test}}$ ) (Calculated value) = 697.968

$(\chi^2_{\alpha})$  (Tabulated value) = 11.3449

d.f. = 3

$\chi^2$  is significant at 1% level

Table 7 reveals that majority of employees are engaged in technical department that is near about 74.8 percent, whereas, in non-technical, managerial and other department, 19 percent, 5.8 percent and 0.4 percent employees are engaged. Information technology industry is a technical industry and hence needs more technical employees as compared to others. Here,  $(\chi^2_{\text{Test}} = 697.968) > (\chi^2_{\alpha} = 11.3449)$ , so  $H_1$  is accepted which means number of employees in different nature of job are not equal. It is significant at 1% level.

7. **Work Experience of Employees:** In information technology industry, a majority of young employees are employed. Many employees have just completed their graduation and post graduation at early age and also get job early. In BPOs most of employees have just completed their +2 or graduation at the age of 19-20 years.

TABLE 8: WORK EXPERIENCE OF EMPLOYEES

Work Exp.	<5 yrs	5-10yrs	10-20yrs	20-30yrs	>30yrs	Total
No. of employees	308	152	38	2	-	500
Percentage	61.6	30.4	7.6	0.4	-	100

Source: Primary Survey

$H_0$ : No. of employees having different experienced are equal

$H_1$ : No. of employees having different experienced are not equal

Chi-square ( $\chi^2_{\text{Test}}$ ) (Calculated value) = 694.16

( $\chi^2_{\alpha}$ ) (Tabulated value) = 13.2767

d. f. = 4

$\chi^2$  is significant at 1% level

Table 8 shows, that there is no employee having more experience than thirty years. On the other hand, a large number of employees that is 61.6 percent are having experience less than five years, 30.4 percent of employees are having experience between five to ten years and 7.6 percent of employees are having experience ten to twenty years. Out of five hundred employees just two employees have experience between twenty to thirty years. Our survey reveals that near about 92.0 percent employees having experience between one to ten years. There may be senior employees are having experience more than 30 years but they did not participate in this survey. Some of them directly refused to take participation in our survey. Data reveals that, ( $\chi^2_{\text{Test}} = 694.16$ ) > ( $\chi^2_{\alpha} = 13.2767$ ) so, alternative hypothesis is accepted, whereas null hypothesis is rejected. It shows that number of employees in various work experience categories is different from each other. This test is significant at 1% level.

**8. Monthly Income of Employees:** Salary in the software industry is one of the most flexible feature and at the same time one of the most closely guarded secret in the industry. There are no fixed norms regarding the wage payment made to the employees. Information technology industry provides one of the highest salary levels in comparison to any other sector for same level of skills. The salary level in this sector has ushered in a new class of young urban upwardly mobile group of information technology employees. The high rates of salary in the industry are attracting workers from other sectors.

TABLE 9: MONTHLY INCOME OF EMPLOYEES

Monthly Income	Not disclosed (Rs.000's)	<20 (Rs.000's)	20-30 (Rs. 000's)	30-40 (Rs. 000's)	>40 (Rs. 000's)	Total
No. of Employees	266	43	64	76	51	500
Percentage	53.2	8.6	12.8	15.2	10.2	100

Source: Primary Survey

$H_0$ : No. of employees having different monthly income are equal

$H_1$ : No. of employees having different monthly income are not equal

Chi-square ( $\chi^2_{\text{Test}}$ ) (Calculated value) = 350.78

( $\chi^2_{\alpha}$ ) (Tabulated value) = 13.2767

d.f. = 4

$\chi^2$  is significant at 1% level

Table 9 depicts, that the large number of employees did not disclose their monthly salaries. It means 53.2 percent of employees did not give any idea regarding their monthly salaries. The 15.2 percent of employees are getting salary between the ranges of Rs. 30-40 thousand per month. Approximately 12.8 percent and 10.2 per cent of employees are getting their monthly salaries between the range of Rs. 20-30 thousand and more than Rs. 40 thousand per month. Near about 8.6 percent employees are getting their salaries less than Rs. 20 thousand per month. It shows that ( $\chi^2_{\text{Test}} = 350.78$ ) > ( $\chi^2_{\alpha} = 13.2767$ ), so null hypothesis is rejected and alternative hypothesis is accepted. All employees in information technology organisations, having different monthly income and chi-square are significant at 1% level.

**9. Nature of Appointment:** Information technology sector in India is well organized sector which includes – public sector, private sector and MNCs. Though information technology industry is primarily in private sector, the nature of appointment in information technology sector is similar to that in the public sector. Some of employees are permanent, trainees, trainee and likely to be permanent and purely temporary. In information technology industry most of the employees are permanent because this industry spends a lot of resources and time on its employees by providing training and development. It is in the interest of organisations to have permanent employees.

TABLE 10: NATURE OF APPOINTMENT

Nature of Appointment	No. of Employees	Percentage
Trainee	30	6
Trainee & likely to be permanent	91	18.2
Permanent	335	67
Purely temporary	44	8.8
Total	500	100

Source: Primary Survey

$H_0$ : No. of employees having different nature of appointment are equal

$H_1$ : No. of employees having different nature of appointment are not equal

Chi-square ( $\chi^2_{\text{Test}}$ ) (Calculated value) = 486.68

( $\chi^2_{\alpha}$ ) (Tabulated value) = 11.3449

d.f. = 3

$\chi^2$  is significant at 1% level

Table 10 reveals, that 67 percent of employees are permanent and 18.2 percent are trainees and likely to be permanent. The 8.8 percent employees are purely temporary and 6 percent employees are just trainees. It means that 85.2 percent employees are permanent in the nature of appointment. Here, ( $\chi^2_{\text{Test}} = 486.68$ ) > ( $\chi^2_{\alpha} = 11.3449$ ), so alternative hypothesis is accepted. It means numbers of employees having different nature of appointment are not equal. Most of them are permanent. Hence, chi-square is significant at 1% level.

## CONCLUSION

Thus it can be calculated that in information technology sector, most of young and technical skilled people are employed belonging to urban-areas and majority of them are male employees. The participation of women employees is relatively lower because of socio constraints, night-shifting, long-working hours and highly challengeable nature of jobs. Data reveals that in this industry majority of employees are unmarried. The nature of the job of most of employees is technical. In this industry majority of employees are young, so majority of them have experience less than five years. The monthly income of employees in information technology organisations is very high as well as flexible, which differs from location to location and varies with size of organisations and skill of employees. Large organisations are offering high salaries and benefits to their workers as compared to their smaller counterparts. In this survey maximum

employees do not disclose their monthly income. Most of employees are permanent in nature of appointment, because industry spends a large amount of resources on the training of their employees.

#### REFERENCES

1. Ganesan, P., V. Samuel Rajkumar and V. Saravanan (2002). "Determinants of Employee Relations Climate in Public Sector Undertaking," *Management and Labour Studies*, pp.275-283.
2. Kandu, Subhash C., Divya Malhan and Pardeep Kumar (2007). "Human Resource Management Practices in Shipping Companies," *Delhi Business Review*, Vol.8, No.1.
3. Katuwal, Shyam Bahadur and Gurpreet Randhawa (2007). "Some Personnel Attributes in Association with Job Satisfaction of Industrial Workers of Nepal," *Paradigm*, Vol. 9, No.1, pp. 20-26.



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