



AN IMPACT OF INFORMATION TECHNOLOGY ON RECRUITMENT AND SELECTION OF HRM IN SELECTED CEMENT INDUSTRY

Shankar Choudhary¹, Ph. D. & Rati Mishra²

¹Associate Professor, Pacific Academy of Higher Education and Research University

²Research Scholar, Faculty of Management, Pacific Academy of Higher Education and
Research University

Abstract

Human Resource Management (HRM) is an important concept for any organization and it is the basic for achieving competitive advantage and the company performance which is influenced by a set of effective HRM practices. Managing human resources is a challenging task as compared to managing technology or capital and any other resources and for effective management of human resources, organization entails an effective HRM system. Information technology has been proved to be a boon to provide more efficient processes that would eventually lead to lower cost products and services and better human resource management. Studying the impact of information technology on human resource management and manpower in particular is very crucial. Thus, it is relevant to take a preview on the impact of advanced technological innovation to the establishment and upgrading of human resource. The present research study is confined to study of employee's perception regarding the information technology in HR Practices as well as role and impact of IT on recruitment and selection of HR practices. For the purpose of data collection, respondents were selected from cement companies of Southern Rajasthan State of India. It also aims at gathering information about the effectiveness of current IT practices followed and the difference they made to the growth and development of human resources and level of the agreement through the study of various IT and HR schemes and practices.



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

INTRODUCTION

As the, Information Technology is expected to improve the performance of Human Resource Management by shifting its focus from administration or personnel management to strategic HRM. The strategic role of HRM is supposed to add value to HR functions. IT based HRM can bring higher accuracy and speed in transaction oriented HR processes like payroll, leave, attendance, Goal setting & tracking, performance appraisals, specially for **application tracking in Recruitment system**, shifts planning, scheduling, management of training

process, maintenance of employee data and its update etc. In a manual system, there is no transparency. An employee does not know if his / her personal record, on the basis of which his career is being managed, is updated or not. In an IT based system, with on-line access to personal records, an employee can audit all personal records & can get the same updated without delays. Efficient management of human resources can increase the performance of the employees of the cement industries.

OVERVIEW OF CEMENT INDUSTRY IN INDIA

Today, the Indian cement industry is very large, second only to China in terms of installed capacity, and has grown at a very fast pace in recent years. The rate of growth over the past 20 years has been phenomenal, since 1992 India's cement production has more than quadrupled from around 50Mt/yr to 220Mt/yr in 2011.

By August 2012, the Indian government attempted to get in the industry's expansion by restarting the sale of six cement plants that had previously been closed by the Cement Corporation of India over 10 years before. Advertised as 'ready-made' capacity, the sale has not yet attracted any bidders as far as Global Cement can ascertain, presumably due to the relative age of the plants and commitments to new capacity by the major players. Projects announced at the same time included two plants being planned by Emmami Cement and ABG's announcement of two new plants for **2014**.

“Cement Industry has expanded much in last a decade. This industry has recorded a CAGR of 8%, against the entire globe concrete industry average of 3.5% and China’s cement industry amount of development of 7.2%. Nowadays concrete industry has become the second biggest concrete manufacturer on the globe after Chinese suppliers.

Domestic concrete requirement development has exceeded the economic amount of development for the previous a very extensive period. Cement requirement in the nation grows at approximately 1.5 times the GDP amount of development. The marketplace had revenues around US\$ 7.8 billion dollars in 2003-04.

Although the Indian cement industry has some multinational cement giants, like Holcim and Lafarge, which have interests such as ACC, Ambuja Cement and Lafarge Birla Cement, the Indian cement industry is broadly home-grown. Ultratech Cement, the country's largest firm in terms of cement capacity, holds around 22% of the domestic market, with ACC (50%-owned by Holcim) and Ambuja (50%-owned by Holcim) having 15% and 13% shares respectively.

According to Forbes India (2016) Cement Industry in India

- ✚ 183 large cement plants and more than 360 mini cement plants
- ✚ 330 million tonnes a year installed capacity
- ✚ 97% of the installed capacity is accounted for by large producers, around 40 in number
- ✚ 21 top companies control 90% of the market
- ✚ 40% of the market is controlled by two groups, Holcim and Aditya Birla Group

Cement is heavy product and cannot be easily transferred over long ranges making it a local industry, with the nation being divided into five regions. Each region is described as its own demand-supply characteristics. Over the previous several decades the cost of cement manufacturing has expanded at a CAGR of 8.4%.

REVIEW OF LITERATURE

Papercamp (2013) Many of the remaining dozen top gamers are Native Indian and are (in order of reducing market share); Jaiprakash Associates (10%), The Indian Cements Ltd (7%), Shree Cements (6%), Century Fabrics and Sectors (5%), Madras Cements (5%), Lafarge (5%), Birla Cement (4%) and Binani Cement (4%). Between them the top 12 concrete firms have around 70% of the household market. Around 100 smaller gamers produce and smash concrete on a wide variety of scales but are often limited to small areas”

Domestic cement demand growth has surpassed the economic growth rate for the past three years. Cement demand in the country grows at roughly 1.5 times the GDP growth rate. The industry had a turnover of around US\$ 7.8 billion in 2003-04.

According to **UK Essays, 2015**, Cement is bulky commodity and cannot be easily transported over long distances making it a regional market place, with the nation being divided into five regions. Each region is characterized by its own demand-supply dynamics. Over the past few years the cost of cement production has grown at a CAGR of 8.4%.

According to **Kumar (2015)** “The public sectors as well as private sector have turned their attention towards the adoption of modern dry process technology for the last two decades. But comparatively the private sectors in India are more prone to the adoption of new dry process technology. The rate of technology change is faster in private sector as compared to public sector. Indian Cement Industry has been passed through many ups and down. It was under strict government control till 1982”.

“Subsequently, it was partially decontrolled in 1982; the industry was opened to the free market economy along with the withdrawal of prices and distribution controls. Finally the industry was totally decontrol and de-licensed in 1991 under the policy of liberalization

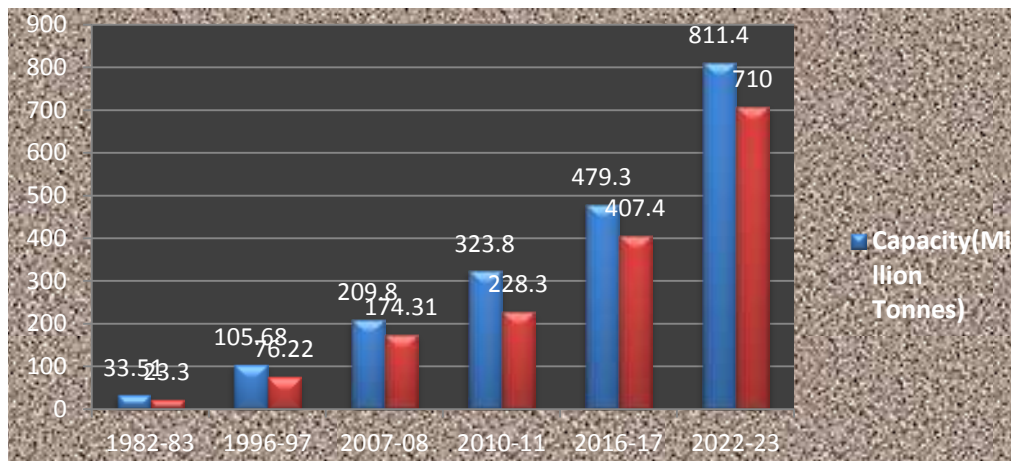
and globalization and the industry witnessed spectacular growth in production after 1991. Over the time the industry has witnessed spread of plants in several areas of the country”.

Table 1: - Capacity/Production capacity

Year	Capacity(Million Tonnes)	Production(MillionTonnes)
1982-83	33.51	23.30
1996-97	105.68	76.22
2007-08	209.8	174.31
2010-11	323.80	228.30
2016-17	479.3	407.4
2022-23	811.4	710.0

Source: Cement Manufacturers Association Report CMA data book 2011

Graph 1: - Graph of Capacity/Production capacity



Source: Cement Manufacturers Association Report CMA data book 2016

Cement Organizations in India Information Given By a Publication Survey

Indian cement companies which were described by “Labour and Industrial Chronical” survey of cement industry and directory, 2012, 3rd edition. It declares about cement market potential per plant and variety of vegetation of each cement organization in Indian. It gives an idea about the capacity of cement and number of plants of company. Two to three plants expansion may be done further by these top cement players.

Table 2- Indian cement companies which were described by “Labour and Industrial Chronical” survey of cement industry and directory, 2012, 3rd edition

Sr. no.	Company Name	Capacity 2012	Mtpa	No. of Plants
1.	Ultratech Cement	48.75		22
2.	ACC Cement	30.08		14
3.	Ambuja Cement	27.00		13

4.	Jaiprakash Associates	24.50	14
5.	India Cement Ltd	15.33	09
6.	Madras Cement Ltd	14.44	08
7.	Shree Cement Ltd	13.50	06
8.	Chettinad Cement Corp	11.50	03
9.	Dalmia Bharat Enterprises	9.00	03
10.	Century Textiles And Industries	7.80	03
11.	Lafarge India Pvt Ltd	7.75	04
12.	J.K Cement Ltd	7.47	04
13.	Kesoram Industries Ltd	7.25	02
14.	Penna Cement Industries Ltd	7.00	04
15.	Birla Corporation Ltd	6.46	07
16.	Binani Cement Ltd	6.25	02
17.	Zuari Cement Ltd	6.20	03
18.	Prism Cement Ltd	6.10	2
19.	OCL India Ltd	5.35	2
20.	J.K Lakshmi Cement Ltd	5.30	3
21.	My Home Industries	5.20	2
22.	JSW Cement	5.20	2
23.	Orient Cement	5.00	2
24.	Bharathi Cement	5.00	1

Source:- http://shodhganga.inflibnet.ac.in/bitstream/10603/49096/8/08_chapter%202.pdf

Walker (1994) clarifies "combination of HR with the business requires another worldview for overseeing Human Resources in an association." It implies that combination of Human asset permits associations the answers for complex issues identified with the authoritative achievement. Incorporation alludes to rise of HRM in associations' system definition and arrangement of HR as indicated by the key prerequisite of association.

ROLE OF INFORMATION TECHNOLOGY IN HUMAN RESOURCE IN CEMENT INDUSTRIES

Krishna kumar (2009), in his doctoral theory entitled, "HRM practices in bond industry in India" has dissected that more than 80% of representatives are fulfilled by the human asset strategies and practices followed in the organization. More than 85% of employees are satisfied with the welfare measures. In allowances more than 80% of employees are satisfied. The overall conclusion about the human resource policies and practices followed in India cement limited Sankari is excellent".

As far as the topic of the study is concerned, many studies have been conducted on particular topic in different sectors but no such study has been conducted on **Employees Perception on Information Technology in HR Practices especially in Cement industries in Rajasthan**. Now-a-days, the environment has become very competitive and they compete for quality of human resources. So this study will help the companies to know the perception of employees about HRM practices.

OBJECTIVES OF THE STUDY

The development of human resource and the information are in friction. In this case, it is relevant to take a glimpse on the impact of technological innovation to the formation and development of human resource. In order that this study will be directed towards its objectives and claim on the impact of IT to human resource the need to underline the problems are significant. Hence, this study seeks to answer the problem statements raised in here.

- To identify the role of IT in HR practices for recruitment and selection.

PROCEDURE FOR DATA COLLECTION

Questionnaires were personally distributed by the researcher to employee of cement industries. The researcher helps to completed some of the questionnaires for those who couldn't read this language very well. The data was collected over a period of six months.

The research relied on both primary and secondary data in order to come up with accurate and objective findings.

ANALYSIS OF RELATIONSHIP BETWEEN INDEPENDENT VARIABLES AND RECRUITMENT & SELECTION METHODS THROUGH IT

This part examined the perception of respondents about various statements of information technology in HR practice in selected cement industries on the Recruitment & Selection, Orientation & Placement and Training & Development related parameters.

For finding the relationship between independent variables and Recruitment & selection methods through IT following hypothesis has been formulated;

H₀₁:- There is no significant difference between male and female employees perception towards the recruitment and selection method through IT.

H₁₁:- There is a significant difference between male and female employees perception towards the recruitment and selection method through IT.

H₀₂:- There is no significant difference amongst various age group of employee's perception about the recruitment and selection method through IT.

H₁₂:- There is a significant difference amongst various age group of employee's perception about the recruitment and selection method through IT.

H₀₃:- There is no significant difference amongst various qualification groups of employee's perception about the recruitment and selection method through IT.

H₁₃:- There is a significant difference amongst various qualification groups of employee's perception about the recruitment and selection method through IT.

H₀₄:- There is no significant difference amongst various experience group of employee's perception about the recruitment and selection method through IT.

H₁₄:- There is a significant difference amongst various experience group of employee's perception about the recruitment and selection method through IT.

Table 3: Test of Homogeneity of Variances of independent variables and (R &S)

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Gender (A3)	2.731	3	381	.044
Age (A4)	.637	3	381	.591
Educational Qualification (A5)	.778	3	381	.507
Work Experience In Years (A8)	.626	3	381	.599

Source: Primary Data

Table 3 shows the Test of homogeneity of Variance to test condition that the variances of both samples are equal or not. A high value results normally in a significant difference and a low value results normally in a non-significant. **Table 3** results present that Gender (.044) has low value and Age (.591), Educational Qualification (.507) and Work Experience in Years (.599) has high value.

Table 4: ANOVA table of independent variables and (R &S)

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Gender (A3)	Between Groups	.172	3	.057	.503	.680
	Within Groups	43.335	381	.114		
	Total	43.506	384			
Age (A4)	Between Groups	2.266	3	.755	.935	.424
	Within Groups	307.875	381	.808		
	Total	310.140	384			
Educational Qualification (A5)	Between Groups	.049	3	.016	.015	.998
	Within Groups	427.613	381	1.122		
	Total	427.662	384			
Work Experience In Years (A8)	Between Groups	2.526	3	.842	.535	.659
	Within Groups	599.646	381	1.574		
	Total	602.171	384			

Source: Primary Data

According to **Table 4**, the significant value of **Gender (0.680)** is greater than 0.05 so we accept the null hypothesis that there is no significant difference between male and female employee’s perception towards the recruitment and selection method through IT. This decipher that both male and female employees holds same perception for recruitment and selection method through IT.

The significant value of **Age (0.424)** is greater than 0.05 so we accept the null hypothesis that there is no significant difference amongst various age group of employee’s perception about the recruitment and selection method through IT. This decode that employees of all the age groups holds same perception for recruitment and selection method through IT i.e. all age group people thinks in a similar manner for the recruitment and selection through IT.

The significant value of **Educational Qualification (0.998)** is greater than 0.05 so we accept the null hypothesis that there is no significant difference amongst various educational qualification group of employee’s perception about the recruitment and selection method through IT. This shows that employees of all the educational groups hold same perception for recruitment and selection method through IT i.e. employees from all educational groups thinks in a similar manner for the recruitment and selection through IT irrespective of their qualification.

The significant value of **Work Experience in years (0.659)** is greater than 0.05 so we accept the null hypothesis that there is no significant difference amongst various experience group of employee's perception about the recruitment and selection method through IT. This deciphers that irrespective of the experience an employee holds the same manner for recruitment and selection method through IT.

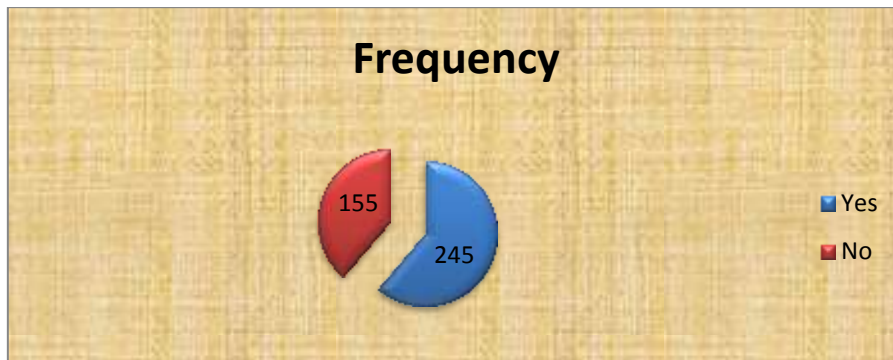
The impact of information technology in human resources practice helping management in making better decisions and the finding support the results to what extent employees are satisfied with the parameters of human resource practices.

Table 5: Frequency table of recruitment and selection practices

	Yes/No	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	245	61.3	61.3	61.3
	No	155	38.8	38.8	100.0
	Total	400	100.0	100.0	

Source: Primary Data

Graph 2: Frequency graph of recruitment and selection practices



Source: Primary Data

According to **table 5** and **graph 2** When employees were asked about whether the recruitment and selection practice of their cement company affected their performance out of 400 respondents 245 said yes and 155 denied and said no i.e. all of them doesn't agree over the same and a considerable amount of employees were not convinced with the performance and recruitment and selection practice relationship.

Relationship between independent variables and Impact of IT in HR Practices

Following hypothesis has been formulated to find the relationship between age and impact of IT in HR practices;

H₀₅:- There is no significant difference between age and their perception about the impact of IT in HRM practices is positive.

H₁₅:- There is a significant difference between age and their perception about the impact of IT in HRM practices is positive.

Table 6: Frequency table of cross tabulation of Age and Impact of IT in HR Practices

Crosstab Count		Impact of IT in HR Practices				Total
		To a small extent	To a modera te extent	To a large extent	To a very great extent	
A	25-35	0	13	33	8	54
ge	35-45	2	34	105	24	165
(A	45-55	0	28	74	8	110
4)	55 and above	0	9	38	6	53
Total		2	84	250	46	382

Source: Primary Data

From the above **Table 6** it could be interpreted that majority of the respondents awarded good degree of agreement to the relationship between age and impact of IT in HR practices by cement companies. Out of 400 respondents (33+105+74+38=250) respondents were agree and (8+24+8+6=46) were strongly agree impact of IT in HR practices are useful for all age groups in cement companies. From this it can say that irrespective of the age factor most of the people strongly accept impact of IT in HR practices as an integral part of cement companies.

Table 7: Frequency table of Chi-Square Tests of Age and Impact of IT in HR Practices

Chi-Square Tests	Value	df	Asymp. (2-sided)	Sig.
Pearson Chi-Square	8.000 ^a	9	.534	
Likelihood Ratio	9.014	9	.436	
Linear-by-Linear Association	.095	1	.759	
N of Valid Cases	382			
a. 4 cells (25.0%) have expected count less than 5. The minimum expected count is .28.				

Source: - Primary Data

From the above **Table 7**, it could be interpreted that Asymp. Sig. (2-Sided) column value is greater than 0.05 which shows that no significant difference between age and their perception about the impact of IT in HRM practices is positive. So it could be decoded that positive impact of IT in HR practices is perceived in the same manner by all employees irrespective of their age group.

CONCLUSION

The sole purpose of this research is, to study the **impact of information technology on human resource practices in selected cement industries especially for the recruitment and selection purpose**". The collection of information regarding the perception of the employees is a focal point.

The present research study was confined to study of employee's perception regarding the information technology in HR Practices as well as role and impact of IT in HR practices. For the purpose of data collection, respondents were selected from cement companies of Southern Rajasthan State of India.

It also aims at gathering information about the effectiveness of current IT practices followed and the difference they made to the growth and development of human resources and level of the agreement through the study of various IT and HR schemes and practices.

SUGGESTION

The research aimed at analysing the perception of employees regarding the IT in HR services that are being offered to them with finding a relationship between various demographic variables (dependent) of employees with the independent variables of IT and HR services, the level of satisfaction of employees towards IT in HR services were also recognised. Employees should be kept well informed and motivated to achieve the ultimate goals of enhanced productivity.

Employee's perception is taken as a strategic tool assessing the impact of IT in HR and also for evaluating its efficacy of IT in improving HR and its functioning in selected cement companies in Rajasthan. For better implementation of IT in HR practices its management should focus on following issues:

1. Management should strive hard to improve the recruitment and selection though IT practices to cater to the needs of HR's.
2. IT practices should be frequently changed for the satisfaction of employees, to enhance their loyalty and commitment in order to build sound relationships with better trust and commitment.
3. Management should increase the budget to practice IT and its tools in order to improve the level of performance of employees.

REFERENCES:-

- Krishnakumar (2009), "Human resource management practices in cement industry in India". A study with special reference to sankari cements, January 2009.*
- Kumar Pardeep (2015). Research Article Technological Development and Change In Cement Industry In India. International Journal of Recent Scientific Research Vol. 6, Issue, 4, pp.3575-3583, April, 2015.*
- Papercamp (2013). Cement Industry. <http://www.papercamp.com/essay/156735/Cement-Industry>*
- UK Essays (2015). Pest analysis of cement industry Introduction Of Cement Industry :<http://www.ukessays.co.uk/essays/accounting/pest-anaylsis-of-cement-industry.php#ixzz3sxskJwFu>*
- Walker, J. (1994) "Integrating the human resources function with the business', Human Resource Planning, vol. 17, no. 2, pp. 59-77.*