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## CHANGING TECHNOLOGY AND ITS IMPACT ON EMPLOYEE PERFORMANCE

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### ABSTRACT

Technologies have been playing a critical role in addressing the major challenges and radically transform our world to the development. This study examines the impact on employee towards the changing technology. The findings from research are demonstrates that in the engineering industry, technical change can have both positive and negative effects on employee. The experience of technical change made the employers to implement different training programme and motivational strategy to improve the performance of the employee in a positive way. Technical change potentially poses the employee to a threat but training and motivational turners enhance their skill to face of that change.

**Key Words:** NSDC - National Skill Development Corporation

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### INTRODUCTION

Technological advancement is the process of combining and reorganizing knowledge to generate new ideas. The development of technology has an impact on companies' performance. Continues rapid high-technology changes will continue to accelerate the future development of the business, but that impacts employee attitudes towards new technology may, in turn, influence the employee work behaviours that are necessary for efficiency and productivity. The employee who worked under both the old and new systems have expressed less positive attitudes about their jobs, and these attitudes circulated to the companies because it has become less committed and more likely to leave the company and the employer attitude towards the changing technology would leads them to invest and innovate the new training and motivational techniques to adopt the employees to face the challenges.

### ABOUT THE ENGINEERING INDUSTRIES

Engineering industry manufactures a wide range of products, with heavy engineering goods accounting for bulk of the production. Most of the leading players produce high-value heavy engineering goods using high-end technology. The major end-user industries for heavy engineering goods are power, infrastructure, steel, cement, petrochemicals, oil and gas, refineries, fertilizers, mining, railways, automobiles, and textiles. Consequently, the small and unorganized firms have small market presence. The unorganized sector specializes in manufacturing low-technology

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products and a few small-scale units are involved only in assembly of imported components. Light engineering goods are essentially used as inputs by the heavy engineering industry. On the other hand, light engineering goods manufacturers use medium to low-end technology. The entry barrier is low owing to relatively lower requirement of capital and technology. This segment is characterized by dominance of small and unorganized players, however, a few medium and large scale firms produce high value-added products. This segment is also characterized by small capacities and high level of competition.

Coimbatore is the second largest city in the South Indian state of Tamil Nadu. It is the administrative headquarters of the Coimbatore District and a major textile and engineering hub of South India. It is referred to as "the Manchester of South India. Industry Growth Prospects in the Coimbatore engineering sector showed immense optimism in the growth prospects of the sector.

### **STATEMENT OF THE PROBLEM**

1. What are the factors influencing employer to bring out the technological change in the companies?  
2. What does the employee perceive about the changes in technology? 3. Does the employee satisfy towards the change in technology? 4. What is the most dominant factor that influences the employee to enhance the morale and performance?

### **OBJECTIVE OF THE STUDY**

- To identify the factors influencing to bring change in technology in the companies
- To examine the morale of the employer employee in the companies
- To access the satisfaction level of the employee in the companies
- To determine the impact of changing technology on employee performance

### **LITERATURE REVIEW**

Hampel and Martinsons, (2009)<sup>1</sup> Technological advancement change the organizational policies and strategies. In any organization, most of challenges are generated by competition, advanced technology, enhancing employee efficiency and repaid growth, new leadership and management. Guthrie J. P (2013)<sup>2</sup> use of high performance work practices may have implications for the effect of turnover on productivity. Practices increase the value and importance of human capital. (Dr. Usha.M, etl.)<sup>3</sup>The study is about the retention factors in automobile components manufacturing industries in Coimbatore district. Industries to remain successful and competitive, it must keep its biggest assets; its people engaged and committed for the long term. This study examines the perspective of the employee to examine the morale of the employees and to identify the effective retention factors. According to (NLSY) National Longitudinal Survey of Youth, the Automobile Industry has recognized as an industry with a very high potential to increase employment and additional employment of 25 million people is envisaged by the year 2016-17 and by 2022, the Automobile Industry will employ an incremental 35 million people. It also has found that the cost of replacing lost talent is 70 to 200 percent of that employee's annual salary. There are advertising and recruiting expenses, orientation and training of the new worker, decreased productivity until the new employee is up to speed, and loss of customers who were loyal to the departing worker. In order to create a successful Industry, employers should consider as many options as possible when it comes to retaining employees.

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## **PRIOR EMPIRICAL STUDY REPORT**

### **RESEARCH GAP**

According to the report of NSDC, India needs to train engineering industries manpower along with the cooperation of the employers to cater to the higher employment demand from the engineering industry expected USD from 165 to 175 billion by 2022 .

### **RESEARCH METHODOLOGY**

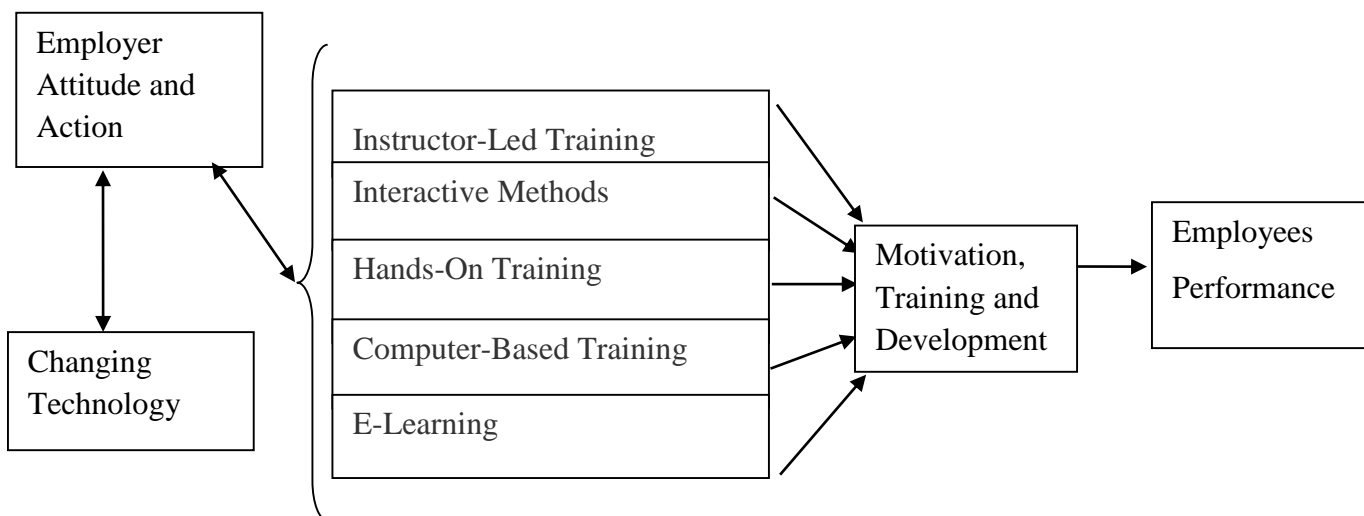
Facts, information or premises systematically collected and formally presented for the purpose of drawing inference, a methodology includes sources of data, collection of data and analysis of data. It seems appropriate at this juncture to explain the difference between research methods and Research Methodology. Research methods may be understood as all those techniques that are used for conduction of Research. Research methodology is a way to systematically solve the research problem. Descriptive Research Design has been used in this research work. Five industries were selected for the study namely Spark Laser Industries, S.S.A Castings India Pvt Ltd, SPB Alloys Steel Pvt Ltd., Senkar Industries., Everon Castings Pvt Ltd., The sample size is 250, data were collected from 250 employees, to analyze the impact of training programmes. Simple random sampling is used to select the sample.

### **STATISTICAL ANALYSIS AND INTERPRETATIONS**

\* Simple percentage analysis \* Chi-square Analysis \*Analysis of Variance

### **HYPOTHESIS OF THE STUDY:**

According to this model there is five independent and two dependent variable this model is used for the research.



**DATA ANALYSIS:**

**PERCENTAGE ANALYSIS**

Data were collected from the respondents of the Engineering industries. To enable analysis, data were classified on the basis of their opinion given on various aspects and a percentage analysis was done.

**Table: 1**

Table showing the gender wise classification

INDUSTRIES	MALE		FEMALE		TOTAL
	No of Respondents	Percentage	No of Respondents	Percentage	
Spark Industries Pvt Ltd.,	35	70	15	30	50
S.S.A Castings India Pvt Ltd.,	41	82	9	18	50
SPB Alloys Steel Pvt Ltd.,	43	86	7	14	50
Senkar Industries Pvt Ltd.,	41	82	9	18	50
Everon Castings Pvt Ltd.,	50	100	Nil	Nil	50
<b>Total</b>	<b>210</b>		<b>40</b>		<b>250</b>

The above table reveals the gender wise classification among 250 respondents in five industries. In Spark Industries Pvt Ltd.,70 percentage of the respondents were male and 30 percentage of them were female, as like that, S.S.A Castings India Pvt Ltd., and Senkar Industries Pvt Ltd.,, 82 percentage of the respondents were male and 9 percentage of them were female,. In SPB Alloys Steel Pvt Ltd.,, 86 percentage of them were male and 7 percentage of them were female and in Everon Castings Pvt Ltd.,, 100 percentage of them were male.

**Table: 3**

Table showing the satisfaction level of employees towards motivation strategies

Particulars	Highly Satisfied					Satisfied					Neutral					Dissatisfied					Highly Dissatisfied				
	S	S.S	SP	SE	E	S	S.S	SP	SE	E	S	S.S	SP	SE	E	S	S.S	SP	SE	E	S	S.S	SP	SE	E
<b>Working Condition</b>	13	12	11	18	15	20	22	21	26	23	12	10	13	4	8	5	2	3	2	2	-	-	2	-	2
<b>Compensation</b>	16	19	12	11	13	24	27	21	23	23	8	4	14	13	9	2	-	3	3	5	-	-	-	-	-
<b>Rewards &amp; Recognition</b>	10	11	14	9	13	23	20	24	31	26	10	10	11	8	9	4	6	4	2	2	3	3	-	-	-
<b>Growth Opportunities</b>	8	10	12	14	15	28	25	24	30	25	12	15	8	6	8	2	5	4	-	2	-	6	2	-	4

<b>Training and Development</b>	12	20	15	10	13	12	25	28	28	22	16	5	7	9	7	6	-	-	2	6	-	-	-	-	2
<b>Communication &amp; Decision Making</b>	13	19	18	16	20	18	20	22	24	25	12	10	10	5	5	3	5	3	-	-	5	2	-	-	-

- \* S = Spark Industries Pvt Ltd., \* S.S = S.S.A Castings India Pvt Ltd.,
- \* SP = SPB Alloys Steel Pvt Ltd., \* SE = Senkar Industries Pvt Ltd.,
- \* E = Everon Castings Pvt Ltd.,

The above table reveals the level of satisfaction of employees towards the adopted motivational strategies. Most of the respondents were satisfied towards the provided motivational factors

**Table : 5**  
**Table showing the morale of the employees towards the adopted training programmes**

Particulars	Strongly agree					Agree					Disagree					Strongly Disagree					
	S	S.S	SP	SE	E	S	S.S	SP	SE	E	S	S.S	SP	SE	E	S	S.S	SP	SE	E	
<b>Enhance to create new product and process</b>	15	10	18	13	17	28	30	32	27	33	7	10	-	5	4	-	-	-	-	5	-
<b>Increase efficiency, lower costs</b>	20	10	23	20	10	30	32	25	20	30	-	8	2	10	5	-	-	-	-	-	5
<b>Co-ordination with team enhanced</b>	18	12	13	16	19	22	32	27	34	31	10	6	5	-	-	-	-	5	-	-	-
<b>Increase the output without increasing the input</b>	22	12	12	14	20	28	30	38	26	30	-	8	-	6	-	-	-	-	-	4	-
<b>Voluntary involvement</b>	19	15	12	11	16	31	35	32	39	32	-	-	6	-	2	-	-	-	-	-	-

- \* S = Spark Industries Pvt Ltd., \* S.S = S.S.A Castings India Pvt Ltd.,
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**Table : 6**  
**Table Showing chi-square Analysis**

Null hypothesis	Degree of freedom	Calculated value	Table value	Significant/Not significant
There is no significant relationship between changing technology and adopted training programmes	12	17.87	21.02	Significant
There is no significant relationship between changing technology and motivational techniques	16	35.23	27.59	Not Significant

### ANALYSIS OF VARIANCE

**Table: 7**  
**Table showing Analysis of Variance**

<b>Hypothesis:</b> There is no significant mean difference between the motivational technique and satisfaction level of employee						
Source of Variation	Sum of Squares	Degrees of Freedom	Mean Sum of Square	f Value	p Value	Significant / Not Significant
Between Groups	142.99	3	47.66	1.48	.07	NS
Within Groups	128.01	4	32.00			
Total	271					

S – Significant (p Value  $\leq$  0.05); NS – Not Significant (p Value  $>$  0.05)

### CONCLUSION

In a rapidly changing market worldwide, regulators, managers, and investors are concerned about how efficiently transform their expensive inputs into various products and services. This transformation of input into output depends on the efficient and effective use of technology and human resource. The result shows that changing technology and training programme have a significant positive impact on employee productivity. On the other hand, changing technology and motivational technique not have a significant positive impact on employee productivity. This study had shown a significant positive and meaningful relationship between changing technology and employee performance and also with the output of the firm.

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