



IMPACT OF TECHNOLOGY IN 'ORGANIZATIONAL COMMITMENT' AMONG THE EMPLOYEES WORKING IN MANUFACTURING SECTOR

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ABSTRACT

Purpose: The purpose of this study is to check the impact of technological advancement on employee commitment among the employees working manufacturing sector in Coimbatore city.

Methodology: This paper has studied with the help of literature study on technological advancement and employee commitment available on the databases and websites. Primary data was used mainly in this paper to check the impact of technological advancement on employee commitment. SPSS 16 software package has used to analyze the employee responses and statistical technique. ANOVA is used to check the impact of technological advancement on employee commitment.

Findings: Total of 250 questionnaires has been distributed among employees of work commitment out of which 222 received from the respondents by duly filled. After analyzing the data completely, we find that

technological advancement has significant impact on employee commitment. Moreover as the concerned for technological advancement and employee commitment, there is significant relationship among them.

Research limitations / Implications: More research requires on this theory “impact of technological advancement on employee commitment in manufacturing sector”

Type: Quantitative Paper Key Words: Technology advancement, employee commitment, manufacturing sector

INTRODUCTION:

In this modern era of high-technology changes, technological advancement will continue to accelerate the future. Technological advancement changes the organizational policies and strategies (Hampel and Martinsons, 2009). Most of challenges are created by competitions, new technology, enhancing employee commitment and repaid growth, new leadership and management in the organizations (Madsen et al., 2005). Most of the research has shown that employee attitude and behaviours is to be develop for grateful organizational performance (Bernerth, 2004).

Most of the firms involved the employee in management, working for technological advancement implementation in the organisation. Employees training is given to improve the employee knowledge and skills and development of employees prior to the introduction of new technology in the organization. You must ensure that workers' union to consider the effects of technological advancement on their own physiology inside the organization. It is clear that the staff who worked under both the old and new systems have expressed less positive attitudes and these attitudes circulated to the organization because it has become less committed and more likely to leave. So firms must motivate the employees to adopt the new technology and also organization gives incentive to employee for better performance (Dauda & Akingbade, 2011).

Moreover organization acquires the advanced technology for improving the employee's commitment, facilitated job-tasks, undisturbed communication, increased efficiencies, and higher-levels of effectiveness in work commitment. The introduction of advance technology has shown different path for performing job. Technological advancement improved the employee commitment as well as less the employee working effort and task completion time.

New technology is essential for economic development of nation. Companies cannot run with same old technologies. Technology has to increase human performance when human or employees use technology for the benefits of the organization without disturbing the ethical values. Individual person cannot adopt technology easily as soon as implemented and on the other side group of people can adopt technology easily through their

real commitment towards the work. New technology can be used for both purposes for break or for make purpose. Employee work load can be reduced through implementation of technological advancement. Number of employees to perform one task is also reduced. Companies require not much more employees to perform one job. Human effort is also reduced through technological advancement. Single employee can perform its job without any hurdle.

ORGANISATIONAL COMMITMENT:

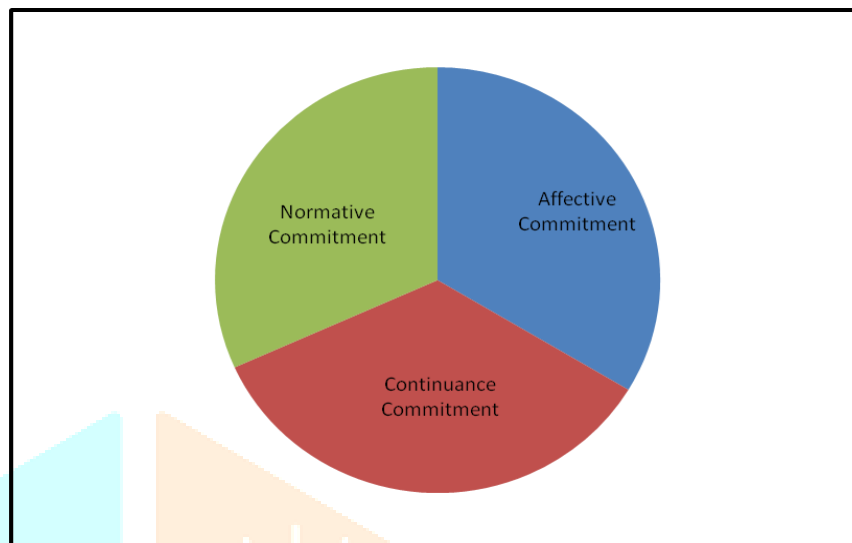
Organisational commitment is an individual's identification and involvement with a particular organization. It can be defined as "(a) a strong belief in and acceptance of the organisation's goals and values; (b) a willingness to exert considerable effort on behalf of the organisation; and (c) a strong desire to maintain membership in the organisation" (Hart & Willower, 2001). According to Morrow (1993) "organisational commitment is a multidimensional construct that has the potential to predict outcomes such as performance, turnover, absenteeism, tenure and organisational goals." People who are committed are more likely to stay in an organisation and work towards the organisation's goals. (Mowday, Porter and Steers 1982). Steers (1975) indicates that organisational commitment is a useful tool to measure organisational effectiveness.

TYPES OF ORGANISATIONAL COMMITMENT:

In their research, Meyer & Allen (1991) have classified organizational commitment into three different types: (a) Affective commitment (b) Continuance commitment and (c) Normative commitment. Affective commitment is the employee's "positive feelings of identification with, attachment, and involvement in the work organisation. (Meyer & Allen 1991). Continuance commitment can be conceptualised as the propensity for employees to feel committed to their organisation based on their perceptions of the associated costs of leaving the organisation. (Buitendach, J., & de Witte, H., 2005) Normative commitment encompasses an employee's felt obligation and responsibility towards an organisation and is based on feelings of loyalty and obligation. (Sparrow, P. & Cooper, C. 2003). The three types of commitment are shown in figure 1.

Figure 1

Types of Organisational Commitme

**REVIEW OF LITERATURE:**

Dunham, Grube, & Castaneda (1994) in their studies examined how participatory management and supervisory feedback influenced employee levels of affective, continuance, and normative commitment. The researchers found that when supervisors provided feedback about performance and allowed employees to participate in decision-making, employee levels of affective commitment was stronger than both continuance and normative. That is, employees indicated staying with the organization was more related to wanting to, rather than needing to or feeling they ought to.

Cohen (1996) has conducted a study of relationship between affective, continuance, and normative commitment among nurses and found out other types of commitment work involvement, job involvement, and career commitment. Findings revealed that affective commitment was more highly correlated with all the other types of commitment. That is, employees who remained with the organization because they wanted to were more likely to exhibit higher levels of commitment to their work, their job, and their career.

Irving, Coleman, & Cooper (1997) investigated the relationship between affective, continuance, and normative commitment and the outcome measures of job satisfaction and turnover intentions. Total participants for the study included 232 employees. Results revealed that job satisfaction was positively related to both affective and normative commitment. However, job satisfaction was negatively related to continuance commitment. All three types of commitment were negatively related to turnover intentions, with continuance commitment having the strongest negative relationship.

Punia (2000) studied commitment among University teachers on two dimensions organizational commitment and job commitment. He found that University teachers were more committed towards their job as compared to their organization.

Similarly, Lambooj et al. (2007) suggested that employees are more willing to work overtime when they have been provided adequate training.

Furthermore, (Lermont-Pape, 2002) there is concern that employees who are given significant levels of training may become more competent, and consequently more likely to look for alternative employment.

OBJECTIVES OF THE STUDY:

The study is intended,

1. To assess the level of Organisational Commitment among the employees.
2. To determine is there a significant difference in the level of the three types of Organisational Commitment which are affective, normative and continuance commitments.
3. To analyse is there a difference in the levels of Organisational Commitment when employees are categorized according to the demographic factors.

MEASUREMENT OF ORGANISATIONAL COMMITMENT:

Organisational Commitment is assessed by the instrument adapted from Organizational Commitment Questionnaire developed by Meyer & Allen. The original questionnaire consists of 18 statements assessing three types commitment, Affective, Continuance and Normative. (OCQ, Meyer & Allen 1997). The adapted questionnaire consists of 12 statements (4 measuring each type) measuring the three types of commitment. Responses to each of the 4 items are rated using a 5-point Likert scale with anchors labeled:

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree.

THE SURVEY:

The survey was conducted among 250 employees in specified industry. Out of the questionnaires distributed 222 duly filled in questionnaires were considered for the analysis. The survey was preceded by a pilot study administered for 30 teachers selected from various colleges. After making necessary changes in the questionnaire the main survey was conducted. *Data collected were analyzed through SPSS (Statistical Package for Social Sciences).*

DATA ANALYSIS AND INTERPRETATIONS:

The data collected were fed into SPSS and the required calculations were made. In order to measure the present level of Organisational Commitment, Mean was calculated. For the second objective of finding the significant difference among the three types of commitment ANOVA was used. For further comparison and testing of significant difference and for pair wise comparison Tukey's Post hoc test has been adopted.

Objective 1: To measure the present level of Organisational Commitment the mean values are calculated. The results are shown in table 1. The mean scores of all the types of commitment are centered around 3 to 3.8. Hence, it is revealed that the employees have moderate level of commitment towards the organization they work for. They neither have high nor low level of commitment. Out of the three types which commitment is the highest is known by analyzing the mean scores of the three commitments. The mean value of each of the three types of commitment which are affective, continuance and normative commitment is calculated by averaging the mean values obtained for each statement under each type. From the final mean scores it is known that the mean value of normative commitment is the highest among the three. So, it is found out that the teachers have their normative commitment the highest among the three types. The second highest is affective commitment and the last is continuance commitment. It is shown table 1 .

Table -1
Mean value of commitments

<i>Affective commitment</i>	Strongly disagree	disagree	No opinion	agree	Strongly agree	Mean	Overall Mean
Organisation has a deal of personal meaning for me.	0	16	73	103	30	3.6622	3.4933
I feel Emotionally attached to this organisation.	15	52	68	68	19	3.1081	
I feel organisation problems are my own.	5	25	68	107	17	3.4775	
Happy to spend rest of my career here itself.	4	13	65	98	42	3.7252	
Continuance commitment	Strongly disagree	disagree	No opinion	agree	Strongly agree	Mean	
It is hard to leave the organisation right now.	5	23	56	95	43	3.6667	3.2973
Scarcity of alternatives reason for not leaving.	4	33	121	59	5	3.1261	
If I had not put so much, I might leave this organisation	3	42	108	61	8	3.1306	
Life would be disrupted if I leave the organisation.	5	42	82	75	18	3.2658	
Normative commitment	Strongly disagree	disagree	No opinion	agree	Strongly agree	Mean	
I owe great deal to this organisation	0	8	65	102	47	3.8468	3.7387
This organisation deserves my loyalty	6	4	69	106	37	3.7387	

I do not leave this organisation for sense of obligation	2	19	77	106	18	3.536	3.6081
I do not feel right to leave this organisation.	4	36	85	81	16	3.3108	

Objective 2: In order to test the significant differences in the three commitments ANOVA test has been adopted. The null hypotheses are the following:

There is no significant difference in the level of three commitments among the employees and the variables which are scale of pay, year of experience, age, religion, gender, marital status, educational qualifications, designation, autonomy status of colleges they work for and types of organisation. In order to find out the relation between the commitments and the bio-graphical characteristics mentioned above, one-way ANOVA has been used. The tests show that there is no significant difference in the level of commitments and biographical data. But, the test result shows a significant difference in the mean values of Continuance Commitment of teachers drawing different scale of pay and different year of service. . This is inferred from the table 2 & 3 given below:

ONE-WAY ANOVA BETWEEN COMMITMENTS AND SCALE OF PAY:

Null Hypothesis: There is no significant difference between the employees grouped based on scale of pay in the mean scores of Affective, normative and continuance commitments

Table 2 - ANOVA

		Sum of	df	Mean	F	Sig.
Affective Commitment	Between Groups	.956	2	.478	1.297	.275
	Within Groups	80.659	219	.368		
	Total	81.615	221			
Normative commitment	Between Groups	1.128	2	.564	1.671	.190
	Within Groups	73.903	219	.337		
	Total	75.030	221			
Continuance commitment	Between Groups	2.247	2	1.123	3.347	.037*
	Within Groups	73.507	219	.336		
	Total	75.753	221			

Since, the Significance value for Continuance Commitment is less than 0.05 (i.e. .037) it is found out that there is a significant (at 5% level of significance) difference between the employees grouped based on scale of pay in the mean scores of continuance commitment. But for the rest of the commitments affective and

normative, the significance value is more than 0.05; hence the null hypothesis is accepted that there is no significant difference in Affective and normative commitments of employees drawing different scale of pay.

ONE-WAY ANOVA BETWEEN COMMITMENTS AND YEAR OF EXPERIENCE:

Null Hypothesis: There is no significant difference between the college teachers grouped based on year of experience in the mean scores of Affective, normative and continuance commitments.

Table 3 - ANOVA

		Sum of	df	Mean	F	Sig.
Affective Commitment	Between Groups	.790	4	.197	.530	.714
	Within Groups	80.825	217	.372		
	Total	81.615	221			
Normative commitment	Between Groups	.524	4	.131	.382	.822
	Within Groups	74.506	217	.343		
	Total	75.030	221			
Continuance commitment	Between Groups	3.726	4	.931	2.806	.027
	Within Groups	72.028	217	.332		
	Total	75.753	221			

Since, the Significance value for Continuance Commitment is less than 0.05 (i.e. .027) it is clear that there is a significant (at 5% level of significance) difference between the employees grouped based on length of service and the mean scores of continuance commitment. But for the rest of the commitments affective and normative, the significance value is more than 0.05; hence the null hypothesis is accepted that there is no significant difference in affective and normative commitments of teachers having different length of service.

CONCLUSION:

Thus, the study reveals that employees have moderate level of organizational commitments in the manufacturing sector. Hence, management has to take steps to improve their commitment. Out of the three types affective, normative and continuance commitments, normative commitment is higher than the other two types. Further, employees are varying in their level of continuance commitment, when they are grouped based on nature of pay and length of service. The variation is more between the level of continuance commitment and nature of pay. Employees receiving consolidated pay have lesser continuance commitment. So that, the management has to take necessary steps to retain those employees either by increasing pay and increments or by changing the pay structure. When we refer to the level of continuance commitment and year of experience, employees who are in 16 to 20 years of service have higher commitment than the freshers and employees with more than 20 years of experience. One thing to be noted is employees with more than 20 years of service have the least level of continuance commitment among the four groups. This group has to be taken care by the

management. They can be motivated through assigning some special positions, higher posts etc. In general, it is concluded that the organizational commitment is moderate among the employees in manufacturing sector.

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