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A View of Management Strategies in Workplace industrial Relations in the Construction Industry

E.O. AIYEWALEHINMI
Department of Civil Engineering, the Federal University of Technology, Akure.

ABSTRACT: *This paper presents a factor analysis on views of management strategies in workplace industrial relations in the Building and Construction Industry. The purpose is to promote a unitary approach where employees and management can work toward a common goal. It is believed that the strong base of the power isusually translated in terms of hierarchical authority, with individuals at higher levels controlling all activities at the lower levels. On this platform the study examines the relationship between employees and management. mail questionnaire was selected as means of data collection and responses were analyzed using SPSS. Assumption that the observations are drawn from a normally distributed population before using analysis of variance (ANOV A with the Scheffe and F test) to test the propositions. Involved are: top management executives, external stakeholders and all categories of employees engaged in the industry. The test showed that 81.5% of variables indicated no significant difference while 18.5% showed a significant difference at a significance level of 0.05 (accepted).*

KEYWORDS: *Management, Communication, Factor Analysis, Statistical Reliability and Workplace Industrial relations.*

I. INTRODUCTION

Industrial relations originate from classical theories, specifically from marginal productivity to cognitive dissonance, from Karl Marx to Max Weber. These theories are broader than industrial relations and of course they contain both bad and good concepts: It is good because they link industrial relations with other systems and disciplines; it is bad because industrial relations needs its own theories, models, identity and systems, and these are still largely lacking and/or badly disorganized in the construction industry Heinemann (1969:13). Management strategy is not a new concept in business literature or in practice. However, its role has been seen as a cornerstone in the manufacturing and construction sectors. In addition, management strategy requires extensive communication between management and employees and also the collaborative efforts of employees (seeCooke and Meyer 1990; Kochan, Katz, and McKersie 1986). Usually, management strategies vary from the management of strategic planning to implementation of strategy, while each choice of strategy has its own advantages and disadvantages - strengths and weaknesses are sometimes being balanced out by application. In a theoretical framework, managers, employees and union leaders seek to optimize their respective gains from the employment relationship. On the other hand, all parties would like to hold on to their traditional power. To measure or evaluate employees' benefits under traditional power relationships or, in other words, for employees to value this kind of benefit, is of great concern for industrial reform. In this connection, Cooke (1990) conducted a study on factors influencing the effect of joint union-management programs on employee-supervisor relations: He found that an improvement in employee-supervisor relations is likely when joint programs are structured to have highly active team-based efforts and substantial participation by union leaders (which indicates supervisor traditional power has been reduced).The tendency of treating management strategy objectively involves recognition of the essential difference between today and tomorrow - including how tomorrow should be. It meansindustrial relations reform strategy occurs when the existing circumstances need a change or need to be improved. Thewarningis that, the present workplace industrial relations practice deserves a new focus. Management of construction focusing on industrial relations reform strategy is not a waste effort is a key solution to industrial relations problems. But the application appears to be aggressive and is likely to fail because it holds out a proposal to integrate the various factions /departments (especially HRM) in the industry.Besides, identifying the opportunity and setting the right direction does not guarantee success. Applied industrial relations management strategy entails: strategy formulation, culture, organization structure, human resources, and management processes. Assuming that instrumental factors behind industrial relations management reform originate from economic events or perspectives (that is, business is defined by function, industrial relations by function, employment relations by function), ideally, workplace industrial relations management reform strategy isclassified into three key sectors and they are:

1) The business sector (employers' sector);
2) The security sector (financial sector);

3) The labour sector (workers' sector).

Each sector is aggressive in its respective strategic objectives and all sectors are combined together to form Workplace Learning and Reform in which all participating parties arefully involved and enthusiastic to compromise on real strategic Issues. White (1969) comments: "our preoccupation with the democratic and bureaucratic models of organization grows out of our own culture with its egalitarian and anti authoritarian values." Replacing workplace industrial relations management reform strategy with Workplace Learning and Reform retains the building and construction industry's values and growth. In thisapproach, the industry's management will be aware that fragmented changes are seldom effective (underlying the tide of stagnation that can creep into a profitable, growing organization). At the same time, it is important to understand that the rigid and uncreative attitudes are slow to develop and they are also slow to disappear. Even in the face of frequent personnel changes, these factors need consideration.

Civil and Civic and Ford (1990) adopted a Workplace Learning Process concept team and discovered the difference between the traditional consultant role and the management employee learning process. In support of their discovery, Civil and Civic (1990) comment: "typically a consultant performs some work then provides a report indicating what should be done. The problem is that the consultant does all the learning, acquires the knowledge, and then leaves the organization to implement something it had little input into." Basically, lack of interest in research and orientation can be seen in managerialbehaviour; that is, management is oriented more to the past than to the future. The construction industry management needs to be refinedto be able to meet the current and future challenges. Identifying the current problem suggests that future challenges can stimulate rapid growth and a change in the industry. Historically, most managers do not recognize the ideological issues that underlie their organizational conflicts - only when they are blatant and the lines of struggle are drawn, as in labour management relationships (Harrison 1972).

In the past, management theories have demonstrated that managerial strategy is vital to understand patterns in the workplace. The originality of these theories is based on manufacturing and mining principles where workplaces are permanent. At the time when theorists, academics and independent researchers focused on these problems, they did not take into account the pattern of workplace industrial relations in the construction industry. Indirectly, these researchers were not aware of what was going on in the industry. A more likely explanation of this is that the process of managing workplace industrial relations in the construction industry was not properly defined. The specific definitions of workplace industrial relations characteristics compared with construction industry management characteristics, it is identified that they somehow vary in details. Thus, these definitions consistently refer to a combining of individual efforts as contributions to attaining certain management goals.Therefore, to address management tradition or the management decision making process, the application of a social division of labour concept must be incorporated. Stogdill (1966) applied detailed applications of systems theory known as the input-output system. Katz and Kahn (1966), Miller and Rice (1967), and Wren (1968) identified that workplace industrial relations management reform strategy can be classifiedinto three key sectors.Benedix and Fisher (1969), saw the limitation in the Human Relations approach as a failure to recognize the explicit value-orientations for collaboration and stability in society rather than conflict and change. The two authors were suggesting that the reasons for the growing problems of management at workplace industrial relations in Australia and growing problems of industrial conflicts in Great Britain were due to the values and practices. Industrial dispute is concerned with various mediator processes that cut across resource types and are of central concern to those at high levels of management. Miner (1971), considered the action of a mediator in terms of control concept, suggested a three step process:

a) Establishing a set of standards;
b) Measuring actual performance against these standards;
c) Correcting all deviations from these standards.

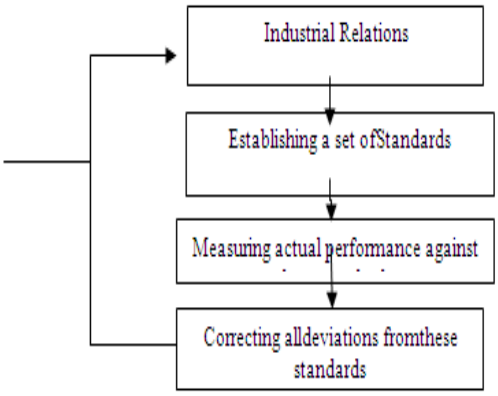


Figure 1 Mediator Control steps

Miner's intention of using a mediator is to create a self - sustaining system, so that undesirable deviation from a standard immediately triggers a feedback process that serves to correct deviations. His work can be regarded as a pinnacle in the management mediator tradition where functionally interrelated institutions influence resources. On one hand, a mediator structure represents action. On the other hand, budgeting activities represent monetary resources which control a mediator. Likewise, industrial relations represent relationships between management and employees, working conditions and so on, in order to increase productivity. Production control or quality control operates in a similar manner with regard to material resources. Human resource mediators - which are related to any techniques that identify individuals whose performance is below standard - serve to initiate corrective action. Developing human resource management as a mediator which provides services such as training, wage and salary administration, safety, labour relations, job analysis, employee communication and supervision, also holds the promise of full integration, implementation and formulation. In the construction industry, there exist one or more power centers that serve to direct efforts toward "goals. The strong base of the power centre is usually translated in terms of a hierarchy of allocated authority, with individuals at higher levels guiding, limiting, or controlling all activities at the lower levels. It is through this power base system or hierarchy that management becomes an essential aspect of the industry. The purpose of this study is to provide a clear understanding of what is involved in the process of industrial relations and its impact.

II. RESEARCH METHODOLOGY AND SAMPLES

New South Wales was selected as the area which the data was collected. Data was limited to New South Wales because all the participating parties are exposed to the same environmental working conditions. Mail questionnaires were selected as a means of data collection and responses were analyzed using a standard statistical package *(SPSS).*Involved are management, non-management employees, employers' associations and the building and construction trade union. Initially, 42 construction firms were contacted. Their names and addresses were randomly selected from both Yellow Pages and Labor Council of New South Wales' lists of construction firms in New South Wales. These companies were mailed the covering letter with a sample of questionnaires and forms to sign if they agreed to participate in the research study. When respondents completed this form, they supplied the data requested on the number of operating construction sites and number of employees, both management and site construction crews. Non-management employees working at individual construction sites were later contacted. Due to the research guidelines the number of eligible participants was set at two non-management employees per site.

MEASUREMENT OF VARIABLES

All variables were defined but they were not identified or measured on the basis of previous investigation or experiment because there was no empirical evidence to build on. Instead, they were derived from the study hypotheses and measured on the basis of Job Evaluation variables: Measured on a five Iikert point scale with responses ranging from not important to highly significant. Assumption that the observations are drawn from a normally distributed population before using analysis of variance (ANOV A with the Scheffe and F test) to test the propositions.

Overall results of the initial analysis regarding management perceptions in regard to the propositions show that 81.5% of variables tested indicate no significant difference between the group means (hypothesis accepted and propositions confirmed) while 18.5% have a significant difference at a significance level of 0.05.

RELIABILITY

Reliability assessment has been a key means of scientific generalization since the 1970s. Peter (1979) reported that behavioural measures are rendered totally reliable and valid through reliability assessment. Reliability assessment is appropriate for multi-item scales such as used in this study. Reliability increases multi-item scales by allowing measurement errors to cover each other. For this reason reliability statistics adopt the test and retest method. The means and standard deviation of each scale are assessed and the reliability coefficient (Alpha) was calculated.

MANAGEMENT PERCEPTIONS OF INDUSTRIAL RELATIONS

The promotion of enterprise bargaining agreements and workplace industrial relations reform in the construction industry establishes a unitary approach where employees and employers can work towards a common goal. Enterprise bargaining agreements accommodate a unitary approach and ignore a pluralist approach. The introduction of enterprise bargaining agreements in the construction industry allows management and employees to think in the same way and ignore the idea that management and employees are different and see each other differently. The reforms introduced by the Industrial Relations Reform Act 1993 in Australia are part of packages that have been a major issue over time. The legal framework, in which workplace industrial relations operated, influenced judiciary decisions which do not favour either of the parties involved in the industry. Nevertheless, the legal framework ensures that all parties involved abide with agreements reached and reform policies involved.

MANAGEMENT PERCEPTIONS OF PARTICIPATION

The lack of non-management employees' participation in management decision making machinery in the construction industry in Commonwealth Countries has been a major debate in past years. The common thinking is that if non-management employees were allowed to participate in the management decision making machinery, there would be a better result in areas such as job satisfaction, motivation, productivity and attitude change. Out of the thirty nine participative related variables investigated in the study, six of them comprise Industrial Training (IT), Safety Training (ST), Labour Management Committee (LMC), Representing Board Directors (RBD), Workplace Industrial Relations Reform Committee (WIRRC) and Participating Training Improve Workplace Communication Productivity (PTIWCP).

MANAGEMENT PERCEPTIONS OF JOB SATISFACTION

The purpose of this section is to explore management perceptions of employees' job satisfaction and analyze the differences between management and non management employees. Listsof all job satisfaction related variables investigated are shown below and their mean scores, standard deviation, variance and range (minimum and maximum) (and number of respondents)were identified. There were significant differences in mean scores compared to equivalent mean scores for employees identified as above, supporting the view that management and employees will differ regarding job satisfaction.

MANAGEMENT PERCEPTIONS OF MOTIVATION

The lists of variables investigated to test management perceptions of motivation are shown below. Their mean, standard deviation variance, range (minimum and maximum) are also identified. It was identified that TS2 (Their Salary) scored highest mean while FI2 (Follow Instruction) scored lowest mean. It might be necessary in the future to explore the relationships between TS2 and FI2.

Management perceptions of workplace communication

Lists of investigative variables relating to management perceptions of workplace communication in the construction industry are shown in the box below. The communication factors identified in this study are linked to job motivation, job satisfaction, participation, workplace industrial relations/ organizational reform and non-management employee role stress. In the table HIF (How Important Feedback) scored the highest mean while DP (Distribution Profit) scored the lowest mean. This indicates that management recognizes the importance of feedback and also shows that communication has little influence on distribution of profits.

GENERAL MANAGEMENT QUESTIONS

The aim of general questions was to identify senior management employees' reactions toward workplace industrial relations reform and communication in the industry. The resultsummarizes respondents' attitudes toward workplace industrial relations reform. ECFCPWT (Effective Communication Four Contracting Parties Workplace Transient) scored the highest means while CAUWCIR (Comment Attitude Union Workplace Communication Industrial Relations) scored the lowest means. This indicates that communication has an effect on all major parties.

IMETRC: Influence Managers/Executives Tendency Resist change, TDFANMT: Term Describe Firm Attitude New Management Techniques, OSDIRPCI: Organization Satisfied/Dissatisfied Industrial Relations Practiced Construction Industry, CAUWCIR: Comment Attitude Union Workplace Communication Industrial Relations, TNCCMN: Transient Nature Construction Communication management/Non- management Employees, ECFCPWT: Effect Communication for Contracting Parties Workplace Transience.

FACTOR ANALYSIS OF JOB SATISFACTION

The results of the factor analysis of the items on the questionnaire for the sample of management relating to job satisfaction appear in Table 1 and figure 1.1 below. Factors identified were based on factor loadings of 0.5 and above. All factor loadings appear in the table are positive. Positive loadings allow more simple interpretation. It helps the researcher to have clear view of overall results. The Table 7 shows the factor loadings and communality coefficients extracted from the analysis of 15 items shown on the questionnaire for management employees' perceptions of job satisfaction. Only four items had factor loadings in excess of 0.5 and above and account for approximately 72.6% of the total variance obtained from management respondent group. They are arranged according to size of loadings. Three dimensional plot of loading of the first three factors is shown in the figure 1.1

Factor 1 clearly indicates a self managing team with minimum supervision. Factor 2 is associated with analytical techniques. Analytical skill is considered as ability to work independently with minimum supervision. Factor 3 has four items and is associated with internal satisfaction described as responsibility. Factor 4 comprises two items and appears to be associated with external satisfaction. It is defined as directionality accuracy. It seems that these factors are associated with trust of minimum supervision. However, the result shows that for management respondents, job satisfaction is associated with group commitment, minimum supervision and self – management within a team.

Table 1 Factor analysis of items relating to management perceptions of Job satisfaction

Items	Loadings 1	Items	Loadings 2	Items	Loadings 3	Items	Loadings 4
TS1	.84524	EN	.80463	RE	.84609	MS	.84375
IN	.72526	SR	.77724	RES	.81853	ST2	.61144
JA	.59797	WG	.64545	ICME	.67452		
WGR	.55370						
IEPMD							

Item	Communality coefficient	Factor	Eigen value	CumPct
WG	.72763	1	4.07812	34
IN	.82971	2	1.94710	50
EN	.73574	3	.73574	63.9
SR	.71534	4	.71534	72.6
IEPMDM	.68076			
RE	.83459			
RES	.69529			
ICME	.62595			
MS	.73649			
ST2	.67136			
JA	.71860			
TS1	.73600			

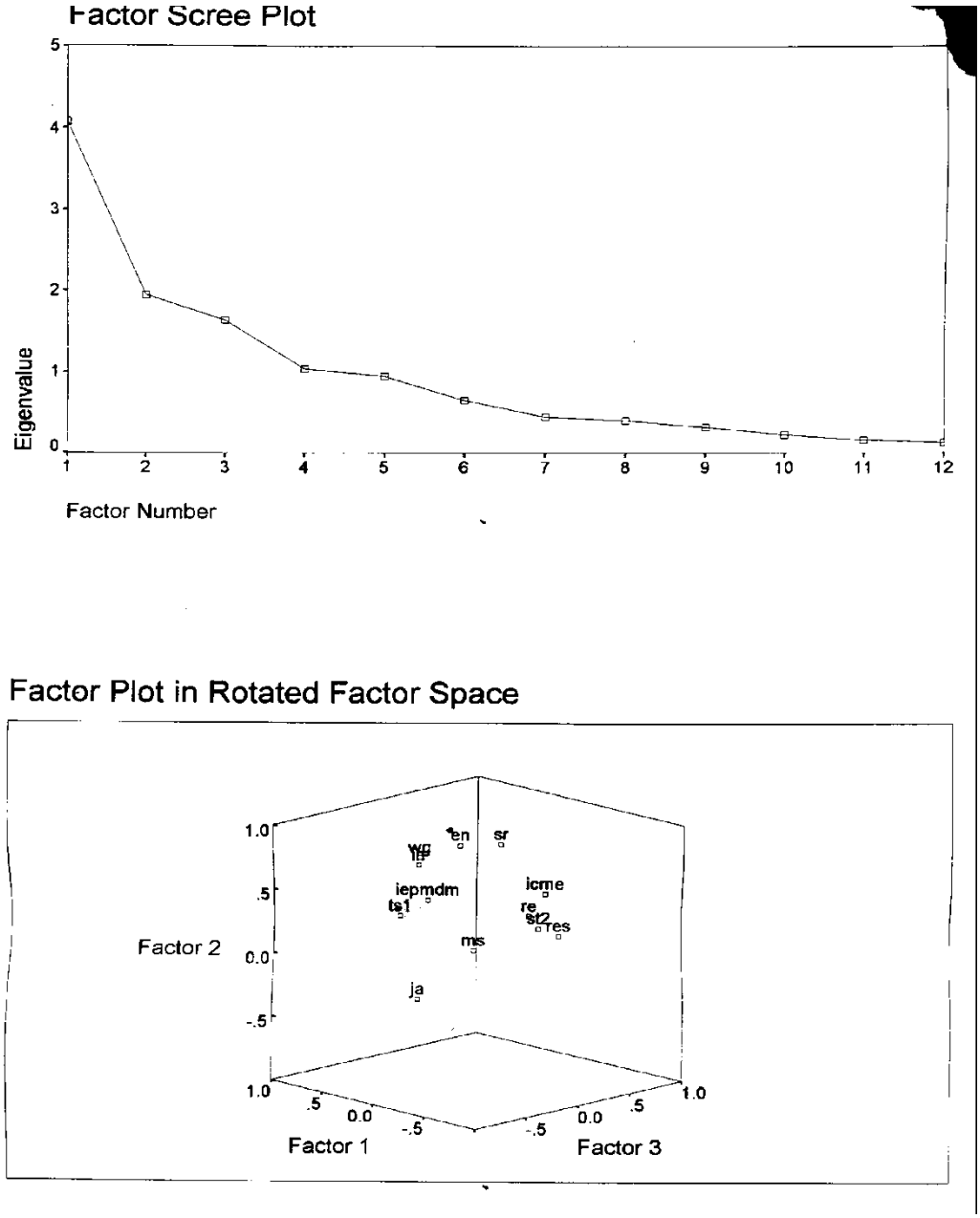


Figure 1.1 Rotated eigenvalue and varimax (3D) factor plot relating to management perceptions of job satisfaction

FACTOR ANALYSIS OF MANAGEMENT PERCEPTIONS OF EMPLOYEE PARTICIPATION

Table 2presents the factor loadings and communality coefficients extracted from variable scores for themanagement perceptions of employees' participation in workplace reform and management decision making. Itpresents maximum factor loadings and communality coefficients obtained from the scores on management perceptions of employees' participation in industrial relations reform in the construction industry workplace.The Figure 2.1 shows the three dimensional plot of the loadings of the first three factors and a scree plot of total variance(eigenvalue) associated with each factor. The factors thus identifiedrepresent 79.3% of all items.

Factor 1 in Table 2 comprises eight items denoting significant influence on employee participation in workplace industrial relations and management decision making machinery. These items describe management communication and implementation capabilities. Factor 2 comprises three items and can be described as denoting continuing achievement, indicating that employees' participation can increase workers' productivity, guarantee quality assurance, and reduce industrial conflict. This also appears to describe a communication problem. Factor 3 consists of three items which can be classified as indicating the influence of employees'

participation. It shows that employees' participation influences overall practice and industrial relations reform in the construction industry. Factor 4 comprises two items which can be considered to denote industrial relations practice. It shows how employees' participation in workplace industrial relations reform can influence agreement between management and employees.

This factor also appears to indicate a communication problem. Factor 5 consists of only two items which can be classified under attitude change or obstacles to change of attitude. The variable Work Rule Discipline (WRD) scored the highest on factor 5, suggesting that employee participation can lead to attitude change. Factor 6 consists of three items and is related to employee participation influence. Productivity (PR) scored the highest on factorFollowed by Industrial Relations (IR) and Management Efficiency (ME). This indicates that employees' participation has great influence on productivity, industrial relations and management efficiency. Factor 7 shows four items, suggesting that employees' participation has great influence on management/employee agreement and the implementation of that agreement. Factor 8 consists of two items and can be labeled as the cost effectiveness of a project. It suggests that employees' participation in the workplace can improve construction planning, method and cost.

Table 2: Results of factor analysis of items relating to management perception of employee participation

Items	**Loading 1**	**Items**	**Loading 2**	**Items**	**Loading 3**	**Items**	**Loading 4**
AES	.88696	IWP	.81699	EP	.85299	EBA	.79146
IWS	.85156	QA	.67102	EC	.78986	STI	.72565
IEP	.83271	RIC	.48196	ES	.53656		
IWC	.82537						
IEM	.77091						
EMT	.72665						
IWR	.70915						
IEL	.68211						
Item	**Loading 5**	**Item**	**Loading 6**	**Item**	**Loading 7**	**Item**	**Loading 8**
WRD	.88860	PR	.84026	JS	.72725	CM	.81048
QC	.80358	IR	.69146	SW	.67498	CC	.65985
		ME	.58518	RLA	.59817		

Item	**Communality coefficient**	**Factor**	**Eigenvalue**	**CumPct**
AES	.89179	1	8.98408	33.1
IWS	.77899	2	2.89634	43.8
IEP	.81401	3	2.30357	52.4
IWC	.83147	4	2.05681	60.0
IEM	.89435	5	1.79557	66.2
EMT	.76414	6	1.28344	71.0
IWR	.77923	7	1.11547	75.3
IEL	.71291	8	1.08968	79.3
IWP	.85740			
QA	.75860			
RIC	.70143			
EP	.78227			
EC	.86980			
ES	.85375			
EBA	.77139			
STI	.75997			
WRD	.87847			
QC	.87069			
PR	.83745			
IR	.81880			
ME	.95210			
JS	.69302			
SW	.75645			
RLA	.75989			
CM	.73556			
CC	.73745			

CUM =Cumulative, PCT = Percentage

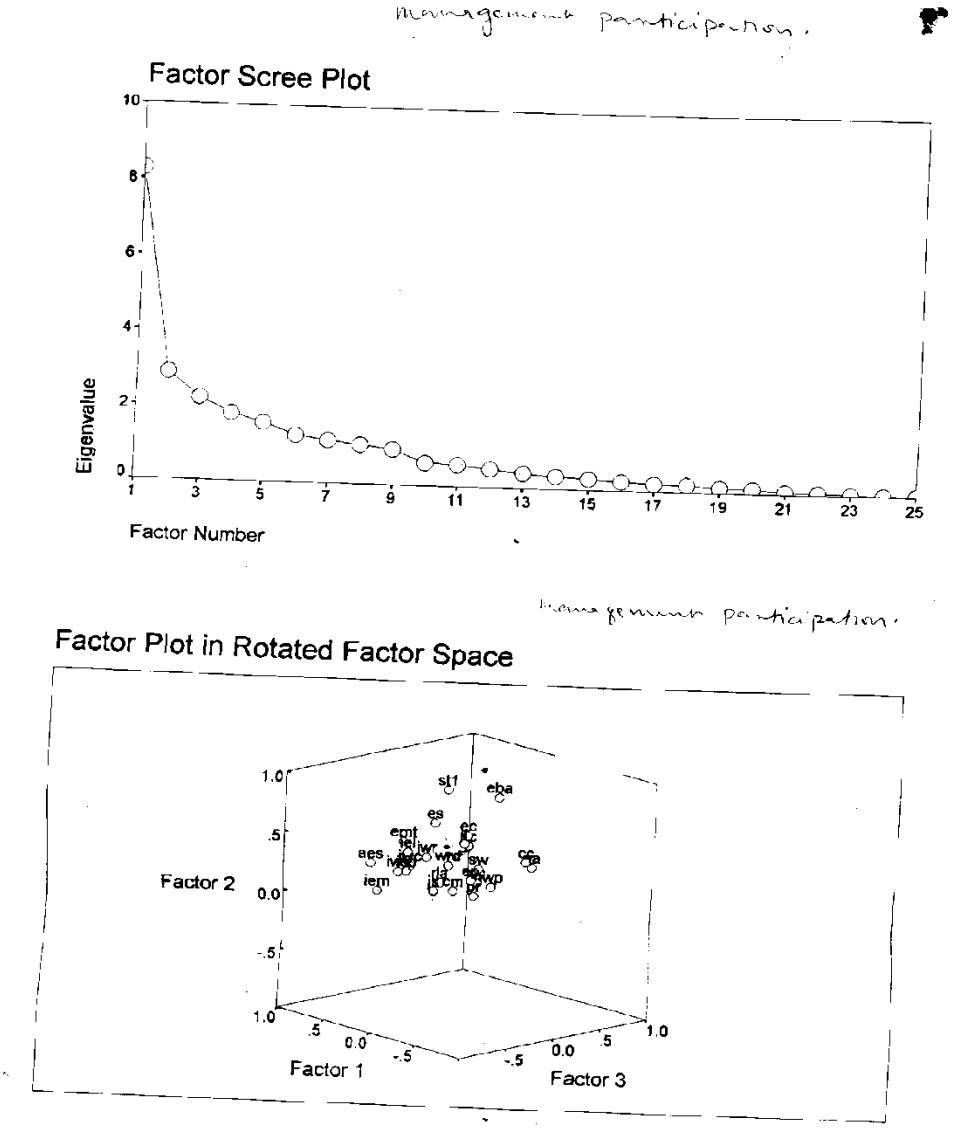


Figure 2.1 Rotated eigenvalue and varimax (3D) factor plot rating to management perceptions of participation

III. FACTOR ANALYSIS OF MANAGEMENT PERCEPTIONS OF JOB MOTIVATION

Table 3 below presents factor loadings and communality coefficient extracted from factor analysis of management perceptions of job motivation together accounting for approximately 74.6% of the total variance, while Figure 3.1 shows the three dimensional plot of the loadings of the first three factors and a scree plot of total variance (eigenvalue) associated with each factor. Factor 1 in Table 3 comprises four items regarded as representing both intrinsic and extrinsic motivation with minimum influence. Job Autonomy (JA) scores high while TS2 scores lowest on factor 1. It appears that extrinsic motivation is associated with professional aspects of motivation, that is professionally conferred rewards include TS which scores lowest on factor 1. Factor 2 consists of three items related to intrinsic motivation. Factor 2 clearly denotes role professional rewards. Factor 3 comprises four items which can be regarded as indicating internal motivation associatedwith team management. Factor can be labeled as internal social aspects of job motivation that is, a socially conferred role reward relating to dynamic process. Factor 4 consists of only item with high loading. This factor can be described as denoting power or recognition.

Table 3 Factor analysis of items relating to management perceptions of Job MotivationFactor Loading

Items	Loading 1	Items	Loading 2	Items	Loading 3	Items	Loading 4
JA2	.83694	ENV	.84095	RES	.83109	St3	.92089
FI2	.70264	INT	.82425	ICME	.79815		
MS2	.69868	WGR	.73390	REC	.70687		
TS2	.50653			IEPMDM2	.64149		

Item	Communality Coefficient	Factor	Eigenvalue		cum PCT
JA2	.73573	1	3.69413	33.6	
FI2	.56372	2	1.90024	50.9	
MS2	.59552	3	1.46960	64.2	
ENV	.85166	4	1.14202	74.6	
INT	.71687				
WGR	.80121				
RES2	.76005				
ICME2	.84967				
REC	.76579				
IEPMDM2	.79007				
ST3	.77565				

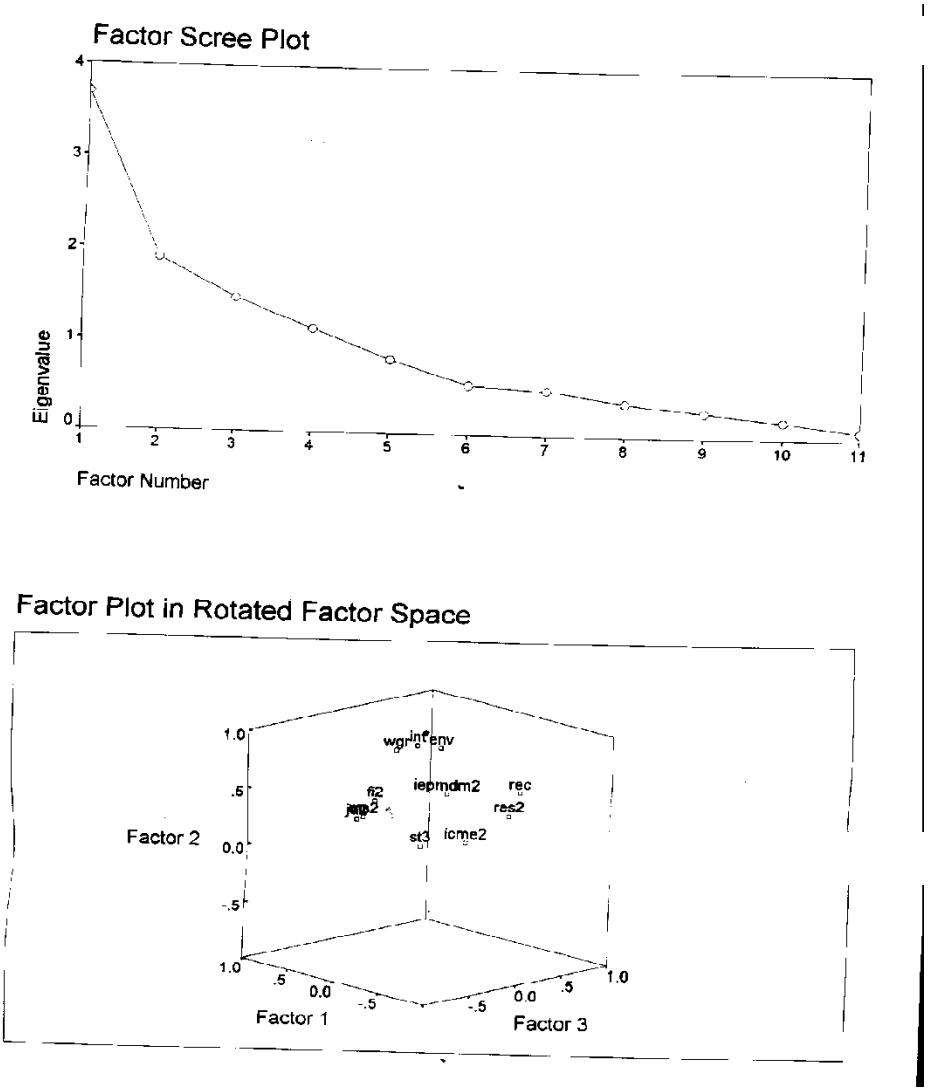


Figure 3.1 Rotated eigenvalue and varimax (3D) factor plot relating to management perceptions of job motivation

FACTOR ANALYSIS OF MANAGEMENT PERCEPTIONS OF WORKPLACE COMMUNICATION

Table 4 presents the factor loadings extracted from the analysis of items scores relating to management perceptions of workplace communication. The factors together account for approximately 72% of the total variance obtained from the respondent group. Figure 4.1 shows the three dimensional plot of the loadings of the first three factors and a scree plot of total variance (eigenvalue) associated with each factor. Factor 1 comprises eight items and can be described as indicating communication influence. Loadings on the factor show that communication among parties has great influence on the morality, relations, cooperation, satisfaction, industrial relations, stability, loyalty and productivity of the parties involved. As it can be seen, factor 1 can be considered as communication influence. Factor consists of seven items and is related to the effectiveness of management communication. Management efficiency has the highest score on factor 2, indicating that effective communication between the parties can lead to effective co-operation between parties. Factor 3 consists of three items considered to denote interpersonal communication. This factor can be described as trust that is relying on one another.

Table 4 Results of factors analysis of items relating to management perceptions of workplace communication in theConstruction industryFactor Loadings

Items	**Loading 1**	**Item**	**Loading 2**	**Item**	**Loading 3**
IE	.86234	ME	.87046	EC	.90110
IRWIN	.81190	QA2	.87022	EP2	.83996
IWC2	.80517	IR2	.79117	PR2	.53282
IWS2	.75967	QC2	.63893		
AIRS	.68035	WRD2	.62903		
IEL2	.66201	IC2	.60153		
IWP2	.63954	PR2	.52361		
HIF	.46586				

Item	Communality Coefficient	Factor	Eigenvalue	Cum Pct
IEP	.74823	1	8.85670	52.1
IWR2	.68248	2	2.04408	64.1
IWC2	.83035	3	1.38891	72.3
IWS	.80754			
AIRS	.74280			
IEL2	.62274			
IWP2	.53840			
HIF	.41704			
ME2	.84332			
QA2	.81265			
IR2	.76329			
QC2	.67094			
WRD2	.58452			
IC2	.76185			
PR2	.72719			
EC2	.89603			
EP2	.84031			

Cum = Cumulative Pct Percentage

Figure 4.1 Rotated Eigenvlue and Varimax (3d) factor relating to management perception of communication

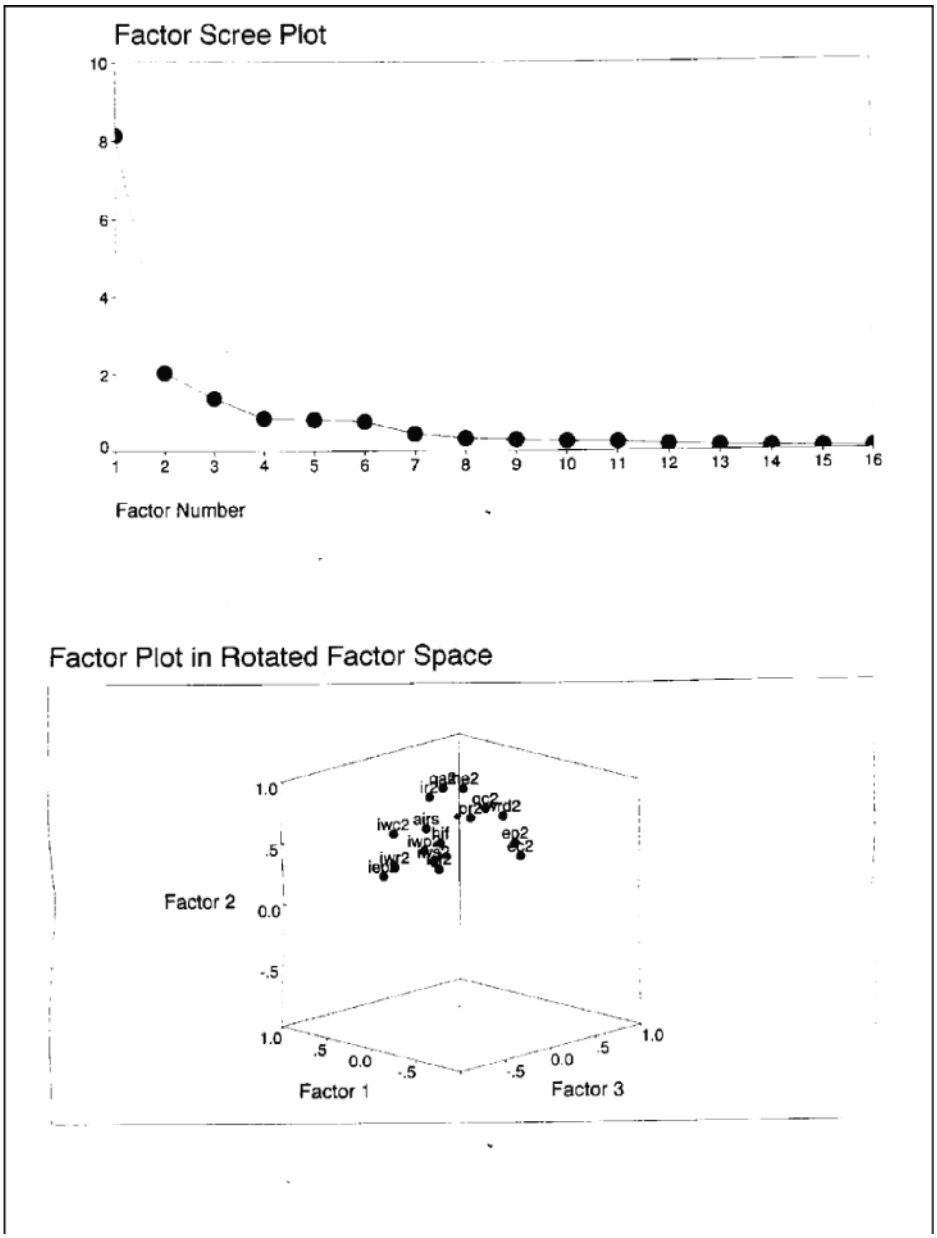


Figure 4.1 Rotated Eigenvlue and Varimax (3d) factor relating to management perception of communication

FACTOR ANALYSIS OF MANAGEMENT PERCEPTIONS OF CONTROL WORKPLACE

IV. INDUSTRIAL RELATIONS

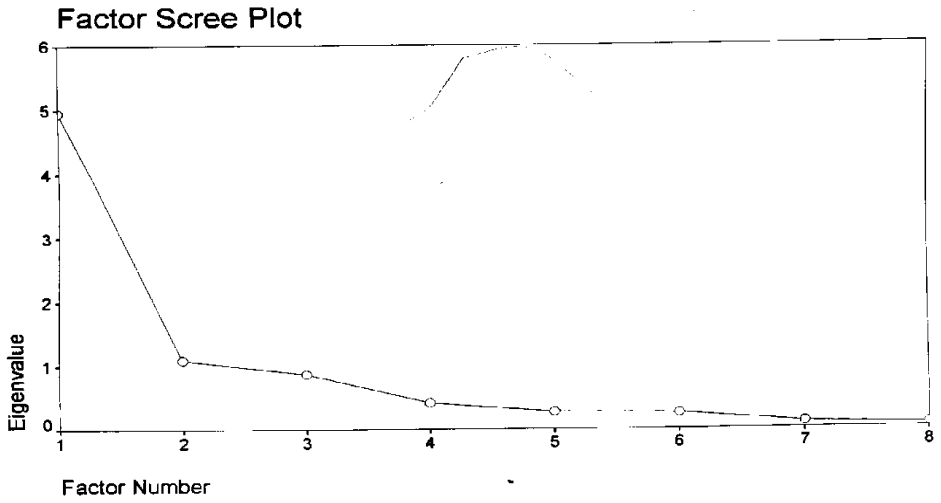
Table 5 gives factor loadings and communality coefficient obtained from factor analysis of variable scores relating to industrial relations perceptions of management. Table 5 shows the factor loadings and communality coefficient relating to management perceptions of industrial relations. The factors all together account for approximately 60.9 % of the total variance. Figure 5.1 the loading on the two factors are plotted and a scree plot of total variance (eigenvalue) associated with each factor is indicated. Factor 1 consists of three items and can be described as role of Law and role of management. The willingness of management to resolve industrial disputes without taking legal action could suggest the role of management in implementing industrial relations policy in the future. It shows that perceptions of industrial relations performance are strongly associated with guidelines. Factor 2 consists of three items and can be viewed as management dimension, lacking management skill in handling industrial relations issues.

Table 5: Factor analysis of management perceptions of control workplace Industrial Relations

Item	Loading 1	Item	Loading 2
IRPGA	.92295	RMHIRHR	.7823
IRCPM	.75640	NILLU	.76090
IRCIOR	.72608	WRPGWIR	.61830

Item	Communality	coefficient	Factor	Eigenvalue	CumPct
IRPGA	.85679	1	2.26881	37.8	
IRCPM	.59607	2	1.38606	60.9	
IRCIOR	.52935				
RMHIRHRM	.64482				
NILLU	. 63046				
WRPGWIR	.39737				

Cum = Cumulative Pct Percentage



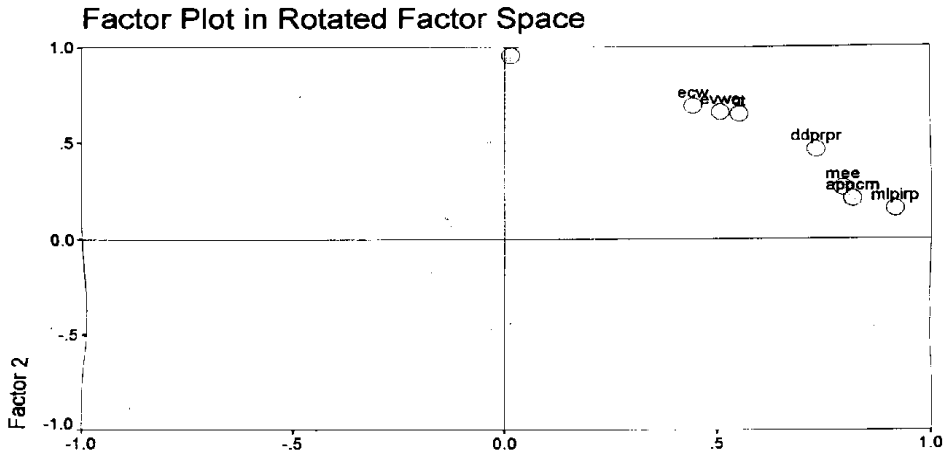


Figure 5.1 Rotated Eigenvalue and Varimax (2D) factor plot relating to management control of workplace industrial relations Practice

RELIABILITY AND VALIDITY MEASURES

The purpose of this section is to stress the instrument of measures as being valid measures what it is intended to measure. Assessing the validity of a measure is imperative to the credibility of the research findings. Failure to assess the validity of measure may results in research findings that are at best misleading. The

necessary condition for is reliability. In this study, it is important to see how reliable the results of all the statistical analysis are, and because the scaled data that has been used and the choice of sample scale could affect the validity. The following discussion focuses on validity of measurement issues as applied to the data on job satisfaction, job motivation, communication, participant evaluation and control. Construct validity is a necessary condition for theory development and testing. Peter (1981) states that construct validity refer to the correspondence between measures, and the unobservable construct the measure is attempting to assess. The reliability of questionnaire data on job satisfaction, job motivation, communication, participation, evaluation and control are reported in Table 6 below, draws on this notion of construct validity. Cronbach's alpha shown in the table is the basic reliability used here. It is based on internal consistency of the test; that is, it is based on the average correlation of items within a test, if the items are standardized to a standard deviation of 1. The other entry in the Table 6 is standardized item alpha, i.e. the alpha value that would be obtained if all of the items were standardized to have a variance of 1. Since the items on the research study scale have fairly comparable variances, there is little difference between the two alphas, indicating that all scales obtained are quite reliable.

Table 6: Scale of Reliabilities (Management)

Scale	Observed Alpha	Standard Item Alpha
Job Satisfaction (15) Items	0.8079	0.8098
Job Motivation (15) Items	0.8198	0.8264
Communication (46) Items	0.8781	0.8781
Participation (38) Items	0.7343	0.8823
Evaluation and Control (8) Items	0.4224	0.5087

IMPLICATIONS FOR IMPROVEMENT

Although the initial Industrial Relations Act has been repealed, the implications and the principles contained in some of its clauses are retained in the succeeding Act. The present circumstances in the construction industry demonstrate that the industry has no clear definable hierarchy (structure). Strategic policy in the construction industry is often presented as a mysterious process involving a complex system necessitating expensive confrontation.

The principal aim of the construction industry management is to undertake a successful business. To conduct a successful business in the industry involves all parties in participation, communication, satisfaction, motivation, and fair industrial relations policy. These elements need to be developed within the framework of workplace reform to assist the industry management to achieve its aim. Resolving workplace conflict in the industry needs a continuous contribution from all parties. It appears that today's problems come from yesterday's unsolved problems. Management is often puzzled over these problems. Employers have refused to accommodate yesterday's problems, which need immediate and long term solution. Due to solutions not being found, behaviour grows worse instead of better.

V. WORKPLACE MANAGEMENT STRATEGY

In this study, "workplace management strategy" is defined as occurring "when building and construction industry management sits down to talk to unions/employees about working conditions, seeks engineers and construction crews to advise on operations; and hirers legal specialists to make sure agreements are drawn up genuinely according to the existing law." The results generated from this study indicate that the above definition is still missing from workplace planning strategy. The reason for this could be because the establishment of a workplace management strategic base in the building and construction industry needs to include communication, policy, implementation, vision, mission, situation analysis, and recognition of issues and objectives. Figure 12.1 below shows the sequencing/relationships of eight major items of workplace management strategic concepts. It is assumed that management and other construction parties (employers' associations, union and employees) are able to formulate policies and implement those policies without communication breakdown. In this way, management can measure its activities in relation to productivity and performance, as well as employees' reproductively and performance. The outcome could be recorded as an accomplishment or a failure. The principle of good management is that management personnel are ready to learn from both success and failure of their activities.

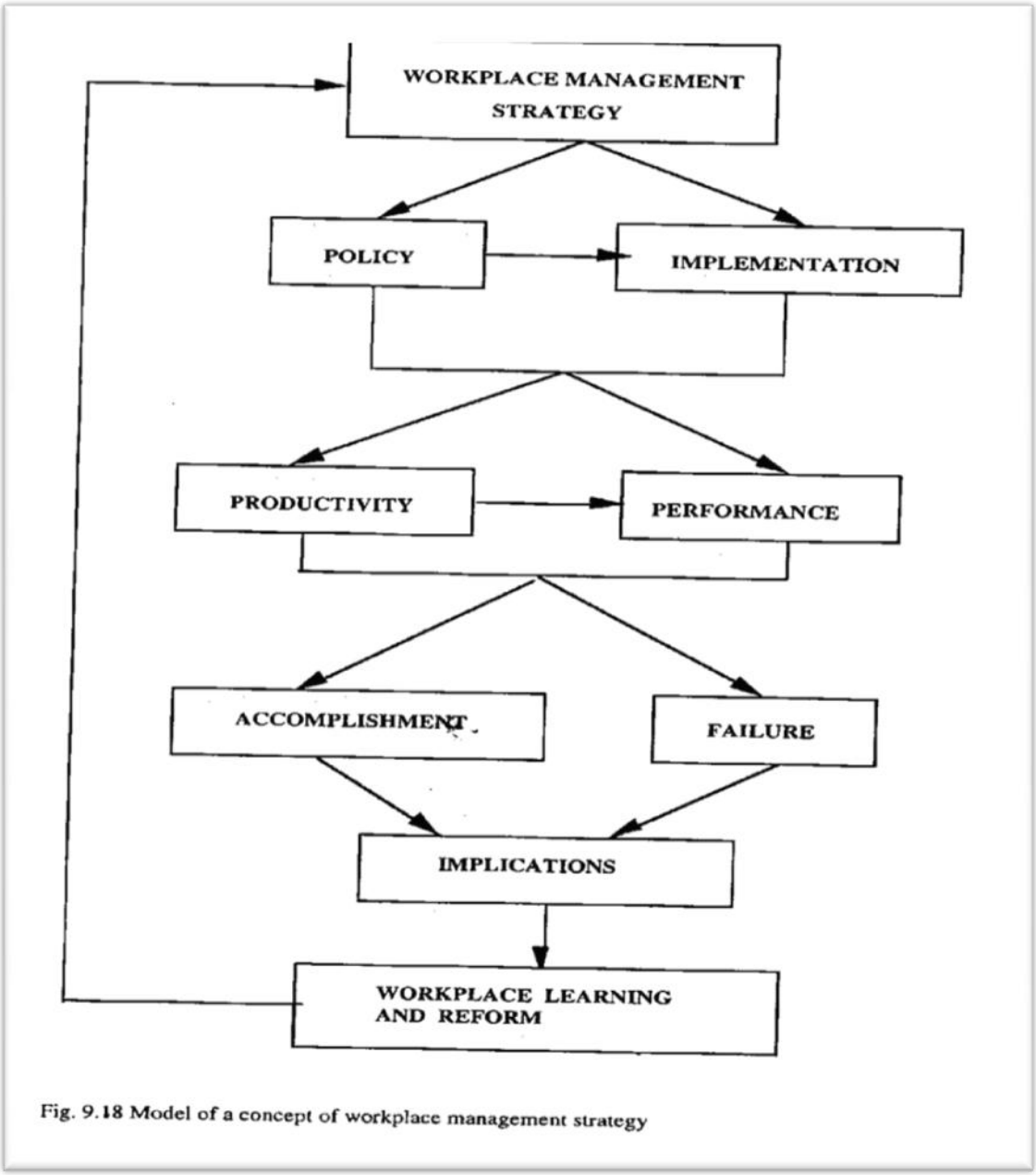


Fig. 9.18 Model of a concept of workplace management strategy

Figure 6.1 Model of a concept of workplace management

CONCLUSION

The development of technology itself did not cause a rapid rise or decrease in the construction business. It should be emphasized that construction business instigates the technological advances. It is the failure of management to move along with advanced technology. In the light of evidence provided by this study, ideological issues are recognized when lines of power struggle are drawn amongst construction parties, especially management and employees including their unions. The parties' ideologies affect the behaviour of the organization, their ability to effectively meet the industry needs, and ability to cope with external environments. The basic problem here is that management tends to operate within task-oriented ideology. This type of ideology is, however, more than a set of prescriptions and prohibitions. This issue can be regarded as sensitive in the construction environment. On the other hand, whether sensitivity can be described as productive or, unproductive depends on the degree of sentiment.

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