

Full Length Research Paper

Quality (Control) circle: The Nigerian experience

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Quality circle as a self managed informal organization is vital for the growth and survival of the industrial sector of developed and developing economies. It operates in guidelines and physical roles that justify contribution to corporate goal actualization. In Nigeria like other nations, the quality circle is not often recognized and accepted by management, though, Nigeria experience is worst. This work based on quantitative and qualitative research techniques that favoured cross sectional survey research, sourced, collected and analyzed data and un-veiled the reasons for the low acceptance of the activities of Quality circle in Nigeria. Results show that most industrial organizations are managed based on ownership/ management interference, discriminative staff motivation and recognition of staff based on ethnic/ cultural affinity as well as gross violation of corporate policies at the whims and caprice of management among others. These hinder informal relationships among industrial employees along the line of quality circle especially as some employees serve as source of management grapevine information at the disadvantage of other employees. To encourage the adoption of Quality Circle principles and practices in Nigeria, the following are recommended: personnel management must be based on policies and quality staff training especially based on the need for cross personal dependency; sponsorship of programme aimed at unified employees' relationships and unified labour rewarding scheme.

Keywords: Effectiveness; motivation, cohesiveness, Informal and formal work group, corporate task, gossips and grape vine.

INTRODUCTION

Globally especially in the industrial organisations, the relevance of work team as a group of people with complementary skills who trust one another and are committed to a common purpose, common performance goals, and a common approach for which they (members) hold themselves mutually accountable is on the increase-Katzenback and Smith, (1993). Work teams are committed to working together successfully to achieve high performance- Bateman and Snell, (1999); thus are being more fully integrated into the organizational structure of most organizations and their authority is increasing.

These work teams that make or do things like manufacture, assemble, sell or providing of services could be project and development oriented, parallel team or management team. Parallel teams which have their operational frame work as separate from the regular work structure, may exist permanently or temporarily and are referred to as self managed teams or autonomous work

groups. They have their members (workers) trained to do all or most of the jobs in an operational unit, they do have immediate supervisors and do make decisions previously made by first line supervisors-Yealth, Hipskind and Barners, (1994). This is unlike the project and development team and management team that are traditionally managed within the organizational structure.

Self managed teams which appear to be more productive have lower costs of operation; provide better customer services and higher quality; have better safety records and are considered to be more satisfying for members-Bateman and Snell (1999: 474), are made up of traditional groups; quality circles; high performance work teams; semi-autonomous work groups; self managing teams and self-designing teams-Banker, Field, Schroeder and Sinha, (1996). The relevance of Quality Circles in contemporary time is higher, compared to other forms of self managed teams. This is considering the effects of globalization that has its base centered on inter

and intra industrial competition.

The Quality (Control) Circle is one of the many forms of self managed teams that exist in different industrial organizations. It is an informal decision making group that exist alongside formal groups in an organization, whose members interact for exchange of ideas for the purpose of making inputs in the areas of product and service quality, working conditions, productivity, employees' safety, tools, equipment, work methods and procedures for the purpose of enhancing the efficiency of corporate goal actualization. Quality (Control) Circle is a competitive advantage enhancement tool.

Competition has its base as quality rather than quantity of goods and services as the consumer with economic power can increase quantity consumption. Quality in most, if not all circumstances adds so much to total cost of product, through increase in cost of production and makes products out of reach of reasonable fraction of anticipated market.

Management of organizations, in a bid to bridging the consumers satisfaction gap vis-à-vis the cost of quality offering, have formally and informally began to accept the new trend of management based on the input of the Quality Control also referred to as Quality Circles.

Theoretical frame work

Study of selected private and public sector businesses in Nigeria show no inclination to the adoption of the principles of quality cycle, rather management favour formal and routine organizations within the principal organization. This in as much as it eliminates reasonably labour-management conflicts does not promote cohesion among personnel; hence the benefits associated with synergy in work relationship are not maximized.

Personnel are polarized along ethnic, religious, social and cultural background and tend to show loyalty to principal (top) management staff or ownership of the different businesses rather than corporate management hence gossips, and destructive and dys-functional information are past about persons and events. This, studies show is destructive and counter productive.

This work thus is aimed at determining the factors that are responsible for the non adoption of the practice of Quality cycle among most business outfits in Nigeria with a view to finding solution to the situation.

Common experiences of quality circle groups

Generally, quality circle members and activities are not normally accepted at initial and formative stage. They are seen as contesting for recognition and as alternative to present organizational (corporate) leadership. Internally, it is difficult to hold meetings; define rules, norms and roles as expected membership are irregular at meetings.

There are also cases of inadequate resources in time (managing normal work schedule and those of the Quality Circle and finance to contend with the need to update information and communicate with the internal and external environmental variables vital for organizational success. This is often a trying period for most quality circle groups as inability to manage these challenges may never revise their behaviours in the appropriate direction-Hackman, (1990). Supporting this assertion, Gersick, (1988), opine that Quality Circle groups pass through critical period of times when they are particularly open to formulate experiences.

To contend with the experiences of the developmental stage in quality circle activities, Kotzenack and Smith, (1993), advocate that the team should work hard at developing common understanding of how they will work together to achieve their purpose, this should aim at translating the group's general purpose into specific and measurable performance goals-Meyer, (1997), based on built trust and inspired team work characteristics of leadership of the group; anchored on activities that facilitate and support group decisions; through expansion of group capacity creation of group identity, ability to differentiate group from other groups and to foresee and influence changes-Zenger and Associates, (1994). In addition, realistic performance measurement in addition to holding Quality Circle members in cohesive relationship will inform and influence corporate management positively concerning the group and will serve as the most honest, crucial and useful performance evaluation standard-Meyer (1994).

Guidelines for effectiveness

Hellriegel and Slocum, (1988); Feildman, (1978), have these guidelines as vital for effective operations of Quality Circle.

- *The circle should have the authority to call on experts in the organization to help solve problems.*
- *Members should agree to set objectives for the coming year within three months of the circle establishment and revise these objectives annually.*
- *Members should agree to contribute their leadership and other abilities to the circles efforts.*
- *Decisions should be made by consensus, and enough time should be allowed to discuss all the issues thoroughly.*
- *All conflicts arising among members or between the circle and others should be discussed openly.*

These guidelines as policies, lead to effectiveness and promote uniformity and ease in objectives actualization.

Nadler, Hackman and Lawler III, (1979), anchor the effectiveness of the Quality Circle on three basic criteria of:

Productive output

The product output of the group should meet or exceed the standards in quantity and quality. This implies that the group's output is acceptable to those customers, insiders and outsiders of the organization, who receive the group's products-(goods and services) as well as management of the organization.

Group members must be able to realize satisfaction of their personal needs in terms of opportunity to enjoy creativity as participants in group activities as well as enthusiasm and sense of pride sequel to realized satisfaction.

Group members remain cohesive even after having realized group and personal goals and are committed to working together for the achievement of greater heights.

Quality Circle group effectiveness may remain elusive in an atmosphere devoid of adequate motivation for members and their constitution based on role performance and cohesiveness in work. Considering these limiting factors, the following are discussed, as factors vital for effectiveness.

Group members motivation

Quality Circle members' motivation strategy and incentive package should be based on well defined criteria which members individually and collectively were involved in their decision. To achieve this, group members should know and be able to assess each other based on job and tasks and have confidence in each other-Erez (1996:15-37). Rather than bossy leadership style, members of the group should be accountable to each other as strategy to ensuring mutual commitment and trust-Katzenbach and Smith, (1993). Rewards should be based on group performance-Paxarelloa, (1997), unless however group where members are interdependent and must collaborate to achieve specific goals –Wageman, (1995). Where group members must be rewarded differently, decision to that effect must be collectively made and must be based on acceptable criteria. Thus it should not be a boss affair –Lawler III, (1996). Group motivational package based on the above (discussed) will encourage and create social facilitation effect rather than social loafing among members of the quality circle.

Members' contribution

Members' contributions to the actualization of group goals is a function of the value of training and experience, thus quality circle members should be selected and trained so that they can become effective contributors to goal actualization-Bateman and Snell (1999). It should include orientation, team and diversity training and should assist group members develop technical or functional

(skills) expertise; problem-solving and decision-making skills as well as interpersonal skills with optimization rather than sub-optimization of each skill. Trainees should be trained to train other members as means of enhancing members' contributions to group goal actualization.

Roles

Members of the quality circle as individuals have different needs, ambitions, attitudes, and desires for responsibility, levels of knowledge and skill. Unless the complexities and individualities of group members are clearly understood, the generalizations about motivation, leadership and communication may be mis-applied by group leadership-Koontz et al., (1980). Given the above, quality circle leadership must influence membership based on role performance. Typical of these roles are task specialist role and team (group) maintenance specialist role. While task specialist roles are performed by group members who have more job-related skills and ability than other members; thus have more decision making responsibilities and provide instruction and advice vital to keep the group moving toward task accomplishment; team (group) maintenance specialists develop and maintain harmony among the group members based on their ability to boost morale, give support, provide humor, sooth hurt feelings and general provision and exhibition of concern for members' well being-Bateman and Snell, (1999). Based on the above, quality circle leadership has the role of keeping the group's purpose and goals relevant and meaningful; building commitment and confidence among members, strengthening the mix and level of skills, managing relationship with outsiders, removing obstacles to the group's performance, creating opportunities for the group and its members and doing real work and not just supervision-Katzenback and Smith, (1993).

Group leadership should be equipped to facilitate and provide support and give direction to the group, it should be resourceful to provide information; resources and opinions that group members do not have or cannot acquire on their own-Bateman and Snell, (1999). These roles should aid group members appreciate the position of the group leadership and should spur them to willingly cooperate with one another for group goal actualization.

Cohesiveness

Cohesiveness is vital for success in group relationship-Seashore (1954). It aids group members attain satisfaction both on corporate and individual yardstick as members share opinion on issues of common interest based on communication. Cohesiveness eliminates conflicts among group members, thus influences the

quantity and quality of work performance positively-Banker; Field; Schroeder and Sinha, (1996) and Mullen and Cooper (1994: 210-227). Given this, it is expected that Quality Circle members should behave in ways that should encourage cohesiveness as vital ingredients for successful operation.

Honorarium

As workers and as members of quality circle, members are not paid salaries. However, depending on the attitude of management, quality circle members are paid over time allowances for the extra period on circle issues. Irimajiri, in Hellriegel and Slocum (1988) remark thus:

No, we don't reward them in form of cash. Winning team earn the opportunity to go to Japan and attend world quality control conference. Some teams are given company certificate of commendation and small gifts.

Authorities are of the view that since the quality circle members with their recommendations assist organization conserve cost and enhance profit, they should be paid. This view in as much as it is valid, should consider that salaries may increase cost of the organization's output and selling price and render the organization (same) competitive disadvantaged. The incentive or bonus as projected by Irimajiri should be considered adequate.

Why gap in the acceptance of quality circle

Honda America Manufacturing (HAM) at its Maryville and Anna, Ohio plants recognized the activities of Quality (Control) Circle members and within one year it had more than 120 circles of aggregate membership of over 1000. This is the case in most progressive organizations.

The International Association of Quality Circles in 1978 according to Marks (1986) had 100 members. **Phase 1:** at 1986 membership had increased to over 7000.

The current growth in acceptance of activities of Quality Circle is associated with the following:

Cost reduction benefit

Irimajiri in JAMA forum reports that the acceptance and implementation of the recommendations of one of its Quality circles on the management of bolts and nuts that used to litter the floor of the plant house, creating very dangerous condition and causing wrench and hanging bags to collect the bolt for reuse saved the company over \$ 173,000 per year. Hence quality circle recommendations aid efficiency and effectiveness, thus hitherto-incidence of wastes and losses are eliminated.

Enhancement of quality output

Irimajiri according to report of JAMA forum 1987, said as follows concerning benefits of quality circle.

In terms of productivity and quality, Honda America Manufacturing (HAM), is almost the same as Honda Plant in Japan. The Japanese plants stand out in some respects, while HAM is strong in others. A number of surveys show that the Accord made in Ohio has exactly the same quality as one made in Japan.

This quality enhancement benefit built around quality corporate image and future growth is attributed to the inputs of the Quality (Control) Circle groups in the companies.

Champion and James, (1989), contributing in the discourse of the benefits of quality circle assert that:

Both the company and its employees are expected to benefit from a successfully implemented quality circle programme. The list of pay offs includes

- Increased job satisfaction
- Productivity improvement
- Efficiency gain
- Improved performance and labour relationship
- Reduction in grievance loads, absenteeism and costs

For Nadler, Hackman and Lawler III (1979:102), some of the functions of quality circle benefit the organization directly.

Odds against quality circle

Common trend in quality circle activities acceptance among different organizations' management in the opinion of Lawler and Mohrman (1987) are as follows:

Phase 1: Results based on the recommendations of this small group are very positive; members are seen to be highly motivated and creative, and hence management is enthusiastic.

Phase 2: There is greater utilization of the service of quality circle groups, hence increase in number of groups and memberships are experienced. Reason for the growth is idealistic-the greater the number of circles, the more the records of improvement achieved.

Phase 3: This phase may record either of these responses by management.

i. Management shows greater commitment to the quality circle groups, emphasizes quality of proposals, on discouraged increase of groups or

ii. Management is disillusioned with quality circles and activities of such groups are discontinued.

Where the first alternative in phase 3 is the case, phase 4

Phase 4: Management may conclude that the quality circle task and group processes should be fully integrated into the organization structure. In most instances, the second alternative in phase 3 is recorded; and the quality circle activities are discontinued; thus, introducing an alternative phase 4.

Phase 4. (alternative) quality circle activities are discontinued.

In the contribution of Lawler (1986), citing Frazer and Dale (1986), the following could account for management odd reactions to quality circles.

- Resistance of first line and middle line managers as they see the recognition of quality circle as threat to their position.
- Participation in decision-making by non-managers is not consistent with the broad and acceptable organizational culture.
- Too many of the ideas generated by the Quality Circle groups are not implemented. This is often without explanation hence circle members become cynical.
- Activities of the Quality Circles involve extra costs, often times, the cost benefits analysis show unfavourable remarks.
- Most of the (too many) Circle members are unskilled or unmotivated

To reduce the chances of failure of Quality Circle, the following should be considered.

- It is not easy to integrate persons with different interests, aspirations, desires, skills and experiences into one body with single and unified goals. To achieve cohesive relationship, leadership requires skills in the act of learning and diplomacy; tackling "people issues" head on; and walking the fine line between encouraging autonomy and rewarding group innovations without letting the group get too independent and out of control-Lawler III (1996).

- Cost of running and managing the groups' activities should be reasonably controlled in terms of time and other resources. All costs must be weighed in terms of expected benefits. Supporting this view-Dumaine, (1994), describes Quality Circle thus "they're high performance but high maintenance and expensive". Costs therefore should be considered in terms of implicit and explicit sacrifices.

- Quality circle members should be allowed some degree of latitude of innovation of ideas. Excessive managerial control kills initiative, thus de-motivates. Hence makes the Quality Circle look nothing different from traditional organizational decision centres-Nahavandi and Aranda (1994).

- Management must truly support the group by giving them some freedom and reward their contribution-Bateman and Snell, (1994) and should encourage group leadership to apply clear thinking and appropriate practices-Katzenback and Smith, (1993).

Preliminary research results point to the fact that the rate and level of acceptance of these self managed work

groups (Quality circle inclusive) is low in Nigeria; in spite of the obvious benefits associated with these groups. Hence this work is interested in accounting for the low level of Quality Circle acceptance in the industrial sector of Nigeria.

Objectives of the study

Organizations make choice of responses that offer the most benefits at the lowest cost as strategic guide to effectiveness in competitive advantage drive-Bateman and Snell (1999). Among the choice responses is the incorporation and or recognition of the quality (control) circles and their activities, as integral of self managed teams in organizations. This is common in the industrialized advanced and developed nations of the globe. Statistics and researchs show that the relevance and acceptance of Quality (Circle) Control activities in Nigeria is low in spite of its obvious benefits. This work therefore is aimed at establishing the cause of the low level of acceptance of Quality Circles activities among industrial organizations in Nigeria. Thus considers the below as subsidiary goals.

- i. To determine factors that constrain or otherwise the acceptability and applicability of the principles of Quality Circle in the Nigerian industrial sector.
- ii. To ascertain whether or not the global benefits of Quality Circle are attainable in the Nigerian industrial sector.
- iii. To suggest marketing and management strategies for the maximization of benefits of Quality Circles in Nigeria.

Literature

Quality circle-defined and explained

Quality circle represents a special and vital type of decision making group which attempts at integrate many of the ideas about group activities for the enhancement of the actualization of organizational goals. It is a technique that focuses on improving quality of market offer through quality and increasing worker control of the process of work.

A quality circle in the assertion of Ruffner and Etkin, (1987), is a group of employees from the same work area, or who do similar work, who voluntarily meet on regular basis to identify, analyze, and propose solutions to problems in the work place. For Bateman and Snell, (1999), Quality Circles are voluntary groups of people drawn from various teams who make suggestions about quality but have no authority to make or execute decision. Common characteristics of the group are those of voluntary membership and limited scope of responsibility-enhancement of quality of corporate offer on advisory

capacity.

Quality circle members, depending on the disposition of organization's management meet for less than two (2) hours periodically during or after formal close of work weekly or once in 2 weeks.

For efficient and effective participation in group discussions, members are exposed to training in the areas of decision making and group discussion processes and procedures.

Quality circle members in their complementary rather than substitute roles to management are not confrontational nor do they assume managerial positions. Rather in individual capacities devoid of official status, they discuss issues bordering on Hellriegel and Slocum, (1988);

"product and service quality, working conditions, productivity, safety, tools and equipment, work methods and procedures, reporting requirements, communication, control mechanism, job structures, etc."

However these members restrain themselves from issues that may have to do with wages and salaries, personality clashes, hiring and firing, disciplinary actions, major resources allocations etc.

The outputs of the Quality Circles are basically recommendations, as their (recognition) right of operation does not extend to implementation of proposed solutions. Recommendations are subject to the approval of management, beyond which they are considered invalid.

METHODOLOGY

The data for this exercise were sourced both from organizations that favour and those that do not favour the operations of Quality (Control) Circle activities in the industrial sector of Nigeria; as shown in the preliminary research based on the use of copies of questionnaire and oral interviews.

Given the nature of the exercise, qualitative and quantitative research techniques were applied to. These data were generated based on the principles of cross sectional survey research.

Firms considered for this research were drawn from banking; building material; the breweries, the conglomerates; construction, engineering technology, food beverage and tobacco, health care, industrial domestic products, petroleum (marketing) and printing and publishing industries. Samples were drawn based on the perato ratio principles- Dave (1996) as industrial market leaders served as greater sources of data.

This was however based on proportionate stratified sampling technique. Fifteen (15) of the seventy (70) firms in the twelve (12) selected industries were chosen as samples, based on Yard mathematical notation of:

$$n = \frac{N}{1 + N ()^2}$$

Where N = population size
n = sample size and
= permissible level

of sampling error

Source: Freund, J. E (1967) Mathematical Statistics, Englewood Cliffs, New Jersey, Prentice Hall

Copies of questionnaire were distributed to middle level managers and foremen of firms of case study at the factory/ headquarters area of operation. Quantitative values were assigned to variables that were considered positively and negatively influential in decision making, while others, assumed to be constant variables were assessed based on principles of ordinal scale rank-order-Ezejelue, Ogwo and Nkamnebe, (2007).

Decision Rule

Decisions were based on the evaluation of variables considered in issues i-v below;

- i. Assessment of the level of management recognition and support for the informal work group.
- ii. Assessment of the impact of cultural affinity and managerial personal relationship on employee motivational variables.
- iii. Employees' inter-personal relationship beyond normal work situation.
- iv. Employer's attitude to information source-grapevine
- v. Impact of the role of business ownership on management, in percentage and projected/accepted mean of 50 (fifty) percent. Where value calculated is greater than 50 (fifty) percent as accepted mean, the projected statement is considered worthy of acceptance; if otherwise, it is rejected. This was the case in all analyses-Table 1 to 5 in data analysis. This is based on the actual weight as percentage of the standard weight statistical tool.

Data Analyses

Data collection, collation and presentation were based on structured questionnaire and oral interview that addressed issues on managerial recognition and acceptance of quality circle; cultural influences on employer/employee and inter employee relationships, employers appreciation of grapevine source of information and impact of separation or otherwise of ownership interest from management interest in informal work team relationship.

Table 1. Assessment of the level of recognition and support for the informal work group by management.

Issues	Assessment				
	A=5	B=4	C=3	D=2	E=1
i. Assess the level of trust and confidence management has that informal work group can offer satisfactory advice	06	8	14	22	74
ii. Assess the willingness of management to accept advice made by the informal work group	08	12	20	21	53
iii. Assess the level of moral, technical and financial assistance extended to the informal work group	05	12	16	16	75
iv. Assess managerial attitude toward the power of initiative of members of the informal work group	10	15	17	10	75
Score	29	47	64	69	287
Multiplier	5	4	3	2	1
Weighted score	145	188	192	130	287
Aggregate weighted score	950				

One hundred and fifty (150) copies of questionnaire were distributed, one hundred and twenty eight were retrieved, representing eighty point three (80.3) percent success rate; and one hundred and twenty four were considered properly responded to and fit for analysis in table 1-5 below.

Analysis 1

Assessment of the level of recognition and support for the informal work group by management. The above is based on the four (4) point criteria listed in table 1; as variables that measure managerial attitude to informal work group.

Decision Rule

If value calculated is greater than 50 (fifty) percent (accepted mean); accept the projection that level of recognition and acceptance of informal work group by management is high. If otherwise, reject – See table 1, for data Based on table 6.0.1 values:

$$\begin{aligned} \text{Standard weight} &= 2480 \\ \text{Actual weight} &= 950 \\ \therefore \text{Aggregate actual weight as a percentage of standard weight} \\ &= \frac{950 \times 100}{2480} \\ &= 38.3\% \end{aligned}$$

Decision

Since value calculated, 38.3% percent is less than accepted mean of 50(%) percent;

The projection that the level of recognition and support of the informal work groups by Management is high is rejected. Accepted; is that the level of recognition and support of the informal work groups by Management is low.

Interpretation

The analysis underscores managerial general poor attitude towards informal work groups and associations, the lack of confidence and unwillingness of management to accept informal work groups’ advice is management willing to finance the activities of such groups.

Analysis 2

Assessment of the impact of employers/ employees cultural affinity and managerial personal relationship on employees’ motivational variables. Analysis above measures the impact of employers/ owners cultural affinity on employees’ motivation.

Decision Rule

If value calculated is greater than 50 (fifty) percent (accepted mean), accept the projection that employers’/ownership and managerial cultural affinity and values negatively affect employer/ employees relationship and employees’ motivation. If otherwise, reject the projection For data, see table 2 Based on the table 2 values

$$\begin{aligned} \text{Standard weight} &= 3100 \\ \text{Actual weight} &= 2191 \end{aligned}$$

Table 2. Assessment of the impact of employer/ employee cultural affinity and managerial personal relationship on employer motivational variables.

Issues	Assessment				
	A=5	B=4	C=3	D=2	E=1
i. Assess the impact of employers/employees cultural affinity on employers/employees relationship	40	46	14	20	04
ii. Assess the impact of employers/employees cultural affinity on employee welfare package	63	40	20	15	13
iii. Assess the impact of employers/employees cultural affinity on employees recruitment policies implementation	20	36	42	16	10
iv. Assess the impact of employers/employees cultural affinity on employees social relationships and interactions beyond corporate task level	25	30	35	24	10
v. Assess the impact of employers/employee cultural affinity on employees recognition by management and exchange of idea on work schedule	50	20	24	16	14
Multiplier	171	172	135	91	61
Weighted score	5	4	3	2	1
Aggregate weighted score	855	688	405	182	61
	219				

Table 3a. Analysis of the interpersonal employees relationship on informal (associations and self managed work team) basis.

Issues	Assessment				
	A=5	B=4	C=3	D=2	E=1
a. Assessment of employees level of interpersonal relationship (informal corporation given joint corporate tasks)	12	15	21	26	50
Score	12	15	21	26	50
Multiplier	5	4	3	2	1
Weighted score	60	60	61	52	50
Aggregate weighted score	283				

∴ Aggregate actual weight as a percentage of standard weight

$$= \frac{2191}{3100} \times \frac{100}{1}$$

$$= 70.67\%$$

Decision

i. Since value calculated (70.67%) percent is greater than accepted mean of 50.0% (percent), the assertion that employers'/ ownerships' and managerial cultural affinity and values as biases, negatively affect employers/ employees relationships and employees' motivation is accepted.

Interpretation

The employers based on cultural inclinations and values show discrimination in their relationships with staff in terms of welfare package, recruitment policies, and social relationships as motivational variables, as staff that are

not indigenes of the locality of principal staff and managers of the organizations are not as favoured as others in the scheme of events.

Analysis 3

This is sub-divided into i and ii.
 Analysis of employees' level of inter-personal relationship (informal cooperation) given joint corporate task.
 Analysis of employees' level of inter-personal relationship given informal social/ religious and economic associations and self managed work teams respectively.

Decision Rule

Accept the assertion that employees' inter-personal relationship is high and favourable if value calculated is greater than 50% (percent) accepted mean. If otherwise, rejected the assertion.
 The analysis of data is shown in Table 3. a and b.

Table 3b. Analysis of the interpersonal employees relationship on informal (associations and self managed work team) basis.

	A= 5	B=4	C=3	D=2	E=1
b. Assessment of employees' level of relationship given the following informal associations					
Social club	50	48	16	8	2
Religious meetings	60	42	18	4	0
Thrift and credit associations	40	38	40	1	1
Think tanks	16	14	26	20	48
Quality (control) circle	5	8	17	16	78
Other self managed teams				15	109
Score	171	150	117	64	238
Multiplier	5	4	3	2	1
Weighted score	855	600	351	128	238
Aggregate weighted score	2171				

Based on the table 3(a) values

Standard weight = 620

Actual = 283

Aggregate actual weight as a percentage of standard weight

$$= \frac{283}{620} \times \frac{100}{1}$$

$$= 45.64\%$$

Based on the table 3 (b) values

Standard weight = 3600

Actual weight = 2172

∴ Aggregate actual weight as a percentage of standard weight

$$= \frac{2171}{3600} \times \frac{100}{1}$$

$$= 60.3\%$$

Decision

i. Calculated value in respect of employees' inter-personal relationship-informal cooperation; given joint corporate tasks is 45.64% (percent). This is below the accepted mean value of 50(%) percent. Based on this; the assertion that employee inter-personal relationship on informal basis is high is rejected.

ii. Value calculated based on the projection that employee's level of inter-personal relationship given informal social, religious and economic associations and self managed work teams is 60.3 (%) percent. This is above the accepted mean value of 50(%) percent. Thus the assertion that the employees' level of inter-personal relationship given informal social, religious and economic associations and self managed work team respectively is high is accepted.

Interpretation

informal relationships among employees based on corporate task is relatively low, this is shown in the employees' assessment of think tanks, Quality (Control) Circles and other self managed work teams. Table 3 (b). This is however not the case given other social, religious and economic associations where the level of interpersonal relationships is assessed as high. Based on the above relationship-informally is higher socially, beyond the level of corporate activities.

Analysis 4

This is the evaluation of the degree of separation of ownership of firms from management.

It is with the view to determining whether or not ownership interest and philosophies conflict with management and to determine how these affect employees' loyalty to management.

Decision rule

Accept the assertion that the degree of ownership separation from management is high if value calculated is greater than 50(%) percent (accepted mean).

If on the contrary, rejected the opinion.

The assessment is based on data on Table 4.

Based on the table 6.0.4 values

Standard weight = 2400

Actual weight = 1170

∴ Aggregate actual weight as a percentage of standard weight

$$= \frac{1170}{2400} \times \frac{100}{1}$$

$$= 48.75\%$$

Table 4. Assessment of the degree of separation of ownership of firm from management

Issues	Assessment				
	A=5	B=4	C=3	D= 2	E=1
i. To what extent is the management of the firm separated from ownership	5	8	14	30	67
ii. To what extent do ownership interest and philosophy influence conflict with organizational interest	22	22	26	28	26
iii. Assess employees' loyalty to:					
Ownership of business	30	29	20	15	40
Corporate management	6	10	21	26	61
Score	53	69	79	99	194
Multiplier	4	3	3	2	1
Weighted score	265	276	237	198	184
Aggregate weighted score	1170				

Table 5. Assessment of the relative importance of grapevine as a source of management information.

Issues	Assessment				
	A=5	B=4	C=3	D= 2	E=1
How important is grapevine information to management	42	28	20	16	10
How much does management encourage sources of grapevine information	38	30	28	20	8
How well do employees generally relate with persons known to be sources of grapevine management information	9	15	22	30	48
Score	89	73	70	66	66
Multiplier	5	4	3	2	1
Weighted score	445	292	210	132	66
Aggregate weighted score	1145				

Decision

Reject the assertion that there is high level of ownership separation from management of organizations as value calculated 48.75(%) percent is less than accepted mean value of 50 (%) percent.

Interpretation

Ownership of most organizations is not separated from management, thus conflicts of interests and philosophies exist. These reasonably influence employees who tend to be loyal to owners of the firms rather than management. This accounts for why cultural affinity and biases are high in existence in most organizations, thus employment and employee welfare policies are discriminately applied across employees, in favour of those that have traceable social relationship with business owners and or top managers.

Analysis 5

This assessment determined the relative importance

attached to grapevine, as a source of information by management.

This assessment proves or otherwise management favourable attitude toward particular employees as well as discriminative motivational incentive policies on employees.

Decision Rule

Accept the assertion that management value and attach relevance to grapevine as a source of information if value calculated is greater than (50%) percent (accepted mean).

If otherwise, reject.

For data, see table 5

Based on the Table 5 values

Standard weight = 1860

Actual weight = 1145

∴ Aggregate actual weight as a percentage of standard weight

$$\begin{aligned} &= \frac{1145}{1860} \times \frac{100}{1} \\ &= 61.55\% \end{aligned}$$

Decision

Value calculated, 61.55 (%) percent is greater than accepted mean value of 50 (%) percent. Thus the assertion that management value and encourage the use of grapevine as a source of information is accepted.

Interpretation

Management value grapevine information source and recognize and motivate employees who service this channel of information. This accounts for the high level of discriminatory motivational policies in most organizations in favour of personnel that serve as source of information as well as employee loyalty to persons rather than corporate goal oriented management. This also accounts for why employees generally do not relate informally beyond official duties on matters relating to official duties and have separate attitude towards those that service the grapevine channel of information.

Summary and discussion of findings

Based on the analysis and responses to interview by selected middle level managers across the firms and industries studied, below are highlights of findings.

- Over 75(%) and 40 (%) percent of Nigerian indigenous and foreign firms respectively are managed based on ownership-management basis, thus business interests are hardly separated from interest and philosophies of ownership.
- Staff recruitments were and are mostly based on personal relationship with business owners and top management personnel; thus conventional criteria for staff selection as laid down in most organizations are ignored.
- Individualism as employees' attitude to work is pronounced, thus collective informal relationships based on work requirements is not emphasized; hence self managed work teams do not exist in most (over 80%) of the organizations.
- Informal relationships are more common in social, religious, and economic associations beyond employment basis and clubs among employees.
- Gossips as grapevine information sources are common among employees; these serve as means of securing top managers' attention and favour. Thus a collection of gossipers' form managerial advisory team.
- Where good ideas are generated by non-gossip

members, such ideas do not reach-or are not sold to management as they are most often considered threat to "gossipers' relationship" with top management.

- Nigerian managers are threatened by the power of initiative of sub-ordinates, especially the informal work group system, they distance themselves from such groups on the basis of lack of trust and confidence, thus deny such groups moral, technical and financial assistance.
- Nigerian managers feel more secured relating and delegating functions to persons of the same cultural, social and religious background, the contrary is considered threat to managerial position. Thus quality circles whose membership ought to cut across different ethnic, cultural and social groups are not considered a welcome development.
- The threat of losing employment based on passing employees personal information (opinion, characteristics and traits) to top management by other employees discourage informal work relationship especially on the basis of quality circle. Relationship on social, religious and thrift credit bases among employees are segmented along ethnic and cultural basis in churches and social clubs.

These (above) as factors account for the low rate (level) of acceptability and applicability of the principles of Quality (Control) Circle in the Nigeria industrial sector. Table 3(b) shows that employees belongingness and relationship based on social club, religious meetings and thrift and credit associations respectively is high but very low given think tanks, Quality (Control) Circles and other self managed work teams.

Given the above, Nigerian industrial organizations can hardly enjoy the global benefits of Quality (control) circles which include operational cost reduction; improvement in the quality of output; improved labour relationship, increased organizational stability among others, in addition to employees related benefits of obtaining skills from others based on sharing of ideas and self accomplishment through job satisfaction.

The situation in the Nigerian industrial sector given the activities of Quality (Control) Circle can be significantly improved for enhanced contributions to industrial growth and sustenance.

Conclusion and summary

The role of Quality Circle is commendable and highly advocated for organizations operating based on the techniques of management by objectives (MBO) as the circles facilitate the actualization of objectives.

However, it is important to stress that the more in number the groups are, the more the attention of management is diverted, thus the number of groups accredited by management should be a function of the scope and complexity of corporate activities. Membership

of quality circle group should be devoid of top management staff; however quality could depend on top management input on consultation basis.

The role of quality circle should be well defined to reduce the hostility of middle managers against Quality (control) circle activities.

RECOMMENDATIONS

Given the findings of this work, the following are recommended:

- Workers' cooperation intra and inter management must be secured for smooth running of organization; the contrary will generate fear of unemployment and unrest. Generated labour cooperation based on policies creates and maintain quality morale that evoke the optimum contributions of employees thus ensures that the organization operates at maximum efficiency-Appleby (1982).
- Based on the above, the industrial sector of the Nigerian economy should be managed based on personnel policies that ensure quality remuneration, job security, opportunity for personal growth; self recognition as status issue; justice, democracy and opportunity for self development. These ensure employee loyalty to management and not individuals.
- Industrial human resources planning process should take cognizance of the socio-cultural variables of the Nigerian environment. This should be strategic for environmental scanning, programming and performance evaluation to meet the long term needs of the organization. These activities should not show any form of discrimination among and against personnel.
- The training and development programmes of industrial organizations should aim at creating and sustaining harmony among employees and should eliminate fear of dominance and discrimination among and against staff.
- Formal communication channels and procedures should be adopted; however the use of company suggestion box should be encouraged. This will reasonably eliminate the relevance of grapevine information network and reduce employees suspecting one another.
- Management should encourage and sponsor the existence of official and non-official non work groups as a means of building desire in employees to relate with one another beyond work period and schedule among employees. Management may also initiate Quality (control) circle activities among employees, labour relations programmes that encourage unionism and collective bargaining for enhanced work conditions should also be encouraged.
- Discriminating or variable pay incentive systems should only be practiced on the ground that the reasons and conditions for the adoption of the programme is

known to members of staff and employees are encouraged to share benefits given the scheme

- Ownership of industrial outfits should be separated from management based on clear cut programmes and defined scheme of events. This will; reduce the tendency of ownership interests and philosophies conflicting with managerial goals and principles.

These when achieved, will generate and control forces that will ensure affective collaboration of individuals and groups especially along the informal work group alternative lines for corporate and individual goal attainment at no cost to the organization.

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