Prospects for sustainability and viability of Nigerian manufacturing organizations through team work approach

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This study on prospects for sustainability and viability of Nigerian manufacturing organizations through team work approach has the overall objective of ascertaining the extent to which teamwork approach to change management holds good prospects for sustenance and viability in Nigerian manufacturing organizations. The study adopted the survey research design, in which ten manufacturing companies in the South-Eastern Nigeria were studied. The population of the study was thirteen thousand, six hundred and twenty three (13,623), and the sample size was calculated to be six hundred and nineteen using the Taro Yamane’s formula. The sampling selection was the stratified sampling method. A self-developed structured questionnaire and oral interview guide were the research instruments used for the study. Data collected were presented descriptively using charts, simple frequency and percentage distribution, mean and standard deviation. The hypotheses were tested using the Z-test statistic. The major finding of the study were that teamwork approach to change management in Nigerian manufacturing organizations to a large extent holds good prospects for sustenance and viability (Zcal = 5.76 > Zcritical = 1.96, p < 0.05). The study concludes that teamwork has the prospect of making manufacturing organisations very effective, viable and sustainable. Specifically, it has the benefits of improved productivity and product quality, innovativeness and manpower development. Based on the findings, the study recommended among others that, for an improved product design with high quality that will appeal to customers’ satisfaction any day, teamwork should be encouraged in Nigerian manufacturing organizations. It is also recommended that team incentives and rewards should be strictly adhered to in order to boost team performance and effectiveness. Team members should be carefully selected so that members with requisite skills are selected to work towards achieving the required objectives.

Key words: Prospects for sustainability and viability of manufacturing organizations and Team work approach.

INTRODUCTION

Team-building is an organizational development strategy that is often used in organization to make work groups more cohesive, committed, satisfied, and productive (Parker, 1990). When interaction among group member is critical to group success, effective team building is always useful. Moorhead and Griffin (1995) see team building as...
members working together in a spirit of cooperation and generally has one or more of the following, goals;

1. To set team goals, priorities, or both
2. To analyze or allocate the way work is performed
3. To examine the way a group is working, that is to examine processes such as norms, decision- making and communications.
4. To examine relationships among the people doing their work.

As organizations have restructured themselves to compete more effectively and efficiently, they have turned to teams as a better way to use employees’ talents. Robins and Judge (2007) are of the opinion that teams have the capability to quickly assemble, deploy, refocus and disband.

As a result, management has found that teams are more flexible and responsive to changing events than traditional departments or other forms of permanent groupings. Teams can compete, wrestle, succeed or fail. A good organizational team can be an invaluable asset to the organization. A bad team can break the internal structure of the organization (Nzewi, 2006). Also, Coles (2002) in his own opinion says that it is also important that teams enjoy reasonable autonomy. When teams enjoy autonomy they are empowered (Gibson, 1996). Onodugo and Igwe (2010) maintain that, team building is one of the key imperatives for a successful organization.

Team-building is seen as one aspect of organizational development strategy that makes or helps organizational change to be successfully employed in many manufacturing organizations. Adeyeye (2009) says that, nowadays business environment produce change in the workplace more suddenly and frequently than ever before. Mergers, acquisitions, new technology, restructuring, downsizing and economic meltdown are all factors that contribute to a growing climate of uncertainty. The ability to adapt to changing work conditions is key for individual and organizational survival. Change will be ever present and learning to manage and lead change includes not only understanding human factors, but also skill to manage and lead change effectively (Pettigrew and Whipp, 1991). Change is the only element of human phenomena that is constant.

The greatest nightmare facing organizations and their managers today is the series of rapid and complex changes which they have to contend with on a continuous basis (Muo, 2004). He goes further to clarify that some of these changes are externally propelled by forces which the organization has little control over: International forces like the Gulf war and the Israeli-Palestinian face-off; rapid changes in technology leading to frightening rates of obsolescence, unforeseen changes in the demographic configuration of societies which automatically changes customers tastes and desires and even what constitutes the target market; globalization and internationalization, increasing competitive pressures, regulatory and legal environment and new types of risks after September 2011.

Mckee (2005) suggests that one most significant essential for success during transition is team-building and maintains that leaders that can challenge, motivate, and empower their teams through change are successful. He went further to state that, leaders who can keep their work teams focused during changes will have organization and business which thrive. McAfee and Champagne (1983) assert that forces of change, also known as change drives or change initiators, can either be external or internal. The external change drives are those forces that are outside the control of management, but have made change imperative. These include government policies, political development, technology, competition, changing consumer behavior, industrial practices, external stake holder interests, socio-economic environment, and customer capabilities.

Statement of problem

A major feature of organizational life is team, and it can have significant influence on the successful implementation of change. Most change can disrupt teamwork. Unless people are involved, committed and prepared to adapt and learn; if not, objectives, plans, and future desired state may likely be resisted. The danger of domination of the team by some powerful members, the difficulty in placing responsibility for a bad team decision, the effects of selecting poorly qualified persons as members and team decisions may result from compromise; poses great challenges to team approach to change management.

A major team problem may be that of conformity, which raises its head in a number of cases, ranging from groupthink to social loafing. With the wide use of teams, personal and inter-group conflict may arise. The ability of the leader to persuade and influence his followers, which in turn, depends largely on how much power the leader possesses, will determine how effective team-oriented approach to change management will succeed.

Kola Jamodu president of MAN in his opening address during 2011 40th Annual Report and Accounts recognizes the federal government initiative of vision 20:2020. He however identifies some urgent national issues bordering on; National Security, Power Sector Road Map, Tariff Issues and Government Fiscal Operation. Specifically, there are major challenges facing manufacturing organizations in Nigeria today, existing evidence shows that every economic sector across the country appears to be facing similar challenges and threats. While in other countries, in Africa, major infrastructural facilities, example water, electricity and transportation system work efficiently and taken for granted, Nigerians and indeed manufacturing industry have the problem of basic
necessities of life, poor transportation system, currency devaluation, deregulation, globalization and collapse of the Nigerian stock exchange.

Obviously most of the aforementioned challenges have compounded and escalated the cost of doing business in Nigeria. Today, each manufacturer in this country provides its own water via borehole, transportation needs by having fleet of vehicles, spends heavily outside normal overhead for security at personal and organizational levels, grades the roads leading to factories, buys and runs generators for a dedicated power supply, and so on.

Furthermore, a survey carried out by Nigerian Association of Chambers of Commerce, Industry, Mines and Agriculture (NACCIMA) has shown that only 6% of industrialist in the country has been able to access the various intervention funds made available by the Central Bank of Nigeria (CBN). Also, Branch Chairman of Imo/Abia branch of MAN, G.C. Ekenma in his address during the branch 25th Annual General Meeting highlighted the following as part of the major issues that confront them; challenging business/operating environment, imposition of a fixed charge for energy by National Electricity Regulatory Commission (NERC), collapse of public infrastructure, local patronage, scarcity of gas and security of lives and property. Another survey conducted by MAN revealed that out of about 2,500 member-companies of MAN, 30% of them had closed down, 60% are ailing and only 10% are operating at sustainable level. The cost of manufacturing in Nigeria therefore is nine times that of China, four times that of Europe, four times above the figure in South African and twice the figure in Ghana.

Therefore, it would be important to study the Prospects for Sustenability and Viability of Nigerian Manufacturing Organizations through Teamwork approach, because it brings about innovation in the design of products and quality.

**Objectives of the study**

The study aims to ascertain the extent to which teamwork approach to change management holds good prospects for sustenance and viability in Nigerian Manufacturing organizations.

**LITERATURE REVIEW**

**Reasons for the formation of teams**

Team work originates with and builds relationships among a group of people who share a common interest or purpose. By allocating the proper resources and support, human resource managers can ensure that the development of effective work teams increases group performance and help an organization to thrive in the most competitive markets (Khan, 2007). A well functional team can bring out the best in its members through mutual support that increases morale. According to Efí (2010) work team encourages free expression of ideas in a manner that engages each member of the team. A team therefore, brings together individuals with similar interests and objectives.

According to Lantz (2010), teamwork can benefit the innovation process and give a return on the investment that it takes, provided the groups have a complex task, considerable freedom, and group processes that are characterized by reflectivity. A good argument for investing in teamwork is that it can promote self-organization. Reflectivity is defined as “the extent to which team members collectively reflect upon the team’s objectives, strategies, and processes as well as their wider objectives” (West et al., 2004). Meanwhile Alderfer (1977) opines that one important thing to note is that teams are formed to meet objectives that can best be met collectively, thus teams help organizations to overcome the limitations of individuals.

According to Efí (2010), Mullins (2010) and Weighrich and Koontz (2005), there are number of reasons why individuals are grouped into work teams. These reasons include the following:

1. To keep employees and reduce costs related to employee turnover (severance costs, living, training expenses).
2. To hold on to valuable organizational knowledge that comes with the continuity of staff and sharing of information.
3. To enhance the power and feeling of satisfaction of individuals working on the team.
4. To build organizational competence and stability.
5. To enhance trust relationships that lead to better sharing of knowledge and understanding.
6. To achieve objectives, because individuals are working together.
7. To reduce too much authority in a single person, for wider spread of authority within the work team leaders.
8. To enhance group deliberation and judgment because two good heads are better than one.
9. To increases motivation through participation, people who take part in planning a program or making a decision usually feel more enthusiastic about accepting and executing it.
10. To increase accomplishment of task through the combined efforts of a number of individuals working together.
11. To provide collusion between members in order to modify formal working arrangement more to their liking. Membership therefore provides the individual with opportunities for initiative and creativity.
12. To enhance companionship and a source of mutual understanding and support from colleagues.
13. To provide members of the group a sense of belonging.
14. To provide guidelines on generally acceptable
behavior by making sure that members adhere to official rules and regulations.

15. To provide proper protection for its members from outside pressures or threats.

Individuals have varying expectations of the benefits from group membership, relating to both work performance, and social process. However, working in groups may mean that members spend too much time talking among themselves rather than doing (Mullins, 2010). It is important therefore, that the manager understands the reasons for the formation of work teams and is able to recognize likely advantageous or adverse consequences for the organization.

**Team characteristics and team-building objectives**

To Trevor (1999), team is a term used widely today for group of people coming together for a common purpose. Teams must be able to bring added value as a team to the organization. Co-operation is essential for team success. Meanwhile Mullin (2010) opines that the characteristics of an effective work team are not always easy to isolate clearly. He went further by advising that the underlying feature is a spirit of co-operation in which members work well together as a united team and with harmonious and supportive relationships. To Athanasaw (2003) the criteria for effectiveness of cross-functional teams are many and varied, but the success of any project may require that all criteria be met if the project is to be successful. However, according to Stevens (1993), much of the literature categorizes self-management and interpersonal skills. Self-management involves the team collectively managing the team’s basic managerial or supervisory function. These include; goal-setting, performance management and task coordination. Meanwhile Denison et al. (1996) explained interpersonal skills to include, conflict resolution, collaborative problem solving and communication.

**Team characteristics**

In an elaborate form, Adair (1986:67) also suggests the following characteristics of effective work team to include;

1. Clear objectives and agreed goals
2. Openness and confrontation
3. Support and trust
4. Cooperation and conflict
5. Sound procedures
6. Appropriate leadership
7. Regular review relations

In addition, he emphasized the importance of careful selection of team members. Team members are not only expected to be technically or professionally competent, but also the ability to work as a team members and the possession of desirable personal attributes such as willingness to listen, flexibility of outlook and capacity to give and accept trust. Meanwhile, Mullins (2010) isolated the following as characteristics evidence that members of a team are working as an effective team members, they include:

1. A belief in shared aims and objective.
2. A sense of commitment to the team.
3. Acceptance of team values and norms.
4. A feeling of mutual trust and dependency.
5. Full participation by all members and decision making by consensus.
6. A free flow of information and communication.
7. The open expression of feelings and disagreements.
8. The resolution of conflict by the members themselves.
9. A lower level of staff turnover, absenteeism, accidents, errors and complaints.

However, as Brooks (2006) points out, that teams operate at the higher order of group dynamics that it is more reflective of “effective work teams” rather than work groups. Finally, Athanasaw (2003) considers these factors necessary for teams to be effective, listening, giving performance feedback, making one’s point at a team meeting, group problem-solving, leaning a new job, peer counseling, conducting team meetings, resolving conflict and working collaboratively.

**Team building objectives**

In the last fifteen years, organizations structure has undergone a shift from the individual climb of corporate ladder, to an increasing emphasis on work teams and groups. The shift to work teams is largely due to factors such as globalization, downsizing and the need for technological efficiency. As companies expand and tasks become more complex, more and more specialists are needed within organizations to work as a team. In addition, the convergence of products, services and technology from around the world has forced companies to work in cross functional environment for which the best original design is often working in teams.

Other reasons for the emergence of work teams are stiff competition, and shifting authority down to members of work teams, which increase productivity (Ezigbo, 2011). She concludes that a well-functioning team can bring out the best in its members because problem solving skills and creativity increase with mutual support that builds morale in teams. Teams occur when a number of people have a common goal and recognize that their personal success is dependent on the success of others (Crainer, 1998).

Team building is not just a good idea; it is a necessity of biological life. A belief in teamwork actually results in a major reduction of medical symptom for managers (Barry and Rhonda, 1990). This style is the one most positively
associated with performance and profitability career success and satisfaction and physical and mental health.

Teamwork is important in any organization but may be especially significant in service industries such as hospitality organization, where there is a direct effect on customer satisfaction. In essence, team working involves a reorganization of the way work is carried out (ACAS, 2007). Teamwork can increase competitiveness by;

1. Improving productivity.
2. Improving quality and encouraging innovation.
3. Taking advantage of the opportunities provided by technological advances.
4. Improving employee motivation and commitment.
5. Being proactive rather than reactive.

As Lucas (2001) rightly puts it, there is no doubt that effective teamwork is crucial to an organization’s efforts to perform better, faster and more profitably than their competitors. To Adams (2008), teamwork is not an option for a successful organization, it is a necessity. Teamwork can lead to achievement, creativity and energy levels that someone working alone or perhaps with just one other person could hardly imagine. In a more elaborate way (Center for Management and Organizational Effectiveness, 2010) stress that team is designed to provide skills and promote high levels of team performance and team member satisfaction. They highlighted the following as team building objectives;

1. Learning how to unleash the team’s power and potential.
2. Discovering new solutions to help team members enhance their teams effective and cohesiveness.
3. Exploring ways to build team motivation and commitment to teams objectives.
4. Discovering the tools and resources that can help strengthen the team and building whole-hearted cooperation among team members.
5. Gaining personal insight about how individual actions and behaviors either add to or detract from teamwork and team building.
6. Understanding the role of each team member.
7. Creating an exciting team-building learning experience that will raise their level of interest in, and commitment to teamwork in their organization.

In a concluding note, Ezigbo (2011) highlights the factors that make for effective team work competency, they include; designing teams properly, creating a supportive team environment and managing team dynamics appropriately.

Skills required for effective team working in organizations

More and more task of contemporary organizations, particularly those in high technology and services business, require teamwork. According to Guirdham (2002), teamwork depends not just on technical competence of the individuals composing the team, but on their ability to ‘gel’.

To work well together, the team members must have more than just team spirit. They also need collaborative skills-they must be able to support one another and handle conflict in such a way that it becomes constructive rather than destructive. Ashmos and Nathan (2002) also state that, the use of teams have expanded dramatically in response to competitive challenges. In fact, one of the most common skills required by new work practices is the ability to work as a team.

Robbins and Judge (2007) maintain that the key components -making up effective teams can be subsumed into four general categories. First are the resources and other contextual influences that make teams effective. The second relates to the team’s composition. The third category is work design. Finally, process variables reflect those things that go on in the team that influences effectiveness, as indicated in Figure 1.

To Heller (1997) he opines that the best culture for an organization is a team culture and that any large organization is a team of teams, so people who have to work together as a team, must also think together as a team. In other words Peeling (2005: 129-130) has it that the important thing in teams is for team member to respect team personalities and use their different skills properly. However, Gomez-Mejia (2001) in his study on team, in relation to productivity, identifies the skills necessary for team members to increase productivity as being technical skills, Administrative skills and interpersonal skills.

Furthermore, Douglas (2003) points out that as we all interact with people to a greater or lesser extent in our everyday lives, there is a tendency to assume that people management skills are merely an extension of our natural abilities. In fact people management skills are the most difficult and rare type of skills but to a large extent, it can be learned. Cloke and Goldsmith (2002) refer to the special skills required for successful teamwork and listed ten skills team members can develop in order to build innovative self – managing teams. All these skills are interrelated, mutually reinforcing and dependent upon each other, and they include;

1. Skill of self-management: Overcoming obstacles together and in the process building a sense of ownership, responsibility, commitment and efficiency within each team member.
2. Skills of communication: Collaboratively developing their skills in becoming better listeners, commiserating with others, reframing communications so they can be heard, and communicating honestly about things that really matter.
3. **Skill of leadership:** Creating opportunities for each member to serve as leader. Employees need to be skilled in linking, organizing, coordinating, collaborating, planning, facilitating, coaching, and mentoring.

4. **Skill of responsibility:** Everyone is personally responsible not only for their own work, but for the work of every other member of the team. Team members have to exercise responsibility in order to become self-managing.

5. **Skill of supportive diversity:** Collaborative experiences allow team members to overcome prejudices and biases and not create winners and losers, reject outsiders or mistrust people who are different.

6. **Skills of feedback and evaluation:** Essential to improving learning, team communication and the quality of products, processes and relationships. In a true team environment, self-critical perspectives are expected, welcomed, acknowledged, and rewarded.

7. **Skill of strategic planning:** To identify challenges and opportunities collaboratively and influence the environment in which problems emerge. Strategic planning encourages employees to think long-term, be proactive and preventative and focus on solutions rather than problems.

8. **Skill of shaping successful meetings:** Team meetings can be streamlined and made shorter, more satisfying and more productive, and result in expanded consensus.

9. **Skill of resolving conflicts:** Encouraging team members to improve skills in problem-solving, collaborative negotiation, responding to difficult behavior and conflict resolution.

10. **Skill of enjoyment:** Most team members enjoy working together to accomplish difficult tasks. Their pleasure derives from meeting high performance challenges and producing results that benefit themselves and their teams, organizations, and communities.

In a concluding note, O'Rourke (2009) advocate team communication framework, that provide tools for developing the communication skills people need in order to be effective team members and achieve results. Team communication incorporate and emphasizes the cultural context – both internal and external for teams. He advised that teams need a communication protocol (rules for managing team or communication) that they understand and use. He developed a system model for team communication. The system model below shows that communication in teams start within individuals and incorporates team members, which will now expand to the organization. Finally, the communication emphasizes the cultural context of the team (Figure 2).
There are so many theories about teams, but this work is based on the theories of these authors:

1. McGregor Characteristics of effective Team: McGregor and his colleagues developed lists of characteristics for effective and ineffective teams. McGregor (1960) his list focuses on management of teams. Other scholars that conducted research similar to his includes, Argyris (1965) who focuses on organizational effectiveness that impact inter-personal competence of team members. He also looks at how the organization supports positive norms, such as openness, experimentation, individuality, thoughtfulness, concern, internal commitment, candidness, encouraging candidness, assisting with experimentation, and encouraging openness.

2. Hackman and Oldham team effectiveness: To Hackman and Oldham (1980) team effectiveness comprises all of the following; the teams’ ability to produce an output that meets or exceeds an organization’s performance standards or expectations, the team experience serving more to satisfy than frustrate the personal needs of team members, and the team’s ability to work together on future assignments as a result of the social process engaged in to carry out current tasks.

The study reviews the work of other authors in line with the objective.

Teamwork approach, sustenance and viability

In a study conducted in Germany at German Sociological Research Institute, at the University of Gottingen, by Kuhlmann et al. (2004). The study emphasized the importance of correct and comprehensive implementation of teamwork, and proposes a “Coherence Thesis”, founded on making close links between an organization’s various dimensions. “The key issues are the integration of work organization and teamwork with the overall company organization and payment system.

Also in another study conducted in Portuguese by Curral and Chambel (1999), investigating the efficiency of teams in Service Sector Companies, the study emphasized the need for what is known as participation security so that the teams function well and proposes innovation ideas. The study examined 26 teams accounting for 70 individuals in total, who work for seven publicity agencies in the Lisbon region.

Oej and Wiezer (2002) in their study, examined teamwork from the perspective of participation, work intensity, learning new things and multi-skilling and autonomy. The empirical result showed that working in a team is closely associated with an environment typical of the possibility to learn new things and job enlargement attributes. Successful organizations today know that teams make a big difference in achievement of strategic goals. That is why the CMOE (2010) advocate for team that are strong, flexible, and productive to be the competitive edge needed to produce better results, achieve higher quality, lower cost both for the organizations and the customers. Hence, building an effective team requires applying practical skills to maximize team performance and development.

More also, in their study “Team Conflict Management and Team effectiveness: The Effects of task interdependence and team identification”. Somech et al. (2009) explored the dynamics of conflict management as a team phenomenon. The study examined how the input variable of task structure (task interdependence) is related to team conflict management style (cooperative versus competitive) and to team performance, and how team identity moderate these relationships. Results revealed that a high level of team identity, task, and interdependence was positively associated with the cooperative style of conflict management, which in turn
fostered team performance.

METHODOLOGY

The study adopted the survey research design, in which ten (10) manufacturing companies in the South-Eastern Nigeria were studied. The population of the study was 13,623, and the sample size was calculated to be 598 using the Taro Yamane’s formula. The sampling selection was the stratified sampling method.

A self-developed structured questionnaire and oral interview guide were the research instruments used for the study. The sample size was distributed among the ten manufacturing organizations in the Southeast under study by the proportionality formula to get 619. Out of the six hundred and nineteen (619) copies of questionnaire that were administered, five hundred and thirty-three copies (533) were correctly filled and returned, giving 86.1% success rate while eighty six copies were incorrectly filled or not returned, giving 13.9% failure rate. Data collected were presented descriptively using charts, simple frequency and percentage distribution, mean and standard deviation. The hypotheses were tested using the Z test statistic.

RESULTS

Table 1 show that the respondents agree that the use of teamwork approach to change management in manufacturing organisation is effective. This is represented in the responses of 194 (36.4%) respondents who noted strongly effective, 212 (39.8%) respondents who noted effective, 11 (2.1%) respondents who were undecided and 116 (21.8%) respondents who noted ineffective, as well as the mean response score of 3.91±1.12.

As indicated from the responses of 240 (45%) respondents who strongly agreed, 129 (24.2%) respondents who agreed, 94 (17.6%) respondents who were undecided, 38 (7.1%) respondents who disagreed and 32 (6%) respondents who strongly disagreed and the mean response score of 3.95±1.21, the respondents are of the opinion that teamwork approach to change management holds good prospects for sustenance and viability in Nigerian manufacturing organisation. With mean response of 4.78±0.48 and 483 (81.2%) respondents strongly agreeing, 85 (15.9%) respondents agreeing and 15 (2.8%) respondents being undecided, the respondents agree that clear objective and agreed goals are characteristics that are evidenced in any effective team.

As 331 (62.1%) respondents strongly agreed, 157 (29.5%) respondents agreed, 35 (6.6%) respondents were undecided and 10 (1.9%) respondents disagreed as well as the mean response of 4.52±0.70, the respondents are of the opinion that appropriate leadership is a characteristics evidenced in any effective team. From the responses of 172 (32.3%) respondents who strongly agreed, 100 (18.8%) respondents who agreed, 40 (7.5%) respondents who were undecided and 221 (41.5%) respondents who disagreed and the mean response of 3.42±1.32, the respondents indicated that trust and support are characteristics that are evidenced in any effective team. Regular review relations was indicated to be a characteristic that is evidenced in any effective team by 138 (25.9%) respondents who strongly agreed, 124 (23.3%) respondents who agreed and 271 (50.8%) respondents who were undecided as well as the mean response score of 3.75±0.84. Having a mean response score of 4.06±0.70, and 125 (23.5%) respondents strongly agreeing, 328 (61.5%) respondents agreeing, 70 (13.1%) respondents being undecided, 5 (0.9%) respondents disagreeing and another 5 (0.9%) respondents strongly disagreeing, conflict and cooperation was indicated to be a characteristics that are evidenced in any effective team.

Teamwork approach to change management holds good prospects for viability and sustainability. This is captured in the responses of 207 (38.8%) respondents who strongly agreed, 311 (58.3%) respondents who agreed, 10 (1.9%) respondents who were undecided and 5 (0.9%) respondents who disagreed as well as the mean response score of 4.34±0.61.

Having mean responses > 3.5, the respondents agreed that skill of communication (4.77±0.48), skill for leadership (4.57±0.1), skill for resolving conflict (4.59±0.60) and skill for feedback and evaluation (4.16±0.67) are skills required for an effective team. From the responses of 303 (56.8%) respondents, 147 (27.6%) respondents, 72 (13.5%) respondents, 6 (1.1%) respondents and 5 (0.9%) respondents who strongly agreed, agreed, were undecided, disagreed and strongly disagreed respectively, the application of teamwork oriented-approach in management of organisational change is effective. The respondents agree that strategy for teamwork approach to change in their organisation is very effective. This is captured in the responses of 407 (76.4%) respondents who strongly agreed, 81 (15.2%) respondents who agreed, 40 (7.5%) respondents who were undecided and 5 (0.9%) respondents who disagreed.

Test of hypothesis

Teamwork approach to change management in Nigeria manufacturing organizations to a large extent holds good prospects for sustenance and viability. In testing this hypothesis, the data presented in Table 1 were tested using Z-test (Table 2). Decision rule if $Z_{cal} > Z_{critical}$, reject the null and accept the alternative hypothesis, otherwise vice-versa.

DISCUSSION

The calculated Z-value is 5.763. This value is greater than the critical Z-value of 1.96. Therefore, the null hypothesis is rejected and the alternative hypothesis accepted.
Table 1. Extent to which teamwork approach to change management holds good prospects for sustenance and viability in Nigerian manufacturing organisations.

| Question                                                                 | Options                                                                 | SA (%) | A (%)  | U (%)  | D (%)  | SD (%) | Mean   | Std. Dev. |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|-----------|
| Effectiveness of the use of teamwork approach to change management       | (strongly effective; effective; undecided; ineffective; strongly ineffective) | 194 (36.4) | 212 (39.8) | 11 (2.1) | 116 (21.8) | 0 (0.0) | 3.91    | 1.12      |
| Teamwork approach to change management holds good prospects for           | sustainance and viability in Nigerian manufacturing organisation       | 240 (45.0) | 129 (24.2) | 94 (17.6) | 38 (7.1)  | 32 (6.0) | 3.95    | 1.21      |
| Characteristics that are evidence in any effective team                  |                                                                         |        |        |        |        |        |        |           |
| Clear objective and agreed goals                                         |                                                                         | 433 (81.2) | 85 (15.9) | 15 (2.8)  | 0 (0.0)  | 0 (0.0) | 4.78    | 0.48      |
| Appropriate leadership                                                   |                                                                         | 331 (62.1) | 157 (29.5) | 35 (6.6)  | 10 (1.9) | 0 (0.0) | 4.52    | 0.70      |
| Trust and support                                                        |                                                                         | 172 (32.3) | 100 (18.8) | 40 (7.5)  | 221 (41.5) | 0 (0.0) | 3.42    | 1.32      |
| Regular review relations                                                 |                                                                         | 138 (25.9) | 124 (23.3) | 271 (50.8) | 0 (0.0)  | 0 (0.0) | 3.75    | 0.84      |
| Conflict and cooperation                                                 |                                                                         | 125 (23.5) | 328 (61.5) | 70 (13.1) | 5 (0.9)  | 5 (0.9) | 4.06    | 0.70      |
| Teamwork approach to change management holds good prospects for viability |                                                                       | 207 (38.8) | 311 (58.3) | 10 (1.9)  | 5 (0.9)  | 0 (0.0) | 4.34    | 0.61      |
| and sustainability                                                       |                                                                         |        |        |        |        |        |        |           |
| Skills required for an effective team                                    |                                                                         |        |        |        |        |        |        |           |
| Skill of communication                                                   |                                                                         | 426 (79.9) | 92 (17.3) | 15 (2.8)  | 0 (0.0)  | 0 (0.0) | 4.77    | 0.48      |
| Skill for leadership                                                     |                                                                         | 337 (63.2) | 161 (30.2) | 35 (6.6)  | 0 (0.0)  | 0 (0.0) | 4.57    | 0.61      |
| Skill for resolving conflict                                              |                                                                         | 342 (64.2) | 161 (30.2) | 30 (5.6)  | 0 (0.0)  | 0 (0.0) | 4.59    | 0.60      |
| Skill for feedback and evaluation                                        |                                                                         | 150 (28.1) | 338 (63.4) | 25 (4.7)  | 20 (3.8) | 0 (0.0) | 4.16    | 0.67      |
| The application of teamwork oriented-approach in management of organizational change is effective strategy for teamwork approach to change in your organization is very effective |        |        |        |        |        |        |        |           |
|                                                                          |                                                                         | 303 (56.8) | 147 (27.6) | 72 (13.5) | 6 (1.1)  | 5 (0.9) | 4.38    | 0.83      |
|                                                                          |                                                                         | 407 (76.4) | 81 (15.2)  | 40 (7.5)  | 5 (0.9)  | 0 (0.0) | 4.67    | 0.65      |

Source: Field Survey, 2014.

Hence, teamwork approach to change management in Nigeria manufacturing organizations to a large extent holds good prospects for sustenance and viability. This result is in line with the findings by Kuhlmann et al. (2004) and Oeij and Wiezer (2002) who noted that the key issues are the integration of work organization and teamwork with the overall company organization and payment system, and thus successful organizations today know that teams make a big difference in achievement of strategic goals.

Conclusions

The major findings of this study were that teamwork approach to change management in manufacturing organizations to a large extent holds good prospects for sustenance and viability. This being so because these prospects are based on the characteristics that every effective team has. These Nigeria characteristics are clear objective and agreed goals, appropriate leadership, trust and support, regular review relations, and conflict and cooperation. To exhibit these characteristics that will ensure that the team is effective, it is paramount that the team possesses the skills of communication, leadership, conflict resolution, and feedback and evaluation. When these are done, the application of teamwork oriented-approach in the management of organizational change will be very effective, not minding the unique attributes of such organization. The study concludes that teamwork has the prospect of making manufacturing organizations very effective, viable and sustainable.
Specifically, it has the benefits of improved productivity and product quality, innovativeness and manpower development. Teamwork sustenance, which entails the involvement of employee in any change process discussion and implementation, has the advantage of curbing resistance to change, thereby giving the organization the opportunity to be innovative, which will ensure its viability, sustainability and survival. Organizations achieve sustainability and viability when change is effectively managed. This is only achievable when the organization has the ability to and can cope with challenges, unique to the organization, that are encountered in the course of change management.

**Table 2.** One-sample Kolmogorov-Smirnov (Z) test result for hypothesis.

| Variable                  | Mean response on teamwork approach |
|---------------------------|-----------------------------------|
| N                         | 533                               |
| Normal Parameters\(^a,b\) | Mean 4.2759 Std. Deviation 0.35049 |
| Most Extreme Differences  | Absolute 0.150 Positive 0.150 Negative -0.106 |
| Kolmogorov-Smirnov Z      | 5.763                             |
| Asymp. Sig. (2-tailed)    | 0.000                             |

\(^a\)Test distribution is Normal; \(^b\)Calculated from data.

**LIMITATIONS OF THE STUDY**

In carrying out a study of this nature, the following constraints were encountered:

**Finance:** The study covered ten manufacturing organizations in South Eastern part of Nigeria. A lot of travelling was involved in visiting these organizations while distributing questionnaires and interviewing the respondents. Also a lot of secretarial work was required in typing, printing, photocopying and duplicating materials. All these require funds to accomplish them.

**Time:** The researcher due to her engagement in office work and family had to combine this work with other family and office work load.

**The attitude of some respondents:** Some of the respondents claimed that they were too busy and refused to accept our questionnaire. Even some that accepted the questionnaire refused to answer some questions in the instrument.

**Data:** All the materials needed for this work could not be gotten because as the respondent was gathering information for the work, new materials were been rolled out. Notwithstanding, the respondent visited many libraries both locally and internationally, organizations under study and made use of the internet to gather enough data needed for this work. However, in all, we obtained responses which we consider adequate for the study.

**SUGGESTION FOR FURTHER STUDIES**

While this study was thoroughly conducted, it is not conclusive in itself as there are areas of this study that should be exhaustively research on. To this end, it is suggested that further studies should be carried on: "the relevance of teamwork as a tool in implementing change in the Nigerian service industry" and "a multivariate analysis of change management and teamwork approach as predictors to process optimization in manufacturing organizations in Nigeria".

**RECOMMENDATIONS**

Based on the findings, the study recommended that,

1. For an improved product design with high quality that will appeal to customers’ satisfaction any day, teamwork should be encouraged in Nigerian manufacturing organizations.
2. It is also recommended that team incentives and rewards should be strictly adhered to in order to boost team performance and effectiveness.
3. Team members should be carefully selected so that members with requisite skills are selected to work towards achieving the required objectives.
4. Team members should interact with one another in order to understand their weaknesses and strengths, by doing so, they will build trust and support for each other, which will make their team more cohesive.
5. Managers of manufacturing organizations should encourage employees to undergo constant training, development, workshops and seminars. This is to keep them abreast of current issues and changes as it concerns their organizations, as such they will be proactive rather than reactive in dealing with challenges that might come up.
CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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