TEAM SPIRITED APPROACH FOR INNOVATION AND SUCCESS IN CHANGE MANAGEMENT IN NIGERIAN MANUFACTURING ORGANIZATIONS: STRATEGIES, CHALLENGES AND PROSPECTS

Okechukwu Elizabeth Uzoamaka1† --- Ejionueme Ngozi2--- Enudu Titus Okey3

1,2,3 Enugu State University of Science and Technology, Enugu, Nigeria

ABSTRACT

The growing complexities and challenges of manufacturing environment characterized by harsh economic realities, unstable and proliferation of government policies, dwindling fortunes, globalization and the forces of competition have imposed considerable responsibilities on manufacturing organizations to either swim or sink. Whatever the degree of change, its implementation can still pose large problems for organizations and their staff. An organization will outperform its competitors if it effectively uses its workforce unique combination of skills and abilities to exploit environmental opportunity and neutralize threats. This paper systematically examines how to build a positive team spirit in the face of change in manufacturing organizations in Nigeria and the extent to which the use of teams in management of organizational change can be effective. The research methodology used was survey research. Data collected were analyzed using z-test and chi-square parametric statistics. The findings of this study suggest that leaders can challenge, motivate, and empower their teams during change are successful. The researchers recommend that managers should share their belief, knowledge and objectives with those to be affected by change. This can involve a major and expansive program of training, face-to-face counseling, group meetings and the publication of memos and reports. The employees who might try to resist change in the organization should be incorporated in the planning and implementing the change. Integration and collaboration can have the effect of minimizing opposition and encouraging commitment to the change efforts. The implication of this study is that unless people are involved, committed and prepared to adapt and learn, organizational objectives, plans and future desired states may likely meet resistance.

© 2015 AESS Publications. All Rights Reserved.

Keywords: Team, Change, Challenges, Prospects, Management, Strategies.

† Corresponding author
DOI: 10.18488/journal.1/2015.5.8/1.8.446.460
ISSN(e): 2224-4441/ISSN(p): 2226-5139
© 2015 AESS Publications. All Rights Reserved.
Contribution/ Originality

The study contributes in the existing literature by maintaining that organizations which fail to recognize human assets critical to the sustenance of its survival will fail. Organization that places high premium on the quality of its employees and develop them accordingly will stand a good change to achieving strategic advantage.

1. INTRODUCTION

The issues of mergers, downsizings and acquisitions and other changes involving reorganization are what most organizations are facing in order to grow, survive and thrive. These forces present different challenges and require that all teams across the organization involve in handling these challenges.

Corporate plans, strategic marketing, new technology and capital investment are very important, but physical and emotional commitment of the people who are to use the tools and execute the plans will determine whether the companies will sink or soar. Because many organizations are challenged by volatile environments in which there is constant change, for them to survive they need to embrace and adapt to change quickly and effectively. The executive or the manager must facilitate and enable change, more especially in understanding the current situation from an objective standpoint to helping people to understand the reason, aims, and ways to responding positively in line with employees’ capabilities and situations.

1.1. Problem of the Study

For new work method and practices to be implemented successfully, it is highly dependent upon the willingness and effective co-operation of employees, management and unions. A team that is not functioning properly can cause unnecessary disruption, unproductive and failure. The implementation of the change can still cause large problems for the organization and their employees. Different interest groups can become obstacles to achieving the change.

To this end, it would be pertinent to investigate how to build positive team spirit in the face of change in manufacturing organizations for innovation and success.

1.2. The Main Objectives of the Study

The study focuses on the following main objectives:

1. To determine the best approach to build positive team spirit in face of change in Nigerian Manufacturing organizations.
2. To determine if the application of team spirit is effective in the management of change in Nigerian manufacturing organizations.
3. To find out if significant relationship exists between organizations’ ability to survive and team spirit approach to management of organizational change.
2. LITERATURE REVIEW

2.1. Organizational Change

Organizational change is the way organizations thrive, grow and stabilize rather than wither and decline. Yet achieving change presents one of the most intransigent problems for both organizations and individuals. The areas in which pressure for change seems most powerful are people, technology, information processing, communication and competition. Change management entails a thoughtful planning and sensitive implementation, and consultation with, and involvement of people affected by the changes to get the desired results.

McAfee-Bruce and Champagne (1983) assert that forces of change, also known as change drivers or change initiators can either be external or internal. The external change drivers are those forces that are outside the control of management but have made change imperative. The organization’s physical, financial and human resources are obtained from outside and the clients or customers for the organization’s products and services are also there. Anything that interferes with or modifies that environment can therefore affect the organization’s operations and cause pressure for change.

Mullins (1996) opines that internal change forces are pressures for change, which come from within the organization for which managers have reasonable measure of control. Mullins goes further to state that both external and internal forces for change, are not found in isolation. They are interrelated with one another. More often than not, external change drivers create internal change drivers, which lead to organizational change.

McKee (2005) asserts that one of the significant essentials for success during change is teambuilding. Leaders that can challenge, motivate, and empower their teams through change are successful (Gomez-Mejia et al., 2001). These authorities opine that effective human polices can influence an organization’s competitive position by controlling cost, improving quality, and creating distinctive capacities. Change may be forced on an organization or an organization may change in response to the environment or for an internal need.

2.2. Team

Katzenback and Smith (1993) define a team as a small number of people with complementary skills who work toward common goals for which they hold themselves mutually accountable. In some organization teams can be organized as departments. Several types of teams are used in organizations today, but the most important is the Self-Managed Team (SMT). Organizations are using self-managed work teams to improve the quality of their products and services, increase productivity and to minimize operating costs (Hoer, 1989).

2.3. Team Spirit

The catalyst every organization needs to achieve outstanding performance is team spirit. MacMillan Dictionary defines team spirit as "an enthusiastic attitude towards working or playing together with other people as a team.” Bailey-Scudamore (1991) opines that if teams are to be successful and perform effectively, there must be a spirit of unity and co-operation. Any group of people working toward a common goal can create a team spirited approach.
Adebayo (2006) advises team leaders to select team members who possess energy and enthusiasm. Those people will be spirited and help to create an equally spirited team in their members.

Kotler and Cohen (2012) and Kotler (2007) describe a detailed model for understanding and managing change. Each stage acknowledges a key principle regarding people's response and approach to change. Change happened because the players were led to "see" and "feel" the change. Kotler (2007) eight step change model can be summarized as:

(a) **Increasing urgency:** it is the leaders’ role to inspire people to move, make objectives real, workable and relevant.

(b) **Build the guiding team:** the right mix of people with needed mix of skills must be assembled in the right place with the right emotional commitment. Lofquist and Dawis (1969) posit that employees’ motivation levels and job satisfaction depend on the fit between their needs and abilities and the characteristics of the job and the organization.

(c) **Get the vision right:** the leader must establish a simple vision and strategy for the team and focus on emotional and creative aspects necessary to drive service and efficiency.

(d) **Communicate for buy-in:** Communication can help dissipate some fears of unknown elements.

(e) **Empowers action:** When those affected by the change participate in designing the change, resistance can be reduced.

(f) **Create short-term wins:** objectives that are easy to achieve should be set, and should be pursued. The current stages should be finished before starting new ones.

(g) **Don't let up:** the manager should foster and encourage determination and persistence.

(h) **Make change stick:** Reinforcing the value of successful change via recruitment, training, promotion, and separation.

The essence of Kotter's eight-step principles and message is that the reason why many change initiatives fail is that they rely too much on "data gathering, analysis, report writing, and presentations" instead of a more creative approach aimed at grabbing the "feelings that motivate useful action."

2.4. Strategies for Building Team Spirit

O'Connor (1996) identified three key elements to leading team effectively:

(1) **Facilitate Team Development:** To facilitate team development, leader should: (i) establish a common vision for the team (ii) communicate the team action plan (iii) clarify individual roles and objectives (iv) gain commitment to plans and strategies and (v) build trust between team members.

(2) **Free the potential of each team Member:** To free the potential of individuals, the leader needs to remove organizational and personal barriers to perform.

(3) **Inspire the team to achieve its goals:** inspirational leaders should capture hearts, minds and souls of his subordinates. A combination of vision and trust makes an inspirational leader.

From the study conducted by D’Innocenzo and Jack (2005) on team effectiveness, ten (10) elements that are evident in any effective team were identified.
1) **Goal Clarity**: Members understand team goals and commit themselves to achieving them.

2) **Recognition/Cooperation**: Members make their own individual contributions by cooperating with one another in solving team problems.

3) **Trust/Support Cohesiveness**: Members suppose to have confidence in one another and trust and support each other.

4) **Role Clarity**: Responsibilities and expectations for each team member are clearly spelt out, communicated and acknowledged.

5) **Means for Solving Role Conflict**: When conflict arises, team member deliberate on issues and resolve conflicting situations.

6) **Participation/Influence/Feedback**: There should always be an open brainstorming where everyone is encouraged to actively participate in discussions.

7) **Meeting Effectiveness**: Team meetings should focus on relevant issues and contribute to the making of sound decisions.

8) **Conflict Management**: Team members should discuss differences of opinion on conflicts openly.

9) **Energy/Satisfaction**: Members should feel a sense of accomplishment and satisfaction for their contributions.

10) **What’s Important Now**: The leader eliminates unnecessary activities and shelters the team from outside distractions as much as possible.

### 2.5. Challenges of Team Approach to Change Management

Every team has challenges, and if not addressed, they will affect team success to various degrees, as they wear down morale and interfere with getting the job done. Longenecker and Neubert (1998) assert that teams can be costly, their discussions may lead to indecisions, and they have the tendency to be self-destructive when one person dominates the meetings. Moreover, a small group of team members may insist on the acceptance of their unwarranted view against the will of the majority. Bank (1994) concludes that the major team problem is that of conformity, where within the group there is excessive conformity to method.

Weihrich and Koontz (2005) opine that managing resistance is like managing organizational conflicts. Agbo (2010) asserts that one of the greatest challenges for teams is the struggle and resulting tension that arises from a group of individuals coming together to work as a team towards a common purpose. Typical issues that arise from the joining of a group of individuals are (i) interpersonal differences leading to misunderstandings (ii) power struggles and competing agenda (iii) members who appear to reject new ideas and bring a constant sense of negativity (iv) lack of adequate support and resources (v) ineffective leadership (vi) members resistant to change (vii) not enough complimentary skills on the team members.

### 2.6 Prospects of Effective Team Spirit to Change Management

Mullins (1996) opines that teams are used for decisions making, negotiating, and bargaining. Teams are powerful in changing behaviour, attitudes, and values and in disciplining members. As noted by Weihrich and Koontz (2005), that the important reasons for the use of teams are: (a) group
deliberation and judgment (b) coordination of department, plans, and policies; (c) transmission and sharing information; and (d) motivation through participation. Bateman and Zeithaml (1990) opine that teamwork can increase competitiveness by: (i) improving productivity; (ii) improving quality and encouraging innovation; (iii) taking advantage of the opportunities provided by technological advantages; and (iv) improving employees motivation and commitment.

Whitfield et al. (1995) assert that team decision-making offer a number of advantages, which include (1) motivation through participation; (2) combined opinions of members (3) securing cooperation of staff; (4) training and manpower development; and (5) exchange of information.

Mcfarland (1979) maintains that teams help to tackle problems of large scale and complex operations by inputs from major sectors of the organization, with specialists and experts, contributing their knowledge and points of view. This would make the managers to master how to manage teams by networking a team, understanding the need for support, dealing with problem individuals, sharing information outside the team, communicating from inside, maintaining contact as observed by Heller and Hindle (1998).

2.7. Effective Leadership in Positive Team

Leadership is required because someone has to point the way and the same person has to ensure that everyone concerned gets on. Robin (1983) defines leadership as the ability to influence a group towards the achievement of goals. Accordingly, effective leaders work with subordinates and co-workers to create visions and strategies as means to achieve the organization’s goals. Armstrong (1990) opines that leadership is getting things done through and with people. Fielder (1964) defines a leader as the individual in the group who has the task of directing and coordinating relevant group activities, and in groups that do not have a designated leader, the leader is the one who carries the primary responsibilities for performing these functions in the group. In achieving such purposes, leaders may engage in any of the following activities, coordinating, controlling, directing, guiding or mobilizing the efforts of others. Fielder (1964) also defines leadership effectiveness as the success of the leader in achieving the organization’s goals. Arguably, if the interpersonal needs of group members are not satisfied, the leader may fail to spur the group to achieve its task (Ugwu, 2011). To some extent the leader’s effectiveness in the interpersonal area can be judged by the groups’ practical achievement. In a business context, the practical criteria for judging leadership effectiveness include: (a) the leader’s ability to achieve output targets, (b) good financial results, and (c) the state of morale and discipline within the leader’s area of command.

3. RESEARCH METHODOLOGY

The study was carried out in Enugu state of Nigeria between 2010 and 2013. The sample was drawn from two manufacturing organizations. The population of study comprises of all the senior staff working in the organizations. This group of people constitutes mostly top and middle level management of these organizations who are responsible for the performance of teams, task forces, are always included in teams and committees. This group was chosen on purpose as most of them are involved in management of change in organization.
The data used in this study were gathered from both primary and secondary sources. The primary data were gathered with the aid of structured questionnaire. The study adopted stratified random sampling technique and Yamane (1968) formula was used to determine a sample size of two hundred and seventy-one (271) respondents from a population of eight hundred and fifteen (815). Out of the 271 copies of the questionnaire distributed to these organizations, 245 copies representing 90% of the questionnaire administered were returned and accepted for analysis. The data obtained were analyzed using frequency distribution tables, percentages, mean and the hypotheses tested using z-test and chi-square. The likert-type scale which has five levels or category was adopted and used, namely: strongly agree; (SA); Agree (A); Undecided (UD); Disagree (DA); and Strongly Disagree (SD) Each level is assigned a number ranging from 5 (SA) to 1 (SD). 3.00 were computed as the mean value. It means that any factor or variable with a mean of 3.00 or above may be accepted while all others with a mean below 3.00 would be rejected. We had postulated the following hypotheses to guide the research.

H₁: The best approach to manage change in Nigerian manufacturing organizations is to build positive team spirit in the face of change.

H₂: Application of team spirit is significantly effective in the management of change in the manufacturing organizations.

H₃: Significant relationship exists between organizations ability to survive and team spirit approach to management of organizational change.

4. DATA ANALYSIS

The data collected were analyzed based on the specific objectives.

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Options</th>
<th>SA (5)</th>
<th>A (4)</th>
<th>UD (3)</th>
<th>SD (2)</th>
<th>D (1)</th>
<th>n</th>
<th>X</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select right mix of people with needed mix of skills</td>
<td>198</td>
<td>99</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>245</td>
<td>4.4</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Establish a simple vision and strategy for the team</td>
<td>201</td>
<td>83</td>
<td>0</td>
<td>12</td>
<td>20</td>
<td>245</td>
<td>4.4</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Empower members</td>
<td>161</td>
<td>93</td>
<td>0</td>
<td>19</td>
<td>43</td>
<td>245</td>
<td>4</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Clarify individual roles and objectives</td>
<td>99</td>
<td>134</td>
<td>3</td>
<td>52</td>
<td>28</td>
<td>245</td>
<td>3.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Communicate the team action plan</td>
<td>163</td>
<td>132</td>
<td>0</td>
<td>21</td>
<td>0</td>
<td>245</td>
<td>4.4</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Gain commitment to plans and strategies</td>
<td>160</td>
<td>77</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>245</td>
<td>4.6</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Dealing with group dynamics</td>
<td>28</td>
<td>50</td>
<td>55</td>
<td>12</td>
<td>100</td>
<td>245</td>
<td>2.5</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Source: filed survey 2013

In table 1 above, it was shown that mean responses from 3.00 and above were accepted as best approaches to building positive team spirit in face of change in Nigeria manufacturing organizations, one of the options was rejected.
Table 2. Mean Responses on Challenges of Team to Change Management

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Options</th>
<th>SA (5)</th>
<th>A (4)</th>
<th>UD (3)</th>
<th>SD (2)</th>
<th>D (1)</th>
<th>n</th>
<th>_X</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No one person feeling responsible for a decision</td>
<td>41</td>
<td>35</td>
<td>0</td>
<td>152</td>
<td>17</td>
<td>245</td>
<td>2.7</td>
<td>Rejected</td>
</tr>
<tr>
<td>2</td>
<td>Group conformity</td>
<td>78</td>
<td>138</td>
<td>0</td>
<td>9</td>
<td>20</td>
<td>245</td>
<td>4</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Interpersonal differences leading to misunderstandings</td>
<td>45</td>
<td>110</td>
<td>5</td>
<td>55</td>
<td>30</td>
<td>245</td>
<td>3.5</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Power struggles and competing agendas</td>
<td>55</td>
<td>76</td>
<td>10</td>
<td>94</td>
<td>10</td>
<td>245</td>
<td>3.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>lack of adequate support and resources</td>
<td>152</td>
<td>90</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>245</td>
<td>4.6</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Ineffective leadership in teams</td>
<td>89</td>
<td>132</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>245</td>
<td>4.1</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Resistance to change</td>
<td>30</td>
<td>149</td>
<td>0</td>
<td>51</td>
<td>15</td>
<td>245</td>
<td>3.5</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: filed survey 2013

In the above table 2, mean responses from 3.00 and above were accepted as challenges of team spirit approach to change management, while mean response below 3.00 was rejected.

Table 3. Mean response on the prospects of team spirit approach to change management

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Options</th>
<th>SA (5)</th>
<th>A (4)</th>
<th>UD (3)</th>
<th>D (2)</th>
<th>SD (1)</th>
<th>N</th>
<th>_X</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provide a pooling of resources</td>
<td>175</td>
<td>41</td>
<td>0</td>
<td>10</td>
<td>19</td>
<td>245</td>
<td>4.4</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Coordination of department, plans, and policies</td>
<td>131</td>
<td>91</td>
<td>2</td>
<td>15</td>
<td>6</td>
<td>245</td>
<td>4.3</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Increase competitiveness</td>
<td>107</td>
<td>124</td>
<td>0</td>
<td>4</td>
<td>10</td>
<td>245</td>
<td>4.3</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Training and manpower development</td>
<td>148</td>
<td>94</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>245</td>
<td>4.6</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Transmission and sharing information</td>
<td>152</td>
<td>90</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>245</td>
<td>4.6</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Combined opinions of members</td>
<td>91</td>
<td>135</td>
<td>0</td>
<td>19</td>
<td>0</td>
<td>245</td>
<td>4.2</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Securing cooperation of staff</td>
<td>99</td>
<td>134</td>
<td>3</td>
<td>52</td>
<td>28</td>
<td>245</td>
<td>3.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>8</td>
<td>Motivation through participation</td>
<td>169</td>
<td>23</td>
<td>0</td>
<td>35</td>
<td>18</td>
<td>245</td>
<td>3.5</td>
<td>Accepted</td>
</tr>
<tr>
<td>9</td>
<td>Dealing with resistance</td>
<td>33</td>
<td>47</td>
<td>51</td>
<td>16</td>
<td>98</td>
<td>245</td>
<td>2.6</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Source: field survey, 2013

In Table 3, mean responses from 3.00 and above were accepted as prospects of team spirit approach to change management. One of the options was rejected.
Table 4. Mean Responses on effectiveness of team spirit to change in Face of Change in Manufacturing Organizations

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Options</th>
<th>SA (5)</th>
<th>A (4)</th>
<th>UD (3)</th>
<th>D (2)</th>
<th>SD (1)</th>
<th>n</th>
<th>X</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improve quality</td>
<td>198</td>
<td>99</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>245</td>
<td>4.4</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Improve competitiveness</td>
<td>201</td>
<td>83</td>
<td>0</td>
<td>12</td>
<td>20</td>
<td>245</td>
<td>4.4</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Increase in interpersonal relations</td>
<td>55</td>
<td>20</td>
<td>37</td>
<td>34</td>
<td>99</td>
<td>245</td>
<td>2.1</td>
<td>Rejected</td>
</tr>
<tr>
<td>4</td>
<td>Improve innovation</td>
<td>161</td>
<td>93</td>
<td>0</td>
<td>19</td>
<td>43</td>
<td>245</td>
<td>4</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Improving productivity</td>
<td>99</td>
<td>134</td>
<td>3</td>
<td>52</td>
<td>28</td>
<td>245</td>
<td>3.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Improving employee motivation and commitment</td>
<td>163</td>
<td>132</td>
<td>0</td>
<td>21</td>
<td>0</td>
<td>245</td>
<td>4.4</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Encouraging innovation</td>
<td>160</td>
<td>77</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>245</td>
<td>4.6</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: filed survey, 2013

From table 4 mean responses from 3.00 and above were accepted indicating effectiveness of factors determinants of team spirit to change management were accepted, while mean responses below 3 were rejected.

Table 5. Mean Responses on Managerial Skills for Building Positive Team Spirit

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Options</th>
<th>SA (5)</th>
<th>A (4)</th>
<th>UD (3)</th>
<th>D (2)</th>
<th>SD (1)</th>
<th>N</th>
<th>X</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Selecting and developing the right people</td>
<td>187</td>
<td>53</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>245</td>
<td>4.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>Understanding team dynamics and encouraging good relationships;</td>
<td>191</td>
<td>42</td>
<td>0</td>
<td>2</td>
<td>10</td>
<td>245</td>
<td>4.5</td>
<td>Accepted</td>
</tr>
<tr>
<td>3</td>
<td>Delegating effectively</td>
<td>169</td>
<td>23</td>
<td>0</td>
<td>35</td>
<td>18</td>
<td>245</td>
<td>3.5</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>Motivating people</td>
<td>199</td>
<td>36</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>245</td>
<td>4.7</td>
<td>Accepted</td>
</tr>
<tr>
<td>5</td>
<td>Managing discipline and dealing with conflict</td>
<td>161</td>
<td>93</td>
<td>0</td>
<td>19</td>
<td>43</td>
<td>245</td>
<td>4</td>
<td>Accepted</td>
</tr>
<tr>
<td>6</td>
<td>Communicating</td>
<td>163</td>
<td>132</td>
<td>0</td>
<td>21</td>
<td>0</td>
<td>245</td>
<td>4.4</td>
<td>Accepted</td>
</tr>
<tr>
<td>7</td>
<td>Planning, making decisions, and problem solving</td>
<td>148</td>
<td>94</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>245</td>
<td>4.6</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: filed survey, 2013

From table 5 mean responses from 3.00 and above were accepted as managerial skills for building positive team spirit in face of change. None of the options was rejected.
4.1. Testing Hypotheses

Hypothesis I

The statistical technique that was used to test the above hypothesis is Z-test, which stated mathematically as follow:

\[ Z = \frac{P_a - P}{\sqrt{\frac{P_o (1 - P_o)}{n}}} \]

where:
- \( n \) = (sample size) 245
- \( x \) = no of successes
- \( P_o \) = sample proportion

Table 6. Best approach to manage change in Nigerian manufacturing organizations in face of change

<table>
<thead>
<tr>
<th>Options</th>
<th>No of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>221</td>
<td>90.20%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>24</td>
<td>9.80%</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100%</td>
</tr>
</tbody>
</table>

Field Survey: 2013

The table 6 indicates that 221 (90.20%) respondents strongly agreed that best approach to manage change is to build positive team spirit in the face of change, while 24 (9.80%) respondents strongly disagree. This was subjected to statistical testing using the Z test at a 5% (0.05) level of significance. Since \( P_o \) represents the probability that respondents strongly agreed that best approach to manage change is to build positive team spirit in the face of change. The hypothesis was formulated thus:

\[ H_0 \quad P = P_o \]
\[ H_1 \quad P \neq P_o \]

Level of significance = 5% or 0.05. Critical value \( Z (\alpha/2) \) and \(-Z (\alpha/2) = \pm 1.96\). Drawing from table 6 above:

- \( n = 245 \) (sample size)
- \( x = \) no of successes = 221
- \( P_o = \) sample proportion

\[ P_o = \frac{X}{n} = \frac{221}{245} = 0.90 \]

\[ P = 50\% = 0.5 \]

Calculate Z-test statistic:

\[ Z = \frac{0.9020 - 0.5}{\sqrt{\frac{0.90 (1 - 0.90)}{245}}} = 0.9020 - 0.5 \]
0.5 (1 - 0.5)

\[
\sqrt{\frac{0.5 (1 - 0.5)}{245}} = 0.402
\]

\[
\sqrt{0.0319} = 12.60
\]

Since \( Z = 12.60 > Z (\alpha/2) = 1.96 \), we reject the null hypothesis and accept alternative hypothesis that best approach to manage change is to build positive team spirit in the face of change.

**Hypothesis II**

<table>
<thead>
<tr>
<th>Options</th>
<th>No of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very effective</td>
<td>230</td>
<td>93.88%</td>
</tr>
<tr>
<td>Not effective</td>
<td>15</td>
<td>6.12%</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100%</td>
</tr>
</tbody>
</table>

Field Survey: 2013

The above table was considered necessary to determine the effectiveness of application of team spirit approach to change management. Two Hundred and thirty (230) or 93.88% of the respondents affirmed that team spirit approach to changed management is effective in the manufacturing, while 15 (6.12%) opined that it was not effective. This also was subjected to statistical testing using the Z test at a 5% (0.05) level of significance. Since \( P \) represents the probability that respondents affirmed that application team spirit approach to changed management is effective in the manufacturing. Then the hypothesis was formulated thus:

\( H_0 \) \( P = P_0 \)

\( H_i \) \( P \neq P_0 \)

Level of significance = 5% or 0.05. Critical value \( Z(\alpha/2) \) and \( -Z(\alpha/2) = \pm 1.96 \). Drawing from table 7 above:

\( n = 245 \) (sample size)

\( x = \) no of successes = 230

\( p = \) sample proportion

\[
\therefore P_o = \frac{X}{n} = \frac{230}{245} = 0.9388
\]

\[ P = 0.94 \]

\[ P = 50\% = 0.5 \]

Calculate Z-test statistic:

\[
Z = \sqrt{\frac{0.94 - 0.5}{\frac{P_o (1 - P_o)}{n}}}
\]

\[
\sqrt{\frac{0.94 - 0.5}{\frac{0.9388 \times 0.0612}{245}}} = 12.60
\]

Since \( Z = 12.60 > Z (\alpha/2) = 1.96 \), we reject the null hypothesis and accept alternative hypothesis that best approach to manage change is to build positive team spirit in the face of change.
\[
= \sqrt{\frac{0.94 - 0.5}{0.5 (1 - 0.5) / 245}}
= \sqrt{\frac{0.44}{0.0319}}
= 13.75
\]

Since \( Z = 13.75 > Z (x/2) = 1.96 \), we reject the null hypothesis and accept alternative hypothesis that application of team spirit is effective in the management of change in Nigerian manufacturing organizations.

**Hypothesis III**

To test this hypothesis contingency table is prepared based on the response to research question. The hypothesis is validated using chi-square test of association.

\[
X^2 = \sum \frac{(O - E)^2}{E}
\]

Where:
- \( E \) = Expected frequency
- \( O \) = Observed frequency
- \( \Sigma \) = Summation sign

A contingency table is constructed to calculate the expected frequency, using the formula

\[
E = \frac{\text{roll total} \times \text{column total}}{\text{Overall total}}
\]

Degree of freedom is given by \((R - 1)(C - 1)\) at 5% level of significance.

**Decision Rule**

We shall reject the null hypothesis and accept the alternative hypothesis if the calculated value is greater than the critical table value, or we accept the null hypothesis if the critical value is greater than the calculated value.

**Table-8. Significant Relationship Exists Between Organization Ability to Survive and Team Spirit Approach to Change Management**

<table>
<thead>
<tr>
<th>Responses</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree (SA)</td>
<td>101</td>
<td>33</td>
<td>134</td>
</tr>
<tr>
<td>Agree (A)</td>
<td>63</td>
<td>27</td>
<td>90</td>
</tr>
<tr>
<td>Undecided (UD)</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Disagree (D)</td>
<td>10</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>Strongly disagree (SD)</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>65</td>
<td>245</td>
</tr>
</tbody>
</table>

**Source:** Field survey, 2013
Table-9. 5 X 2 Contingency Table

<table>
<thead>
<tr>
<th>Responses</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree (SA)</td>
<td>101 (98.45)</td>
<td>33 (35.55)</td>
<td>134</td>
</tr>
<tr>
<td>Agree (A)</td>
<td>63 (66.12)</td>
<td>27 (23.88)</td>
<td>90</td>
</tr>
<tr>
<td>Undecided (UD)</td>
<td>2 (2.20)</td>
<td>1 (0.80)</td>
<td>3</td>
</tr>
<tr>
<td>Disagree (D)</td>
<td>10 (8.82)</td>
<td>2 (3.18)</td>
<td>12</td>
</tr>
<tr>
<td>Strongly disagree (SD)</td>
<td>4 (4.41)</td>
<td>2 (1.59)</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>65</td>
<td>245</td>
</tr>
</tbody>
</table>

Source: Field survey, 2013

The degree of freedom is given by \((R-1)(C-1)\):  \(R = \text{row}, C = \text{column}; \) at 5% level of significance.

\[
\text{df} = (R-1)(C-1)
\]

\[
\text{df} = (5-1)(2-1)
\]

\[
\text{df} = 4 \times 1 = 4
\]

The critical value of chi-square at 0.05 level of significance and df = 4 is 9.488.

Table-10. Computed chi-square \((x^2)\) for hypothesis III

<table>
<thead>
<tr>
<th>O</th>
<th>E</th>
<th>O - E</th>
<th>(0 - E^2)</th>
<th>(\frac{0 - E^2}{E})</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>98.45</td>
<td>2.55</td>
<td>6.5025</td>
<td>0.0660</td>
</tr>
<tr>
<td>63</td>
<td>66.12</td>
<td>-3.12</td>
<td>9.7344</td>
<td>66.12</td>
</tr>
<tr>
<td>2</td>
<td>2.20</td>
<td>-0.2</td>
<td>0.04</td>
<td>0.0182</td>
</tr>
<tr>
<td>10</td>
<td>8.82</td>
<td>1.18</td>
<td>1.3924</td>
<td>0.1579</td>
</tr>
<tr>
<td>4</td>
<td>4.41</td>
<td>-0.41</td>
<td>0.1681</td>
<td>0.0381</td>
</tr>
<tr>
<td>33</td>
<td>35.55</td>
<td>-2.55</td>
<td>6.5025</td>
<td>0.1829</td>
</tr>
<tr>
<td>27</td>
<td>23.88</td>
<td>3.12</td>
<td>9.7344</td>
<td>0.4076</td>
</tr>
<tr>
<td>1</td>
<td>0.80</td>
<td>0.2</td>
<td>0.04</td>
<td>0.05</td>
</tr>
<tr>
<td>2</td>
<td>3.18</td>
<td>-1.18</td>
<td>1.3924</td>
<td>0.4379</td>
</tr>
<tr>
<td>2</td>
<td>1.59</td>
<td>0.41</td>
<td>0.1681</td>
<td>0.1057</td>
</tr>
</tbody>
</table>

\[\Sigma X^2 \text{calculated} = 67.5843\]

Decision: since the calculated value of 67.5843 is greater than the critical value of \(x^2 = 9.488\), the alternative hypothesis that states significance relationship exists between organization ability to survive and team spirit approach to change management is accepted.

5. FINDINGS

The result of the first hypothesis agreed that best approach to manage change is to build positive team spirit in the face of change. This showed that leaders work with subordinates and co-workers to create visions and strategies as means to achieve the organization’s goals in the face of change.
It was indicated that the application of team spirit approach to change management is effective in manufacturing organizations. It was found that the important reasons for the use of teams are for coordination of departments, plans, and policies, transmission and sharing information. Team spirit can increase competitiveness.

It was also found out that significant relationship exists between organization ability to survive and team spirit approach to change management.

6. CONCLUSION

Competitive advantage can be obtained with a high quality work force that enables organizations to compete on the basis of market responsiveness, product and service quality, differentiated products and technological innovations. Managers should share their perspective, knowledge and objectives with those affected by change. This can involve a major and expansive program of training, face-to-face counseling, team meetings, and empowerment. People need to be informed about the nature of the problems necessitating change. The cause of resistance may be based on conflicts, misunderstanding and inaccurate sharing of information.

REFERENCES


