An Empirical Investigation into the Impact of Change Management on Selected Manufacturing Firms in South East Nigeria

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Abstract
This paper seeks to investigate the effectiveness of change management and the level of commitment of top management of manufacturing firms in South Eastern Nigeria. Data were collected from two hundred and five (205) participant manufacturing firms who were financial members of Manufacturers Association of Nigeria (MAN). The Yamane’s statistical formula was utilized for sample size determination. 267 copies of questionnaire were distributed to top and middle management staff who were knowledgeable about the technical information needed for implementing change management. Using Chi-square (X) statistic and Pearson product moment correlation coefficient, the study reveals that change management improves the level of performance and that there is a very strong positive relationship between commitment of top management, middle management and success rate of implementation in the selected firms. Based on these findings, the paper advocates that leaders and top management of these organizations should make the process of change management more conducive and organization friendly. Again employees who are going to be affected by change should earlier be identified with respect to their interest, knowledge and attitudes before implementation of change.

Keywords: empirical investigation, impact, change management, manufacturing firms

1. Introduction

1.1 Background of the Study

Many writers have characterized today's business environment as “hyper-competitive (D’Aveni, 1994; and Volberda, 1996), high velocity (Brown and Eisenhardt, 1997) or shaped by ‘jolts’ (Meyer, Brooks and Goes, 1990). In emerging economies such as the Nigeria one, these environmental features have been exacerbated by the globalization drive. In these circumstances, rapid adaptive organizational processes are essential to a firm’s survival and success. From a social science perspectives, organizational adaptation is the ability of an organization to change itself or the way in which it behaves in order to survive in the face of external changes which were not predicted in any precise way when the organization was designed (Tomlinson, 1976). This definition confirms March's assertion that adaptation is essential to survival. Those organizations that do not adapt seem destined to expire (March, 1995).

In today’s organization, change is inevitable and managers all over the world are adapting to changing market conditions and at the same facing the need for creating a proactive rather than a reactive managerial system. They are searching for ways to manage an increasingly complex technology and more sophisticated workforce or teams. To accomplish diverse goals, managers need more than piecemeal ad-hoc change programmes dealing only with current crises. They need change management techniques to prepare for future organizational competitive challenges, Drucker cited by Herbert (2002:2) succinctly put it in corporate parlance. “Managers must learn to build and manage a human group that is capable of anticipating the new, capable of converting its vision into technology, products, processes and services, willing and able to accept the new”. Attempts to implement change management have been many and wide-ranging, but the promises made in its name have remained unfulfilled. There are three main causes for this:

- Mistakes continue to be made at the shop-floor level;
Bad examples have brought high-level management into discreditation. In today's organizations, many top executives start out heavily in the red as far as their credibility is concerned.

The internal change story, circulated by organizations' communication channels to awaken the readiness and commitment of those affected, is frequently seen as pure rhetoric and rhapsodizing about change (Doppler, 2006).

In spite of the aforementioned causes, change remains a necessity. It is the only way for organizations to consistently adapt to new trends, react to competitors, and meet the needs of their customers. The challenge facing Nigerian organizations is not to avoid change and attain a state of changelessness. It is to manage change. That is seek change, initiate it, keep looking for something new to add, something old to discard, and do all these with minimum undesirable effects as possible. Research on organizations has shown that organizations that do not change are compelled to change from existence to non-existence (Ejiofor, 1998 and March, 1995). Given the benefits of organizational change and the difficulty of successfully bringing it to fruition, there has been much debate over the last two decades on the most appropriate way to bring about change (Pettigrew, 1990; Stacey, 2003; Dawson, 2003; Igwe, Chibuike and Alinno, 2012). There is a consensus amongst academics and practitioners that organizations are facing unprecedented levels of change, and as a result, the need to manage change and mitigate its effects successfully should be a core organizational competence.

1.2 Statement of the Problem

The contribution of the manufacturing sector to Nigeria’s Gross Domestic Product (GDP) is currently less than five percent. The current GDP figure of $194 billion dollars places the country in the 41st position, according to the International Monetary Fund (IMF) estimates of 2012 (The Guardian, 2012). At the heart of this problem of the real sector is the problem of competitiveness. The challenges for the industrial production and indeed real sector of the economy had persisted for over twenty years. Some of these challenges include: epileptic power supply; near absence of adequate distribution channels, and a top-grade transportation network; rising cost of automotive oil and gas as well as uncoordinated tax administration system. Others are smuggling and trade malpractice; incessant increase in the monetary policy rate; difficulty in accessing long-term credits for small-scale manufacturing firms; achievement of a single-digit interest rate and insecurity of lives and property due to nefarious activities of hoodlums, terrorists, militants and crude oil picketing mafias/pirates. The concomitant effects of all these challenges is that many manufacturing firms in Nigeria had decommissioned their plants and sent their workers home to an uncertain future. Some of the manufacturing organizations had relocated to other West African nations with better macro-economic stability (Newswatch, 2009). Even the manufacturing firms seem not to help matters. There are issues with haphazard change management techniques in these organizations. The top echelons of the manufacturing firms are suspected of serving only their interest by manipulating relevant change management data. The implications of the above scenario pose a tremendous threat to both the manufacturing firms and the nation. To the firms they will not be able to improve productivity and create needed jobs. On the side of the government, the revenue accruable to the government by non-performing firms would be missed greatly. Thus the government’s much trumpeted vision of the country joining the league of 20 most industrialized economies come 2020 is gradually turning into a slogan like many others before it such as Housing for All, Water for All etc.

1.3 Objectives of the Study

In order to develop an expanded theoretical foundation and understand how change management can be put into practice in Nigerian organizations, the objectives of the study are as follows:

- To find out the effectiveness of change management in improving organizational performance.
- To examine the level of commitment of top and middle management in the implementation of change management.

1.4 Research Questions

From the foregoing, the following research questions become imperative.

1. What is the effectiveness of change management in improving the level of performance in the selected organizations?
2. To what extent does top and middle management’s commitment improves the success of change management project.
1.5 Statistical Hypotheses
In view of the above research questions, the following hypotheses were formulated to guide the study:

i. Change management is effective in improving the level of organizational performance.

ii. There is a correlation between the commitment of top and middle management and success of change management project.

2. Theoretical Considerations and Review of Related Literature
Organizations can be viewed as dynamic systems of adaptation and change - two terms that are often used interchangeably that contain multiple parts which interact with one another and the environment (Morel and Ramanujan 1999). Existing views on adaptation and their definition of change differ with respect to:

1) Whether the pressure for change reside within the organization or within its environment.

2) Timing

3) The radical nature of change. Change is often regarded as an organization's response to changes in external factors: threats and opportunities (Kraatz, 1998). As shown by Siggelkow and Levinthat (2005) authors such as Chandler (1962); Lawrence and Lorsch (1967) alluded to internal reasons for change and most life cycle models adhere to this perspective. A more inclusive view on change suggests that both external and internal pressures for change are relevant.

Defining change management is tough under any circumstances write Holland and Skarke (2003:24), especially in the context of new technology being implemented in an existing organization. Mention the issue of change management and a typical response to the question will be, “Does it really matter in the real world?” The answer to that question is “of course”. After all definitions are important because they can provide clarity. In the simplest sense, change management means the process of helping a person, group or organization change. The world “management” implies an effort to plan the change and exert influence over other people in the process. Thus change management implies purposeful effort to bring about change. Kudray and Kleiner (1997:18) define change management as “the continuous process of aligning an organization with its market place - and doing it more responsively and effectively than competitors”. For Anderson and Anderson (2001) Change management is seen as a set of principles, techniques and prescriptions applied to the human aspects of executing major change initiatives in organizational settings. Its focus is not on what is driving change (technology), reorganization plans, mergers and acquisitions (M & A) Udeh & Igwe, 2013, globalization etc. but on 'how' to orchestrate the human infrastructure that surrounds key projects so that people are better prepared to absorb the implications affecting them. Change management is one of the Human resource management (HRM) processes that contributes to or underpins the activities of human resources department or unit in an organization. It is concerned with advising and assisting with the facilitation of change in organizations in response to changes in the environment and the introduction of new organizational structures and systems, human resource policies and practices (Armstrong, 2005). Organizational change has also been referred to as organizational development and organizational transformation (Cummings, and Worley, 2005). For this paper change management is seen as the process that is used to help all the stakeholders adapt successfully to the changes that are taking place in the organization. It is meant to shift stakeholders from their current state to a desired future state.

According to the Greek Philosopher Heraclitus, “There is nothing permanent but change”. By that he meant that everything is always in a flux. As the Chinese adage suggests no one can step in the same river twice, because the river is always in motion and is therefore always changing. The world has seen radical change in global markets and national economics. The exit world is getting more interconnected and the economies and industries have become global. There are crises in financial institutions, the housing market, education, health care and emerging markets to mention only a few major issues. On the positive side nanotechnology, green technology, unified communications technology, visualization technologies, social software and information systems - the whole technology world will bring advances beyond our imagination. These technologies will inevitably impact the way we manage in different organizations.

Rothwell, Prescott and Taylor (1998, 2008) had identified six key changes that would have the greatest impact in the workplace and workforce over the next ten years. The list is as highlighted below:

- Changing technology;
- Increasing globalization;
- Continuing cost containment
Increasing speed in market change
The growing importance of knowledge capital; and
Increasing rate and magnitude of change

Changing technology refers to rapid advancement in human knowledge. Increasing globalization refers to the impact that rapid transportation and global communications have on how organizations conduct business. Continuing cost containment refers to efforts undertaken by organizations to address declining profit margins, brought by the ease of price comparison through web-based technology. To maintain a profitable business, organizations are making efforts to improve profits by reducing the costs of business operations. Increasing speed in market change refer to the continuing importance of beating competitors to the punch by meeting the rapidly changing tastes of consumers. The growing importance of knowledge capital refers to the key value-added capabilities of human creativity and innovation to identify new businesses, products, services and markets. Finally, the increasing rate and magnitude of change refers to the increasing speed and scope of changes that are occurring. In short change itself is changing and posing ever-more-daunting challenges for business leaders who need to respond in real time to breaking events.

A search through the literatures (Brown and Eisenhardt (1997); Ejofor (1998); Herbert (2002); Robbins (2005); Kieffer, (2005) Pryor, Taneja, Humphreys, Anderson and Singleton, (2008) revealed that each trend influences the others. The definition of each trend may vary by organizational context and even functional area. The trends are related in that many are the root causes of other trends. And each trend required new competencies from leaders to respond to or even anticipate the changes brought by each trend. Nowadays these changes can be seen almost in all types of organizations (the manufacturing firms inclusive) in Nigeria. They constitute organizational downsizing, continuous improvement, globalization of industries, Mergers and Acquisitions (Palmer, Dunford and Akin, 2009); Udeh and Igwe, (2013).

Regardless of change speed, organizational change is the movement of an organization from the existing plateau toward a desired future state in order to increase organizational efficiency and effectiveness (Cummings and Worley, 2005; George and Jones, 2002; Pryor and et al, 2008). Conclusions drawn by these researchers are that the driving motives for change management are the result of the need to constantly improve productivity and efficiency (Arnetz, 2005, Pryor et al, 2008, Igwe, Chibuike and Alinno, 2012). This creates the need for further studies into the effect of such change management on manufacturing firms such as this research, which will inform policies linked to the federal government’s desires of the country joining the league of twenty (20) most industrialized economics come 2020.

In essence what the successful Nigerian manufacturing organizational leaders and managers should strive to do is to transform their respective organizations by developing and deploying new visions, missions, values, goals, strategies and structures that show a continuously changing organizations with capacity and capability to undergo transformation. This would help them key into the transformational agenda of the current Nigeria Federal Administration. This definitely makes such organizations to proactively drive innovations to the extent that they become major players for change within the macro-economic environment.

3. Methodology
For this study, the survey research method was adopted (Eboh, 2009). The objective of the study was to investigate the impact of change management implementation as applied to the manufacturing sector in South East Nigeria. 205 participant manufacturing organizations were identified through published literature such as trade journals and data base of Manufacturers Association of Nigeria (MAN). The study lasted for two years (2009 – 2011). The instruments for data collections were questionnaire and structured interviews. The questionnaire was administered to top management and middle management staff of 267 respondents using Yamane (1964) for sample size determination (Appendix I). The questionnaire and structured interview questions were designed by the researchers. Some colleagues from the Faculty of Business Administration, University of Nigeria Nsukka who were experienced and knowledgeable in the construction of research instruments validated the instruments. Consequently, some items were added while a few others were re-written. The computed sample size was allocated proportionally to the selected states depending on the proportion of the manufacturing firms that came from each state using Kumar (1976) proportional allocation formula (Appendix ii). The questions were optioned using five (5) Likert type of responses namely: Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree.

As indicated earlier, the study included interviews with senior managers who agreed to be interviewed. They were asked to indicate their availability and eagerness in the questionnaire. These managers were influential in developing change management interventions and so powerful in influencing implementation strategies. As it was expected that
Human Resource (HR) practitioners, would be most likely to provide reliable information on change managements. Managers in the Human Resources departments were identified and chosen for this exercise.

A total of 267 copies of the questionnaire were administered out of which seven (7) were cancelled while ten (10) were not returned. As a result, 250 (93.6 percent) were used for analysis. A combination of Chi-Square statistic and Pearson Product Moment correlation coefficient were used to test the stated hypotheses at 0.05 level of significance. These techniques were adopted because the samples of the variables were randomly selected from the population.

Table 1. Distribution of questionnaire among the South East states of Nigeria (Man members)

<table>
<thead>
<tr>
<th>S/N</th>
<th>State</th>
<th>Number of Selected Organizations</th>
<th>No. of Top Management and Middle Management Staff</th>
<th>No. of Questionnaire served</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Abia</td>
<td>35</td>
<td>105</td>
<td>35</td>
</tr>
<tr>
<td>2.</td>
<td>Anambra</td>
<td>135</td>
<td>540</td>
<td>179</td>
</tr>
<tr>
<td>3.</td>
<td>Ebonyi</td>
<td>Nil</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Enugu</td>
<td>22</td>
<td>88</td>
<td>29</td>
</tr>
<tr>
<td>5.</td>
<td>Imo</td>
<td>13</td>
<td>72</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>205</td>
<td>805</td>
<td>267</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2011 and Statistical Analysis

4. Result and Discussion

In this paper, the impact of change management implementation on selected manufacturing firms in Southeast Nigeria was investigated. In this section, the findings in relation to the objectives of the study are presented and discussed:

i. The extent change management is effective in improving organizational performance. The finding of this objective reveals that change management was effective in improving the level of performance in the selected organizations in South East Nigeria. This result agrees with Anderson and Anderson, (2001); Dawson, (2003) and Armstrong, (2005). These authors see change management as a set of principles, techniques and prescriptions applied to the human aspects of implementing change initiatives in organizational settings. Again Kudray and Kleiner, (1997) had remarked that change management is the continuous process of aligning an organization with the realities of its market place and doing more responsively and effectively than competitors. It is heart-warming to note that many of the sampled firms agreed that people who would be affected by change management implementation must be involved in the work of structuring it from the outset. This shows that some of the manufacturing firms are aware of global practices in change management implementation. Table 2 gives more insight.

Computation of Hypothesis One (1)

Change management is effective in improving organizational performance of the selected manufacturing organizations.

The test statistic used is the chi-square, $X^2$.

Relevant Questions:

- Change management can improve employees’ performance and productivity
- Change management can lead to a better utilization of employees in this organization.

Table 2. Contingency table on the effectiveness of change management in improving organizational performance

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>Change management can improve employees’ performance and productivity</td>
<td>120</td>
</tr>
<tr>
<td>Change management can lead to a better utilization of employees in the organization</td>
<td>110</td>
</tr>
<tr>
<td>Column Total</td>
<td>230</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2011.
Where
SA - Strongly Agree
A - Agree
N - Neutral
DA - Disagree
SD - Strongly Disagree

Table 3. The computed observed and expected frequencies of sample results

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA A N DA SD Row Total</td>
</tr>
<tr>
<td>Change management can improve employees’ performance and productivity.</td>
<td>120 (115) 10 (15) 10 (05)</td>
</tr>
<tr>
<td>Change management can lead to a better utilization of employees.</td>
<td>110 (115) 90 (85) 20 (15) 30 (30) 0 (05)</td>
</tr>
<tr>
<td>Column Total</td>
<td>230 170 30 60 10 500</td>
</tr>
</tbody>
</table>

Test Statistic $= X^2$
Degree of Freedom $= 4$
Level of Significance $= 0.05$
Critical value $= 9.49$
Calculated value $= 14.35$

Decision: Since the computed value (14.35) is greater than the critical value (9.49), we conclude that change management is effective in improving the level of organizational performance of the selected manufacturing organizations.

ii. The extent top management and middle management are committed in the successful implementation of change management. The findings of this objective reveal a very strong positive relationship between commitment of top management and success rate of change management projects amongst the sampled manufacturing firms in Nigeria. Table 4 and appendix iv attest to this assertion. This finding agrees with the writings of Currie (1999); Huy (2002); Floyd and Lane (2000) who in their different perspectives view middle management as strategic assets championing new ideas, facilitating adaptability and synthesizing strategic information for senior managers in formulating strategies. Engagement of top management goals and support are a sine qua non for a successful change management readiness (Igwe, Chibuike and Alinno, 2012). Lack of genuine management support is one of the most frequent causes of implementation failure. However, this investigation reveals that the sampled manufacturing firms seem to place more emphasis on organizational downsizing, continuing cost containment and value added capabilities of human creativity and innovation to survive the inherent harsh manufacturing environment in Nigeria. (Table 4 throws more light).

Table 4. Contingency table for the correlation between the commitment of top management and success of change management project

<table>
<thead>
<tr>
<th>N (paid values) of X and Y</th>
<th>In this organization the level of commitment of top management is high $= X$</th>
<th>Provision of Fund for a successful change management project was provided by top management $= Y$</th>
<th>$X^2$</th>
<th>$Y^2$</th>
<th>$XY$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>100</td>
<td>120</td>
<td>10,000</td>
<td>14,400</td>
<td>12,000</td>
</tr>
<tr>
<td>Agree</td>
<td>60</td>
<td>80</td>
<td>3,600</td>
<td>6,400</td>
<td>4,800</td>
</tr>
<tr>
<td>Rating</td>
<td>Neutral</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------</td>
<td>----------</td>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 5</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\sum X) = 250</td>
<td>20</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\sum Y) = 250</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\sum X^2) = 16,300</td>
<td>400</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\sum Y^2) = 21,700</td>
<td>600</td>
<td>300</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(\sum XY) = 18,300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey, 2011.

Test statistic = Pearson’s product moment correlation coefficient

Degree of Freedom = N-2 = 3
Number of Pairs = 5
Level of significance = 0.5
Critical value = 2.35
\(r\) (rho) = 0.9809

Source: Statistical Analysis (Appendix IV).

Decision Rule: Reject H₀, if \(t\) computed is > \(t\) critical, otherwise do not reject (accept).

Decision: The \(t\) computed (8.49) > \(t\) critical (2.35). Then we accept the alternative hypothesis which states that when the level of top management commitment is high in the implementation of a change management project, the success rate of such project tends to be higher.

5. Conclusion and Recommendations

This study had investigated the effectiveness of change management in improving organizational performance and the relationship between the level of commitment of top and middle management in success of implementation from 2009 to 2011. The study revealed that change management was effective in improving the level of organizational performance and that the commitment and genuine support of top and middle management were a sine qua non for success in managing its implementation.

In relation to the objectives, the researchers made the following recommendations:

i. Leaders and top management of manufacturing organizations have to understand the requirements of managing change among employees by making the process more conducive and environment friendly. This will improve the positive attitude, the internal core and dynamic capabilities of employees in adapting to changes in their internal and external environment.

ii. Employees who will be affected by change management implementation must be involved in the work of structuring it from the outset. The minimum form of involvement is constant communication and not information.

iii. In order to get employees affected involved, they need to be identified at the beginning with respect to their interest, knowledge, attitude towards implementation and their mental state. This is because employees who are passing through major life transitions such as bereavement, relocation hassles, redundancy threats are never committed to implementing change management project.

iv. Verbal reinforcement of new behaviour that fit into the organizational change should be encouraged by organizational leaders and managers. This will increase employee repetition of those new change behaviours expected of them. This will help to extinguish old behaviour and allow the new take root in the individual employee.

v. Nigeria government at all levels should continue to create and provide the needed environment for these manufacturing firms to survive and thrive bearing in mind that the operating environment is still far from conducive and friendly.

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References


**Appendix I.** Sample size determination using Yamane (1964) formula

\[
n = \frac{N}{1 + N (e^2)}
\]

Where

\( n \) = Sample size
\( N \) = Finite population
\( e \) = Level of significance
\( I \) = Unity (a constant)

\[
n = \frac{805}{1 + 805 (0.05)^2}
\]

\[
= \frac{805}{1 + 2.0125}
\]

\[
= \frac{805}{3.0125}
\]

\[
= 267.22
\]
Appendix II. Questionnaire distribution format

Applying Kumar (1976) proportional allocation formula for the manufacturing firms in South East States of Nigeria.

\[ nh = \frac{n (N_h)}{N} \]

Where

\( N_h \) = Group population from each stratum
\( n \) = Overall sample size
\( N \) = The overall population
\( nh \) = Sample size from each stratum, in this case each state.

For Abia State:

\[ nh = \frac{n (N_h)}{N} = \frac{267 \times 105}{805} = 34.8 \]

\[ nh = 35 \]

For Anambra State:

\[ nh = \frac{n (N_h)}{N} = \frac{267 \times 540}{805} = 179 \]

For Ebonyi State: None of the manufacturing organization in the state is a bona fide (financial) member of Manufacturing Association of Nigeria (MAN) at the time of this investigation.

For Enugu State:

\[ nh = \frac{n (N_h)}{N} = \frac{267 \times 88}{805} = 39.2 \]

For Imo State:

\[ nh = \frac{n (N_h)}{N} = \frac{267 \times 72}{805} = 23.88 \]

\[ nh = 24 \]

Appendix III. Computation of Hypothesis one from sample result

Test statistic: The Chi-Square \( (X^2) \) is applied at 5 percent level of significance.

Let \( X = 0.05 \)

Degree of Freedom, D.F. \( = (r-1)(c-1) \)
\( = (5-1)(2-1) \)
\( = (4)(1) \)
\( = 4 \)

Critical value = 9.49

To compute the expected we apply,

\[ e_{ji} = \frac{(row \ total)(column \ to \ tal)}{overall \ total} \]

\[ e_{ji} = \frac{250 \times 230}{500} = 115 \]

\[ e_{ji} = \frac{250 \times 170}{500} = 85 \]
\[
\begin{align*}
= & \frac{250 \times 30}{500} = 15 \\
= & \frac{250 \times 60}{500} = 30 \\
= & \frac{250 \times 10}{500} = 05 \\
X_i^2 &= \frac{o_j - e_j}{e_j} \\
&= \frac{(120 - 115)^2}{115} + \frac{(10 - 115)^2}{115} \\
&= 0.22 + 0.22 \\
&= 0.44 \\
X_{ii}^2 &= \frac{o_j - e_j}{e_j} \\
&= \frac{(80 - 85)^2}{85} + \frac{(90 - 85)^2}{85} \\
&= 0.29 + 0.29 \\
&= 0.58 \\
X_{i}^2 &= \frac{(10 - 15)^2}{15} + \frac{(20 - 15)^2}{15} \\
&= 1.67 + 1.67 \\
&= 3.33 \\
X_{ii}^2 &= \frac{(30 - 30)^2}{30} + \frac{(30 - 30)^2}{30} \\
&= 0 \\
X_{i}^2 &= \frac{(10 - 05)^2}{05} + \frac{(0 - 05)^2}{05} \\
&= 0.5 + 0.5 \\
&= 05 + 05 \\
&= 10 \\
\text{Total} &= 0.44 + 0.58 + 3.33 + 0 + 10.00 = 14.35
\end{align*}
\]
Appendix IV. Computation of hypothesis two

\[ \gamma = \sqrt{\frac{N \sum X \sum Y - (\sum X)(\sum Y)}{N \sum X^2 - (\sum X)^2 \cdot N \sum Y^2 - (\sum Y)^2}} \]

By substitution

\[ = \frac{5(18,300) - (250)(250)}{\sqrt{5(16,300) - 250^2 \cdot 5(21,700) - (250)^2}} \]

\[ = \frac{91,500 - 62,500}{\sqrt{81,500 - 62,500}} \]

\[ = 29,000 \sqrt{19,000} \]

\[ \gamma = \frac{29,000}{874,000} \]

\[ \gamma = 0.9809 \]

The computation of \( \gamma \) gave a value of 0.9809 indicating a very strong positive relationship between commitment of top management and success of change management project.

Transformation of the result of Pearson’s Product Moment Correlation to t-test is as follows

\[ t = \frac{\gamma}{\sqrt{\frac{N - 2}{n - r^2}}} \]

Where

- \( N - 2 \) = degree of freedom
- \( n \) = number of paid values
- \( t \) = t-statistic
- \( \gamma \) = 0.9809 = correlational coefficient

\[ t = \frac{0.98}{\sqrt{\frac{5 - 2}{1 - 0.98}}} \]

\[ = \frac{0.98}{\sqrt{\frac{3}{0.9604}}} \]

\[ = \frac{0.98}{\sqrt{0.1057}} \]

\[ = 8.49 \]

Appendix V. List of financial member companies in Anambra/Enugu/Ebonyi States Branch arranged according to sectoral grouping

A. FOOD, BEVERAGES & TOBACCO GROUP

<table>
<thead>
<tr>
<th>NO.</th>
<th>NAMES</th>
<th>ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bons West Africa Ltd</td>
<td>Km2 Enugu/Onitsha Exp. Road, Trans-Ekulu Box 21,</td>
</tr>
<tr>
<td>NO.</td>
<td>NAMES</td>
<td>ADDRESS</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2</td>
<td>Bounatine Ventine (Nig) Ltd.</td>
<td>Enugu</td>
</tr>
<tr>
<td>3</td>
<td>Delta Flour Mills Nig. Ltd.</td>
<td>18, Iweka Road, P. O. Box 242, Onitsha</td>
</tr>
<tr>
<td>4</td>
<td>Eastern Distilleries Food Ind. Ltd.</td>
<td>Km 18 Onitsha/Enugu Exp. Way. P. M. B. 1580, Onitsha</td>
</tr>
<tr>
<td>5</td>
<td>Envoy Oil Industries Ltd.</td>
<td>KM2, Atani Road, Harbour Ind. Layout, Onitsha</td>
</tr>
<tr>
<td>6</td>
<td>Golden Oils Inds. Ltd.</td>
<td>P. O. Box 13465, Onitsha</td>
</tr>
<tr>
<td>7</td>
<td>Ibeabuchi Nig. Ltd.</td>
<td>51A Pokobros Inds. Avenue, Habour Inds. Estate</td>
</tr>
<tr>
<td>8</td>
<td>Life Breweries Co. Ltd.</td>
<td>No. 3 Umuoefe Pocket Layout 9th Mile Corner Ngwo, Onitsha</td>
</tr>
<tr>
<td>9</td>
<td>Mikson Industries Ltd.</td>
<td>P. O. Box 657, Awka</td>
</tr>
<tr>
<td>10</td>
<td>Niccus Industries Ltd.</td>
<td>Block 1 Unity Lane New Tyre’s Mkt. Nkpor P. O. Box 6385 Onitsha.</td>
</tr>
<tr>
<td>11</td>
<td>Nigerian Breweries Plc.</td>
<td>No. 43 Obosi Road, Nkpor Junction, Obosi, Anambra State.</td>
</tr>
<tr>
<td>12</td>
<td>Nigerian Mineral Water Ind. Ltd.</td>
<td>9th Mile Corner, Enugu</td>
</tr>
<tr>
<td>13</td>
<td>Nigerian Starch Mills Ltd.</td>
<td>P. M. B. 1549, Onitsha</td>
</tr>
<tr>
<td>14</td>
<td>Ogenna Rice Mills Ltd.</td>
<td>P. O. Box Ihiala</td>
</tr>
<tr>
<td>15</td>
<td>Pokobros Foods &amp; Chemical Ind. Ltd.</td>
<td>4, Pokobros Ind. Avenue, Box 322, Nnewi</td>
</tr>
<tr>
<td>16</td>
<td>Poko Oils Mills Ltd.</td>
<td>P. O. Box 10001, Fege-Onitsha</td>
</tr>
<tr>
<td>17</td>
<td>Resources Improvement &amp; Mfg. Co. Ltd.</td>
<td>Akwu-uru Industrial Estate, P. O. Box 905, Nnewi</td>
</tr>
<tr>
<td>18</td>
<td>Shrifats &amp; Magarine Ltd.</td>
<td>Plot 26 Block 2A ACME Road Ogba GPO Box 67 Lagos OR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plot In/52 Harbour Industrial Layout off Atani Road Osha.</td>
</tr>
<tr>
<td>19</td>
<td>Union Oak Farms &amp; Inds. Ltd.</td>
<td>217A Awka Industrial Layout &amp; 8 Pokobros Ind. Avenue, Awka</td>
</tr>
<tr>
<td>20</td>
<td>Zubee International Co. Ltd</td>
<td>217A Awka Industrial Layout &amp; Pokobros Ind. Avenue, Awka</td>
</tr>
<tr>
<td>21</td>
<td>VAC Industries (Nig.) Ltd.</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>CHEMICAL AND PHARMACEUTICAL SECTORAL GROUP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NAMES</td>
<td>ADDRESS</td>
</tr>
<tr>
<td></td>
<td>AESF AP Ltd.</td>
<td>97 Onitsha Owerri Road, Onitsha</td>
</tr>
<tr>
<td></td>
<td>A-Z Petrochemicals Ind. Ltd.</td>
<td>Akwu-Uru Inds. Estate, Umudim P. M. B. 5088, Nnewi</td>
</tr>
<tr>
<td></td>
<td>Beta Cosmetic Ind. Co. Ltd.</td>
<td>28 Madueke St. Odoakpu P. O. Box 5835 Onitsha</td>
</tr>
<tr>
<td></td>
<td>C.C. Umeji Agro Allied Co. Ltd</td>
<td>15 Arch Bishop Henry Street, Odoakpu P. O. Box 2591, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Ceenek Pharm. Ind. Ltd.</td>
<td>Plot 219 Ibeagwa-Aka St. Nike Community Layout Ext. Phase 2, P. O. Box 252, Enugu.</td>
</tr>
<tr>
<td></td>
<td>Dezem Nig. Ltd.</td>
<td>87 Ogui Road, Box 9233, Enugu</td>
</tr>
<tr>
<td></td>
<td>Dover Inds. Ltd.</td>
<td>P. O. Box 309, Ibusa, Delta State</td>
</tr>
<tr>
<td></td>
<td>Duemen Chemical Ltd.</td>
<td>Npor Umuoji Road, P. O. Box 237, Umuoji Idemili L.G.A.</td>
</tr>
<tr>
<td></td>
<td>Emy Holdings Nig. Ltd</td>
<td>No. 1 1st Avenue, Independence Layout, P. O. Box 553, Enugu.</td>
</tr>
<tr>
<td></td>
<td>E. Amobi Mfg. Co. Ltd</td>
<td>9 Archbishop Street, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Euco Inds. Ltd.</td>
<td>2 Chukwubuike Close, Ozalla 40 Awka, Box 913, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Emos Best Ind. Ltd.</td>
<td>82 Upper New Market Road, P. O. Box 913, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Franoson Mannyon Int. Ltd.</td>
<td>2 Enugu Road, P. O. Box 9, Idemili</td>
</tr>
<tr>
<td></td>
<td>Gafa Industries Nig. Ltd.</td>
<td>Plot 50 Odume Layout, Obosi P. O Box 10205, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Group Enterprises (Nig) Ltd.</td>
<td>Plot 19/83 Niger Bridge Inds. Layout, P. M. B. 17141, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Hardis &amp; Dromedas Ltd</td>
<td>Hardis Industrial Estate, Airport Road, Emene</td>
</tr>
<tr>
<td></td>
<td>Hutton Chemical Inds. Ltd.</td>
<td>7 Ichida St., Federal Housing Estate, Trans-Ekulu P. O. Box 13789, Enugu.</td>
</tr>
<tr>
<td>No.</td>
<td>NAMES</td>
<td>ADDRESS</td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Atuchukwu Chemical Inds. Ltd.</td>
<td>10 Atuchukwu close, Nkpor, P. O. Box 304, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Awutolo Inds. Ltd.</td>
<td>Agu Awka Inds. Layout, P. O. Box 166, Awka Awada</td>
</tr>
<tr>
<td></td>
<td>Basmic Plastic Inds. Nig. Ltd.</td>
<td>Industrial Layout, P. O. Box 9985, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Charity Foam Ind. Ltd.</td>
<td>Km 4 Onitsha/Enugu Road, P. O. Box 4292, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Climax Ind. Ltd.</td>
<td>48 Nanka Str. Odume Layout, Obosi, P. O. Box 410, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Christoplast Ind. Nig. Ltd.</td>
<td>P. O. Box 10055, Fegge – Onitsha</td>
</tr>
<tr>
<td></td>
<td>Curtis-Jas Ind. Ltd.</td>
<td>43 Obetedit Str., Off Enugu/Onitsha Exp. Nkpor</td>
</tr>
<tr>
<td></td>
<td>Deco Foam &amp; Chem. Ind. Ltd.</td>
<td>15 Obeledu Str. Onitsha</td>
</tr>
<tr>
<td></td>
<td>Dozzy Group Ltd.</td>
<td>Plot In/14 Niger Bridge head, P. M. B. 1591, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Elephant Chem. Inds. Ltd.</td>
<td>33 Nanka Str., Odume Layout Obosi, P. O. Box 410, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Emic Foam &amp; Allied Inds. Ltd.</td>
<td>1,3 &amp; 5 Emic Road, Odume Layout, Obosi, P. O. Box 570, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Ezenwa Plastic Ind. Ltd.</td>
<td>Ichi Street, Ind. Layout Box 188, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Fabro Trading &amp; Inds. Co. Ltd.</td>
<td>14 Chinton Street, Onitsha, P. O. Box 10205, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Finoplastics Inds. Ltd.</td>
<td>Plot 182 Ikenga Inds. Layout P. O. Box 14, Nwafia.</td>
</tr>
<tr>
<td></td>
<td>Gabee Inds. Ltd.</td>
<td>No. 5813 Old Market Road, P. O. Box 9118 Onitsha</td>
</tr>
<tr>
<td></td>
<td>Gabinson Inds. Ltd.</td>
<td>12 Douglas Street, P. O. Box 2432, Onitsha</td>
</tr>
<tr>
<td></td>
<td>GASFA Inds. Ltd.</td>
<td>50, Nduka Str. Odume Obosi, P. O. Box 10306, Onitsha</td>
</tr>
<tr>
<td></td>
<td>G. M. O. Rubber Products Ltd.</td>
<td>26/27 G. M. O. Rd., East Niger Inds. Layout, P. O. Box 2248, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Godwin Okafor &amp; Sons Ltd.</td>
<td>Plot 231 Pokobros Avenue Ind. Layout, Awka P. O. Box 1419, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Group Enterprises (Nig.) Ltd.</td>
<td>Plot 19/83 Niger Inds. Layout, P. M. B. 17141, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Global Concepts (W.A.) Ind. Ltd.</td>
<td>Plot EL 7/8 Ikenga Layout, G. P. O Box 1264, Awka</td>
</tr>
<tr>
<td></td>
<td>INNOSON Technical &amp; Ind. Co. Ltd.</td>
<td>Plot W/I Inds. Layout, Emene, P. O. Box 1570, Enugu.</td>
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</tbody>
</table>
### D. DOMESTIC & INDUSTRIAL PLASTIC, RUBBER AND FOAM SECTORAL GROUPS

<table>
<thead>
<tr>
<th>NO.</th>
<th>NAMES</th>
<th>ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Best Aluminum (Mfg) Co. Ltd.</td>
<td>30D Port Harcourt Road, P. O. Box 5396, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Bonanza Inds. Co. Nig. Ltd.</td>
<td>72 Oguta Road Onitsha</td>
</tr>
<tr>
<td></td>
<td>Brollo Pipes and Profiles Ind. Ltd.</td>
<td>Plot 6/62 Industrial Layout Onitsha</td>
</tr>
<tr>
<td></td>
<td>Gazasonner Inds. (Nig.) Ltd.</td>
<td>P. O. Box 680, Onitsha</td>
</tr>
<tr>
<td></td>
<td>General Metals Nig. Ltd.</td>
<td>No. 43 Oso1o Way, Osolo-Lagos OR Enugu – Port</td>
</tr>
<tr>
<td></td>
<td>GINPAT Aluminium Products Ltd.</td>
<td>Km 12, Onitsha-Enugu Express Way</td>
</tr>
<tr>
<td></td>
<td>G.M.O. Galvanizing Ind. Ltd.</td>
<td>Plot 38/48 Atani Road, Inds. Layout East Nigeria, Head</td>
</tr>
<tr>
<td></td>
<td>International Enamel Ware Ind. Ltd.</td>
<td>P. M. B. 1617, Onitsha</td>
</tr>
<tr>
<td></td>
<td>HUNT Inds. Ltd.</td>
<td>97B Onitsha-Owerri Road, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Jimex Inds. Nig. Ltd.</td>
<td>Umuanuka Village, I Industrial Avenue, P. M. B. 5005</td>
</tr>
<tr>
<td></td>
<td>Niccus Industries Ltd.</td>
<td>No. 43 Obosi Road, Nkpor Junction, Obosi, Anambra</td>
</tr>
<tr>
<td></td>
<td>Onitsha Aluminium Mfg. Co. Ltd.</td>
<td>10 Akunnia Njote St. Woliwo, P. O. Box 1684, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Peter E. Ventures Inds. Ltd.</td>
<td>9/11 Isiokpo Street, P. O. Box 788, Onitsha</td>
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<tr>
<td></td>
<td>Robertson Nig. Ltd.</td>
<td>Emene Inds. Layout, P. O. Box 788, Onitsha</td>
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<tr>
<td></td>
<td>Vincent Standard Steel Ind. Ltd.</td>
<td>P. O. Box 680, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Homus Steel Ltd.</td>
<td>Plot 3/2 In/5 Harbour Ind. Layout, P. O. Box 14478, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Alo Aluminum Mfg. Co. Ltd.</td>
<td>Enugu-Abakaliki Express Way, Opp Mobil Filling Station Enugu</td>
</tr>
<tr>
<td></td>
<td>Chriscord Inds. Ltd.</td>
<td>Nkpor Unuoj Rd., P. O. Box 6300, Onitsha.</td>
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### E. PULP, PAPER & PAPER PRODUCTS, PRINTING & PUBLISHING SECTORAL GROUP

<table>
<thead>
<tr>
<th>NO.</th>
<th>NAMES</th>
<th>ADDRESS</th>
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<tbody>
<tr>
<td></td>
<td>African – First Publishers Ltd.</td>
<td>Niger Bridge Head, P. O. Box 4771, Onitsha</td>
</tr>
<tr>
<td></td>
<td>B.C. Ifegbo &amp; Associates Ltd.</td>
<td>25 New Market Road, Box 2490, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Denson paper Mill Ltd.</td>
<td>24 New Market Road, P. O. Box 115, Onitsha</td>
</tr>
<tr>
<td></td>
<td>L.L. Nwadike &amp; Associates Ltd.</td>
<td>12 New market Road, P. O. Box 5017, Onitsha</td>
</tr>
<tr>
<td></td>
<td>Mikson Industries Ltd.</td>
<td>Block 1 Unity Lane New Tyre’s Mkt Nkpor, P. O. Box 6385, Onitsha.</td>
</tr>
<tr>
<td></td>
<td>Niccus Industries Ltd.</td>
<td>No. 43 Obosi Road, Nkpor Junction, Obosi Anambra State.</td>
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</table>
### F. ELECTRICAL & ELECTRONICS SECTORAL GROUP

<table>
<thead>
<tr>
<th>NO.</th>
<th>NAMES</th>
<th>ADDRESS</th>
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<tbody>
<tr>
<td>1</td>
<td>Adswitch Plc</td>
<td>1 Metu Uzodike Str. Okpuno Otolo, P. O. Box 11139, Nnewi</td>
</tr>
<tr>
<td>2</td>
<td>Benmax Cables Ltd.</td>
<td>Plot In/123 Emene Inds. Layout, P. O. Box 2599, Enugu.</td>
</tr>
<tr>
<td>3</td>
<td>Cuitix Plc.</td>
<td>1 Metu Uzodike Street, P. M. B. 5040, Nnewi</td>
</tr>
<tr>
<td>4</td>
<td>Geoelis Cables Ltd.</td>
<td>Nkpor Umuoji Road, Onitsha</td>
</tr>
<tr>
<td>5</td>
<td>P. M. S. Electrical Mfg. (Nig) Ltd.</td>
<td>1 PMS Road, Otolo, Nnewi, P. O. Box 8330, Marina Lagos.</td>
</tr>
</tbody>
</table>

### G. ELECTRICAL & ELECTRONICS SECTORAL GROUP

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<th>NO.</th>
<th>NAMES</th>
<th>ADDRESS</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>General Cotton Mills Ltd.</td>
<td>Niger-Bridge Inds. Layout P. M. B. 1601 Onitsha</td>
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### H. WOOD & WOOD PRODUCTS INCLUDING: FURNITURE SECTORAL, GROUP

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<th>NO.</th>
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<th>ADDRESS</th>
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<tbody>
<tr>
<td>1</td>
<td>Dunon Furniture Ind. Ltd.</td>
<td>11/15 Mbanugo Street, P. O. Box 745, Enugu</td>
</tr>
<tr>
<td>2</td>
<td>Caprisage Exp. Wood &amp; Furniture Co. Ltd.</td>
<td>Bridge Head, Behind Tomoto Mkt., Onitsha</td>
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</table>

### I. NON-METALLIC MINERAL PRODUCTS SECTORAL GROUP

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<th>NO.</th>
<th>NAMES</th>
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<tbody>
<tr>
<td>1</td>
<td>Best Rose Inds. Ltd.</td>
<td>No. 69 Ozomagala Str., P. O. Box 13782, Onitsha</td>
</tr>
<tr>
<td>2</td>
<td>Emenite Ltd.</td>
<td>P. O. Box 646</td>
</tr>
<tr>
<td>3</td>
<td>Franklin Marbel inds. Ltd.</td>
<td>31, Awka Road, Onitsha</td>
</tr>
<tr>
<td>4</td>
<td>Ibeto Industries Ltd.</td>
<td>60-61 Igwe Orizu Road, P. O. Box 131, Nnewi</td>
</tr>
<tr>
<td>5</td>
<td>Sylver Concrete Ind. Ltd.</td>
<td>Km3 Nkpor-Obosi Road, P. O. Box 10320, Fegge-Onitsha</td>
</tr>
<tr>
<td>6</td>
<td>Bonanza Inds. Co. Ltd.</td>
<td>Onitsha</td>
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</tbody>
</table>

### J. MOTOR VEHICLE & MISCELLANEOUS SECTORAL GROUP

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<th>NO.</th>
<th>NAMES</th>
<th>ADDRESS</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Alf Williams Inds. Ltd.</td>
<td>14 New Market Road, Box 567, Nnewi</td>
</tr>
<tr>
<td>2</td>
<td>Anamrma Motor Mfg. Co. Ltd.</td>
<td>Emene Industrial Layout, Enugu</td>
</tr>
<tr>
<td>3</td>
<td>Basico Bicycle Mfg. Co. Ltd.</td>
<td>10b Osamele Str. Odoakpu Onitsha</td>
</tr>
<tr>
<td>4</td>
<td>Cospam Nig. Ltd.</td>
<td>17 Nise Street Uwani – Enugu OR 124 – 126 Enugu Rd., Nsukka</td>
</tr>
<tr>
<td>5</td>
<td>Ekene Dili Chukwu (SS) Ltd.</td>
<td>2 Ekene Dili Chukwu Rd. Awada Layout Box 210, Onitsha</td>
</tr>
<tr>
<td>6</td>
<td>Ehae Adirindo Nig. Ltd.</td>
<td>Km2 Enugu/Onitsha Expressway, Box 3183, Onitsha</td>
</tr>
<tr>
<td>7</td>
<td>Eziobi Motors Nig. Ltd.</td>
<td>Zone 12 Block A34 Store No. 2 Main Market, P. O. Box 2834, Nnewi</td>
</tr>
<tr>
<td>8</td>
<td>Fenok Inds. Ltd.</td>
<td>Km6 Onitsha/Owerri Rd., Obosi P. O. Box 5666, Onitsha</td>
</tr>
<tr>
<td>9</td>
<td>Iju Inds. Ltd.</td>
<td>39 Awka Road</td>
</tr>
<tr>
<td>10</td>
<td>Innoson Nig. Ltd.</td>
<td>20 New Market Road, Box 1068, Nnewi</td>
</tr>
<tr>
<td>11</td>
<td>Jagua Pan-African Ind. Ltd.</td>
<td>Ohaegbu Rd., P. O. Box 192, Okija</td>
</tr>
<tr>
<td>12</td>
<td>Maryment Nig. Ltd.</td>
<td>3A New Market Road, Nnewi</td>
</tr>
<tr>
<td>13</td>
<td>Naco Motors Ltd.</td>
<td>37 Nnobi Road, P. O. Box 120, Nnewi</td>
</tr>
<tr>
<td>14</td>
<td>Niger Automobile Inds. Ltd.</td>
<td>P. O. Box 4327, Onitsha</td>
</tr>
<tr>
<td>15</td>
<td>Omathia Automobile Products Ltd.</td>
<td>33 Omathia Holdings Factory P. M. B. 2525, Enugu.</td>
</tr>
<tr>
<td>16</td>
<td>OCE Fitters Mfg. Ind. Ltd.</td>
<td>Mile 12, New Onitsha Rod., Akabaukwu Uruagu, P. O. Box 322 Nnewi</td>
</tr>
<tr>
<td>17</td>
<td>Osychris inds. (Nig.) Ltd.</td>
<td>5, New Motorcyle Spare-parts Road, Nnewi</td>
</tr>
<tr>
<td>18</td>
<td>Steveana Ltd.</td>
<td>60 Igwe Orizu Road, Nnewi</td>
</tr>
<tr>
<td>19</td>
<td>Todson Enterprise Ltd.</td>
<td>4 Edo Ezemewi Road, P. O. Box 99, Nnewi</td>
</tr>
<tr>
<td>20</td>
<td>Uru Inds. Ltd.</td>
<td>Akwu-uru Industrial Estate, P.M. B. 6, Nnewi</td>
</tr>
<tr>
<td>21</td>
<td>Union Autoparts Mfg. Co. Ltd.</td>
<td>60-61 Igwe Orizu Road, P. O. Box 131, Nnewi</td>
</tr>
<tr>
<td>22</td>
<td>Variations Inds. Ltd.</td>
<td>37 igwe Orizu Rd., P. O. Box 148 Nnewi</td>
</tr>
</tbody>
</table>
### Appendix VI

List of man financial member companies in Abia and Imo states

<table>
<thead>
<tr>
<th>S/No</th>
<th>Name and Address</th>
<th>Address Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Umuokpara Town, Km 11½ Old Aba/Owerri Road</td>
<td>Osisioma Ind. Layout, Osisioma Ngwa L.G.A. 68 Asa Road P. O. Box 702, Aba</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Telephone: 082-440590, 441814, 232058, 233653, 446105</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Website: wwwadaobi.com</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:info@adaobi.com">info@adaobi.com</a> <a href="mailto:adaobiplastics@yahoo.com">adaobiplastics@yahoo.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub-sector: Domestic &amp; Ind. Plastics/Basic Ind. Chemicals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product Manufactured: Rubber Products, Polythene bags, Solid Mineral Chemicals</td>
</tr>
<tr>
<td>2.</td>
<td>AGAD LIMITED</td>
<td>5, Eze Achike Street Off MCC/Uratta Road Owerri</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel: 083233608, 08033344420, 08033270926</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:agad@rbow.net">agad@rbow.net</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sectoral Group: Textile, Wearing Apparel &amp; Leather</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub-Sector: Textile, Wearing Apparel</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product Manufactured: Garments</td>
</tr>
<tr>
<td>3.</td>
<td>ALABA SOAP INDUSTRIES LIMITED</td>
<td>46 Aba/Owerri Road P. O. Box 695</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel: 082 300801, Aba</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sectoral Group: Chemicals and Pharmaceutical Group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub-Sector: Soap and Detergent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Products Manufactured: Laundry Soap</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALUMINIUM EXTRUSION IND. PLC Km 4 Atta-Amaimo Road, Ikoyi, Ikeduru P. M. B. 1581, Owerri</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:alexip@phea.linkserve.com">alexip@phea.linkserve.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sectoral Group: Basic Metal, Iron &amp; Steel and Fabricated Metal Products</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub-sector: Aluminium producers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Products Manufactured: Aluminium Profiles</td>
</tr>
<tr>
<td>5.</td>
<td>ANZZY INDUSTRIAL CO. LTD</td>
<td>10 Powerline/188 Faulks Road P. O. Box 6704, Aba</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel: 082 – 221715, Fax: 227123, 440164</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:anzzy@phea.linkserve.com">anzzy@phea.linkserve.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sectoral Group: Textile, Wearing Apparel &amp; Leather</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub-sector: Leather Products Manufacturers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Products Manufactured: Leather, Heel Adhesive, Nails and Shoes Soles</td>
</tr>
<tr>
<td>6.</td>
<td>BEAUTY BASE LIMITED</td>
<td>Aya Umuez oﬀ P.H/Enugu Exp. way 152 Aba/Owerri Road P. O. Box 3223, Aba</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:juhaba@alpha.linkserve.com">juhaba@alpha.linkserve.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sector Group: Chemical and Pharmaceuticals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sub-sector: Soap and Detergent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Products Manufactured: Body Cream, Soap and Allied Products</td>
</tr>
<tr>
<td>7.</td>
<td>BENA COSMETIC INDUSTRIES LTD</td>
<td>16/17 Chief Ogbaru St. 20A Ozuomba Road</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tel: 082 – 225879, 225962</td>
</tr>
</tbody>
</table>
8. **CAMELA VEGETABLE OIL CO. LTD**
Plot C1/24 Onitsha Industrial Layout  
P. O. Box 852, Owerri  
Tel: 090-501988, 500516, 083-233905, 082-446504  
E-mail: camelaoli@yahoo.co.uk  
Sectoral Group: Food, Beverages & Tobacco  
Sub-sector: Starch and other miscellaneous food products  
Products manufactured: vegetable oil

9. **CASCAMITE GLUE LIMITED**
Kilo 1 Opodo Road, 55 Azikiwe Road  
P. O. Box 714 Aba  
Tel: 0802 – 220798, 226300, (Fax: 226751, 225486)  
E-mail: tanugrup@yahoo.com  
Sectoral Group: Textile, Wearing Apparel & Leather  
Sub-sector: Leather Products Manufactured  
Products Manufactured: Adhesive (Glue)

10. **CHEMLAP NIGERIA LIMITED**
Osisoma Industrial Layout  
P. O. Box 1356, Aba  
Tel: 083-440033, 350095  
Sectoral Group: Chemical and Pharmaceuticals  
Sub-sector: Textile, Wearing Apparel & Leather  
Products Manufactured: Resins, Adhesive

11. **CHIEME MOTHERS NIG. LIMITED**
33 St. Michael’s Road  
P. O. Box 1392, Aba  
Tel: 082-222330, 225456  
E-mail: chieme@phea.linkserve.com  
Sectoral Group: Motor Vehicle & Miscellaneous Assembly  
Sub-sector: Automobile Components manufacturers  
Products Manufactured: Car Components

12. **CONSOLIDATED BREWERIES PLC**
Km 24 Owerri/Onitsha Road  
P. O. Box 440, Awo-Omamma  
Tel: 083-800220, 232941, 232765, 230796  
Sectoral Group: Food, Beverages & Tobacco  
Sub-sector: Beer  
Products Manufactured: Beverages (Beer and Malt)

13. **CONVERSIONS NIGERIA LTD**
7th Mile Old Aba/Owerri Road  
P. M. B. 7446 Aba  
Tel: 01-616761  
Sectoral Group: Pulp, paper & paper products, printing & publishing  
Sub-sector: pulp, paper & paper products

14. **ELCHEM LIMITED**
15 Elchem Industrial Road  
P. O. Box 395, Mgbidi  
Tel: 082-447963  
Sectoral Group: Motor Vehicle & Miscellaneous Assembly  
Sub-sector: Automobile Components manufacturers
Product Manufactured: Elchems car wash, radiator coolant, electrolyte

15. **EMPRESA JEOMEG LIMITED**  
   48 Ehi Road  
   P. O. Box 6210 Aba  
   Tel: 082-231206, 08033181703  
   Sectoral Group: Chemical and Pharmaceutical Group  
   Sub-sector: Paints, vanishes and allied products  
   Products manufactured: Paints

16. **FALCON BOTTLING CO. LTD**  
   Osisioma/Old Aba Owerri Road  
   P. O. Box 1257, Aba  
   Tel: 082-231582  
   Sectoral Group: Soft drinks and carbonated water group  
   Products Manufactured: Battled water

17. **GLASS FORCE LIMITED**  
   Osusu Umueme Village, Ogbor Hill Aba  
   Sectoral Group: Non Metallic mineral products  
   Sub-sector: Glass manufacturers  
   Product Manufactured: Bottles

18. **GMICORD INTERBIX LIMITED**  
   Otulu Town  
   P. O. Box 243, Awo-Omamma, Oru West  
   Tel: 087-772742  
   Sectoral Group: Basic Metal, Iron & Steel & Fabricated Metal Products  
   Sub-sector: Nail and Wire Manufacturers Group  
   Product Manufactured: Nails and Wires

19. **HOME CHARM PAINTS INDUSTRIES LTD**  
   Km 5 Old Aba/Owerri Road  
   PMB 7131, Aba  
   Tel: 082-223843, 440062  
   Sectoral Group: Chemical and Pharmaceuticals  
   Sub-sector: Paints, Vanishes and Allied Products  
   Product Manufactured: Paints, Wood Vanish

20. **HYDRO RESOURCES INDUSTRIES LTD**  
    Iyi-Ukwuebi Spring, Umuosinta, Amuzi, Obowo  
    5 Mission Road, Umualum, Nekede  
    P. O. Box 1308, Owerri  
    Tel: 083-234894, 234631,233910  
    E-mail: uzzi@hyperia.com  
    Sectoral Group: Food, Beverages and Tobacco  
    Sub-sector: Soft Drinks and Carbonated Water  
    Products Manufactured: Uzzi Natural Spring Water

21. **INTERNATIONAL EQUITABLE ASSOCIATION LTD**  
    No. 1 Nicholas Road  
    P. O. Box 282, Abo  
    Tel: 082-220699, 232130 (Fax; 227792)  
    E-mail: equitable@phealinkserve.com  
    Sectoral Group: Chemical and Pharmaceuticals  
    Sub-sector: Soap and Detergent  
    Products Manufactured: Laundry Soap, Detergent etc.

22. **INTERNATIONAL GLASS INDUSTRIES LTD**  
    New Aba Industrial Layout  
    PMB 7044, Aba  
    Tel: 082-220699  
    Sectoral Group: Non metallic Mineral Products
23. **JACOBS WINES LIMITED**  
1 – 5 Frank Jacobs Avenue  
P. O. Box 20 Mgbidi  
Tel/Fax: 083-231135, 082 442501, 0803332967  
E-mail: Jacobs@infoweb.abs.net  
Sectoral Group: Food, Beverages and Tobacco  
Sub-sector: Distillery and Blending of Spirit  
Products Manufactured: Wines, Spirit, Starch and Juice

24. **KARISTO INDUSTRIAL SYSTEMS LTD**  
Km 1.5 Aba/Umuahia Expressway  
P. O. Box 5300, Aba  
Tel: 082-221949  
Sectoral Group: Basic Metal, Iron & Steel and Fabricated Metal Products  
Sub-sector: Distillery and Blending of Spirit  
Products Manufactured: Wines, Spirit, Starch and Juice

25. **KITCHEN VEGETABLE OIL LTD**  
152 Aba/Owerri Road  
P. O. Box 3223, Aba  
Tel: 082-350157-9, 350160  
Sectoral Group: Food, Beverages & Tobacco  
Sub-sector: Vegetable/Edible Oil  
Products Manufactured: Vegetable Oil

26. **KORAMA CLOVER INDUSTRIAL LTD**  
Km 6 Old Aba/Owerri Road  
P. O. Box 1345, Aba  
Tel: 082-350101, 350100, 440019  
E-mail: korama@yahoo.com cloverpains@hotmail.com  
Sectoral Group: Chemical and Pharmaceuticals  
Sub-sector: Paints, Vanishes and Allied Products Group  
Products Manufactured: Paints, Wood Variables

27. **LEKVAS METAL WORKS LTD**  
Km 2.5 Aba/PH Expressway, Alaoji  
142 Ehi Road  
P. O. Box 606, Aba  
Tel: 082-220055, 230103, Fax: 237104  
E-mail: lekwasmetal@yahoo.com  
Sectoral Group: Basic Metal, Iron & Steel and Fabricated Metal Products  
Sub-sector: Nail and Wire Manufacturers Group  
Products Manufactured: Wire and Nails

28. **LEO MELOS PHARM. IND. LTD**  
301 Old Aba/Owerri Road  
P. O. Box 188, Aba  
Tel: 082-226410, 352061, 350067, 440111  
E-mail: lcomeless2000@yahoo.com  
Sectoral Group: Chemical and Pharmaceutical  
Sub-sector: Pharmaceutical  
Products Manufactured: Drugs

29. **LIMCA BOTTLES PLC**  
Litma Junction, Enugu/PH Expressway  
P. O. Box 236, Okigwe  
Tel: 083-231671  
Sectoral Group: Food, Beverages and Tobacco  
Sub-sector: Soft Drinks and Carbonated Water
Products Manufactured: Soft Drinks, Sachet Water

30. MAWATEC INDUSTRIES LTD
Km 4 Orlu/Owerri Road
P. O. Box 293, Orlu
Tel: 083-520122, 520522, 082-440714
Sectoral Group: Food, Beverages and Tobacco
Sub-sector: Star and Miscellaneous Food Products
Products Manufactured: Vegetable Oil, PKO and PKC

31. NICEN INDUSTRIES LIMITED
Km 6 Old Aba/Owerri
Osisioma Industrial Layout
Tel: 082-441788, 082 – 222688, Aba
Sectoral Group: Chemical and Pharmaceutical Group
Sub-sector: Paints, Vanishes and Allied Products
Product Manufactured: Paints and Plastics

32. PGN LIMITED
Km 1 Aba/Umuahia Expressway
P. O. Box 214
Tel: (082) 353545, 08035232330, Aba
E-mail: ngn1000@yahoo.com
Sectoral Group: Basic Metal, Iron & Steel and Fabricated Metal Products
Sub-sector: Aluminium Producers
Products Manufactured: Longspan Aluminium, Tower Step Tiles, etc.

33. POLEMA INDUSTRIES LIMITED
Old Aba/Ower Road, Osisioma, near NNPC Depot
31 Okigwe Road
P. O. Box 2582
Tel: 082-223388, 227081
Sectoral group: Food, Beverages and Tobacco
Sub-sector: Star and other Miscellaneous Food Products
Products Manufactured: PKO, PKC

34. ROKANA INDUSTRIES PLC
5 Mission Road, Nekede
P. O. Box 1270 Owerri
Tel: 083-234894, 234631, 233910, 01-4970100
E-mail: rokana@infoweb.abs.net
Sectoral Group: Chemical and Pharmaceuticals
Sub-sector: Domestic Insecticide and Acrosol
Products Manufactured: Toothbrush, Air Freshener, Body spray etc.

35. SACLUX INDUSTRIES NIG. LIMITED
Umuoko Amuzukwu Ibeku
10 Lock-up Shop, Warri Str. Umuahia
Tel: 088-222653, 082-440145
E-mail: sacluxpaints@yahoo.com
Sectoral Group: Chemical and Pharmaceuticals
Sub-sector: Paints, variables and Allied Products Group
Products Manufactured: Paints, Vanish

36. SEAMASTER INDUSTRIES NIG LTD
Abor Umuazihe Amaifeke (Off Owerri Rd., Junction)
P. O. Box 1111, Orlu
Tel: 082-440775, 083-520356, 520341
Sectoral Group: Food, Beverages and Tobacco
Sub-sector: Starch and other Miscellaneous food products group
Products Manufactured: PKO, PKC

37. STARLINE NIGERIA LIMITED
38. **STAR PAPER MILL LIMITED**  
114/116 Aba/Owerri Road  
PMB 7376, Aba  
Tel: 082-222473, Fax: 221472, 090-500269  
E-mail: star@alpha.linserver.com www.starpapermil.com  
Sectoral Group: Pulp, paper products, Printing & Publishing  
Sub-sector: Pulp, Paper & Paper Products Group  
Products Manufactured: Tissue paper & Stationeries

39. **TEEGEE NIG MFG. & CO., LTD**  
37A New Ind. Layout  
P. O. Box 2872, Owerr  
Tel: 083-234232  
E-mail: teegee@informed.abs.net  
Sectoral Group: Basic Metal, Iron, & Steel and Fabricated Metal Products  
Sub-sector: Nail and Wire Manufacturers Group  
Products Manufactured: Nail

40. **TONIMAS NIGERIA LIMITED**  
11 Port Harcourt Road  
Km 8 Aba/Umuahia Exp. Way Aba  
P. O. Box 3273, Aba  
Tel: 082-2232968, 231122, 447696  
Sectoral Group: Chemical and Pharmaceuticals  
Sub-sector: Petroleum Refinery  
Products Manufactured: Lubricating Oils

41. **TOPTREE OIL MILL LTD**  
Km 5 Enugu/P.H. Expressway  
P. O. Box 1268 Aba  
Tel: 090-501770, 222751, Fax: 440018  
E-mail: toptreeoil@yahoo.com  
Sectoral Group: Food, Beverages and Tobacco  
Sub-sector: Star and other miscellaneous food products group  
Products Manufactured: Refined PKO Oil, (Vegetable Oil) Pal Kernel Oil  
Install Capacity: 100 Metric Tons per day  
Chief Sir Andy C. Okpa (KSM) – Managing Director

42. **TURA INTERNATIONAL LIMITED**  
J. Udeagbala Factory Premises  
Ayaba, Umuze, Aba  
Sectoral Group: Chemicals & Pharmaceutical Group  
Sub-sector: Soap and Detergent Group  
Product Manufactured: Soap

43. **TWINSET INDUSTRIES LIMITED**  
29/30 MCC Road Abayi Aba  
Tel/Fax: 08 225154  
Sectoral Group: Food, Beverages and Tobacco  
Sub-sector: Soft drinks and carbonated water group  
Products Manufactured: Bottled water, be cream  
Install Capacity: 2,000 Packets of 0.51, bottle/day
44. **UCIKO NIGERIA LIMITED**  
47, Str. Michael’s Road  
P. O. Box 4701, Aba  
Tel: 082 – 223799, 08033418320  
Sub-sector: Galvanize Iron Sheet Manufacturers Group  
Products Manufactured: Stainless Profile (Grids) Pop Ceiling Bond

45. **UNITED STEEL CONVERTERS LTD**  
214 Port Harcourt Rd.,  
P. O. Box 292, Aba  
Tel: 082 – 220170, 224425, 440409, 225250 Fax: 233508  
E-mail: USCL@phea.linkserve.com  
Sub-sector: Galvanize Iron Sheet Manufacturers Group  
Products Manufactured: Galvanize roofing sheets

46. **UNIVERSAL OILS LTD**  
216218 PJI Rd.  
P. O. Box 6630, Aba  
Tel: 082-224609, 220500, 221690, Fax: 082-223936  
Sub-sector: Star and other Miscellaneous food products  
Products Manufactured: PKO, Vegetable Oil

47. **ZAN COSMETIC IND. LTD**  
Km 2.5 PH/Enugu Exp. Way  
P. O. Box 12130, Aba  
Tel: 082-225347, 227906  
Sub-sector: Toiletries and Cosmetics  
Install Capacity: 150,000 tons  
Mr. Alexander Onuwa Osuji – Managing Director

48. **ZANDOB INDUSTRIAL LTD**  
Okpokorala Umuode-Obia, Enugu/PH Exp. Way  
3D Cemetery Road  
P. O. Box 7233, Aba  
Sub-sector: Distillery and Bleeding of Spirit  
Install Capacity: 1.2m Cartons per annum  
Mr. Alex Maduako – Managing Director

49. **GOODY A. DECORATORS LIMITED**  
1, Okigwe Road  
P. O. Box 20240, Aba  
Tel: 082-225617  
Sub-sector: Absetors Manufacturers Group  
Product Manufactured: Ceiling Products

50. **CITRACO INDUSTRY LIMITED**  
253/255 Aba/Owerri Road  
P. O. Box 12031, Aba  
Tel:  
Sub-sector: Leather products Manufacturers Group  
Product Manufactured: Shoes, Plastic & Leather Shoes