

**VALUE MANAGEMENT AND PERFORMANCE IN SELECTED OIL AND
GAS COMPANIES IN SOUTH-SOUTH, NIGERIA.**

Abstract

Every day, employees at all organization levels in the oil and gas industry in Nigeria make decisions that affect their company's values-yet the link between these decisions and change in company value is often not made. This prompted the study to ascertain the extent of relationship that exists between Value Management and performance of these oil companies. The study specifically seeks to identify the extent to which business value contributions relate to social responsiveness of these selected oil and gas companies in South-South Nigeria. The research question and hypothesis were formulated in line with the specific objective. Survey research design was utilized for the study. Analysis of variance and simple regression analysis were used for hypothesis testing. The finding shows that there is a significant positive relationship between business value contribution and social responsiveness of these oil companies. The study identified Value Management as a critical factor in maintaining harmony in the host environment. The study recommended that the management of these oil companies should train staff on the current use of VM tools to ensure optimal performance in social responsiveness to their host communities.

Keywords: Value Management, Performance, Business Value Contribution and Social Responsiveness.

1. Introduction

Every day, employees at all organizational levels in the oil and gas industry in Nigeria make decisions that affect their company's values yet the link between these decisions and change in company value is often not made. Without this link, oil and gas companies cannot be sure that the decisions being made are increasing value which is the single measure of company's success (Mzera, 2012). These are:- a philosophy that puts value creation at the centre of operational decision making and a process that links day-to-day management with strategic objectives.

Dwindling oil prices and global recession have created new challenges and opportunities for both upstream and downstream players ride out the storm and emerge stronger. The increasing customers' demands for flexibility all at

37 lower costs have generated a new trend in the global oil and gas industry.
38 (Onyeizugbe and Ossai, 2016).

39 Therefore securing a competitive edge in the current global competition is
40 becoming increasingly difficult for these companies. Consequently many oil
41 and gas companies in Rivers State find it difficult to live up to their social
42 responsibility as it is becoming tough for them to catch up with the current
43 challenges (Onyeizugbe et al, 2016).

44 Hamidi (2006) posits that value management (VM) is one of the initiatives that
45 many organizations have been trying to adopt to remain competitive in an
46 increasingly intensive global market-value management is a service which
47 maximizes the functional development from concept to completion, through
48 the comparison and audit of all decisions against a value system determined
49 by a client or customer (Hamidi, 2016). Value management can also be
50 defined as a systematic, proactive, problems solving management system that
51 maximizes the functional value of a project by managing its development from
52 concept stage to operation stage of the product through multidisciplinary value
53 team (Fong, Edie and Cheng, 2001). For a company to be performing, it must
54 be in a position to match its internal resources to the demands of its external
55 environment and in particular its markets and customer expectations of
56 increasing value creation (Johnson and Scholes, 1993). No company is going
57 to survive by history and build the future on historical strengths and therefore
58 organizations need to continuously improve their performance in order to beat
59 competition and dynamism of the business world. There are many
60 management approaches nowadays which can improve organizational
61 performance but VM is different from all these because it aligns all business
62 process to the goal of creating value. This study seeks to identify the extent to
63 which value management relates to performance of selected oil and gas
64 companies using Rivers State as area of study.

65 The oil and gas industry in Nigeria plays a vital role in the country's economic
66 development in terms of foreign exchange government revenue and provision
67 of employment and business opportunities. However this industry in Rivers
68 State in the past years, has witnessed a sluggish growth. Further the
69 profitability and investment of this industry have not increased significantly and
70 flourishing of new business in this sector has been on the decline. The main
71 reason for such a state of affairs of oil and gas industry seems to be linked to
72 inability of some of these companies to create value in the environment in
73 which they operate in. This had led to reduction in oil prices, economic
74 sabotage by oil bunkering and destruction of pipelines by the militants in the

75 Niger Delta. This problem has caused many oil companies in Rivers State to
76 close up. These companies seem to lack the requisite skills on improving the
77 business value contribution in creating value to the host communities and
78 clients.

79 Pursuant to the above stated problem, the study seeks to ascertain the extent
80 of relationship that exists between value management and performance in
81 selected oil and gas companies by identifying the VM tool that can enhance
82 the performance of these companies.

83 The general objective of the study is to identify how value management
84 relates to performance in selected oil and gas companies in Rivers State. The
85 study specifically seeks to ascertain how business value contribution relates to
86 value creation in terms of social responsiveness of these selected companies
87 in Rivers State.

88 **Research Question**

89 This research questions was formulated to guide the study;

- 90 1. How does business value contribution relates to value creation.

91 **Hypothesis**

92 This hypothesis was stated to guide the study:

93 H_{a1}: There is a significant positive relationship between business value
94 contribution and social responsiveness in selected oil and gas
95 companies in Rivers State.

96 **Scope of the Study**

97 The study is delimited to value management and performance in selected oil
98 and gas companies in Rivers State. Value management will be evaluated in
99 terms of business value contribution and performance for value creation in
100 terms of social responsiveness of the oil and gas companies. The companies
101 selected for the study were three (3) out of twelve (12) oil and gas companies
102 currently operating in Rivers State. The companies selected for the study were
103 south Atlantic Petroleum (SAPETRO), Sterling Oil Exploitation & Energy
104 Productive Nigeria Limited, Agip Energy and Natural Resources.

105 **2. REVIEW OF RELATED LITERATURE**

106 **2.1 Conceptual Review**

107 **2.1.1 Value Management**

108 The basic concept of value can be traced back to 19th century Economic
 109 Theory which pioneered the idea of residual income. However the term VM
 110 was not used until the mid 1990's by authors such as (MC Taggart, James,
 111 Peter, Knotes and Michael, 1994). MC Taggart (1994) defines VM as a formal
 112 systematic approach to managing value creation and shareholder value over
 113 long time.

114 VM is also an approach to management whereby the company's overall
 115 aspirations, analytical techniques and management processes are all aligned
 116 to help the company maximize its value by focusing decision-making on the
 117 key drivers of value (Copeland, Koller and Murrin, 2000).

118 Value management became popular in the mid 1980's when Rapport
 119 published his seminar text, "creating shareholder value-the new standard for
 120 business performance. Value-based management theoretically involves a shift
 121 away from the use of Traditional Accounting Measures such as Earnings Per
 122 Share (EPS) and rate of Return on Equity (ROE) which are argued by the
 123 proponents of VM to offer an unreachable guide to "shareholder value
 124 creation". Companies should adopt a number of alternative measures like
 125 Economic Value Added (EVA), Cash Flow Return on Investment (CFRO),
 126 Rate of Return on Investment (ROI) and Discounted Free Cash Flow
 127 Valuation (DCF) that are intended to provide "a calculating machine"
 128 consistent with the principles of economic income. (Copeland et al, 2000).

129 Ansoff and Sullivan (1993) have listed some of the prescriptions for optimizing
 130 profitability such as; strategic planning, back to the basics, emerging strategy,
 131 logical instrumentation, stick to knitting, return to core business and put
 132 customers first.

133 Fong, Eddie and Chenge (2001) posit that VM is a systematic process that
 134 aims to create the best value for project on the basis that the project factions
 135 must be achieved.

136 Kelly and Male (2001) view VM as a proactive, problem solving management
 137 system that maximizes the functional value of a project by managing its
 138 development from concept stage to operation state of a project through
 139 multidisciplinary value team.

140 Kelly and Male (2001) identify three elements of value-based management as;

141 1. Creating Value – how a company can increase or generate maximum
 142 future value. More or less equal to strategy.

- 143 2. Managing for Value – Governance, change management,
144 organizational culture communication and leadership.
- 145 3. Measuring Value – Value-based management is dependent on the
146 corporate purpose and the corporate values. The corporate purpose
147 can either be economic (shareholder value) or can also aim at other
148 constituents directly (stakeholder value). This study tends to focus on
149 the stakeholder value.

150 **2.1.1 Value Management Life Cycle**

151 Fong et al, (2001) identify, the stages of Value Management life cycle that can
152 accelerate the pace of performance in organizations as:

- 153 1. Discovery Phase
- 154 a. Benchmark performance
- 155 b. Clarify initiatives with defined success metrics communicated
156 through a robust business case.
- 157 c. Ensure that executives are accountable for outcomes.
- 158 2. Realization Phase
- 159 a. Drive project prioritization based on value throughout the
160 implementation.
- 161 b. Design processes for value
- 162 c. Build management visibility into the project design.
- 163 3. Optimization Phase
- 164 a. Institutionalize VM capabilities across the portfolio
- 165 b. Foster performance-based thinking; make success visible.
- 166 c. Enable management visibility and discipline

167 **2.1.2 Benefits of Value-based Management**

- 168 a. Can maximize value creation consistently
- 169 b. It increase corporate transparency
- 170 c. It helps organizations to deal with globalized and deregulated capital
171 markets.
- 172 d. Aligns the interests of top managers with the interests of
173 shareholders and stakeholders.
- 174 e. Facilitates communication with investors. Improves internal
175 communication about the strategy.
- 176 f. Prevents under valuation of the stock
- 177 g. If sets clear management priorities
- 178 h. Facilitates to improve decision making.
- 179 i. It helps to balance short-term, middle-term and long-term trade offs

- 180 j. Encourages value-creating investments
- 181 k. Improves the allocation of resources
- 182 l. Streamlines planning and budgeting
- 183 m. It sets effective targets for compensation
- 184 n. Facilitates the use of stocks for mergers or acquisitions
- 185 o. Prevents turnover
- 186 p. It helps to better manage increased complexity and greater
- 187 uncertainty and risk.

188 **2.1.3 Business Value Contribution**

189 In management, business value is an informal term that includes all forms of
190 value that determine the health and well being of the firm in the long run.
191 Business value expands concepts of value (also known as economic profit,
192 economic value added, and shareholder value) to include other forms of value
193 such as employee value, customer value, societal or community value,
194 supplier value, channel partner value, alliance partner value and managerial
195 value. Many of these forms of values are not directly measured in monetary
196 terms (Sliger and Broderick, 2008).

197 The concept of business value contribution is aligned with the theory that a
198 firm is best viewed as a network of relationship both internal and external.
199 These networks are sometimes called a network or value Chain
200 (Sward, 2006). Each node in the network could be a stakeholder group, a
201 resource, an organization, end-customer, interest groups, regulators or the
202 environment itself. In a value network, value creation is viewed as a
203 collaborative, creative, synergistic process rather than purely mechanistic or
204 as a result of command and control (Sliger and Broderick, 2008; Sward,
205 2006).

206 **2.1.4 Components of Business Value**

207 The components of business value as listed by Sliger and Broderick, 2008;
208 Sward, 2006) are;

- 209 a. Shareholder value: For a publicly traded company, shareholder value is
210 the part of its capitalization that is equity as opposed to long-term debt.
211 One type of stock would be estimated with the number of outstanding
212 shares times current share price. Dividends augment shareholder value
213 while issuing of shares lower it that is stock options lower it. This
214 shareholder value added should be compared to average/required
215 increase in value, also known as cost of capital for private companies,

216 the firm's value can be computed using valuation methods like
 217 discounted cash flow.

218 b. Customer value: This is the value received by the end-customer of a
 219 good or service. These customers include a single individual or an
 220 organization with various individuals playing different roles in the
 221 buying/consumption processes. This can be measured as utility, quality,
 222 benefits and customer satisfaction.

223 c. Employee knowledge: This is mostly undervalued and also the area
 224 where there is the most discord in reporting. Employees are the most
 225 valuable asset organizations possess.

226 d. Channel partner value: This can be critical to a firm's functioning. It
 227 stops to exist if partner value is diminished or lost.

228 e. Supplier value: The suppliers also add or create value for the
 229 organizations

230 f. Managerial value: Managers should follow the principle of system value
 231 and people oriented principle.

232 g. Societal value: The organizations should follow or adopt several values
 233 toward society or communities they carry out their operations. These
 234 social values include the provision of hospitals, schools, employment,
 235 environmental, protection and other programmes that will impact
 236 positively on the host communities. This component is one of the
 237 focuses of this study.

238 **2.1.5 Social Responsiveness**

239 The European Commission defined Social Responsiveness in 2006 as a
 240 concept whereby companies integrate social and environmental concerns in
 241 their business operations and in their interaction with their stakeholder on a
 242 voluntary basis (Kaufmann and Olaru, 2012). Today's consumers hold
 243 companies to a high standard. Eighty-four (84%) of global consumers also
 244 said they seek out responsible products whenever possible (Post, 2017).
 245 Recognizing how important social responsibility is to their customers, many
 246 companies now focus and practice a few broad categories of corporate social
 247 responsibility (CRS). They are as stated by Post (2017):

- 248 i. Environment efforts: Green energy usage eco-friendly activities.
- 249 ii. Philanthropy: Donating to national and local authorities
- 250 iii. Ethical labour practices: Treating employees fairly and ethically.
- 251 iv. Volunteering: By doing good deeds without expecting anything in
 252 return, companies are able to express their concern for specific
 253 issues and support for certain organizations.

254 Social responsiveness is an organizations obligation to contribute to their
255 community or country in a way that makes the quality of life and environment
256 better for those around them.

257 2.1.6 Techniques of Value Management

258 The Institute of Value Management, United Kingdom views value management technique as a
259 combination of concepts and methods to create sustainable value for both organizations and their
260 stakeholders. Some tools and techniques are specific to value management and others are generic
261 tools that many organizations and individuals use. Detailed below is a list and summary of some of
262 the main tools or techniques

- 263 i. Brainstorming
- 264 ii. Cost efficiency
- 265 iii. Criteria weighting
- 266 iv. Excursion/Metaphors
- 267 v. Function analysis
- 268 vi. Objectives Hierarchy
- 269 vii. Issues Generation and Analysis
- 270 viii. Pair wise comparison
- 271 ix. Pareto analysis
- 272 x. Process mapping
- 273 xi. Risk analysis
- 274 xii. Scamper
- 275 xiii. Stakeholder analysis
- 276 xiv. SWOT analysis
- 277 xv. Value analysis
- 278 xvi. 5 W's and H
- 279 xvii. SMART Methodology (simple multi-attribute)
- 280 xviii. Creative techniques

281 i. **Brainstorming Technique:** Hamersley (2002) in Chan and Tsang (2014) are of the
282 opinion that this technique is an idea generation technique that focuses on creating of
283 ideas by volume (no judging). The benefits are that it allows a large volume of ideas to be
284 generated in a short period of time. It ensures all parties are involved- no ideas are
285 discounted initially but later, evaluation and filtering of ideas are undertaken.

286 **The Steps involved are;**

- 287 1. Know and understand the real criteria the company will adopt to make decisions about the
288 resulting ideas
- 289 2. Use questions, the right ones for that matter as the platform for idea generation so that value
290 management team will explore in small groups during a series of idea generation sessions.
- 291 3. Pick people who can answer the questions you are asking by choosing participants with first
292 hand “In the trenches” knowledge
- 293 4. Conduct multiple, discrete, highly focused idea generation sessions among sub-groups on
294 three to five people on different ideas rather than holding one continuous, rambling discussion on
295 one idea or topic among the entire group for several hours.
- 296 5. Before dividing the participants into sub-groups on their arrival, orient them on what you
297 expect them to accomplish and the no-go areas.
- 298 6. Finally, ask the sub-groups to narrow their list of ideas, to a top few and then share all the
299 leading ideas with the full group and motivates and inspire participants but a winner with the best
300 idea or ideas should not be picked, rather notifying them on how the winning ideas will be chosen
301 and how they will learn about the final decisions
- 302 7. Quick follow-up activities on decisions taken should be carried out (Coyne and Coyne 2011)

303 **Criteria Weighting Technique:** is a tool used to assist in option selection and uses functional
304 drivers (or objectives) that are weighted for scoring options against (Coyne and Coyne, 2011).

305 The benefit of this technique is that it enables options selection and alternatives to be reviewed in
306 order to support decisions being made. There are a number of different weighting techniques with

307 varying degrees of complexity which are commonly used in value management studies. These
308 include:

309 Dots: This is the most simplistic technique and the least scientific but can be the quickest way to
310 assess the relative importance of a number of items by simply allocating dots to their preferred
311 choices (Dallas, 2006).

312 Distribution of points: This is a more statistically sound way to assign weightings by asking the
313 team to allocate a field number of points between the items. Each person can put as many points
314 as they wish against anyone item but must use all their points and no more (Kelly and Male 2011)

315 Paired comparison: Here direct comparisons are made between each of the attributes by judging
316 each item against the others and a three point scale designed for assessing by how much one
317 attribute is better than another (Dallas, 2006).

318 **Cost efficiency Technique:** is defined as a state in which the inputs and methods used to produce a
319 product or service results in the maximum feasible outcome. It is also the accomplishment of
320 objectives with the lowest expenditure of resources (Kelly and Male, 2011). **Excursion and**
321 **Metaphors Technique:** This can be described as a tool used to take delegates on an outward and
322 return journey (possible excursion). It requires moving delegates from a problem to somewhere where
323 creativity flourishes. The return journey often releases such creativity and ideas that would not
324 normally be evident (Institute of Value Management 2015). The benefit of excursion and metaphors is
325 that it is very effective in bringing creativity to the fore front and is often used as a precursor to
326 brainstorming.

327 **Function Analysis Technique:** is a method or technique or tool of value management for
328 analysing the functions of the constituent parts of a project. There are many approaches to function
329 analysis, some very structured (such as the function analysis system technique) and others less formal
330 (such as value trees or mind maps). Functional analysis provides a very

331 powerful tool to identify intended outcomes. In developing a functional model, the team is forced to
332 make a very clear definition of the project by considering key questions such as:

- 333 1. What are we trying to achieve?
- 334 2. What must we get right, if we are trying to achieve it?
- 335 3. What considerations do we need to bear in mind while designing it? How do various design
336 solutions contribute towards achieving the desired outcome?

337 **(a) Function Analysis System Technique-** This is one of the approaches to function
338 analysis, defined by the institute of value management as a technique used for
339 identification of functions (at the heart of value management) of products, processes,
340 projects or services and focused on client needs and wants. This technique relies on
341 logically linking functions and allows people from different technical backgrounds to
342 use a common language to describe and link the functions of complex systems to build a
343 FAST (Function Analysis System Technique) Diagram. In order to produce the FAST
344 Diagram, the team will have to interact and communicate with one another effectively to
345 arrive at a logical diagram that they can all understand and agree with. (Male and
346 Graham, 2004).

347 The benefits of function analysis system techniques are that it determines what functions are delivered
348 i.e. what they do or must not do, not what they are (avoiding solution mode)

349 **(b) Value trees:** The value tree is similar to the function analysis system techniques diagram
350 but the only difference is that in the FAST Diagram, the “how” and “why” are linked
351 together in a logical way for the team to understand and agree with but in value tree,
352 functions and attributes of a project normally begins on the left hand side with a statement of
353 project objectives. The answer to the question “how” is expressed in simple value-adding
354 attributes required to deliver the project objective. Each of these is broken down into the
355 attributes that add value to that branch, this building a tree of decreasing abstraction from
356 left to right, (connaughton, 2010).

357 **Objectives Hierarchy Technique:** The institute of value management opines that it is a
358 diagrammatic process for identifying objectives in a hierarchical manner and is often used in
359 conjunction with functions. The benefit of this techniques is that it assists in focusing input where the
360 key objectives are an the diagram is constructed in descending order.

361 **Issues Generation and Analysis Technique:** This is a way of eliciting many issues connected
362 with a problem or opportunity. Team members write down their issues on post-it notes and they are
363 displayed on the wall under appropriate categories or groupings e.g. requirements, constraints,
364 groupings, opportunities, consumptions, uncertainties, risks. The benefits of this technique are that it
365 enables voting of the top ten important issues followed by exploration of actions to address issues
366 (Connaughton, 2010).

367 **Pair wise comparison Technique:** This technique enables ranking of items by means of
368 comparisons between all possible pairs of items. It enables option selection and alternatives to be
369 reviewed in order to support decisions being made (Connaughton, 2010)

370 **Pareto Analysis Technique:** It is often called the 20/80 rule and aims to concentrate on the top 20
371 percent of items that often have biggest (often 80 percent impact), it focuses on those items or
372 activities that can achieve the optimum.

373 **Process mapping Technique:** Mohd and Zulkaman (2014) is of the opinion that this technique
374 uses flow charts to review steps in processes. It identifies processes in a diagrammatic format in a step
375 by step manner and is often used in a manufacturing of system type processes. It is also used to
376 identify omissions or superfluous items in the process for correction.

377 **Risk analysis Technique:** This was defined by Kelly and Male (2011) as a structured approach to
378 identifying risks that could affect project, product, process or service success. Here, risks are
379 identified, evaluated (in terms of cost, time, and other impact) and robust action planning applied. It is
380 often used in parallel with value management as there are genuine links and assist decision making or
381 option selection.

382 **Scamper Technique:** is used as a checklist to develop ideas by applying separate verbs to choose
383 ideas singly or together with others e.g. combine, amend etc. this technique could help
384 with moving an idea from a creative thought to a more practical use, expand on the concept behind
385 ideas and find different ways of expressing the idea.

386 **Stakeholder Analysis Technique:** identifies those key stakeholders (groups of individuals) with
387 an influence or interest in a project, product, process or service. It can assist in following attention
388 where the priorities are required i.e satisfaction of key stakeholder interests (Connaughton, 2010).
389 Stakeholders of the firm includes customers, project sponsors, project team, government, suppliers,
390 and subcontractors etc.

391 **(a) Project sponsor:** Walt (2011) sees him as a stakeholder who sometimes is an executive in
392 the organization with the authority to assign resources and enforce decisions regarding the
393 project.

394 **(b) Customers:** are the reasons why a business was established. Their expectations in terms of
395 prices, product quality, features and performance must be met for the organization to succeed and
396 survive.

397 **(c) Top management:** May include the president, vice president, directors, division managers,
398 the corporate operating committee. These people direct the strategy and development of the
399 organization.

400 **(d) Project team:** is made up from the main departments closely related to production activities,
401 the managers of the departments, workshop planners brainstorming on ideas for the company and
402 making various analyses.

403 **(e) Suppliers:** are those who provide raw materials, equipment for the production activities in
404 the organization

405 **(f) Government:** are the various government agencies like the regulatory organizations like,
406 National Agency for Food and Drug Administration and Control (NAFDAC), Standards Organization
407 of Nigeria (SON), tax and revenue organizations, other task force that influences or regulate the

408 activities of the organization.

409 **Value analysis Technique:** is a structured team based approach to identifying functional
410 requirements of projects, products, processes or services., it aids in optimization and maximization of
411 value to the clients or customer. The value analysis process entails.

- 412 1. Pre-Analysis which consists of activities of project selection and team selection
- 413 2. Analysis phase which consists of activities like investigation, speculation, evaluation,
414 development and presentation of the report.
- 415 3. Post analysis phase which consists of activities' implementation of the report and regular
416 audit (Watt, 2011).

417 Activities for value analysis by Kelly and Male 2011 include;

- 418 i. Identifying the product or service which is based on usage and demand, complexity in
419 development and future potentials.
- 420 ii. Understand in detail cost structure in developing and manufacturing the product.
- 421 iii. Define all the primary functions of the product and service through satisfying the
422 basic needs and then taking the next step in delighting the customer.
- 423 iv. Shortlist alternatives through brainstorming which can provide value to the primary
424 function of the product. Cost evaluation at high level needs to be done for all the
425 alternatives and the cheapest alternative chosen.
- 426 v. Secondary functions of the product and services are studied and evaluated.
- 427 vi. Value analysis done has to be communicated to the various levels of the management
428 team as to get acceptance.

429 Reasons for Value Analyzing Existing Projects.

- 430 1. It reduces costs (in all areas such as materials, parts and products) as well as improving
431 product function thereby increasing the value of the product to the customer.
- 432 2. Reducing the costs of products increases revenue and profit per product. Therefore, giving

433 your company the option of reducing prices to sell more or investing in research and
434 development.

435 3. It enables improvements to be made to the products in a variety of areas such as design and
436 engineering, material selection testing, manufacturing, assembling, shipping, installation etc.

437 4. Value analysis enables your business to take commercial advantage of the constantly falling
438 prices of some technologies, as well as source alternative components and materials.

439 5. For many manufacturing businesses, their products range has evolved over time, as a
440 collection of solutions to meet new customer needs rather than being the result of strategic
441 planning.

442 **SWOT Analysis Technique:** identifies strengths, weaknesses, opportunities and threats
443 and is also a tool used in many organizations to assist in focusing activities where required
444 and minimize those items that can impact negatively. It consists in understanding strengths,
445 weaknesses, opportunities and threats that can impact on an organization, individual, product
446 or processes (Dallas, 2006).

447 **(a) Strengths:** This describes the positive factors of a business. These are completely
448 under the control of the business owner and he decides how to utilize them for the
449 benefit of his company. Strengths are considered as an internal factor and include the
450 positive attributes of a company (Connaughton, 2010). Examples of strengths are strong
451 finance sector, brilliant marketing team, high skilled workers etc.

452 **(b) Weaknesses:** are internal factors that are within the control of the business and include
453 the lack of technologies, lack of capital invested, in the business, unskilled labours or
454 even the poor location of the business. (Connaughton, 2010). A business strategy should
455 focus less on the different areas of threat to the business and also analyze the weaknesses
456 by coming up with ideas which improves the weaknesses but also match up with the
457 competitors.

458 **(c) Opportunities:** are external factors of the business that are beyond the control of
459 the business but they are positive in nature. Opportunities reflect the potentials of the

460 business and marketing strategy implemented. Zelthan (1996). These open up possibilities
461 for the business to do well if done right or taken advantage of ,the business will have a
462 significant boost over its rivals or competitors

463 **(d) Threats:** are basically the factors which may put your marketing strategy and entire
464 business in jeopardy. It is therefore important for a company to asses the threats surrounding
465 a business opportunity. It is an external factor which the company has no control over.
466 Examples of threats may include bad weather, government tax regulations, rising prices from
467 suppliers, pressure from the activist groups, bad media coverage, lawsuits that may damage
468 the company's reputation, threats from competitors etc. (Watt, 2011).

469 **5W's and H Technique:** is defined as a technique for exploring problems which
470 provokes further depth of questioning about the dimensions framing the problem or
471 opportunity.

472 **2.2 Theoretical Framework**

473 This study is anchored on Porter's Value Chain Framework. Porter (1985)
474 analyzes value creation at the firm level. Value chain analysis identified the
475 activities of the firm and then studies the economic implications of those
476 activities. It includes four steps: (i) defining the strategic business unit (ii)
477 identifying critical activities (iii) defining products and (iv) determining the value
478 of an activity. The main questions that the value chain framework addresses
479 are as follows: (i) what activities should a firm perform, and how? and (ii) what
480 is the configuration of the firm's activities that would enable it to add value to
481 the product and to compete in its industry. Value chain analysis explores the
482 primary activities, which have a direct impact on value creation, and support
483 activities which affect value only through their impact on the performance of
484 the primary activities. Primary activities involve the creation of physical
485 products and include inbound logistics, operations, outbound logistics,
486 marketing and sales and service.

487 This theory is relevant to the study in that the oil and gas companies in Rivers
488 State should study the economic and social activities of their company and
489 evaluates the level of value creation to the host communities they carry out
490 their operations in.

491

492 **2.3 Empirical Review**

493 These are some of the empirical studies carried out by different authors. They
494 are reviewed below:

495 Mzera (2012) carried out a study on the effect of strategic value-based
496 management on the performance of organizations in coast province, Kenya.
497 The study was based on a survey of 70 managers of classified hotels in
498 Mombasa and was relating the performance of these hotels to the probability
499 of using value-based management visa vis not using value-based
500 management through regression analysis. The findings indicated that value-
501 based management had a significant positive relationship with the
502 performance of the hotels.

503 Khalid, Ibrahim and Raed (2015) in their study on key performance indicators
504 for value management in Saudi Construction Industry. A list of 55 initial
505 performance criteria classified within three main groups have been identified
506 by literature and interviews with VM experts: A survey for 119 of Practitioner
507 Engineers in Saudi Construction Industry has also been done. They key
508 performance indicators have been identified to play a big role in measuring the
509 performance of value management in Saudi Industry.

510 Oane, Smolag; Marinescu and Szopa (2015) using theoretical approach
511 studied value-based management as the innovating paradigm of
512 contemporary governance. The findings showed that indicator systems
513 developed under value management became irreplaceable sources of
514 information to ensuring long-term performance.

515 Wyk and Smith (2008) studied value-based management and its application in
516 developing value maximizing strategies at Anglo Platinum. The study adopted
517 descriptive methodology and found out that VM ensures alignment of
518 objectives and established a common language, standards and processes to
519 align decisions and actions. Companies who made explicit commitments to
520 value improvement targets improved their performance.

521 Brenda and Dina (2002) carried out a study on evolution and implementation:
522 A study of values, business ethics and corporate social responsibility.
523 Correlational analysis was used and the study identified the links among
524 values, ethics and corporate social responsibility as they are incorporated into
525 the culture and management of the two organizations studied.

526 Ezezue (2015) in a study on value management in Nigeria manufacturing
527 companies: Challenges and prospects. The study surveyed 6000 top, middle

528 and lower level management staff of twenty selected manufacturing
 529 companies drawn from five states in South East, Nigeria. The results showed
 530 that inadequate orientation and focus on VM principles impeded the success
 531 of VM and performance in these companies.

532 Ezigbo (2011) using primary data conducted a study on customer service and
 533 business value contribution in manufacturing companies in Nigeria. The data
 534 was analyzed with Pearson Product Moment Correlation. The findings
 535 indicated that customer service significantly relates positively with business
 536 value contribution.

537 Wenpin and Sumantra (1998) studied social capital and value creation: The
 538 role from multiple respondents in all the business units of a large multinational
 539 electronics company. Social interaction, a manifestation of the structural
 540 dimension of social capital and trust, a manifestation of its relational
 541 dimensional, were significantly related to the extent of interunit resource
 542 exchange, which in turn had a significant effect on product innovation.

543 Artur, Karan, Craven and Gudrun (2003) in a study on performance
 544 consequences of brand equity management: evidenced from organizations in
 545 the value chain. It was found out that organizations in the value chain
 546 performed improvably. Data was analyzed with regression analysis.

547 Mold and Zulkamin (2014) carried out a study on impact of value management
 548 on the business growth using four plastic manufactory firms. The data was
 549 analyzed with Z-test and the findings revealed that VM has influence on
 550 business growth of these firms.

551 Sakunasingha (2013) carried out an empirical study on “Value Analysis and Value Management”
 552 using 462 members and Heads of Finance and Accounts Departments of Electrical and Electronics
 553 industries of Thailand. Data was analyzed using correlation, regression and factor analysis. His
 554 findings revealed that none of the chosen organizational factors studied directly influences the use of
 555 value management tools and a significant relationship was found between
 556 organizational size and market share position but these two factors do not establish significant
 557 relationship with value management or organizational performance.

558 Paarlberg & Perry (2006) carried out a study on the topic “value management: Aligning Employee
 559 values and organizational goals. Their respondents were civilian employees and managers who have
 560 worked for over five years in Department of Defence Installation.

561 They used comparative case analysis to explore differences in the relationship between installation
 562 practices and social values across high-performing and low performing units. Their findings revealed
 563 that strategic values are motivating to employees to the extent that they reflect employees internal
 564 affective, normative and task oriented values, a zone of existing values.

565 Coyne & Coyne (2011) carried out a study on Seven steps to Better Brainstorming in value
 566 management by observing 200 projects in 150 companies in industries ranging from retailing and
 567 education to banking and communications. Their experiences have helped reveal a practical approach
 568 that captures the energy typically wasted in a traditional brainstorming session and steers it in a more
 569 productive direction. The trick, they also revealed is to leverage the way people actually think and
 570 work in creative problem-solving situations.

571 Che Mat (1995) carried out a study on Value Management: An effective cost optimization technique
 572 on 215 managers in five selected construction companies in India using factorial analysis and
 573 correlation to analyse data. Findings revealed that several techniques in value management are often
 574 used to reduce cost and increase profits in construction and design projects.

575 Mold & Zulkamain (2014) examined the impact of value management on the business growth using
 576 four plastic production company. The study was guided by three research questions and descriptive
 577 survey design was adopted. The data used were collected through questionnaire and was analysed
 578 with Z-test with the aid of statistical package for social sciences (SPSS). The study reveal that value
 579 management has a significant effect on business growth of Production Company

580 Cornel (2010) carried out a study on business value contribution and as correlate of customers
 581 satisfaction. The study was guided by one research questions; the data collected was a primary data
 582 through structural questionnaire. The data was analysed with correlation using statistical package for

583 social sciences (SPSS version 21). The findings shows that business value contribution has a
584 significant effect on customers satisfaction

585 Empirical reviews showed that the studies of Khalid et al, 2005; Oane et al,
586 2015; Wyk and Smith, 2008; Brenda and Dina (2002); Ezezue (2015), Ezigbo
587 (2011); Wenpin and Sumantra (1998), Artur et al, 2003; Mold and Zulkamin
588 (2014) revealed that value management significantly improved the
589 performance of organizations studied.

590 The research lacuna expressly showed that the studies from other authors did
591 not focus on business value contribution and social responsiveness of oil and
592 gas companies in Nigeria. This study fills that gap by studying the extent of
593 relationship that exists between value management and performance of
594 selected oil and gas companies in Rivers State of Nigeria with specific
595 reference to business value contribution and social responsiveness of these
596 oil and gas companies which have never been studied in Nigerian
597 environment.

598 3. METHOD

599 The study adopted survey research design. The research design enabled the
600 study to determine the opinions of the respondents on Value Management
601 towards the performance of oil and gas companies in Rivers State. The data
602 collected was used in testing hypothesis and making generalization on the
603 population based on the findings from the sample.

604 Primary data is the source of data for this study. The data were collected
605 using structured questionnaire built on a five-point likert scale. Copies of
606 questionnaire were administered to the respondents.

607 The total population includes all the oil and gas companies in Rivers state.
608 The study population of two thousand, three hundred and ninety five (2395)
609 were drawn from the total population of nine thousand, eight hundred and
610 thirty seven (9837).

611 **Table 1: Total Population of Oil and Gas Companies Operating in Rivers**
612 **State**

S/N	COMPANY NAME	NO. OF EMPLOYEES
1	Shell Petroleum Company of Nigeria (SPDC)	1638
2	Total E and P Nigeria Limited (TEPNG)	1164
3	Nigeria Liquefied National Gas Limited (NLNG)	1342
4	Nigeria Agip Oil company (NAOC)	1053

5	Mobil Producing Nigeria Limited (MPN)	1840
6	Chevron Nigeria Limited (CNL)	2410
7	Addax Petroleum Nigeria	177
8	Nigeria Agip Energy and Natural Resources (NAE)	41
9	South Atlantic Petroleum (SAPETRO)	45
10	Statoil Nigeria Limited (SNL)	17
11	Sterling Oil Exploration and Energy Production Company Limited	81
12	Petroleum Brasileiro Nigeria Limited (PEROBRAS)	29
Total		9837

613 **Source:** Field Survey, 2017.

614 **Table 2: Study Population**

S/N	COMPANY NAME	NO. OF EMPLOYEES
1	Nigeria Liquified Natural Gas Limited (NLNG)	1342
2	Nigeria Agip Oil Company	1053
Total		2396

615 **Source:** Field Survey, 2017

616 Two oil and gas companies were selected from the total of 12 operating oil
617 and gas companies in River State.

618 The study relied on the table of random numbers of probabilistic sampling
619 technique which gave each item of the population equal and independent
620 chance of being included in the sample. Then the sample size was determined
621 using the Taro Yamene formula. The computation is shown below:

$$622 \quad n = \frac{N}{1 + N(e)^2}$$

624 Where n = sample size

625 N = Population size

626 e = error limit (0.05)

$$627 \quad N = \frac{2395}{1 + 2395(0.05)^2} = 400$$

629 Bowley's proportionate allocation formula was used to determine copies of
630 questionnaire to be distributed to each company. The computation is shown
631 below:

$$632 \quad N_h = n (n_h)/N$$

633 Where: N_h = number of units to be distributed to each group

634 n_h = number of respondents in each group

635 n = total sample

636 N = total population
 637 NLNG
 638 Nh = 400 (1342)/2395 = 224
 639 AGIP Oil Company
 640 400(1053)/2395 = 176

641 The study adopted content validity where expert judges were carefully
 642 selected in the field of statistics and top management level. They were given
 643 the instrument and asked to rate the instrument independently as “strongly
 644 relevant to the construct”. Then after collecting the instrument from the judges,
 645 the decision rule was applied which states that only the items in the instrument
 646 which the entire expert judges independently certify “strongly relevant to the
 647 construct” should be retained while the ones that fail this test should be
 648 dropped. This approach enabled the study to share the opinions of the experts
 649 and therefore certified this instrument fit to elicit the actual responses and
 650 measure what it is supposed to measure.

651 The study adopted split-halves method. A pilot study involving 30 participants
 652 was used. The responses of the participants based on the questions from the
 653 instrument were divided into two equal halves by assigning the odd numbers
 654 items to one half and even numbers items to the other half of the test.

655 **Table 3: Reliability Test Table**

S/N	Pre-test	Post-test	d	d ²
1	30	29	2	4
2	30	29	1	1
3	29	28	1	1
4	29	28	1	1
5	30	29	1	1
6	29	27	2	4
7	30	29	1	1
8	30	28	2	4
9	30	29	1	1
10	30	29	1	1

656 Correlation between the two halves 19

657
$$r_s = 1 - \frac{6\sum d^2}{N^3 - N}$$

 658
$$= 1 - \frac{6 \times 19^2}{30^3 - 30} = 0.91$$

 660

661 Applying Spearman Brown Prophecy Formula

662
$$PXX'' = 2PXX' / 1 + PXX'$$

663 Where PXX' = the reliability coefficient for the whole test

664 PXX' = the split half coefficient for the whole test

665 PXX' = the split half coefficient

666
$$= \frac{2(0.91)}{1+0.91} = 0.9$$

668 This certifies that the instrument is reliable

669 The analysis of variance and simple regression Analysis were used in testing
670 the hypothesis to establish the level of relationship/ difference that exists
671 between the dependent and independent variables.

672 3.1 Limitations of the study

673 The study encountered some hindrances in the process of the study. These
674 hindrances were:

- 675 1. Inability of the respondents to fill in the questionnaire but this problem
676 was mitigated by visiting them during break-time.
- 677 2. Refusal by the respondents to reveal any information because of fear of
678 militants in the area but the limitation was mitigated by educating and
679 convincing them the reason for carrying out the study

680 4. Data Presentation and Analysis

681 Out of 400 copies of questionnaire distributed, 354 returned the copies of
682 questionnaire showing 88.5% response rate.

683 4.1 Demographic Profile of the Respondents

684 **Table 4: Age of the Respondents**

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-30	7	2.0	2.0	2.0
31-50	231	65.2	65.2	67.2
51-66	92	26.0	26.0	93.2
66 and above	24	6.8	6.8	100.00
Total	354	6	100.0	

685 Source: Field Survey, 2017

686 The table of age of distribution above who participated in the study revealed
687 that those between the ages of 18-30 are 7 (2percent), those between the
688 ages of 31-50 are 231 (65.3percent), those in age bracket 51-65 are 92
689 (26percent) while ages 66 and above are 24 (6.8percent).

690 **Table 5: Sex Distribution of the Respondents**

Age	Frequency	Percent	Valid Percent	Cumulative Percent
Male	317	89.5	89.5	89.5
Female	37	10.5	10.5	100.0
Total	354	100.0	100.0	

691 Source: Field Survey, 2017

692 The sex distribution table above showed that 317 (89.5percent) of the
 693 participants are males while 37 (10.5 percent) are females. It is clear that the
 694 males dominate in the companies.

695 **Table 6: Analysis of Research Question**

S/N	Question	Mean	Standard deviation	N
Business value contribution				
1	My organization reacts quickly to clients where there are complaints	4.48	.991	354
2	My company embarks on production process that reduces cost of production	4.41	1.029	354
3	The departments in my company work towards generating ideas that will add value to our business	4.54	1.126	354
4	My company makes use of standard equipment in production processes in order to produce durable products	4.88	.522	354
5	We work in teams to ensure that we add value to our production process and output	4.14	.556	354
Social Responsiveness				
6	My company responds promptly to community agitations on their social needs	4.23	.847	354
7	My company explores any available means to control gas flaring in the host communities	4.71	.854	354
8	Management of my organizations gives employment opportunities to the host communities.	4.62	.972	354
9	My company builds infrastructure like hospitals, schools, roads in the host communities	4.87	.474	354
10	We do not wait for youth restiveness before we provide them with social amenities	4.70	.793	354

696 In the analysis of research questions, it showed the respondents mean values
 697 are more than 3 each of the decision value. This reveals that a business value
 698 contribution is one of the indicators of social responsiveness. This is
 699 supported by Ezezue (2015) in a study carried out on value management in
 700 Nigerian manufacturing companies that inadequate orientation and focus on
 701 VM principles impede the success and performance of companies.

702 Hypothesis Testing

703 There is a significant positive relationship between business value contribution
704 and social responsiveness of selected oil and gas companies in Rivers state.

705 **Table 7: ANOVA Table for Simple Regression Result for the Hypothesis**

Model	Sum of squares	df	Mean square	f	Sig
Regression	191.073	1	191.073	133.349	.000 ^b
Residual	504.373	352	1.433		
Total	695.446	353			

706 **Source:** Field Survey, 2017

707 Table 5 result above reveals that f-calculated value of 133.349 is greater than
708 f-critical table value of 3.85 at 0.05 level of significance and at 1 degree of
709 freedom. Null hypothesis is rejected and alternate hypothesis accepted which
710 states that there is a significant positive relationship between business value
711 contribution and social responsiveness of these companies.

712 **Table 8: Model Summary for Test of the Hypothesis**

Model	R	R-square	Adjusted R-square	S.E of estimate
1	.524 ^a	.275	.273	1.197

713 **Source:** Field survey, 2017

714 Table 6 is the model summary. It shows how much of the variance in the
715 social responsiveness of these companies that is explained by business value
716 contributions. In this case, the R-square value of .275 and an Adjusted R-
717 square value of .273 means business value contributions explains 27.3%
718 variance in social responsiveness of these oil companies in Rivers State.

719 **5. Discussion of Findings**

720 The finding from the hypothesis supports the views of Mzara (2012), Khalid et
721 al, 2005; Oane et al, 2015; Wyk and Smith (2008), Brenda and Dina (2002);
722 Ezezue (2015); Ezigbo (2011); Wen Pin and Sumentra (1998); Artur et al,
723 2003; Mold and Zuikamin (2004). The authors' findings support the study's
724 findings that Value Management significantly relates to performance of these
725 selected Oil and Gas companies in Rivers State significantly.

726 The findings revealed that the calculated value of 133.349 is greater that f-
727 critical table value of 3.85 at 0.05 level of significance and 1 degree of
728 freedom. Alternative hypothesis was accepted. The results revealed that R-
729 square value of .275 and an Adjusted R-square value of .273 means business
730 value contribution explains 27.3% variance in social responsiveness of these
731 oil companies.

732 This supported the view of Ezezue (2010) that inadequate orientation and
733 focus on VM principles will impede the success of VM and performance of oil
734 and gas companies in South-South Nigeria. The finding also explained the
735 views of Brenda and Dina (2000) that there is link among values, ethics and
736 corporate social responsibility as they are incorporated into the culture and
737 management of organizations. Dane et al (2005) confirmed the finding that
738 indicator systems developed under value management have been identified to
739 play a big role in measuring the performance of value management.

740 **5.1 Conclusion**

741 Identifying the extent to which business value contributes to creating value in
742 terms of social responsiveness helps the oil and gas companies to evaluate
743 VM for optimal performance. Value management plays a very big role in
744 maintaining harmony in the host environment.

745 The oil and gas industry in the South-South Nigeria in the past years has
746 witnessed a sluggish growth. The profitability and investment of this industry
747 have not increased significantly and flourishing on the decline. The main
748 reason for such a state of affairs of this industry seems to be linked to inability
749 of some of these companies to create value in the environment in which they
750 operate in. The oil companies need the requisite skills on improving the
751 business value contribution in creating value to the host communities and
752 clients.

753 **5.2 Recommendations**

754 Based on the findings, the following policy recommendations were made:

- 755 1. The oil and gas companies in Rivers State should vigorously implement
756 value-based management **techniques** so as to improve performance in
757 every area of their organization.
- 758 2. The companies should realign the value management strategies with
759 maintaining social harmony in the environment
- 760 3. Managers ought to train staff on the use of VBM tools and **techniques** in
761 order to be able to measure their performance on social responsiveness
762 to their host communities.

763 **5.3 Suggestion for Further Studies**

764 Other researchers can carry out a study on value management and
765 performance in other industries in the South-South Nigeria.

766 **References**

767 Artur, B; Karen, S; Cravens, G. B. (2003). Performance consequences of
768 brand equity management: evidence from organizations in the value
769 chain, *Journal of Product and Brand Management*, 12 (4): 226-236.

770 Brenda, E.J and Dinah, P. (2002). Evolution and implementation: A study of
771 values, business ethics and corporate social responsibility, *Journal of*
772 *Business Ethics*, 41(4): 297-311.

773 Copeland, T. Koller and Murrin, J. (2000). *Valuation Measuring and Managing*
774 *the Value of Companies*: Wiley: New York.

775 Cornel, X. (2010). *Developing a knowledge management system for improved*
776 *value engineering practices in the construction industry, automation in*
777 *construction*, 2(4) 776-779

778 Coyne, K.P. and Coyne S.Y. (2011). *Seven Steps to Better Performance in*
779 *Value Management*, Vellitona Press, London.

780 Ezezue, B. (2015), *Value Management in Nigeria Manufacturing Companies:*
781 *Challenges and Prospects: An Empirical Study Presented at the 11th*
782 *International Business and Social Research Conference*, 8-9 January,
783 2015, UAE Dubai.

784 Fong, P.S.; Eddie, Q.S; Cheng, W.L. (2001).A framework for bench marking
785 the value management process. *Benchmarking: An international*
786 *Journal*, 8(4): 306-316.

787 Johnson, G. and Scholes, K. (1993). *Exploring Corporate Strategy: Text and*
788 *Cases 3rd edition*, London: Prentice Hall.

789 Kaufmann, M. and Olaru, M. (2012). The impact of corporate social
790 responsibility on business performance – can it be measured and is
791 so, how? A paper presented at the Berlin International Economics
792 Congress, March, 7th-10th, 2012.

793 Kelly, J. and Male, S. (2001). A quick approach to task fast diagrams, *Safe*
794 *International Conference Proceeding: Save International*, Dayton,
795 Ohio, 219-228.

796 Khalid, Ibrahim A. and Raed, A. (2015), *Key performance indicators for value*
797 *management in Saudi construction industry. International Journal of*
798 *Application or Innovation in Engineering and Management*, 4(11): 54-
799 62.

800 Mc Taggart, J.M; Kontes, P.W. and Manikins M.C. (1994). The Value
801 Imperative: Managing for Superior Shareholder Return. The Free
802 Press Macmillan, New York: New York.

803 Mc Taggart, James, M; Peter, M; Knotes and Michael, C. (1994). The Value
804 Imperative New York: The Free Press.

805 Mold, R. and Zulkamain, R.E. (2014) Extreme lean: How to keep Jobs in
806 American Society Manufacturing Engineers. New Jersey, WESTEC.

807 Mzera U.M. (2012). The effect of strategic value-based management on the
808 performance of organizations in coast province, Kenya International
809 Journal of Business and Social science, 3(16) 262-270.

810 Oane, C.M; Smolag, K; Marinescu, E.S; Szopa, R. (2015) Value-based
811 management as the innovating paradigm of contemporary
812 governance: A theoretical approach, Polish Journal of Management
813 Studies, 12 (1): 106-120.

814 Onyeizugbe, C.U. and Ossai, I.F. (2016) Lean production: A frontier for
815 improving performance of oil and gas companies in Nigeria. Pyrex
816 Journal of business and Finance Management Research, 2(5): 35-41.

817 Pearbery, M.O. and Perry, T.S. (2006). Value Management: Aligning
818 Employee Values and Organizational Goals. Torbtech Publishing
819 Firm, India.

820 Sakunasingha, R. (2013). Value Analysis and Value Management. Southern
821 Cross University Press, Lismore.

822 Shger, M. and Broderick, S. (2008). The software project manager's Bridge to
823 Agility, Addison-Wesley, P. 4-6

824 Sward, (2006) Measuring the Business value Information Technology, Intell
825 press.

826 Van Wyk, L. and Smith, G.L. (2008). A paper delivered on the Third
827 international platinum conference 'Platinum in Transformation' at the
828 Southern African Institute of Mining and Metallurgy.

829 Wen pin, T. and Sumantra, G. (1998). Social capital and value creation: The
830 role of intra firm networks. Academy of Management 41 (4): 464-476.

831

832

S/N	Question	Strongly Agree	Agree	Undecided	Strongly Disagree	Disagree
1	My organization reacts quickly to clients where there are complaints					
2	My company embarks on production process that reduces cost of production					
3	The departments in my company work towards generating ideas that will add value to our business					
4	My company makes use of standard equipment in production processes in order to produce durable products					
5	We work in teams to ensure that we add value to our production process and output					
6	My company responds promptly to community agitations on their social needs					
7	My company explores any available means to control gas flaring in the host communities					
8	Management of my organizations gives employment opportunities to the host communities.					
9	My company builds infrastructure like hospitals, schools, roads in the host communities					
10	We do not wait for youth restiveness before we provide them with social amenities					