Influence of Environmental Scanning on Performance of HIV and AIDS Interventions Managed by Non-Governmental Organizations in Nyanza Region

Leon Hongo Awiti
PhD Candidate, School of Business Administration, Jomo Kenyatta University of Agriculture and Technology, Kenya
Email: awitileon@gmail.com

Dr. Margaret Oloko
Dean, School of Business Administration, Jomo Kenyatta University of Agriculture and Technology, Kenya
E-mail: olokoma@jkuat.ac.ke

Prof. Charles Rambo
Department of Extra Mural Studies, School of Continuing and Distance Education University of Nairobi (UON), Kenya
Email: rambocharls@gmail.com

DOI: 10.6007/IJARBSS/v7-i2/2628 URL: http://dx.doi.org/10.6007/IJARBSS/v7-i2/2628

Abstract
Interventions on Human Immunodeficiency Virus and Acquired Immune-Deficiency Syndrome (HIV and AIDS) face major challenges of resource constraints, relevance, efficiency and because of inadequate environmental scanning during strategic planning processes at global, regional, national, and county levels. The purpose of this study is to assess the influence of environmental scanning on performance of HIV and AIDS interventions managed by non-governmental organisations (NGOs) in Nyanza Region and the moderating influence of stakeholder participation in such relationship. The study adopted ex-post facto survey design in a mixed method approach. The sampling frame comprised 54 departmental heads as well as 6 managers/directors from three NGO National coordinating bodies. Purposive sampling techniques was used to pick the respondents. Self-administered questionnaires and Key informant interview guides were used to collect data. It was established that there was a significant weak positive relationship between environmental scanning and the performance of HIV and AIDS interventions, \( r (50) = 0.117, p = 0.418, CL = 95\% \). Stakeholder participation significantly moderated the relationship between environmental scanning and performance of HIV and AIDS interventions, \( r (50) = 0.024, p = 0.033, CL = 95\% \). It is inferred that most organization conducted environmental scanning but did not realize optimal outcomes. Environmental scanning and stakeholder participation added value to HIV and AIDS interventions, though to a
small extent. It is recommended that NGOs managing HIV and AIDS interventions should re-examine their environmental scanning processes for effectiveness. The NGOs also need strengthen stakeholder participation in the environmental scanning processes.

**Key Words:** Strategic Planning, Environmental Scanning, Performance, HIV and AIDS interventions.

1.0 Introduction
Challenges such as changing economic situations, resource constraints, and inadequate environmental scanning during strategic planning have made management and control of HIV and AIDS complex at global, regional, and national levels. Kenya is cited as the fourth largest causality of HIV infections in the world (UNAIDS, 2010). In 2012, it was reported that about 1.6 million people were infected and living with HIV while 57,000 people died because of AIDS related infections, with many HIV related deaths and new infections reported in Nyanza region annually (KNASP, 2014). Existent agencies such as national governments, county governments, inter-governmental agencies, private firms, and community-based organisations have not addressed these problems adequately. Therefore, the role of NGOs has become a crucial mechanism in delivery of HIV and AIDS interventions and other related programmes in areas where other means have failed. Despite of the NGOs efforts to contain the pandemic through its intervention programmes, the performance of such agencies is yet to resonate substantially with the beneficiaries.

Resources available to NGOs to fulfill their mandates are currently on the decline because of changing trends in the environment such as economic recessions have prompted donors and other funding agencies to monitor and evaluate the needs of the concerned beneficiaries before they advanced funds to the concerned organisations (McKelvie & Davidison, 2009). Data is collected and analysed for baseline surveys, mid-year surveys, and end-of-year surveys to get information of the needs of the concerned community and the extent to which the advanced funds have been utilized to fulfill the objectives of the specified programmes (Judge & Douglas, 2009). The approach has led to elevated focus and emphasis on better accountability, governance, transparency, and NGOs in their intervention programmes. In addition, many stakeholders are increasingly becoming more concerned because NGOs receive a large percentage of their funding from different donors and funding agencies. However, the successful performance of such organisations is dependent on the extent of environmental scanning.

Andriany and Djumahir (2013) posit that organisations constantly seek to reduce the extent at which they depend on the environment through the acquisition of control over resources at their possession. Therefore, it is imperative that environmental scanning takes a centre stage in strategic planning, decision-making, and strategic adaptation. Odindo (2009) cited that there are many NGOs whose performance is wanting because the suffer resource constraint, environmental constraint, and inadequate monitoring and evaluation expertise to conduct sufficient environmental scanning. Constant pressures to realise fundraising targets, difficulties in scaling-up operations, poorly crafted organizational purpose, and weak management skills are potential limits of NGOs’ performance (Heilman & Kennedy-Phillips, 2011). These
researchers concur to the claim that proper environmental scanning can result in better performance of NGOs because it helps improve their ability to identifying opportunities specifically the ones that may result in sustainable funding, environmental understanding to implement the desired programmes. 

HIV prevalence in Kenya is at 7.4 and Nyanza province having the highest prevalence of 15.3% (NASCOP, 2012), situated at the shores of Lake Victoria, where cultural beliefs of ‘wife inheritance’ are rampant) there are pockets with prevalence rates as high as 27.1%, case in point Homa Bay County (Kenya AIDS Response Progress Report, 2014: KAIS, 2012). Several NGOs operate in Nyanza region to address poverty situations and HIV related death that have worsened the life style of the community with many children left orphans and vulnerable (Nam, 2012). The communities living along Lake Victoria have a tendency of engaging in unprotected and risky sexual behaviors (KNASP, 2014). Females often fall a prey when they are lured into exchanging sex for the fishermen’s catch, and they find it hard to avoid this behavior because they are poor and would want to fend for themselves and their families. NGOs therefore come in to provide sex education and awareness programmes to contain the HIV and AIDS pandemic.

1.1 Statement of the Problem
The geographical areas currently demarcated as Nyanza Region have had the highest HIV and AIDS prevalence, incidence and mortality rates in Kenya since 2004; this has been attributed to weak strategic planning leading to poor performance of HIV and AIDS interventions managed by NGOs in the region (NACC, 2014). NGOs in Kenya at times also criticized for adopting inappropriate and culturally insensitive strategies for achieving their intended aims for failure to properly do environmental scanning (Radley, 2008). There is limited knowledge regarding traditions and culture in among NGOs managing HIV and AIDS interventions in Kenya which is attributed to incomprehensive environmental scanning (Gadling-Cole & McElderry, 2014). According to Collier (2000) most strategic planning are more symptomatic rather than fundamental in addressing issues because of faulty environmental scanning. Thaw and Petersen (1999) and Scharmer (2000) observed that while the environmental analysis may be relatively easier, the synthesis process is often weak in most NGOs. Furthermore, Immelman (1995) observed that strategic plans often fail because there is more emphasis on tools and analysis as compared to synthesis and drawing strategic insights that can move the NGO forward.

1.2 Study Objective
To establish the influence of environmental scanning on performance of HIV and AIDS interventions managed by non-governmental organizations in Nyanza Region To examine the moderating influence of stakeholder participation on the relationship between environmental scanning and performance of HIV and AIDS interventions managed by NGOs in Nyanza Region.

1.3 Research Hypotheses
H0: There is no significant relationship between environmental scanning and performance HIV and AIDS interventions managed by non-governmental organisations in Nyanza Region
H0: There is no significant moderating influence of stakeholder participation on the relationship between strategic planning and performance of HIV and AIDS interventions managed by non-governmental organisations in Nyanza Region.

1.4 Conceptual Framework

The conceptual framework depicts the relationship between the independent variable; environmental scanning and the dependent variable; performance of HIV and AIDS interventions managed by NGOs in Nyanza Region. This relationship is also moderated upon by the stakeholder participation.

Figure 1: Conceptual Framework of the Study

2.0 Literature Review
Theoretical Framework
Hannan and Freeman (1989) postulated the survival-based theory explaining the organisational ecology and how firms survive competition. The survival-based theory is based on the idea that
strategic management is about how to survive in a competitive environment, which is changing dynamically. In contrast to resource-based theory, the survival-based theory stresses the general notion that organisation needs to adapt to its changing environment in order to survive. The organisation therefore needs to continuously adapt to its competitive environment in order to survive. This theory is relevant to the study and is at the core of strategic planning, the need for an organisation to survive. This theory underpins the second stage in the strategic planning i.e. environmental scanning. Environmental scanning majorly focuses on the Political, Environmental, Social and Technological aspects of the operating environment as well as Strengths, Weaknesses, Opportunities and Threats to the organisation. All this is done in a bid to secure organisational competitiveness and enhance its survival.

**Empirical Literature**
The second step in strategic planning is environmental scanning (David, 2013; Arasa & K’Obonyo, 2012). Environmental scanning is the monitoring, evaluating, and disseminating of information from the external and internal environment to key people within the corporation or organization (Kazmi, 2008). Environmental scanning is a process of gathering, analyzing, and dispensing information for tactical or strategic purposes. The environmental scanning process entails obtaining both factual and subjective information on the business environments in which a company is operating or considering entering (Bayode & Adebola, 2012).

The first step in developing an environmental scanning strategy is to accurately appraise the needs of information users in the organization. Understanding their needs and requirements would be a significant step in developing information strategy and tools for providing effective information services and promoting organization-wide creativity and innovation (Karim & Hussein, 2008). Scanning need identification should be in relation to the specific projects that an organization is implementing or seeks to implement. Theoretically, perceived environmental uncertainty in a particular project triggers the need for scanning (Elenkov, 1997).

The second step in developing an environmental scanning is acquisition of information. According to Zhang et al. (2011), information acquisition aims to satisfy the identified strategic information needs of a project/s. There are three key issues that must be addressed at this step; where to collect, how to collect, and when to stop. The manner in which these three issues are addressed is dependent on the particular intervention that the organization is executing. Choo (2002) divided information sources into three categories: textual, online and human. Information literate workers should realize that each kind of information source has its own advantages and disadvantages, and sources need to be matched with the information needs and strategic objectives as well as their ‘accessibility’ and ‘reliability’. Adequacy of information collected is a key determinant on whether the information would be important in improving the quality of organizational interventions.

The third step in developing an environmental scanning processing of information that has been acquired. According to Zhang et al (2011), Analyzing the collected information and extracting meaning from it is the most important part of environmental scanning and, moreover, today’s complex and turbulent environment places a premium on the reliability and quality of information. The collected information should be analyzed for issues and trends that
may influence the organizational projects, to assist users to acquire a better sense of situations and make better decisions, and hence facilitate the creation of a dynamic knowledge capability. The relevant information from each source should be extracted and information from multiple sources should be organized. Srinivas (2009) pointed out that during processing, the following questions need to be addressed: which parts of the information collected would be used? What additional data are needed? How can information be best presented to enable situation understanding and problem solving?

The fourth step in developing an environmental scanning is utilization of information that has been processed and analyzed. According to Zhang, Majid and Soo (2009), environmental scanning should be used for tactical or strategic purposes to enhance project performance. Souchonet et al. (2004) on receiving the processed information, the end-users would evaluate and use it for assisting with decision-making. In the current information intensive business environment, the utilization of information is indeed a critical factor in the achievement of organizational success and improvement of performance of organizational interventions.

The participation of stakeholder participation in the strategic planning process is critical. David (2003); Herman and Renz (1998); Siciliano (1997) observed that NGOs with an effective board and management team are more likely to be successful in their strategic planning than those that do not. The board of an NGO plays the governance role, which means that it is responsible for the oversight, sustainability and impact of the NGO (Tandon, 1995). In carrying out this role, the board is supposed to continuously scan the environment and anticipate the future before it arrives by seizing opportunities and recognizing and addressing threats posed by the political, economic, technological and socio-cultural factors in the task environment to the organization (Thaw, 1997). By playing these roles the board takes the ultimate responsibility to ensure adequate resources, legitimacy and relevance. Kemp (1990) however observed that most NGO boards are preoccupied with the present and are usually reactive rather than proactive to change.

Njuguna, Munyoki and Kibera (2014) studied the influence of external organizational environment on performance of community based HIV and AIDS organizations in Nairobi County, Kenya. The study used a descriptive cross-sectional survey. The sample size comprised 163 community based HIV and AIDS organization. The study indicates that the external environment of an organization impacts of an organizations effectiveness, efficiency, relevance and financial viability with higher impact on the relevance of performance indicators. External environment was evaluated from three dimensions of uncertainty, domain consensus, heterogeneity, capacity and dynamism. The findings of the study indicate statistically significant positive relationship between external environment and CBOs external environment and effectiveness ($\beta=0.541, p\text{-value}=0.000$) efficiency ($\beta=0.695, p\text{-value}=0.000$), relevance ($\beta=0.707, p\text{-value}=0.000$) and financial viability ($\beta=0.578, p\text{-value}=0.000$) leading to an argument that proper scanning of external environment influences HIV and AIDS activities. The study recommended that extra attention should be paid external environment in programme identification and planning and this shapes implementation. The study has important implications for managers of CBOs on the relevance of proper scanning of external environment.
as it influences all activities of an organization from program conceptualization to implementation.

Oramasionwu, Daniels, Labreche, and Frei (2011) did a study on the environmental and social influences of HIV and AIDS in Sub-Saharan Africa: A focus on rural communities. The study established that there are many aspects of rural life that contribute to disease transmission of HIV and AIDS and that pose unique challenges to the population dynamics in sub-Saharan Africa. Widespread AIDS-related mortality has caused a decrease in population growth for many African countries. These alterations in population dynamics have resulted in a decrease in the percentage of prime-age working adults, as well as a gender disparity, whereby; females carry a growing burden of household responsibilities. There are a rising proportion of older adults, often females, who assume the role of provider and caretaker for other dependent family members. These changing dynamics have caused many to exploit their natural surroundings, adopting less sustainable land use practices and utilizing protected resources as a primary means of generating revenue. The study concludes that it is important to do environmental scanning to enhance the performance of HIV and AIDS interventions.

Seeley et al. (2012) did a study addressing the structural drivers of HIV: a luxury or necessity for programmes? The study established that social, economic, political and environmental structural factors that increase susceptibility to HIV infection and undermine prevention and treatment efforts continue to pose a challenge. The paper highlights the importance of sustaining those efforts to address the structural drivers of the HIV epidemic, and that initiatives to achieve HIV elimination will only come about through a comprehensive HIV response, that includes meaningful responses to the social, political, economic and environmental factors that affect HIV risk and vulnerability. In the context of declining resources for HIV and AIDS, the papers speak to the need to integrate responses to the structural drivers of HIV and AIDS into future HIV investments, with both initiatives to integrate HIV into broader gender and development initiatives, as well as adaptations of current service models, to ensure that they are sensitive to and able to respond to the broader economic and social responsibilities that their clients face.

Hellandendu (2014) studied the contributory factors to the spread of HIV and AIDS and its impacts in sub-Saharan African countries. The study established that the fast propagation of the virus in Africa is attributed to its finding a more congenial social, political and economic environment for survival. The congenial environment has been created by, among other vices, economic disorganization, poverty and the sexually permissive youth sub-culture that has emerged from the culture of poverty. The spread of HIV and AIDS has significant impacts on the health sector, education sector, economy, life expectancy, and food production and on the children of HIV and AIDS victims. The study therefore concluded that HIV and AIDS, like other infectious diseases (e.g. tuberculosis and cholera), thrive most in poor social economic reforms that make female, in particular, have adequate material resources and for habitually promiscuous males and females to beware and take necessary precautions against the spread of HIV and AIDS.
Research Gaps
Njuguna, Munyoki and Kibera (2014) assessed the influence of external organizational environment on performance of community based HIV and AIDS organisations in Nairobi, Kenya. The findings of the study indicate statistically significant positive relationship between external environment and CBOs external environment and effectiveness leading to an argument that proper scanning of external environment influences HIV and AIDS activities. The focus was on organizational performance and not the projects, which is the focus of the present year. The study was silent on the environmental scanning steps and their contribution on the performance of HIV and AIDS interventions; this is a gap that the current study seeks to fill.
Oramasionwu, Daniels, Labreche, and Frei (2011) assessed the contribution of environmental scanning to organisational performance in Singapore. They found out that effective environmental scanning would help organisations to achieve better alignment with rapidly changing external factors and hence improve their performance. The study focused on the contribution of strategic planning on organizational performance as opposed to project performance. The influence of environmental scanning steps on project performance still remains unknown. Seeley et al. (2012) did a study on addressing the structural drivers of HIV: a luxury or necessity for programmes, they established that social, economic, political and environmental structural factors that increase susceptibility to HIV infection and undermine prevention and treatment efforts continue to pose a challenge. The study focus did not to investigate the steps of environmental scanning and how each of them enhances performance of HIV and AIDS interventions. Performance in the project is implied, the study talks more of an environmental scanning enabling an organization to overcome challenges but does not specify the implication of these in project performance.

3.0 Research Methodology
The study adopted positivism and interpretive research paradigms with ex post facto survey design. The study used both quantitative and qualitative approaches to data sourcing and analysis. The sampling frame comprises 60 departmental heads: 18 Program/Unit management heads, 18 Monitoring and Evaluation departmental heads and 18 Program Implementation departmental heads as well as two managers/directors from each of the 3 NGO National coordinating bodies: Kenya AIDS NGO Consortium, National AIDS and AIDS and STDs Control program and Network of People National AIDS Control Council. The study applied purposive sampling to pick the respondents from the NGOs and the NGO National coordinating bodies. The data collection instruments for the study comprises: Self-administered questionnaires and Key informant interview guides. Split-half technique was used to enhance reliability of research instruments giving a Cronbach’s Alpha was 0.662 while validity were ensured through pilot testing and reviews of the instruments by peers and supervisors to generate content validity indices for each question. The data analysis techniques comprised descriptive analysis, correlation analysis, logit regression modeling, hypotheses testing and content analysis for qualitative aspects. The researcher sought for ethical approvals from the relevant authorities and observed research ethics throughout the study. The findings were presented using frequency and percentage distribution, contingency, chi-square tables and narrative form.
4.0 Findings and Discussions

This chapter analyses data, presents, interprets and discusses the findings of the study in light of the empirical literature, this is done in accordance with the specific objectives the study. The respondents were given statements on environmental scanning to react to in 5 point Likert Scale where 1-Strongly Disagree (SD), 2-Disagree (D), 3-Neutral (N), 4-Agree (A) and 5-Strongly Agree (SA). The results were as shown in Table 1

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA (%)</th>
<th>x</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization does scanning needs assessment</td>
<td>50</td>
<td>00%</td>
<td>00%</td>
<td>6%</td>
<td>44%</td>
<td>50%</td>
<td>4.44</td>
<td>0.62</td>
</tr>
<tr>
<td>Our organization collects adequate information on the operating environment</td>
<td>50</td>
<td>00%</td>
<td>00%</td>
<td>00%</td>
<td>50%</td>
<td>50%</td>
<td>4.50</td>
<td>0.51</td>
</tr>
<tr>
<td>Our organization processes/analyzes the information collected on the operating environment often</td>
<td>50</td>
<td>00%</td>
<td>00%</td>
<td>04%</td>
<td>42%</td>
<td>54%</td>
<td>4.61</td>
<td>0.50</td>
</tr>
<tr>
<td>Our organization utilizes the processed information to enhance competitiveness</td>
<td>50</td>
<td>00%</td>
<td>6%</td>
<td>06%</td>
<td>30%</td>
<td>58%</td>
<td>4.56</td>
<td>0.62</td>
</tr>
<tr>
<td>Our organization is competent in conducting a PEST analysis on its environment</td>
<td>50</td>
<td>00%</td>
<td>6%</td>
<td>18%</td>
<td>12%</td>
<td>64%</td>
<td>4.44</td>
<td>0.92</td>
</tr>
<tr>
<td>Our organization is competent in conducting SWOT analysis on its environment.</td>
<td>50</td>
<td>00%</td>
<td>00%</td>
<td>18%</td>
<td>18%</td>
<td>64%</td>
<td>4.50</td>
<td>0.79</td>
</tr>
<tr>
<td>Mean of mean</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4.51</td>
<td>-</td>
</tr>
</tbody>
</table>

It was popular among 47(94.0%), of the respondents that their organization did scanning needs assessment with the minority at 3(6.0%) uncertain whether the organization did scanning needs assessment none of the respondent had a disagreed. This meant that the organizations identified the informational gaps so as to be able to collect the relevant information. In convergence with the Karim& Hussein (2008) the organizations managing HIV and AIDS interventions in Nyanza Region recognized the importance of understanding the needs and requirements in developing information strategy and tools for providing effective information services and promoting organization-wide creativity and innovation. The item mean (4.44)<mean of mean (4.51), SD=0.616 this implied that the practice of scanning needs assessment contributed to environmental scanning to a small extent. Entirety of the respondents at 50(100%), stated that their organization collected adequate information on the operating environment with none being undecided or holding a contrary opinion to the majority. This meant that the organization collected enough data to fill their informational gaps; this would enable the organizations to better understand their operating environment. This was supported by the assertion by Zhang et al. (2011) that information acquisition aims to satisfy the identified strategic information needs of a project while putting
emphasis on informational adequacy. The item mean (4.50)<mean of mean (4.51), SD=0.616 this implied that collection of adequate information on the operating environment contributed to environmental scanning to a small extent.

Majority of the respondents at 48(96.0%), stated that their organization processed/analyzed the information collected on the operating environment often, the minority at 2(4.0%) undecided/uncertain. Majority of the organizations were able to process the data to come up with information that is capable of being utilized to inform programming work. The organizations managing HIV and AIDS intervention subscribed to Zhang et al. (2011) views that analyzing the collected information and extracting meaning from it is the most important part of environmental scanning, they caution that today’s complex and turbulent environment should place a premium on the reliability and quality of information. The item mean (4.61)>mean of mean (4.51), SD=0.502 this implied that processing the information collected on the operating environment often contributed to environmental scanning to a large extent.

Most of the respondents at 44(88.0%), Mean=4.56, SD=0.616 stated that their organization utilized the processed information to enhance competitiveness, 3(6.0%) of respondents were undecided with a similar number noting that their organization did not the processed information to enhance competitiveness. In line with Franklin (2011) assertion the organizations used the processed information to make rational decisions. Majority of the firms also seemed to have heeded the advice of Souchonet al. (2004) that on receiving the processed information, the end-users would evaluate and use it for assisting with decision making. Despite the majority of the organization utilizing information, a considerable number of organizations that collected and analyzed the information failed to utilize it. The item mean (4.56)>mean of mean (4.51), SD=0.616 this implied that processing the information collected on the operating environment often contributed to environmental scanning to a large extent.

It was also popular among 38(76.0%), of the respondents to state that their organization was competent in conducting a PEST (Political, Environmental, Social and Technological) analysis on its environment, 9(18.0%) undecided, 3(6.0%) stated that their organization was not competent in conducting a PEST analysis on its environment. This showed that the organization managing HIV and AIDS in Kenya were able to identify and analyze issues to be able minimize errors that might cause performance gaps. The item mean (4.44)<mean of mean (4.51), SD=0.922 this implied competence in conducting a PEST analysis on its environment contributed to environmental scanning to a small extent.

A preponderance of the respondents at 41(82.0%), stated that their organization was competent in conducting SWOT (Strength, Weaknesses, Opportunities and Threats) analysis on its environment, minority of the respondents at 9(18.0%) were undecided whether their organization was competent or not. This meant that most were able to think about everything that could potentially impact the success of a new project. The item mean (4.50)<mean of mean (4.51), SD=0.786 this implied that competence in conducting SWOT analysis on its environment contributed to environmental scanning to a small extent.

Consensus in the respondent views was seen on the processing /analysis of the information collected on the operating environment often (SD=0.502). Divergent opinions were seen in the in on the views that the organization was competent in conducting a PEST analysis on its
environment (SD=0.922). The overall item mean was 4.51; this meant that environmental scanning was carried out to a large extent by NGOs managing HIV and AIDS interventions in Nyanza Region.

The respondents were asked to state how well the analysis met the informational needs of the organization. They said that the analyzed information enabled the organizations to make informed decisions and effect adjustments on their project implementation tactics and strategies and develop standard operational procedures. This enhanced efficiency in resource utilization for optimal performance for the HIV and AIDS interventions. The respondents were further asked to explain how the information was used to enhance competitiveness; the respondents said they had reflections with the stakeholder on how to enhance project effectiveness. The information was also enabled them to draw greater learning and leverage opportunities in the external environment by creating partnerships and linkages.

Asked to state the tools that they actually used during environmental scanning, 45(90.0%) used SWOT analysis, 44(88.0%) used PEST analysis, 14(28.0%) used core competence analysis. It was established that the 5-forces analysis and BCG Matrix were not used at all by any organization. The challenges that the respondents faced during the environmental scanning processes, rapid changes in the operating environment, lack of technical capacity and inadequate finances to carry out environmental scanning stood out.

Elements of environmental scanning and performance of HIV and AID interventions

The researcher did a logistic regression analysis to establish the relationship between the elements of environmental scanning and the performance of HIV and AIDS interventions managed by non-governmental organizations in Nyanza Region, the findings were as shown in Table 2

| Table 2:Elements of Environmental Scanning and Performance of HIV and AIDS interventions |
|---------------------------------|-----|-----|-----|-----|-----------------|-----|-----|
|                                | B   | S.E. | Wald | Df | Sig. | Exp(B) | 95% C.I. for EXP(B) |
| Scanning need assessment       | 15.945 | 21.96 | .000 | 1   | .009 | 8409306.93 | .000 | .  |
| Data collection                | 38.844 | 17.73 | .000 | 1   | .018 | 39088.000 | .000 | .  |
| Data analysis                  | 54.539 | 12.56 | .000 | 1   | .037 | .000 | .000 | .  |
| Information utilization        | -.112 | 10.35 | .000 | 1   | 1.000 | .894 | .000 | .  |
| PEST Analysis                  | 17.352 | 75.53 | .000 | 1   | .048 | 34333332.14 | .000 | .  |
| SWOT Analysis                  | -92.415 | 16.41 | .000 | 1   | .005 | .000 | .000 | .  |
| Constant                       | -32.543 | 94.09 | .000 | 1   | .997 | .000 | .000 | .  |

Organizations that conducted a scanning needs assessment to a large extent increased the odds of having performing HIV and AIDS interventions by 8409306.93(p=0.999) compared to those that conducted scanning needs assessment to a small extent. Utilization of information to a large extent decreased the odds of having performing HIV and AIDS interventions by 0.894
times \( (p=1.000) \). Conducting PEST analysis to a large extent increased the chances of performing HIV and AIDS interventions by 3433332.14 \( (p=0.998) \) compared to conducting PEST analysis to a small extent. This meant that data analysis, information utilization and SWOT analysis have not been effectively carried out to positively influence the performance of HIV and AIDS interventions.

**Odds Ratio Analysis**
The study computed the chi-square odds ratio to ascertain the relationship between independent and moderating variables on performance of HIV and AIDS interventions managed by non-governmental organisations in Nyanza Region. The odds ratio showed the likelihood for non-performing outcomes for HIV and AIDS interventions given a small extent execution of environmental scanning and stakeholder participation, this was done using at 95% Confidence Interval. The results were as shown in Table 3

**Table 3: Odds Ratio Analysis**

<table>
<thead>
<tr>
<th>Statistic descriptor</th>
<th>Value</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Odds Ratio for Environmental Scanning</td>
<td>1.667</td>
<td>0.494</td>
</tr>
<tr>
<td>Odds Ratio for Stakeholder Participation</td>
<td>1.111</td>
<td>0.334</td>
</tr>
</tbody>
</table>

It was established that organizations that conducted environmental scanning to a small extent were 1.667 times more likely to have non-performing HIV and AIDS interventions compared to those that conducted environmental scanning to a large extent. This relationships was statistically significant \( \chi^2(1) = 5.684, \ p=0.029, \ CL=95\% \). This meant that conducting environmental scanning would increase the chances for better performance for HIV and AIDS interventions managed by NGOs in Nyanza Region. This finding is supported by those of Jean Diana, and Avan (2011) that high-performing projects engaged in significantly greater amounts of environmental scanning than low-performing projects in the two strategic groups.

The findings also showed that NGOs that engaged stakeholders in environmental scanning to a small extent had 1.111 times the odds for non-performing HIV and AIDS interventions compared to those that engaged stakeholders to a large extent, \( \chi^2(1) = 5.030, \ p=0.033, \ CL=95\% \). This meant that stakeholder participation in the environmental scanning process added value to HIV and AIDS interventions.
Correlation Analysis
The study conducted correlation test between environmental scanning and the performance of HIV and AIDS interventions managed by non-governmental organizations in Nyanza Region using Spearman’s Rho coefficient. The relationship between stakeholder participation and environmental scanning as well as performance of HIV and AIDS interventions were also explored. The results were as shown in Table 4.

<table>
<thead>
<tr>
<th></th>
<th>Environmental Scanning</th>
<th>Stakeholder Participation</th>
<th>Performance of HIV and AIDS interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Scanning</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder Participation</td>
<td>0.504**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance of HIV and AIDS interventions</td>
<td>0.117*</td>
<td>0.024</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.029</td>
<td>0.033</td>
<td>-</td>
</tr>
</tbody>
</table>

It was established that there was a weak significant positive relationship between environmental scanning and the performance of HIV and AIDS interventions, \( r (50)=0.117, p=0.029, CL=95\%\). This meant that the practice of environmental scanning impacted the performance of HIV and AIDS interventions managed by NGOs in Nyanza positively, though to a small extent. The findings of this study is supported by those of Kathama (2012) who found that intelligence-rationality factor, which comprise environmental scanning, controls, communication, adaptiveness, analysis, integration, multiplicity, and industry experience, was by far the most important factor in separating the successful companies from the unsuccessful, accounting for more than half of the observed variance. The study by Indrakumaran (2011) also found that there is a direct positive link between organizational strategy and environmental scanning to project performance. The study found that strategy and environmental scanning had a substantial influence on performance of organizational projects.

There was a significant strong positive relationship between environmental scanning and stakeholder participation \( r (50)=0.504**, p=0.000, CL=95\%\). This meant that there was a tendency of engaging stakeholders whenever environmental scanning is conducted. The study also established that there was a significant weak positive relationship between stakeholder participation and the performance of HIV and AIDS interventions, \( r (50)=0.024, p=0.033, CL=95\%\). This implied that the stakeholder participation positively impacted the performance of HIV and AIDS interventions managed by NGOs in Nyanza, though to a small extent.
Hypothesis testing

The study tested the null hypotheses (H<sub>0</sub>) using chi-square statistic to ascertain the statistical insignificance of the relationship between the independent and dependents variables, the (H<sub>0</sub>) on the moderating effect of stakeholder participation was also tested. The results were as shown in 5

Table 5: Hypothesis Testing

<table>
<thead>
<tr>
<th>Variables</th>
<th>X&lt;sup&gt;2&lt;/sup&gt; Value</th>
<th>Df</th>
<th>Asymp. Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Scanning</td>
<td>5.684</td>
<td>1</td>
<td>0.029</td>
</tr>
<tr>
<td>Stakeholder participation</td>
<td>5.030</td>
<td>1</td>
<td>0.033</td>
</tr>
</tbody>
</table>

The study tested the null hypothesis (H<sub>0</sub>) that there is no significant relationship between environmental scanning and performance HIV and AIDS interventions managed by non-governmental organisations in Nyanza Region. The Chi-square distribution table gave a reading of critical value = 3.84 and the $X^2(1)$ value = 5.684, 3.84 < 5.684, therefore we reject the null hypothesis. This meant that it was statistically very unlikely that the null hypothesis (H<sub>0</sub>) is true. We then revert to the alternative hypothesis (H<sub>1</sub>) that there is a significant relationship between environmental scanning and performance HIV and AIDS interventions managed by non-governmental organisations in Nyanza Region. The outcome of the hypothesis testing supports the correlation analysis that the relationship between environmental scanning and performance of HIV and AIDS interventions is significant.

The study tested the null hypothesis (H<sub>0</sub>) that there is no significant moderating influence of stakeholder participation on the relationship between environmental scanning and performance of HIV and AIDS interventions managed by non-governmental organisations in Nyanza Region. The Chi-square distribution table gave a reading of critical value= 3.84 and the $X^2(1)$ value = 5.030, 3.84 < 5.030, therefore we reject the null hypothesis, this means that its is statistically very unlikely that the null hypothesis is true. We revert to the alternative hypothesis (H<sub>1</sub>): that there is a significant moderating influence of stakeholder participation on the relationship between strategic planning and performance of HIV and AIDS interventions managed by non-governmental organisations in Nyanza Region.

Logit Regression Modeling

Logit regression analysis between the independent and the dependent variables

The study conducted a logit regression analysis to measure the relationship between the independent variable and the dependent variables by estimating the probabilities using a logit function. The independent variables in the function is environmental scanning while the dependent variable is performance of HIV and AIDS interventions. The results are shown in Table 6 and fitted in the model.
Table 6: Logit Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>df</th>
<th>Sig.</th>
<th>Exp (B)</th>
<th>95% C.I. for EXP (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Environmental Scanning</td>
<td>.511</td>
<td>.620</td>
<td>1</td>
<td>.010</td>
<td>1.667</td>
<td>.494</td>
</tr>
<tr>
<td>Constant</td>
<td>.020</td>
<td>.928</td>
<td>1</td>
<td>.983</td>
<td>1.020</td>
<td></td>
</tr>
</tbody>
</table>

Odds of performance of HIV interventions managed by NGOs = 0.20 + 0.511*0.066 +1.458

Where: $\beta_0$ is the constant, $x_1$ is environmental scanning.

The findings showed that organizations that conducted environmental scanning to a large extent were 1.667 times more likely to have performing HIV and AIDS interventions compared to those that did environmental scanning to a small extent.

Logit regression analysis on the moderating influence of stakeholder participation

The study conducted logit regression analysis on the moderating influence of stakeholder participation on the relationship between environmental scanning and performance of HIV and AIDS interventions managed by NGOs in Nyanza Region. The results are shown in Table 7 and fitted in the model.

Table 7: Logit regression analysis on the moderating influence of stakeholder participation

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% C.I.for EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Environmental Scanning by Stakeholder Participation</td>
<td>.066</td>
<td>.248</td>
<td>1</td>
<td>.790</td>
<td>1.068</td>
<td>.657</td>
</tr>
<tr>
<td>Constant</td>
<td>.598</td>
<td>.655</td>
<td>1</td>
<td>.361</td>
<td>1.819</td>
<td></td>
</tr>
</tbody>
</table>

Odds of performance of HIV interventions managed by NGOs = 0.20 + 0.511*0.066*0.066 +1.458

This gives:

Odds of performance of HIV interventions managed by NGOs = 0.20 + 0.337*1 +1.458

The findings showed that organizations that engaged stakeholders to a large extent in the environmental scanning were more likely (OR=1.068) to have performing HIV and AIDS interventions as compared to those that engaged stakeholders to a small extent.
5.0 Summary of Findings

Overall, majority of the respondents at 90.0% agreed that their organization conducted environmental scanning following the recommended steps and competently apply PEST and SWOT analysis in the processes, 8.0% were uncertain while 2.0% disagreed that their organisations did environmental scanning as it should. Organisations that conducted environmental scanning to a small extent were 1.667 times more likely to have non-performing HIV and AIDS interventions compared to those that conducted environmental scanning to a large extent. There was a significant weak positive relationship between environmental scanning and the performance of HIV and AIDS interventions managed by NGOs in Nyanza region. Stakeholder participation significantly moderated the relationship between environmental scanning and performance of HIV and AIDS interventions.

6.0 Conclusions

It is inferred that most organization conducted environmental scanning following the recommended steps. Nonetheless, the environmental scanning in most organizations was not effective. Environmental scanning impacted performance of HIV and AIDS interventions to a small extent.

It was deduced that environmental scanning added value to the performance HIV and AIDS interventions managed by non-governmental organizations in Nyanza Region. The PEST approach was effective in conducting the environmental scanning in organizations managing HIV and AIDS interventions in Nyanza Region. Conversely, SWOT approach was not effective. It was concluded that the stakeholder participation in environmental scanning positively impacted the performance of HIV and AIDS interventions managed by NGOs in Nyanza, though to a small extent.

7.0 Recommendations

The NGOs managing HIV and AIDS interventions should re-examine their environmental scanning processes for effectiveness. They should also properly analyze that data that is collected during the environmental scanning and ensure proper use of information so as to effectively make decisions as to enhance the performance of their HIV and AIDS interventions. The NGOs also need to conduct SWOT analysis process properly; this will enable an understanding of the operating environments and shape the strategic choices and success of the whole process. There is need to strengthen stakeholder participation in the environmental scanning process so as to realize better programming outcomes.

Acknowledgement

I am grateful to my supervisors Dr. Margaret Oloko, Ph.D. and Prof. Charles Rambo, Ph.D. for their sagacious guidance, constructive critique and invaluable insights throughout the development of this work. I also that all my respondents, the heads of departments(Unit Management, Monitoring and Evaluation and Program Implementation) in NGOs managing HIV and AIDS in Nyanza for giving me information, without them this publication could not have been realized.
I appreciate my wife Christine Awuor and daughter Nicla Mayah for their moral support. This work preoccupied me and often kept me away from sufficiently discharging my duties and obligations to them as a husband and a father but they bore with me and instead showed me all the love and support.

Corresponding Author
Leon Hongo Awiti, PhD Candidate, School of Business Administration, Jomo Kenyatta University of Agriculture and Technology, Kenya, Email: awitileon@gmail.com

References


