A SWOT Analysis of Maritime Transportation and Security in the Gulf of Guinea

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Abstract

The Gulf of Guinea has been spotlighted as a major international maritime security concern. Maritime traffic in this region has significantly increased with the advent of new findings of huge oil and gas deposits offshore. However, this region is riddled with numerous acts of maritime piracy. Recent figures indicate that approximately 300,000 vessels transit the Gulf of Guinea sea lanes annually. It is therefore obvious that any disruption to the free flow of traffic will have consequences on maritime transportation and security. This paper conducts an analysis of the situation of oil piracy and the relationship between maritime transportation and security. The analysis was conducted using a SWOT analysis. This method proved beneficial because it provided information regarding strengths and weaknesses of maritime security, opportunities to either exploit or decrease weakness and predict potential future threats, all in consideration of piracy in the Gulf of Guinea. On average, strengths were found to be least important at 36%, unimportant at 29.0%, and most important at 35%. On average, weaknesses were found to be at least important at 34.5%, unimportant at 30.6%, and most important at 34.9%. On average, opportunities were found to be least important at 35.5%, unimportant at 29.2% and most important at 35.3%. On average, threats were found to be at least important at 37.3%, unimportant at 28.8% and most important at 33.9%.

Keywords

Oil, Gulf of Guinea, Maritime Security, Maritime Transportation, Piracy, SWOT Analysis

1. Introduction

There are increasing concerns regarding piracy along the Gulf of Guinea. How-

ever, until recently, greater attention has been paid to Somali piracy [1]. Therefore, there have been greater mitigations of Somali piracy, prompting numbers relating to Somalia piracy to decrease. This has been due to the use of vessel protection detachments, as well as foreign naval forces intervention. However, as the focus has been on Somali piracy, there has been an increase in Gulf of Guinea piracy, escalating from armed robberies to violent hijackings, causing alarm to maritime stakeholders [2].

Recently, perceptions have held that international forces have failed to control piracy. Moreover, there is only moderate information regarding the causes, particularly in relation to economic origin. For example, maritime transport costs have been significantly influenced by piracy. Moreover, the relationship between modern maritime piracy and maritime transport costs could be impactful to the global economy, which is evident through the increased trade costs that have occurred between Asia and Europe [3]. Prior to the end of 2010, over 18 nations were directly influenced by piracy, due to hostage situations of 600 mariners and international piracy with total cost between USD 7 to 12 billion annually [4]. The purpose of this study is to conduct an analysis of the situation of oil piracy in the Gulf of Guinea. In order to conduct this analysis, it is necessary to consider the relationship between maritime transportation and security. Therefore, the remainder of the study is composed of two sections. The first section provides an overview of the analysis to be used within the study. The second section contains the actual analysis itself.

2. Overview of Analysis

One of the most common types of analyses is the SWOT analysis. This type of analysis is commonly used for organisations. However, it can be used in other situations-such as maritime security. The SWOT analysis refers to the analysis of Strengths, Weaknesses, Opportunities, and Threats [5] [6] [7]. It is possible to use a SWOT analysis to determine strengths and weaknesses of maritime security, opportunities to either exploit strengths or eliminate and/or decrease weaknesses, and predict potential future threats-all in consideration of piracy in the Gulf of Guinea. Figure 1 shows this relationship.

In consideration of Figure 1, the completion of the SWOT analysis will be beneficial, as it will provide additional information regarding the situation regarding maritime transportation and security in relation to piracy in the Gulf of Guinea from 2006 to 2016. The conduction of the SWOT analysis will occur through 16 international opinions from stakeholders (such as individuals, countries, organisations, task forces, etc.) influenced by piracy in the Gulf of Guinea.

3. SWOT Analysis

The remainder of this study will contain the results of the SWOT analysis. This will occur through four main sections: 1) participants; 2) questionnaires; 3) results;
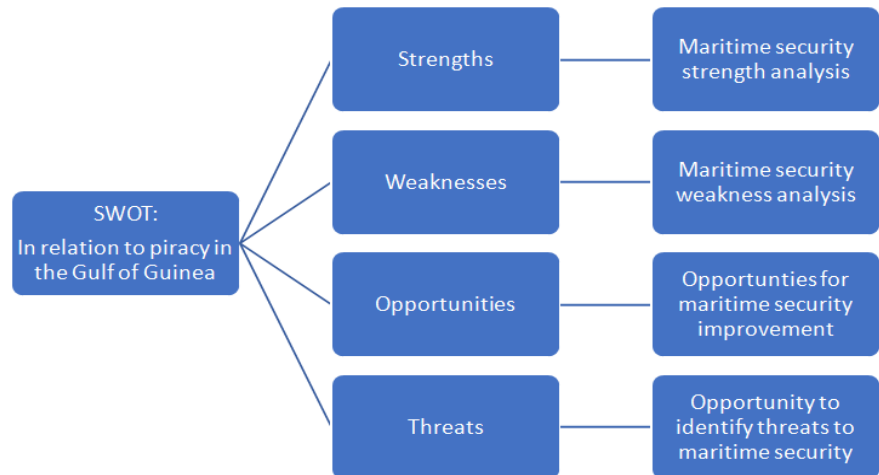
Figure 1. SWOT analysis relationship for maritime security. source: Ofosu-Boateng (2017).

and 4) discussion. The questionnaires and results section will be further divided for each of the four aspects of the SWOT analysis. A discussion of the results will be held in the final sub-section and will be further divided for figures and comprehensive discussion.

4. Participants

As noted, the 16 participants of the study are stakeholders (such as individuals, countries, organisations, task forces, etc.) influenced by piracy in the Gulf of Guinea. Table 1 shows the participants and representation.

The demographic characteristics of the participants though unique for the individual participants all have the elements of security threading through them. They use diverse methodologies which are related but not limited to profile and risk assessments, information gathering and sharing models. Maritime piracy has a global effect on Maritime Transportation and Security. There are effective and common implementations of existing international laws on piracy among the participants. They have sought to promote good levels of support with navies through effective coordination. They have also assisted littoral states to fend off maritime piracy attacks through capacity building and the application of International Laws to those who engage in armed robbery or maritime piracy to bring them to justice.

5. Questionnaire

In the conduction of this study, four questionnaires were developed and utilised in the conduction of the SWOT analysis. Based on existing literature and responses from each stakeholder, the degree of importance will be determined through the items using a Likert scale from 1 to 3, where 1 = least important; 2 = not important; and 3 = most important. Each questionnaire will have 10 items for measurement. They are shown in the subsequent sub-sections.

Table 1. Shows the participants and representation. Source: Ofosu-Boateng (2017).

Participant	Representation[1]
International Maritime Bureau	Global
EOS Risk Group	Local
United Nations	Global
European Union	Regional
South African Institute of International Affairs	Local
G7 Foreign Ministers of Maritime Security	Regional
Maritime Security Cooperation in the Gulf of Guinea	Regional
North Atlantic Treaty Organization	Global
Owners, Operators and Masters for Protection Against	Global
Economic Community of West African States	Local
Marine Domain Awareness for Trade	Global
INTERPOL	Regional
International Organization for Standardization	Global
International Maritime Organization	Global
United International Organization, Human Rights and	Global
Economic Community of Central African States	Local

[1]Representation classifications are: 1) Global; 2) Local; and 3) Regional. Global classifications refer to those stakeholders that impact all countries. Local classifications refer to those stakeholders that impact a specific country. Regional classifications refer to those stakeholders that impact a group of countries.

Strengths are manifest in the willingness of states in the Gulf of Guinea to have common responses and approaches in dealing with occurring maritime security issues. While there are no failed states in these regions, the individual states through regional agreements seek to harness their resources to combat the current scourge of Maritime piracy. This has attracted international financial support and logistical supplies.

Weakness cannot be overlooked when addressing maritime transportation and security issues in the Gulf of Guinea. The lack of escort vessels in the area, ineffective governance systems, regulations on private security, differences in levels of investment in maritime security, are some of the challenges that occur in this region.

Opportunities exist in diverse ways in handling the multifaceted nature of maritime security in the Gulf of Guinea. International Maritime Security Organizations have demonstrated the resolve to tackle the situation. There have been opportunities, to increased information sharing, joint participation between regional and international organizations, and the use of modern technology.

Threats of piracy and maritime security situations in the Gulf of Guinea have gotten more unpredictable with their effects lingering on for many years. Pirates have extended their activities further out to sea and have become well versed in navigation and pilotage. It is essential that these threats are noticed in time and curtailed or completely eliminated.

5.1. Strengths

The strengths listed in the following questionnaire were developed from current literature. These are shown in Table 2.

5.2. Weaknesses

The weaknesses listed in the following questionnaire were developed from current literature. These are shown in Table 3.

5.3. Opportunities

The opportunities listed in the following questionnaire were developed from current literature. These are shown in Table 4.

5.4. Threats

The threats listed in the following questionnaire were developed from current literature. These are shown in Table 5.

6. Results

The results will be shown in individual tables, consisting of two rows per item. Only the item number will be used for identification purposes. Both individual scores and overall scores will be shown. Accompanying each results table will be a figure for individual (local, international, and regional) responses.

Table 2. Strengths questionnaire. Source: Ofosu-Boateng (2017).

Number	Item	Likert Scale		
1	Increased number of organisations and/or task forces established specifically for maritime security purposes [2] [8]	1	2	3
2	Increased protections (such as escorts) for merchant ships in highly impacted areas [9] [10]	1	2	3
3	Increased monitoring of impacted areas (such as increased patrols) [11] [12]	1	2	3
4	Increased maritime security initiatives, both locally (regionally) and internationally [13] [14]	1	2	3
5	Increased awareness of need for enhanced maritime security measures [15] [16]	1	2	3
6	Development of new task forces designed specifically for the improvement of maritime security [17] [18]	1	2	3
7	Improved tactics for maritime security within impacted areas [19] [20]	1	2	3
8	Increased awareness of tactics used by those engaged in piracy [21] [22]	1	2	3
9	Increased on-board protocols to reduce the consequences of piracy incidences [23] [24]	1	2	3
10	Increased security protocols (such as cameras, etc.) for capture of those engaged in piracy [25] [26]	1	2	3

Table 3. Weaknesses questionnaire. Source: Ofosu-Boateng (2017).

Number	Item	Likert Scale		
1	Lack of effective mechanisms in emerging nations for maritime security protections [15] [16]	1	2	3
2	Lack of priority in emerging nations for maritime security protections [17] [18]	1	2	3
3	Lack of ability by emerging nations to fund increased protections for merchant ships [19] [20]	1	2	3
4	Lack of sufficient escorts for merchant ships in impacted areas by local (and regional) nations [21] [22]	1	2	3
5	Lack of ability to capture those engaged in piracy, both individuals and groups [23] [24]	1	2	3
6	Investment differences among developed and emerging nations in relation to maritime security [25] [26]	1	2	3
7	Increased trafficking in impacted area [2] [8]	1	2	3
8	Potential for corruption to facilitate maritime security risks [9] [10]	1	2	3
9	Potential for lack of security information relating to activities taken by those in piracy activities [11] [12]	1	2	3
10	Differences in transnational maritime security policies [13] [14]	1	2	3

Table 4. Opportunities questionnaire. Source: Ofosu-Boateng (2017).

Number	Item	Likert Scale		
1	Opportunities for increased international cooperation in enhancing maritime security measures [9] [10]	1	2	3
2	Opportunities for increased local (and regional) initiatives based on international standards [11] [12]	1	2	3
3	Opportunities for international maritime security organisations and/or task forces to assist in establishing local (and regional) initiatives [13] [14]	1	2	3
4	Opportunities for international maritime security organisations to establish dedicated protections within impacted areas (both in water and on ground) [15] [16]	1	2	3
5	Opportunities for local (and regional) maritime security organisations to cooperate with international maritime security organisations in the improvement of local (and regional) initiatives [17] [18]	1	2	3
6	Opportunities for increased investment relating to maritime security knowledge [19] [20]	1	2	3
7	Opportunities for those nations with greater investment ability to become leaders in maritime security protections [21] [22]	1	2	3
8	Opportunities for leaders in maritime security to assist emerging economies in the development of effective maritime security initiatives [23] [24]	1	2	3
9	Opportunities for increased technology investment in relation to maritime security [25] [26]	1	2	3
10	Opportunities for integrated maritime security protections between developed and emerging nations [2] [8]	1	2	3

Table 5. Threats questionnaire. Source: Ofosu-Boateng (2017).

Number	Item	Likert Scale		
1	Potential for increased piracy [19] [20]	1	2	3
2	Potential for ineffective protections in those nations without adequate investment in maritime security [21] [22]	1	2	3
3	Potential for political instability, which may lead to increases in piracy through insurgent groups [23] [24]	1	2	3
4	Potential for conflicts due to different developmental statuses (such as developed versus emerging nations) in relation to maritime security initiative implementation [25] [26]	1	2	3
5	Potential for differences in investments, increasing maritime security risks [2] [8]	1	2	3
6	Potential for improved technology, aiding those engaged in piracy activities [9] [10]	1	2	3
7	Potential for increased difficulties in the capture of those engaged in piracy due to improved technology [11] [12]	1	2	3
8	Potential for elimination of funding (such as through budget cuts) dedicated to maritime security [13] [14]	1	2	3
9	Potential for decreased maritime security research, leading to ineffective maritime security initiatives [15] [16]	1	2	3
10	Potential for decreased maritime security protections (such as escorts for merchant ships) due to other conflicts (such as war) [17] [18]	1	2	3

In Table 6 the representative classifications namely, Local, Regional and Global are indicated with their respective percentage score. For strengths the first item emphasises on the increased number of organisations established for the sole purpose of maritime security with 42.0% as most important. The second item emphasises on escorts for vessels in areas that are highly impacted and obtained 45.0% as most important strength. The third item ranks as unimportant with 46.0% and in global organisation for increased monitoring and patrol of highly impacted areas. The fourth item underscores increased maritime security initiatives on the local, regional and international fronts obtaining 44.0% with a rank of unimportant. The fifth item expresses the heightened awareness for enhanced maritime security measures ranking at most important in global organisations and obtaining 50.0% .The sixth item dwells mainly on new task forces created solely for the improvement of maritime security obtaining 43.0% as least important strength and ranking highest in global organizations. The seventh item emphasises on tactics improvement, with a ranking of 40.0% and highest in local organisations. The eight items are on tactics used by those involved or engaged in piracy. The ninth item obtained a ranking of least important at 52.0% and highest in global organizations. The emphasis is on onboard protocols which had to be increased to mitigate the incidence of piracy. The tenth item emphasises increasing the security using cameras to capture pirates images ranking as least important with 55.0% and highest in global organisations.

Table 6. Strengths. Source: Ofosu-Boateng (2017).

Item	Least Important			Not Important			Most Important		
	Local	Regional	Global	Local	Regional	Global	Local	Regional	Global
1	0.0%	20.0%	10.0%	14.0%	5.0%	9.0%	8.0%	0.0%	34.0%
		30.0%			28.0%			42.0%	
2	5.0%	3.0%	17.0%	9.0%	0.0%	21.0%	15.0%	7.0%	23.0%
		25.0%			30.0%			45.0%	
3	3.0%	2.0%	19.0%	1.0%	0.0%	45.0%	18.0%	2.0%	10.0%
		24.0%			46.0%			30.0%	
4	0.0%	5.0%	10.0%	15.0%	0.0%	29.0%	10.0%	2.0%	29.0%
		15.0%			44.0%			41.0%	
5	0.0%	0.0%	25.0%	2.0%	4.0%	19.0%	9.0%	0.0%	41.0%
		25.0%			25.0%			50.0%	
6	1.0%	1.0%	41.0%	0.0%	5.0%	21.0%	3.0%	15.0%	13.0%
		43.0%			26.0%			31.0%	
7	19.0%	20.0%	1.0%	15.0%	0.0%	21.0%	15.0%	2.0%	7.0%
		40.0%			36.0%			24.0%	
8	7.0%	19.0%	25.0%	0.0%	15.0%	3.0%	1.0%	21.0%	9.0%
		51.0%			18.0%			31.0%	
9	2.0%	9.0%	41.0%	0.0%	0.0%	15.0%	9.0%	10.0%	14.0%
		52.0%			15.0%			33.0%	
10	3.0%	1.0%	51.0%	0.0%	5.0%	17.0%	4.0%	1.0%	18.0%
		55.0%			22.0%			23.0%	

In Figure 2 it depicts the graph of the individual score for strengths with Local, Regional and Global. Global organisations scored highest from items one to six, nine and ten. Regional organisations scored a highest in the eighth item, and for item 7 it was for Local organisations. In Figure 3, Global organisations scored the highest for items 1, 3, 4 and 6 through to 10, but Local organisations scored the highest in item 2, and Regional scored the highest in item 5. In Figure 4, Global organisations scored the highest results for items 1, 2, 4 and 6 through to 10, but Local organisations had the highest result for item 5. Global organisations had the highest result in Figure 5 for items 1 to 4, items 6 to 8 and 10. However, Regional organisations had the highest results in item 5 and Local organisations and highest results for item 9.

For weaknesses in Table 7, the lack of mechanisms that show effectiveness for maritime protections is depicted in item 1 with a 44.0% ranking for unimportant weakness for global organizations. In item 2, lack of priority for maritime security protections for emerging nations ranked as least important with 40.0%. The emphasis in item 3 dwelt with the inability of emerging nations to adequately fund protections for merchant ships with a ranking of 45.0% for most important and highest in global organisations. In item 4, sufficient security escort for merchant ship for pirate infested areas, had a ranking of 45.0% for most important
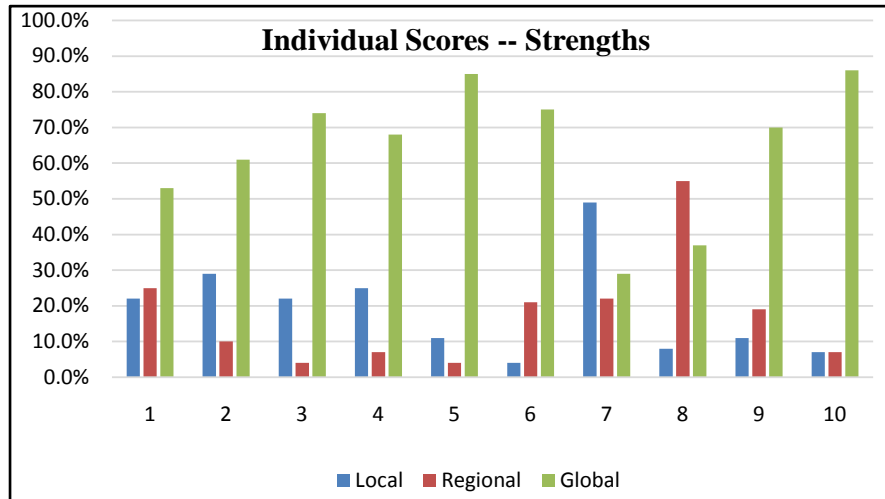
Figure 2. Individual scores-strengths. Source: Ofosu-Boateng (2017).
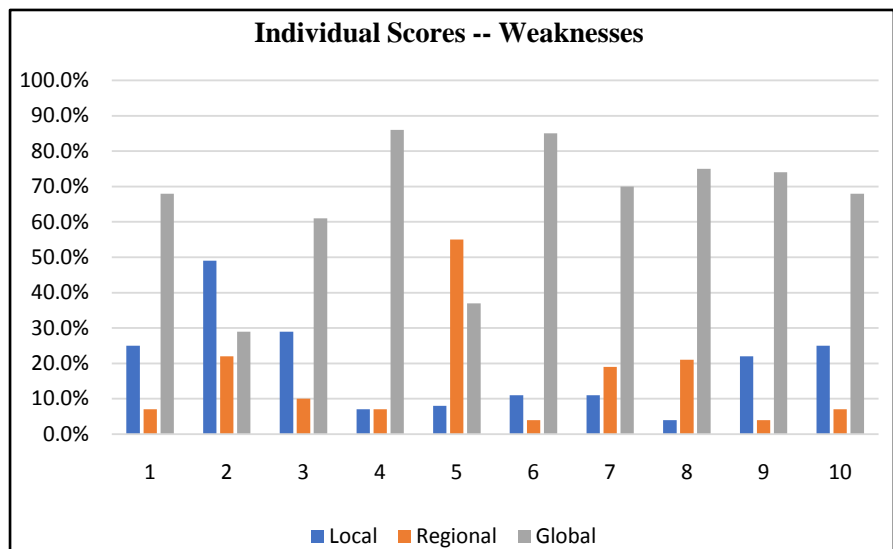

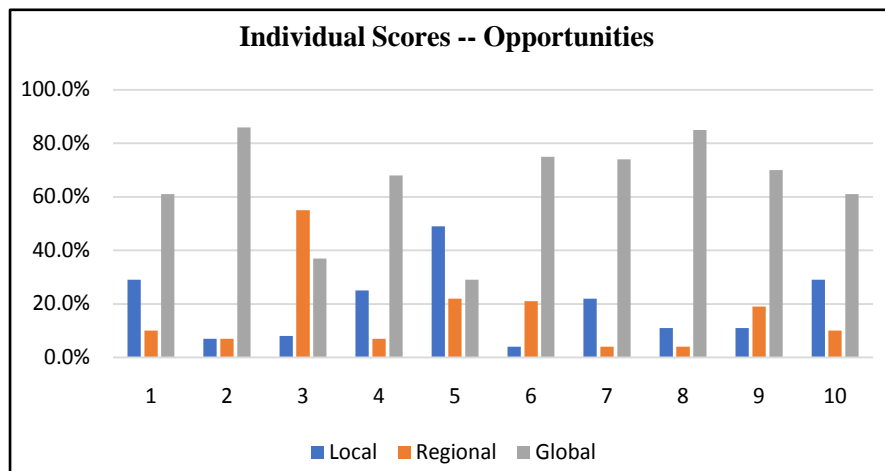**Figure 3.** Individual scores. Source: Ofosu-Boateng (2017).

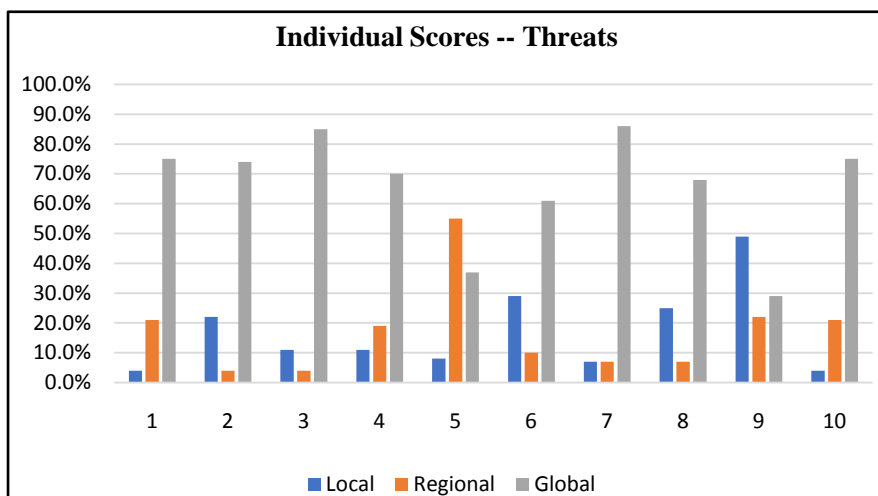**Figure 4.** Individual scores-opportunities. Source: Ofosu-Boateng (2017).

Figure 5. Individual scores-threats. Source: Ofosu-Boateng (2017).

Table 7. Weaknesses results. Source: Ofosu-Boateng (2017).

Item	Least Important			Not Important			Most Important		
	Local	Regional	Global	Local	Regional	Global	Local	Regional	Global
1	0.0%	5.0%	10.0%	15.0%	0.0%	29.0%	10.0%	2.0%	29.0%
		15.0%			44.0%			41.0%	
2	19.0%	20.0%	1.0%	15.0%	0.0%	21.0%	15.0%	2.0%	7.0%
		40.0%			36.0%			24.0%	
3	5.0%	3.0%	17.0%	9.0%	0.0%	21.0%	15.0%	7.0%	23.0%
		25.0%			30.0%			45.0%	
4	3.0%	1.0%	51.0%	0.0%	5.0%	17.0%	4.0%	1.0%	18.0%
		55.0%			22.0%			23.0%	
5	7.0%	19.0%	25.0%	0.0%	15.0%	3.0%	1.0%	21.0%	9.0%
		51.0%			18.0%			31.0%	
6	0.0%	0.0%	25.0%	2.0%	4.0%	19.0%	9.0%	0.0%	41.0%
		25.0%			25.0%			50.0%	
7	2.0%	9.0%	41.0%	0.0%	0.0%	15.0%	9.0%	10.0%	14.0%
		52.0%			15.0%			33.0%	
8	1.0%	1.0%	41.0%	0.0%	5.0%	21.0%	3.0%	15.0%	13.0%
		43.0%			26.0%			31.0%	
9	3.0%	2.0%	19.0%	1.0%	0.0%	45.0%	18.0%	2.0%	10.0%
		24.0%			46.0%			30.0%	
10	0.0%	5.0%	10.0%	15.0%	0.0%	29.0%	10.0%	2.0%	29.0%
		15.0%			44.0%			41.0%	

and highest in global organisations. In item 4, lack of sufficient security escorts for merchant ships in pirate infested areas had a ranking of 55.0% for least important and giving highest for global organisations. Item 5 showed the inability to capture potential pirates and people associated with them, and ranked at

51.0% as least important. Considering item 6, different investment among nations now developing, ranked most important at 50.0% and highest at global organisations. For weaknesses, Item 7 emphasised on impacted area increase in traffic with a rank of least important at 52.0% and global organisations ranking highest. The capability for corruption to make easier all maritime security risk was what item 8 emphasised on, ranking as least important at 43.0% and highest in global organisation ranking. In item 9, lack of information on security with regards to activities by pirates ranked 46.0% as unimportant and global organisations ranking highest. For item 10, transnational policies on maritime security policies rank at 40.0% for unimportant and going highest for global organisations.

In Table 8 on opportunities, item 1 shows measures in enhancing maritime security through a surge in international cooperation ranking at 45.0% with most important and global organisation ranking highest. In item 2 a ranking of 55.0% was obtained for least important and increased opportunities both local and regional and ranking highest for global organisations. In item 3, establishing local and regional initiatives by a task force of International Security organisations gave a ranking of least important at 51.0% and highest for regional organi-

Table 8. Opportunities results. Source: Ofosu-Boateng (2017).

Item	Least Important			Not Important			Most Important		
	Local	Regional	Global	Local	Regional	Global	Local	Regional	Global
1	0.0%	5.0%	10.0%	15.0%	0.0%	29.0%	10.0%	2.0%	29.0%
		15.0%			44.0%			41.0%	
2	19.0%	20.0%	1.0%	15.0%	0.0%	21.0%	15.0%	2.0%	7.0%
		40.0%			36.0%			24.0%	
3	5.0%	3.0%	17.0%	9.0%	0.0%	21.0%	15.0%	7.0%	23.0%
		25.0%			30.0%			45.0%	
4	3.0%	1.0%	51.0%	0.0%	5.0%	17.0%	4.0%	1.0%	18.0%
		55.0%			22.0%			23.0%	
5	7.0%	19.0%	25.0%	0.0%	15.0%	3.0%	1.0%	21.0%	9.0%
		51.0%			18.0%			31.0%	
6	0.0%	0.0%	25.0%	2.0%	4.0%	19.0%	9.0%	0.0%	41.0%
		25.0%			25.0%			50.0%	
7	2.0%	9.0%	41.0%	0.0%	0.0%	15.0%	9.0%	10.0%	14.0%
		52.0%			15.0%			33.0%	
8	1.0%	1.0%	41.0%	0.0%	5.0%	21.0%	3.0%	15.0%	13.0%
		43.0%			26.0%			31.0%	
9	3.0%	2.0%	19.0%	1.0%	0.0%	45.0%	18.0%	2.0%	10.0%
		24.0%			46.0%			30.0%	
10	0.0%	5.0%	10.0%	15.0%	0.0%	29.0%	10.0%	2.0%	29.0%
		15.0%			44.0%			41.0%	

sation. For item 4, 44.0% was the ranking for unimportant with the emphasis on dedicated protections in impacted areas on the ground and in water, by international maritime security organisations and ranking highest for global organisations. The ranking of 40.0% went for ranking for unimportant opportunities and highest ranking for local organisations in item 5. The emphasis was for cooperation between international, regional and local security organisations to improve their initiatives. In item 6, a ranking of 43.0% was for least important opportunities and increased investment concerning knowledge in maritime security and ranking highest for global organisations. For nations with greater capacity to champion leadership in maritime security protection, item 7 emphasised that with a ranking of 46.0% as unimportant and highest ranking for global organisations. In item 8, the emphasis was on leaders in maritime security having opportunities to aid emerging economies in coming out with maritime security initiatives that effective, ranking 50.0% for most important and ranking highest in global organisations. Ranking at least important for opportunities at 52.0%, item 9 emphasised on heightened investment in the use of technology for maritime security protections between nations that are well developed and emerging ones, with a ranking of 45.0% for most important and global organisations ranking the highest.

For threats, item 1 emphasised the potential for the act of piracy to increase, ranking at 43.0% with least important threats and having global organisations ranking highest. In item 2, the attention was on the potential for protections that are ineffective among nations who do not undertake investment in maritime security matters with 46.0%, rankings as unimportant and global organisations ranking as highest. The emphasis on item 3 shows political instability causing a ripple effect by way of insurgent groups, ranking at 50.0% for most important threats and global organisations raking the highest. In item 4, emphasis was on the possibility of conflicts due to diverse developmental status on maritime security and the implementation of its initiatives. The ranking is 52.0% for least important threats with global organisations ranking highest. Differences when it comes to investments and increased risks in maritime security is emphasised in item 5, ranking 51.0% for least important threats and regional organisations as the highest ranking. Advances and improved technology in assisting those involved in piracy activities is emphasised in item 6, with a ranking of 45.0% for most important, and ranking highest for global organisations. Advances and improved technology in assisting those involved in piracy activities is emphasised in item 6, with a ranking of 45.0% for most important, and ranking highest for global organisations. In item 7, the emphasis was on the difficulty of capturing pirates due to their use of modern and improved technology, with a ranking of 55.0% for least important threats and global organisation having the highest ranking. In item 8, it emphasised budget cuts or elimination of funding meant for maritime security, with 44.0% ranking as unimportant and obtaining a highest ranking in global organisations. The emphasis on the potential for a reduced

maritime security research leading to maritime security initiatives that are ineffective occurred in item 9, ranking 40.0% for least important and local organisations ranking highest. In item 10, emphasis was on conflicts which lead to decrease in maritime security protection with a ranking of 43.0% for least important, and ranking global organisations as highest.

6.1. Strengths

The results for strengths may be found in Table 6 and Figure 2.

6.2. Weaknesses

The results for weakness may be found in Table 7 and Figure 3.

6.3. Opportunities

The results for opportunities may be found in Table 8 and Figure 4.

6.4. Threats

The results for threats may be found in Table 9 and Figure 5.

Table 9. Threats results.

| Item	Least Important			Not Important			Most Important		
	Local	Regional	Global	Local	Regional	Global	Local	Regional	Global
1	1.0%	1.0%	41.0%	0.0%	5.0%	21.0%	3.0%	15.0%	13.0%
		43.0%			26.0%			31.0%	
2	3.0%	2.0%	19.0%	1.0%	0.0%	45.0%	18.0%	2.0%	10.0%
		24.0%			46.0%			30.0%	
3	0.0%	0.0%	25.0%	2.0%	4.0%	19.0%	9.0%	0.0%	41.0%
		25.0%			25.0%			50.0%	
4	2.0%	9.0%	41.0%	0.0%	0.0%	15.0%	9.0%	10.0%	14.0%
		52.0%			15.0%			33.0%	
5	7.0%	19.0%	25.0%	0.0%	15.0%	3.0%	1.0%	21.0%	9.0%
		51.0%			18.0%			31.0%	
6	5.0%	3.0%	17.0%	9.0%	0.0%	21.0%	15.0%	7.0%	23.0%
		25.0%			30.0%			45.0%	
7	3.0%	1.0%	51.0%	0.0%	5.0%	17.0%	4.0%	1.0%	18.0%
		55.0%			22.0%			23.0%	
8	0.0%	5.0%	10.0%	15.0%	0.0%	29.0%	10.0%	2.0%	29.0%
		15.0%			44.0%			41.0%	
9	19.0%	20.0%	1.0%	15.0%	0.0%	21.0%	15.0%	2.0%	7.0%
		40.0%			36.0%			24.0%	
10	1.0%	1.0%	41.0%	0.0%	5.0%	21.0%	3.0%	15.0%	13.0%
		43.0%			26.0%			31.0%	

7. Discussion Figures

Figure 6, which will show breakdown of the results relating to strengths in terms of the Likert scale, is shown.

Figure 7, which will show breakdown of the results relating to weakness in terms of the Likert scale, is shown.

Figure 8, which will show breakdown of the results relating to opportunities in terms of the Likert scale, is shown.

Figure 9 and Table 10 which will show breakdown of the results relating to threats in terms of the Likert scale, are shown.
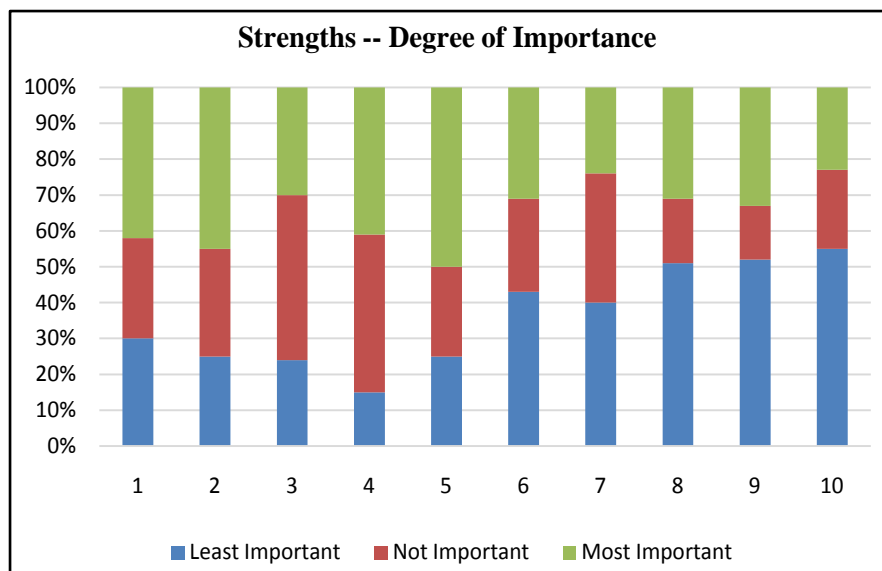
Figure 6. Strength-degree of importance. Source: Ofosu-Boateng (2017).
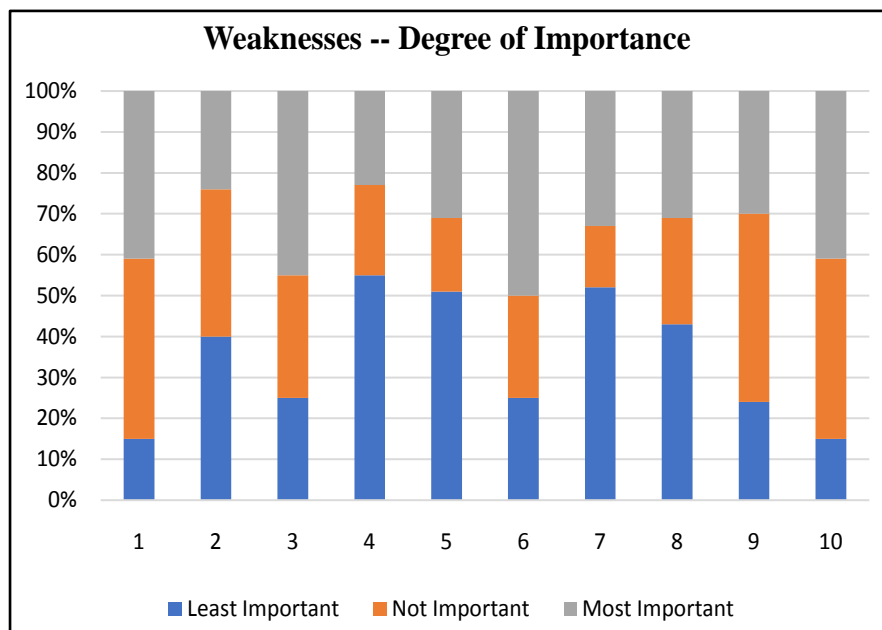
Figure 7. Weakness-degree of importance. Source: Ofosu-Boateng (2017).
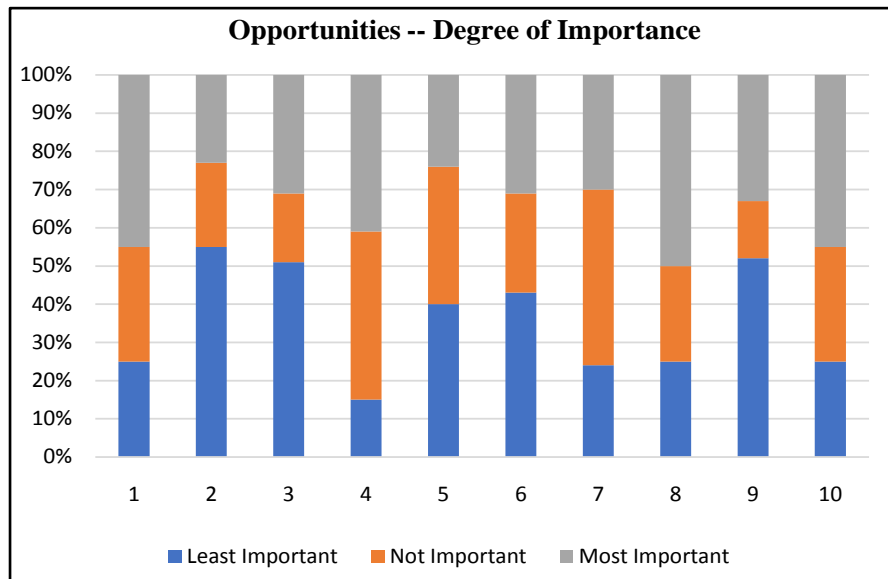
Figure 8. Opportunities-degree of importance. Source: Ofosu-Boateng (2017).
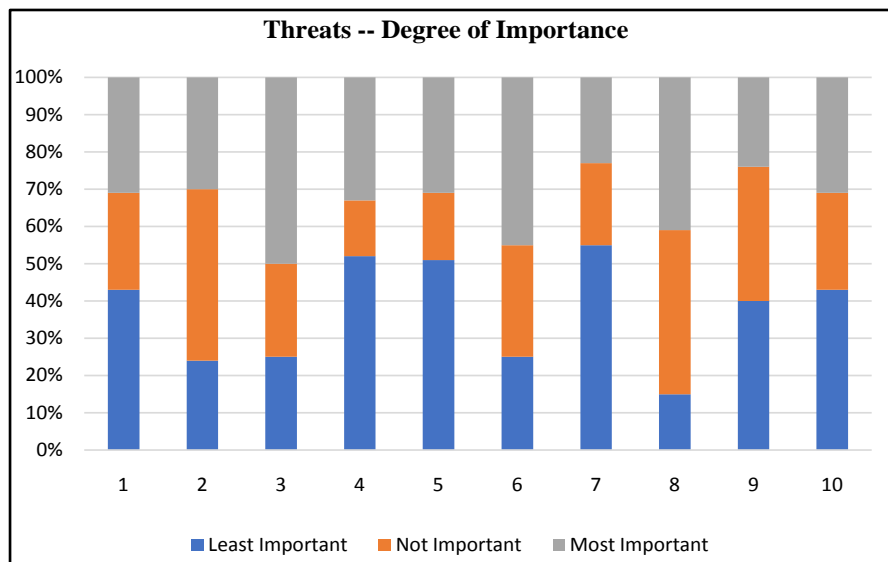
Figure 9. Threats-degree of importance. Source: Ofosu-Boateng (2107).

Table 10. Ranking of highest result. Source: Ofosu-Boateng (2017).

	Strengths	Weaknesses	Opportunities	Threats
1	Global	Global	Global	Global
2	Global	Local	Global	Global
3	Global	Global	Regional	Global
4	Global	Global	Global	Global
5	Global	Regional	Local	Regional
6	Global	Global	Global	Global
7	Local	Global	Global	Global
8	Regional	Global	Global	Global
9	Global	Global	Global	Local
10	Global	Global	Global	Global

8. Discussion

There were different relationships observed within the results. For example, in Figure 2, for items 1 to 6, 9, and 10, global organisations had the highest results. However, in the case of item 8, regional organisations had the highest results and in the case of item 7, local organisations had the highest results. In Figure 3, for items 1, 3, 4, and 6 to 10, global organisations had the highest results. However, in the case of item 2, local organisations had the highest results and in the case of item 5, regional organisations had the highest results. In Figure 4, for items 1, 2, 4, and 6 to 10, global organisations had the highest results. However, in the case of item 3, regional organisations had the highest results and in the case of item 5, local organisations had the highest results. In Figure 5, in the case of items 1 to 4, 6 to 8, and 10, global organisations had the highest results. However, in the case of item 5, regional organisations had the highest results and in the case of item 9, local organisations had the highest results.

It was interesting to note that through all four categories (strengths, weaknesses, opportunities, and threats), in the case of items 1, 4, 6, and 10, the highest results all came from global organisations.

In the questionnaire for strengths, the first item emphasised the increased number of organisations and/or task forces established specifically for maritime security purposes [2] [8], ranking as one of the most important strengths at 42.0%, and ranking highest in global organisations. In the questionnaire for weaknesses, the first item emphasized the lack of effective mechanisms in emerging nations for maritime security protections [15] [16], ranking as an unimportant strength at 44.0%, and ranking highest in global organisations. In the questionnaire for opportunities, the first item emphasised the opportunities for increased international cooperation in enhancing maritime security measures, [9] [10], ranking as one of the most important strengths at 45.0%, and ranking highest in global organisations. In the questionnaire for threats, the first item emphasised the potential for increased piracy, [19] [20], ranking as one of the least important strengths at 43.0%, and ranking highest in global organisations.

In the questionnaire for strengths, the second item emphasised the increased protections (such as escorts) for merchant ships in highly impacted areas [9] [10], ranking as one of the most important strengths at 45.0%, and ranking highest in global organisations. In the questionnaire for weaknesses, the second item emphasised the lack of priority in emerging nations for maritime security protections ranking as one of the least important weaknesses at 40.0%, and ranking highest in local organisations. In the questionnaire for opportunities, the second item emphasised the opportunities for increased local (and regional) initiatives based on international standards ranking as one of the least important opportunities at 55.0%, and ranking highest in global organisations. In the questionnaire for threats, the second item emphasised the potential for ineffective protections in those nations without adequate investment in maritime security ranking as unimportant at 46.0%, and ranking highest in global organisations.

In the questionnaire for strengths, the third item emphasised the increased monitoring of impacted areas (such as increased patrols) ranking as unimportant at 46.0%, and ranking highest in global organisations. In the questionnaire for weaknesses, the third item emphasised the lack of ability by emerging nations to fund increased protections for merchant ships ranking as one of the most important weaknesses at 45.0%, and ranking highest in global organisations. In the questionnaire for opportunities, the third item emphasised the opportunities for International Maritime Security organisations and/or task forces to assist in establishing local (and regional) initiatives ranking as one of the least important opportunities at 51.0%, and ranking as highest in regional organisations. In the questionnaire for threats, the third item emphasised the potential for political instability, which may lead to increases in piracy through insurgent groups ranking as one of the most important threats at 50.0%, and ranking as highest in global organisations.

In the questionnaire for strengths, the fourth item emphasised the increased maritime security initiatives, both locally (regionally) and internationally [13] [14], ranking as unimportant at 44.0%, and ranking as highest in global organisations. In the questionnaire for weaknesses, the fourth item emphasised the lack of sufficient escorts for merchant ships in impacted areas by local (and regional) nations [21] [22], ranking as one of the least important weaknesses at 55.0%, and ranking highest in global organisations. In the questionnaire for opportunities, the fourth item emphasised the opportunities for international maritime security organisations to establish dedicated protections within impacted areas (both in water and on ground) [15] [16], ranking as unimportant at 44.0%, and ranking highest in global organisations. In the questionnaire for threats, the fourth item emphasised the potential for conflicts due to different developmental statuses (such as developed versus emerging nations) in relation to maritime security initiative implementation [25] [26], ranking as one of the least important threats at 52.0%, and ranking highest in global organisations.

In the questionnaire for strengths, the fifth item emphasized the increased awareness of need for enhanced maritime security measures [15] [16], ranking as one of the most important strengths at 50.0%, and ranking as highest in global organisations. In the questionnaire for weaknesses, the fifth item emphasized the lack of ability to capture those engaged in piracy, both individuals and groups [23] [24], ranking as one of the least important weaknesses at 51.0%, and ranking as highest in regional organisations. In the questionnaire for opportunities, the fifth item emphasized the opportunities for local (and regional) maritime security organisations to cooperate with international maritime security organisations in the improvement of local (and regional) initiatives [17] [18], ranking as one of the least important opportunities at 40.0%, and ranking as highest in local organisations. In the questionnaire for threats, the fifth item emphasised the potential for differences in investments, increasing maritime security risks [2] [8], ranking as one of the least important threats at 51.0%, and ranking as

highest in regional organisations.

In the questionnaire for strengths, the sixth item emphasised the development of new task forces designed specifically for the improvement of maritime security [17] [18], ranking as one of the least important strengths at 43.0%, and ranking as highest in global organisations. In the questionnaire for weaknesses, the sixth item emphasised the investment differences among developed and emerging nations in relation to maritime security [25] [26] ranking as one of the most important weaknesses at 50.0%, and ranking as highest in global organisations. In the questionnaire for opportunities, the sixth item emphasised the opportunities for increased investment relating to maritime security knowledge [19] [20], ranking as one of the least important opportunities at 43.0%, and ranking as highest in global organisations. In the questionnaire for threats, the sixth item emphasized the potential for improved technology, aiding those engaged in piracy activities [9] [10], ranking as one of the most important threats at 45.0%, and ranking as highest in global organisations.

In the questionnaire for strengths, the seventh item emphasized the improved tactics for maritime security within impacted areas [19] [20], ranking as one of the least important strengths at 40.0%, and ranking as highest in local organisations. In the questionnaire for weaknesses, the seventh item emphasized the increased trafficking in impacted area [2] [8], ranking as one of the least important weaknesses at 52.0%, and ranking as highest in global organisations. In the questionnaire for opportunities, the seventh item emphasized the opportunities for those nations with greater investment ability to become leaders in maritime security protections [21] [22], ranking as unimportant at 46.0%, and ranking as highest in global organisations. In the questionnaire for threats, the seventh item emphasized the potential for increased difficulties in the capture of those engaged in piracy due to improved technology [11] [12], ranking as one of the least important threats at 55.0%, and ranking as highest in global organisations.

In the questionnaire for strengths, the eighth item emphasized the increased awareness of tactics used by those engaged in piracy [21] [22], ranking as one of the least important strengths at 51.0%, and ranking as highest in regional organisations. In the questionnaire for weaknesses, the eighth item emphasised the potential for corruption to facilitate maritime security risks [9] [10], ranking as one of the least important weaknesses at 43.0%, and ranking as highest in global organisations. In the questionnaire for opportunities, the eighth item emphasized the opportunities for leaders in maritime security to assist emerging economies in the development of effective maritime security initiatives [23] [24], ranking as one of the most important opportunities at 50.0%, and ranking as highest in global organisations. In the questionnaire for threats, the eighth item emphasised the potential for elimination of funding (such as through budget cuts) dedicated to maritime security [13] [14], ranking as unimportant at 44.0%, and ranking as highest in global organisations.

In the questionnaire for strengths, the ninth item emphasised the increased

on-board protocols to reduce the consequences of piracy incidence [23] [24], ranking as one of the least important strengths at 52.0%, and ranking as highest in global organisations. In the questionnaire for weaknesses, the ninth item emphasised the potential for lack of security information relating to activities taken by those in piracy activities [11] [12], ranking as unimportant at 46.0%, and ranking as highest in global organisations. In the questionnaire for opportunities, the ninth item emphasised the opportunities for increased technology investment in relation to maritime security [25] [26], ranking as one of the least important opportunities at 52.0%, and ranking as highest in global organisations. In the questionnaire for threats, the ninth item emphasised the potential for decreased maritime security research, leading to ineffective maritime security initiatives [15] [16], ranking as one of the least important threats at 40.0%, and ranking as highest in local organisations.

In the questionnaire for strengths, the tenth item emphasised the increased security protocols (such as cameras, etc.) for capture of those engaged in piracy [25] [26], ranking as one of the least important strengths at 55.0%, and ranking as highest in global organisations. In the questionnaire for weaknesses, the tenth item emphasised the differences in transnational maritime security policies [13] [14], ranking as unimportant at 44.0%, and ranking as highest in global organisations. In the questionnaire for opportunities, the tenth item emphasised the opportunities for integrated maritime security protections between developed and emerging nations [2] [8], ranking as one of the most important opportunities at 45.0%, and ranking as highest in global organisations. In the questionnaire for threats, the tenth item emphasized the potential for decreased maritime security protections (such as escorts for merchant ships) due to other conflicts (such as war) [17] [18], ranking as one of the least important opportunities at 43.0%, and ranking as highest in global organisations.

9. Conclusion

Maritime transportation is essential for global trade. It often involves sea vessels traversing great distances and in regions having unstable security concerns. In Sub-Saharan Africa, oil discovery and production is taking centre stage ushering in a renewed sense of interest in that particular region. This region with its vast oil reserves continues to be a key oil production area for the oil tanker trade. Maritime related crimes are likely to occur in the Gulf of Guinea until a holistic approach is used to access and address these numerous security challenges that plague the region. The ripple effect of these criminal activities resonates into a global perspective. The Strength, Weaknesses, Opportunities, and Threats (SWOT) Matrix used for the Gulf of Guinea brings to the fore, the identification and analysis of individual (SWOT) elements which are crucial in determining the security situation. The findings in this analysis will assist stake holders in making a fair and balanced assessment of Maritime Security issues in the Gulf of Guinea.

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