



ASHESI

ASHESI UNIVERSITY

**BOOSTING TOURISM IN GHANA
THROUGH SOCIAL MEDIA**

SELORM YAA WUAKU

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Thesis



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**BOOSTING TOURISM IN GHANA
THROUGH SOCIAL MEDIA**

BY

SELORM YAA WUAKU

Dissertation submitted to the Department of Computer Science,
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In partial fulfillment of the requirement for the award of Bachelor of
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DECLARATION PAGE

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate’s Signature:.....

Candidate’s Name: Selorm Yaa Wuaku

Date:.....

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by Ashesi University.

Supervisor’s Signature:.....

Supervisor’s Name: Dr Stephane Nwolley Jnr

Date:.....

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ABSTRACT PAGE

Recreational activities in Ghana are generally limited in relation to its scope. Looking at exploration as a recreational activity that translates into activities that fall under the tourism sector, a remedy to the limitation placed on the scope of recreational activities in Ghana can in turn, boost the tourism culture that exists in Ghana.

With the many technological advancements, social media has become quite common especially among the youth at large. This paper would be exploring a solution that would boost tourism through the use of social media. To have a solid backing to the claims being made in this paper, scholarly literature was reviewed to provide strong credibility to the points being made in the paper.

Data gathered from questionnaires that were sent out to a target population, information from semi-structured discussions with representatives from the Ghana Tourism Authority as well as historical data also gathered from the Ghana Tourism Authority would be analysed to affirm or dispute the hypothesis of this paper.

From the analysis of the data gathered, recommendations on a solution that utilizes recommendation systems in getting its audience would be a good approach to boosting the tourism culture in Ghana were given.

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CHAPTER 1: TITLE AND INTRODUCTION

1.1 INTRODUCTION

Recreation in Ghana seems to be very limited to a few activities that one way or the other always involves food. The places people keep going to for their “recreational purposes” are mostly the popular restaurants, ice cream or cupcake places, or the known night clubs and beaches in town. Aside the fact that this limitation does not allow the average Ghanaian to explore the scope of recreation in its entirety, it also limits the business ideas of the many people who open businesses around these few recreational areas most Ghanaians stick to. To a very large extent, these new businesses cannot be blamed for this occurrence. These businesses are just being smart and have identified an area in the country where they know for sure would yield them the profits they are seeking to gain.

Looking at recreation critically, it does not just involve going out to places to eat or to dance just to have a good time. Recreation, as defined by the Cambridge English Dictionary, is a way of enjoying yourself when you are not working [1]. This definition of recreation encapsulates any and everything you can do when you are not working. This can range from relaxation to drawing or painting, to reading, to exploring new places, to taking a walk in a park, riding a bicycle, as well as Ghana’s topmost activities; eating and dancing.

In Ghana, when it comes to exploring new places, it tends to be left to foreigners to do. There would be a huge increase in the revenue gained by the many tourist sites in Ghana, should the citizens themselves put a conscious effort into visiting them and not leaving it to the foreigners to do.

This shows that there is a limited understanding the average Ghanaian has about tourism, that's why this issue exists [2].

The problem this paper addresses is the limit placed on recreational activities in Ghana; specifically in relation to tourism, that has in one way or the other, caused the tourism sector to recede in its development. There are many tourist sites in Ghana that can be visited for recreational purposes that are not being utilized to their full potential.

Taking a closer look at the behavioural characteristics of the average Ghanaian who goes to the popular restaurants, ice cream or cupcake places, and the known night clubs and beaches, there exists a relationship between the places they visit and their social media posts. People go to these popular places, take photographs and videos and post them on the various social media platforms they are on. This paper seeks to analyse how social media can be used to increase the patronage or participation of more Ghanaians in tourist activities.

1.2 RESEARCH QUESTIONS

In order to be able to analyse the problem identified; the receded development in the tourism sector of Ghana caused by the limit placed on how recreational activities are viewed, taking all possible causative factors, the following research questions have been posed.

1. What is the culture of tourism in Ghana?
 - What role does social media play in the tourism sector?
2. Would social media help promote the culture of tourism in Ghana?

1.3 AIMS AND OBJECTIVES

The aim of this paper is to first prove that the problem identified is indeed an actual problem and then find possible feasible corrective methods to do away with the problem to a large extent, if not entirely. In trying to achieve this, the following objectives have been set for this paper.

1. Understand the limit placed on recreational activities in Ghana.
2. Establish the importance of an increased scope of recreation in Ghana.
3. Identify the role social media plays in recreational activities in Ghana.
4. Propose a solution to the problem identified.
5. Analyse the responsiveness of the Ghanaian community to the solution proposed.

1.4 HYPOTHESIS

In order to properly delve into the analysis of the problem this paper is addressing, the understanding, idea or explanation being used in the analysis, which is got from known facts or already existing issues or topics, which are yet to be proved must be stated [3]. This is the hypothesis of the paper.

“Using machine learning functionalities through social media activities can increase the patronage of tourism by Ghanaians in Ghana.”

CHAPTER 2: BACKGROUND AND RELATED WORK

2.1 LITERATURE REVIEW

In [4], the depth of the development of tourism which would further improve the wellbeing of African communities is explored. When the wellbeing of a people are taken into consideration in relation to developmental decisions, the final solutions arrived at are going to be of great benefit to the environment, the people within that location and the country at large. In most cases, when the wellbeing of people is forgone to gain a certain asset, the long-term effect becomes detrimental to the country as a whole. An example is the oil spill that occurred in Bodo, Nigeria by one of the oil pipes that belonged to Shell [5].

They threw light on the income or revenue earning characteristic of tourism to a given community or country. Emphasis was placed on the need of researchers to act as partners to specific businesses rather than talking about the benefits that they can enjoy, should they take their research into consideration on how to improve the wellbeing of the people in tourist site communities. Although drilling of oil does not translate into tourism, reference is being made to the extent to which the wellbeing of people in a community that generates significant revenue margins can be affected when plans are not put in place to prevent the occurrences of the unwanted or to deal with any unwanted circumstances like the oil spill.

There was also the acknowledgement of the differences that are present among the many tourism communities in African countries. Because of the dynamic nature of the various cultures that exist, they need to be taken into

consideration when looking at a problem that may seem to cut across a number of communities. The problem may be the same, but the causes would differ because of the difference that exists among the various communities around the world even within a small country like Ghana. Diversity deals with understanding the uniqueness that exists in each area, accepting and respecting those differences, and goes beyond a mere acknowledgement to embracing and celebrating the dimensions of richness that each area possesses [6].

[7] researched the social impacts of tourism in Nadi, Fiji to find out what perceptions the residents of a tourist community had towards the impacts of tourism on their community. Involving the residents of the tourism communities in the survey was to gain first-hand responses from the people themselves who are in these communities. This helped in gathering authentic responses or feedback of the tourism communities in question.

It was recorded after the survey that the majority of the residents supported the magnitude of tourism in their community. Despite this fact, they also pointed out the downsides to the tourism magnitude within their community. Their responses were non-biased because they took into consideration the good and the bad of the advancement of tourism in their community. In involving the people of the tourism communities; in this survey, the problems they came up with were specific to them and as such, in addressing them, the issue will have a positive impact on their lives since that issue is specific to them and not a generalized problem they searchers, came up with. In the quest to arriving at effective problem solving, the interests of everyone

involved must be taken into consideration and further evaluated to arrive at a consensus for that specific problem in question [8].

In the paper [9], the use of social media by business-to-business (B2B) companies was touched on about how they adapt to the constant changes in the demographic and social media patterns which are caused by the constant technological advancements. Technological advancements have changed the ways in which we make purchases, our way of life, our communication channels, how we travel, among others [10].

With regards to meeting the various needs of customers, Flanigan and Obermier mentioned that the industries have to keep up with the constant changes in customer's preferences. The changes in the preferences of customers have an effect on the demand of the goods and services being provided by a company and as such, the changes in their preferences must be monitored closely so as to constantly meet their preferences as they change [11]. They also shed some light on the buying behaviours of millennials who are comfortable with the new technologies. This characteristic in the millennials was also identified as being very different from that of the older generation.

The undergraduate thesis [12] which explores the way forward for Ghana's tourism industry through domestic tourism talks about various measures that should be considered seriously in the development of the tourism industry of Ghana. The paper makes reference to some of the strategies the government

of Ghana had put in place to help encourage tourism in Ghana to help sustain tourism activities in the country.

The paper also made mention of the fact that, despite the country being a prime tourist location, the domestic tourism potential of the country needs to be developed first before it can eventually trigger an increment in foreign tourists flooding into the country to partake in tourist activities.

The article, *Introduction to Social Recommendation*, speaks about information filtering techniques. This is a method of classifying groups of information gathered into distinct groups that can each be identified by similar characteristics of the grouped information [13]. This is done in an attempt to give suggestions that are likely to interest a user. This functionality relates to websites like e-commerce sites where a user is provided with product suggestions based on their activity on the site in question. This information filtering process is tied to social recommender systems that deal with understanding social trust and distrust relations. It also looks at how to use social signals to improve recommender systems as well as machine learning techniques for effective and efficient recommendations made. This article focuses on bettering recommender systems that are employed by websites so as to make good suggestions to the various users of the website.

[14] looks at two main successful travel recommender systems that have been employed by Triphop and VacationCoach on their individual websites. The article makes mention of the fact that these websites make use of client

clustering which is popular on e-commerce sites. This helps in the suggestions of various items to users based on their activities on the website. Both Triphop and VacationCoach use content-based approaches in their recommendation systems where their users express their various needs, benefits, and constraints on the website and it matches their preferences to destinations that suit their user cluster.

For the important attributes that users do not explicitly state, Triphop guesses it and computes the user recommendations based on past user experiences to make suggestions. VacationCoach, on the other hand, does some form of user-profiling by asking their users to profile themselves. This helps the system make suggestions that match well with the various clusters these profiled users will fall into.

Although these two successful sites are able to make destination suggestions to their users, the article points out a limitation to the content-based approach which is a difference between each individual user. A suggestion to this limitation would be a hybrid approach that utilizes both content-based and collaborative-based approaches in making user-specific suggestions.

In [15], personalized recommendation in social tagging systems using hierarchical clustering is explored. The data mining technique looked at in this article was clustering. It also explores a content-dependent variant of hierarchical agglomerative clustering which is generated from user's current navigation on a given website. The article talks about categorizing the resources available to a website in question into several tags instead of one single branch of a hierarchy. The importance of collaborative tagging

applications was emphasised since it utilizes opinions from many users instead of using a view that is dominant among a few people. It was also pointed out that the interest of a user is understood better if it is measured by the importance of a tag cluster to that user.

The recommendation system explained in this article was shown to not use the traditional agglomerative algorithms. The modification made selects a subset of potential clusters related to the user's current navigational activity [15, 2]. This personalized recommendation framework was tested on two real-world datasets. The first was a two-stage process that records a user's click on a tag and then applies a standard non-personalized recommendation algorithm to produce a set of recommendations. The second is personalized to the user by considering the user's profile as well as tag clusters linked to the user. The results are re-ranked with the premise that there is the existence of tag clusters from the offline phase of the user's activities on the website.

The article, after the tests run, proved that an effective and efficient way to make personalized navigational recommendations in collaborative tagging systems is by hierarchical agglomerative clustering. It is effective in gaining user-specific interests and the clusters provide an equally effective way to bridge the gap between users and the resources on the website.

2.2 RELEVANCE TO THESIS

The papers referenced above throw light on the subject matter of this paper; tourism, its impacts and how social media helps businesses. This paper seeks to analyse the tourism culture in Ghana, and the paper [4] talks about how there exists diversity among various tourism communities and as such, there should be a more direct link to the people or businesses that will be involved in any form of research. This will guide further research of this paper.

Despite the good this paper seeks to gain from this research, there is the possibility for the outcome to cause negative effects on the chosen focus group for the research. This is what the research in [7] professes may occur.

Since this paper seeks to find out how social media can help in solving the problem of tourism in Ghana, [9] assesses the use of social media in the business market sector gives some insight to the behavioural characteristics exhibited by customers with regards to social media and technological advancements.

This research paper is looking to provide a solution to the limitation placed on recreational activities with the help of social media. The paper [12] on exploring ways to better the tourism industry in Ghana states social media as one of the recommendations to help better the tourism industry in Ghana.

[13], [14] and [15] all talk about how recommendation systems are effectively utilized in e-commerce sites by providing suggestions to users based on their activity on the website as well as their individual profiles. In relation to this research paper, the hypothesis of this paper looks at how machine learning can boost tourism through social media. These papers suggest ways by which recommendation systems can be utilized in the

website to make user-specific suggestions based on user interest. This would be a good approach to boosting tourism through social media by suggesting places people will actually enjoy visiting based on their individual interests.

2.3 GAP IN KNOWLEDGE

The current social media accounts, as well as the main website of the Ghana Tourism Authority, do not utilize any form of machine learning. A solution that includes machine learning will be a new approach in trying to boost tourism through social media in Ghana and that is what this paper seeks to explore. This research seeks to first understand how social media has or has not helped the tourism sector of Ghana before moving forward with the solution in machine learning, specifically recommendation systems.

CHAPTER 3: METHODOLOGY

3.1 INTRODUCTION

From the literature review made in chapter 2, the findings from the selected literature provided guidance for the approach this paper's research would take. The wellbeing of the participants of the research of this paper is of top-most priority to do away with any negative long-term effect from the research that may be detrimental to them. In order for this research to be more relatable, a partnership would be formed with the organisations and businesses that this research would require to be reached out to. The literature review also points out the fact that the various tourist sites are dynamic from each other and as such, there may be differences in the data gained about them. Since the people who live in tourism communities are in constant contact with the tourism activities in their community, both negative and positive feedback can be gained from them and this would give more insight to the research being undertaken.

This section shows the data gathering technique employed in this paper; the mixed research method. This will involve gathering quantitative and qualitative data from the Ministry of Tourism about existing barriers to the flourishing of the Tourism sector as well as questionnaires that would be sent out to a select group of people. An informant from the Ministry of Tourism can also shed more light on the research this paper is undertaking to have more relevant hard facts about the problem identified.

3.2 DATA COLLECTION AND DATA COLLECTION TOOLS

- Questionnaires
- Semi-structured discussions
- Document review (Historical data)

3.3 TARGET POPULATION

- Ghanaians
- University students
- Fresh graduates
- National Servicemen

The nationality of the target population was chosen because the best way to boost the tourism of a country would first start from the indigenes themselves before it extends to foreigners. This is in the hope of boosting the dwindling numbers in domestic tourism in Ghana [16]. The categories of people chosen for this target population fall under the youth of the country and the youth are up to date with the millennial era and are technology savvy [11].

3.4 SAMPLING STRATEGY

- Probabilistic / Stratified Random Sampling would be used in the dissemination of the questionnaires.
- Convenience sampling was considered for the Ashesi community because of the ease with which they would have been easy to recruit but it was decided against since there would exist a lack of representativeness of the general population.

- Snowball sampling would be used for students of other universities, recent graduates and national servicemen to get more people from those categories to be included in the data collection required for the research of this paper.

3.5 OBJECTIVES

- Gain the views of the participants in the survey have about recreation and its link to social media.
- Understand the tourism culture in Ghana and the limitations to the thriving of the tourism sector.

CHAPTER 4: RESULTS

4.1 INTRODUCTION

This chapter deals with the analysis of the data collected for the research of this paper. As stated in the previous chapter, the data gathering techniques employed were questionnaires, semi-structured discussions, and collation of historical data. From these three techniques, each method produced its unique set of data and analysis would be made of the data gathered. After analysis, links would be drawn out to see whether there exists some form of correlation among the data gathered from the three techniques.

4.2 QUESTIONNAIRES

The questionnaire designed was sent out over various social media platforms to the target population of this research paper; Ghanaian university students, recent graduates as well as national servicemen. As stated in Chapter 3, stratified probabilistic sampling was employed in the dissemination of the questionnaires to the target population. For Ashesi students, convenience sampling was employed due to proximity while snowballing was used in sampling the recent graduates and national servicemen.

The questionnaire sent out was online and at the deadline for filling the questionnaire, there were 230 responses in total. Below are the responses from the questionnaires.

The chart in Figure 1 below indicates the percentage of Ghanaian and non-Ghanaian respondents of the questionnaires sent out. 92.2% were Ghanaian while the remaining 7.8% were not Ghanaian.

Are you Ghanaian?

230 responses

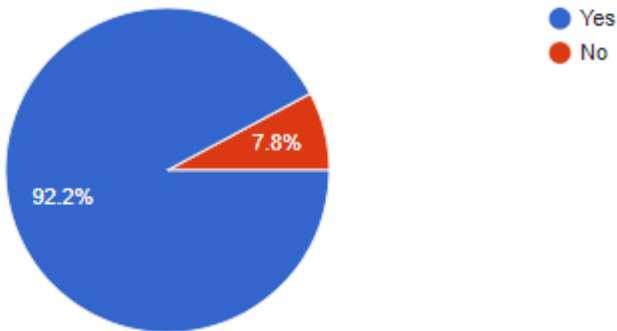


Figure 1

The chart in Figure 2 shows the percentages of university students, recent university graduates and national servicemen respondents of the questionnaires. 86.5% were university students, 7.8% were recent university graduates while the remaining 5.7% were national servicemen.

Which of the following categories do you identify with?

230 responses

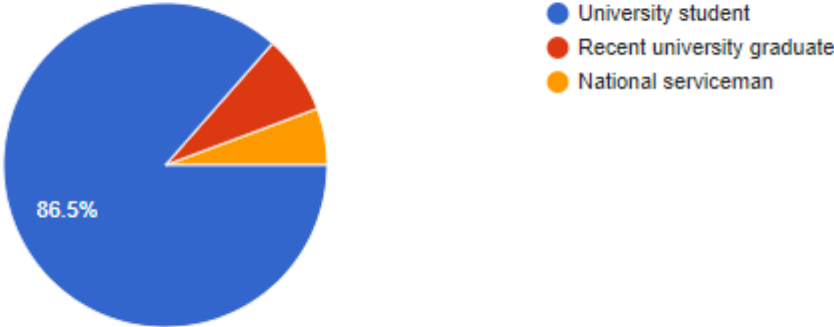


Figure 2

In Figure 3 below, on average, 32.6% of respondents felt that social media was of moderate importance with regards to their recreational activities. 29.1% and 17% of the respondents felt that social media was of higher importance to them in relation to their recreational activities. The remaining 15.7% and 5.7% did not appreciate the importance of social media in the performance of their recreational activities.

On a scale of 1 - 5, how important will you say social media is to you in recreational activities? (1 being least important and 5 being most important)

230 responses

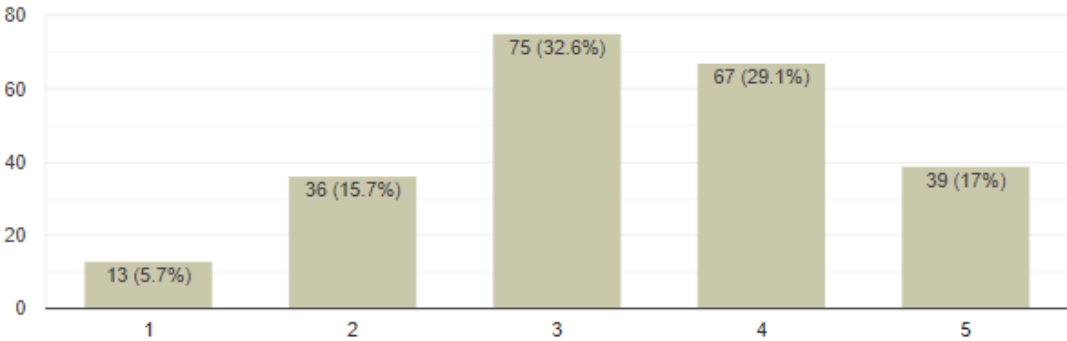


Figure 3

In Figure 4, 8.7% and 10.4% of the respondents were least likely to visit a place that is not as popular as the popular places while the remaining 34.3%, 27.8% and 18.7% ranging from average likeliness to most likely to visit places that are not as popular as the known places.

How likely are you to visit a place that is not as popular as the "known places" (restaurants, clubs,etc)? (1 being least likely and 5 being most likely)

230 responses

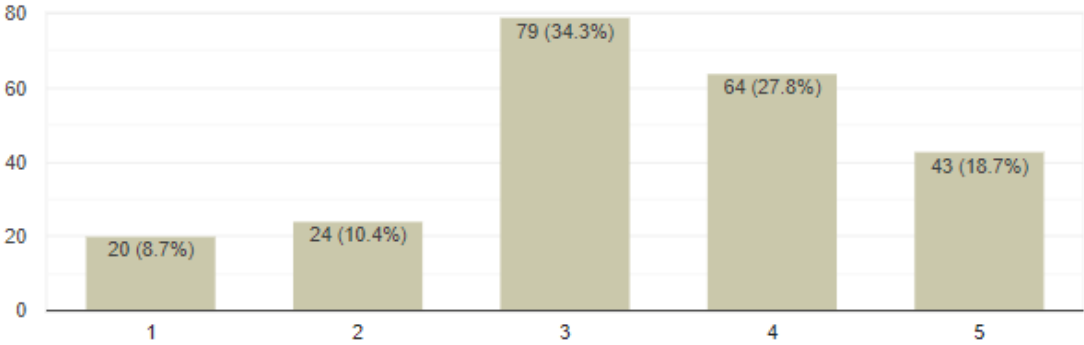


Figure 4

From the responses in the chart in Figure 5 below, the average number of regions in Ghana visited by the respondents is 2.

How many regions in Ghana have you visited for tourism purposes?

230 responses

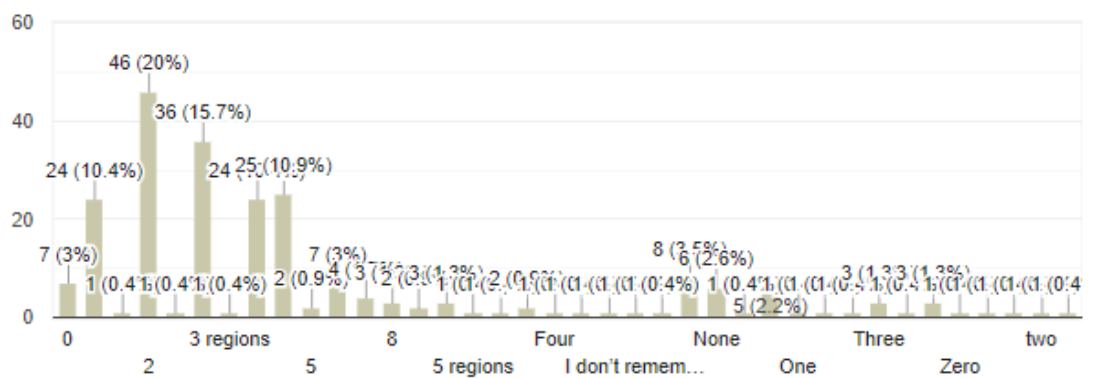


Figure 5

From the chart in Figure 6 below, 96.7% of the respondents indicated that they would recommend their experiences at tourist sites to their friends. The remaining 3.3% of the respondents felt otherwise. This result is not biased as [7] made mention of indigenes having both positive and negative opinions about their tourist sites.

If you have visited some regions in Ghana for tourism purposes, will you recommend that experience to your friends?

215 responses

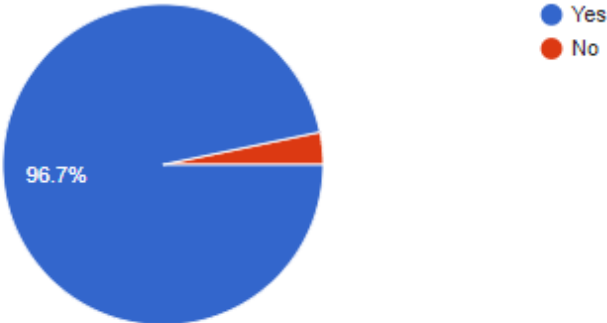


Figure 6

4.3 SEMI-STRUCTURED DISCUSSIONS

The semi-structured discussions were held with two representatives from the Ghana Tourism Authority; an agency under the Ministry of Tourism and Creative Arts. The guide the interview questions is seen in appendix item 3.

4.3.1 Interview 1

The first interview was with the Central Regional Director for the Ghana Tourism Authority who shed light on tourism in general.

Various categories were highlighted that can be considered under tourism although some of those sites have not been explicitly classified as tourist sites. Examples of these sites are schools and some resorts or hotels whose unique and beautiful scenery causes people to travel to those sites to have an experience of those places. Owing to that, not all categories under general tourism brings in revenue to the tourism sector.

My attention was brought to the fact that reports from the various tourist sites indicate that there are more Ghanaians who visit the tourist sites in Ghana as compared to foreigners. The current impediments the tourism sector faces were broken into three parts.

The first is from the point of view from policy implementers. The issues they face are the visa regime to foreigners, poor road infrastructure, the price of aviation fuel, and the attitudes of some employees at the various tourist sites. The second is from the point of view of the operators who face high electricity costs from unstable power supply and multiplicities of taxes to name a few. The third and last was from the point of view of the tourist from outside Ghana who is faced with rigid visa policies that include the price as

well as the procedure to acquire it, high airline ticket prices, and expensive accommodation prices.

For past techniques used in promoting tourism in Ghana, information about the tourist sites was printed out on flyers and brochures and handed out to people at random. Some billboards were also mounted to display information about the tourist sites as well as prints in newspapers. Now that the world is moving quickly towards a paperless era, the tourism authority responded to it and explored the online world and has hosted their website on the internet as well as marked out all tourist sites and provides their digital addresses which makes it locatable over GPS. The Tourism Authority also attends fairs abroad as a way to market Ghana to potential tourists.

4.3.2 Interview 2

The second interview was held with the Digital Marketing Lead in the Greater Accra office of the Ghana Tourism Authority.

Comparing past to present trends, the Tourism Authority as a body has become more active on social media now. This has helped them educate a wider audience about the various products they offer with regards to the promotion of the tourism sector in Ghana. Their social media presence has helped them also push some agendas and some social media campaigns like this year's "The year of return" theme and the most recent Kwahu Easter festivities. It has also given them access to certain strategies their competitors have put in place of which they can learn from or adopt. This move into social media by the Ghana Tourism Authority resonates with the technological adaptations by businesses in [9].

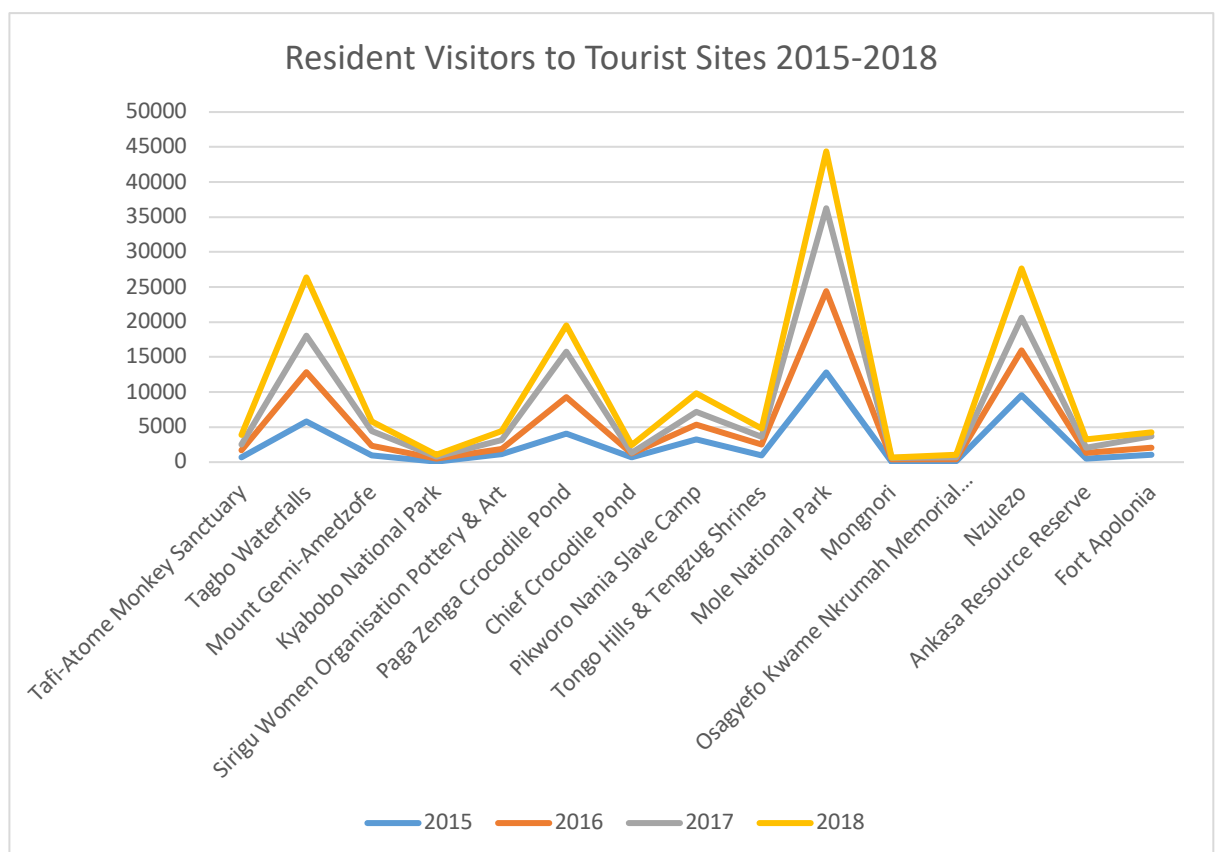
Having an online presence has helped the Tourism Authority monitor the number of visits to its website and various social media accounts. Prior to this, they relied only on data given to them by the Ghana Immigration. The downside to this data being given to them by the Ghana Immigration was, it was not fully accurate and as such, it was only averages of tourist immigrants to Ghana that were being captured. With their online presence now, the number of average clicks on their website corresponds with the average figures that are presented to them by the Ghana Immigration and it is a more reliable average since there is data to back the figures from the Ghana Immigration.

From the number of clicks on the website of the Tourism Authority, it showed that more Nigerians visit it as compared to people from the US and the UK. This finding did not tally with the data from the Ghana Immigration that indicated people from the US, UK, and Germany as the majority group of tourists that come into the country. Digital Marketing also confirmed that more Africans visit other Africans as compared to non-Africans. Digital Marketing has also helped to measure the impact of the social media aspect of the sector and it has been a positive one since its adoption.

4.4 DOCUMENT REVIEW (HISTORICAL DATA)

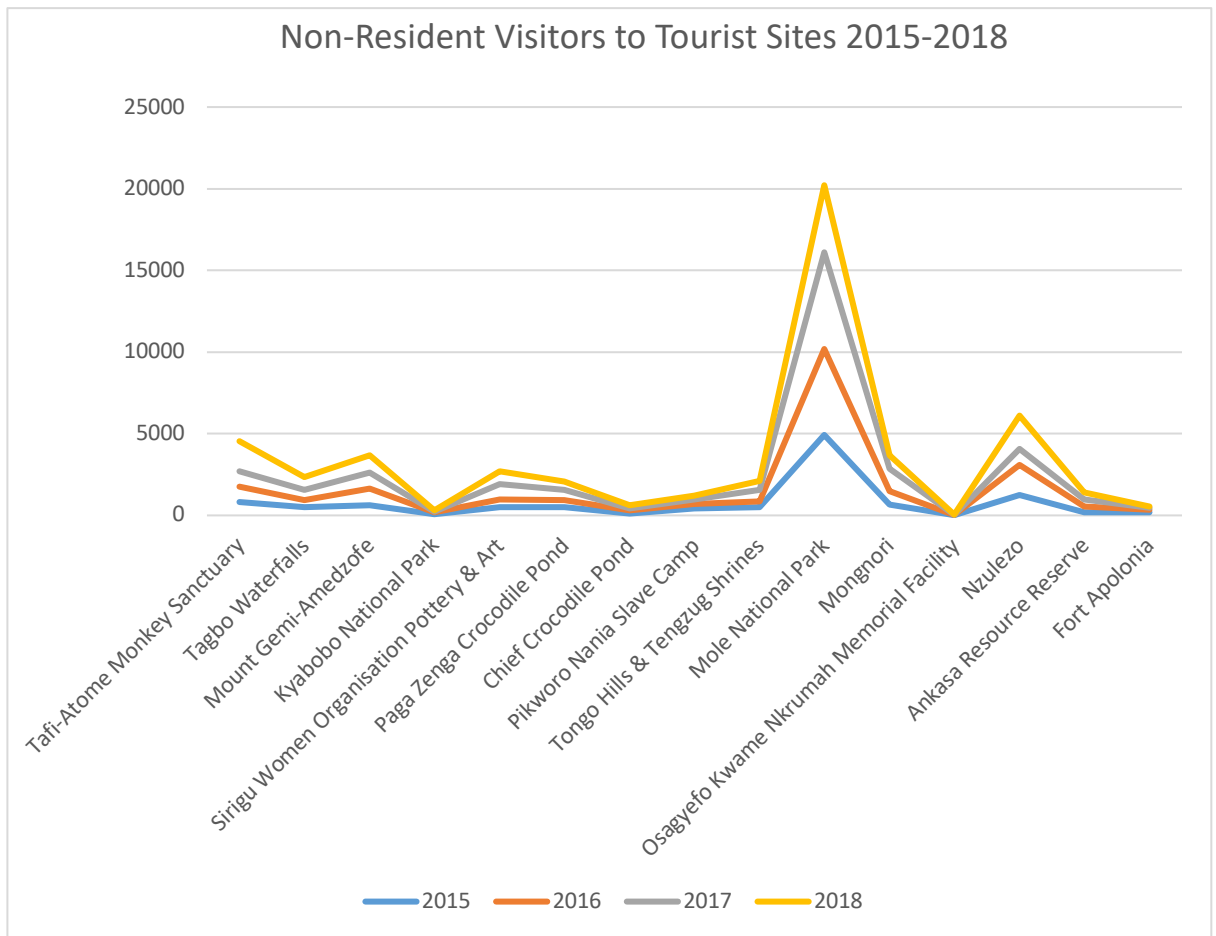
The data gathered from the Tourism Authority makes a comparison between Ghanaian tourists and foreign tourists who visited select tourist sites over a four year period; 2015 to 2018. Although there were 35 tourist sites in the entire data set, only 15 sites had constant figures over the four year period. For the sake of consistency, this paper has developed a graph focusing on the data of the 15 tourist sites to draw out trends over the years.

4.4.1 Ghanaian tourists



Source: Ghana Tourism Authority

4.4.2 Foreign tourists



Source: Ghana Tourism Authority

4.5 DATA ANALYSIS

By focusing on the target population of this research paper, the entries of non-Ghanaians were excluded from the final data analysis.

One objective of the research was to gain insight into how the respondents feel about the relationship social media has with their recreational activities. The results from the questionnaire that asked about the importance of social media in the performance of recreational activities would help meet the objective.

The results showed that 78.7% of the respondents felt social media was of some significant importance in the performance of their recreational activities.

Another objective of the questionnaires was to understand the tourism culture in Ghana and show that a limitation on recreational activities in the average Ghanaian youth exists. From the recreational activities stated by the respondents in answering the questionnaires, only six people showed interest in exploration as the activity that's undertaken for leisure purposes and this is seen in appendix item 1. This proves that there is a limit placed on recreational activities by the average Ghanaian youth.

4.6 UNDERSTANDING THE TOURISM CULTURE IN GHANA

Although responses from the questionnaires sent out showed that majority of the respondents did not have exploration as something done for recreation, the information from both the interviews held with the Ghana

Tourism Authority representatives as well as the historical data gathered showed that tourism in Ghana is patronized more by Ghanaians than foreigners. This finding indicates that the average Ghanaian does not necessarily view exploration as a recreational activity but in one way or the other, undertakes it on their own terms.

4.7 THE RELATIONSHIP BETWEEN SOCIAL MEDIA AND RECREATIONAL ACTIVITIES

Looking at the data from the questionnaires, it is evident that there is a form of correlation between the performance of recreational activities and the use of social media. The information from the second interview with the Digital Marketing Lead at the Ghana Tourism Authority in Accra indicates that followers on their various social media accounts and website visits or clicks have increased naturally; without sponsored adverts or coercion, over the years since their move onto the internet.

4.8 RELIABILITY AND VALIDITY TEST

In finding the degree to which the data gathered from the questionnaires and interviews produced consistent results, the internal consistency reliability will be employed. This technique will prove the reliability of the data from the questionnaires by comparing items on the questionnaire that seeks to measure the same construct to see if similar results were produced. In the

questionnaire seen in appendix item 2, the item that asked about activities performed for leisure was to see how many of the respondents considered exploration or tourism as a recreational activity. The other item on the questionnaire that asked about the number of regions respondents had visited for tourism purposes sought to find out whether the respondents' recreational activities correlated with their tourism activities.

The results from the activities performed for leisure matched well with the number of regions visited by the respondents for recreational activities. Only 6 respondents indicated exploration as a recreational activity for them and the average number of regions visited by the respondents of the questionnaire was 2 out of the then ten regions of Ghana.

With regards to both interviews conducted, findings from both interviews were practically the same. The second interview threw more light on the general view of tourism in Ghana ascertained from the first interview.

With these comparisons, it is safe to say that the data from the questionnaires and interviews are reliable for this research.

In finding out how accurate the instruments used in the data gathering for this research are at gaining the right information for this research, construct validity can be employed. This technique examines whether the questionnaire truly encompasses enough areas that will help generalize the findings to the objective of the questionnaire. The questionnaire sought to gain the views of the respondents on the importance of social media in relation to the performance of their recreational activities as well as the general tourism culture that exists in the average Ghanaian youth.

The questionnaire explored the areas of personal recreational activities of respondents, the importance of social media in the performance of said recreational activities as well as the number of regions visited for recreational purposes by the respondents.

These areas provide the exact information needed to meet the objective of the questionnaires. Owing to this, the data from the questionnaires can be labelled as valid.

Criterion validity being used to validate the information gained from the interviews proves whether or not the information gathered accurately relates to some kind of external variable. The external variable here is the ability of social media to boost tourism. From the interviews, it was found out that the number of followers gained on the various social media accounts of the Ghana Tourism Authority have increased naturally as well as the number of visits to their website. These increases tally with the increasing numbers gained from the historical data gathered from the Ghana Tourism Authority.

With the backing gained from the figures from the historical data, it can be agreed that the information from the representatives of the Ghana Tourism Authority is valid for the research.

4.9 CONCLUSION

From analysing the data from the questionnaires, historical data as well as information from the interviews conducted, it is safe to say that a solution linked to social media can help boost the tourism culture in Ghana. Although exploration is not seen as a recreational activity according to the data gathered, a solution relating to social media would more likely reach the right target in the hope of encouraging exploration or tourism among the average Ghanaian youth.

CHAPTER 5: CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

In this chapter, all findings from the research conducted would be analysed in accordance to the objective of this research paper which seeks to find a way to boost tourism in Ghana through the use of social media. Analysis of all data gathered during the research phase of this paper would help give appropriate recommendations for seeing the objective of this paper to life.

5.2 THE RESEARCH PROCESS

The initial solution proposed was to build a web application that would serve as a centralized database for the various tourist sites that provided information about the sites, links to Google Maps for directions and links to accommodation facilities close to said tourist sites. Undertaking research to find out about existing resources manned by the Ghana Tourism Authority brought to light the fact that the current website of the Ghana Tourism Authority is an exact replica of the proposed solution.

The next phase of the research after gathering data from the questionnaires was to understand the tourism culture that exists in Ghana and find out in depth how social media has helped the Ghana Tourism Authority promote its cause; marketing Ghana as a good tourist destination. The findings from this showed that social media has indeed helped the Ghana Tourism Authority promote its cause to a wider range of people; both Ghanaians and foreigners alike.

The third phase of this research explored ways the current social media accounts and website of the Ghana Tourism Authority could be enhanced that would, in turn, boost tourism in Ghana.

5.3 LIMITATIONS

Time was a big factor that was against the research of this paper. Most of the time went into research about the current management of the various social media accounts and websites of the Ghana Tourism Authority so as to understand the real impact social media is having on the tourism sector of Ghana. A lot of time was put into doing this research so that the recommended solution will be something that will solve the problem and not just be a replica of something already in existence.

Due to the very technical nature of machine learning and the time it takes to build and perfect a system to run smoothly, the system as described in [15] could not be built for this paper within the time frame available to this paper.

5.4 FUTURE WORK

The papers [13], [14] and [15] showed how recommendation systems have been incorporated into various websites to suggest products to users based on users' activity on said websites. Including this feature on the website of the Ghana Tourism Authority, suggestions of other tourist sites based on a user's activity on the website would be generated. A more user-specific suggestion can be made to users of the website by filling out a personality

form on the website that would categorize users so as to give suggestions to fit their taste as mentioned in [15].

Entering a partnership or collaboration with the Ghana Tourism Authority to implement this new feature will be a very good way that the tourism sector of Ghana would be influenced. The current website and social media accounts of the Ghana Tourism Authority has increased patronage in the sector over a period of time. The introduction of recommendation systems in their already existing website that has grown naturally is sure to boost tourism in Ghana past the current figures being recorded.

5.5 CONCLUSION

After going through all the research for this paper, the initial problem of the limitation placed on recreation in Ghana was debunked because, from the data collected from the Ghana Tourism Authority, the number of Ghanaians who visit tourist sites is more than that of foreigners. This showed that the initial correlation between the performance of recreational activities and tourism was faulty. Further research showed that the online presence of the Ghana Tourism Authority has helped the sector in reaching a larger group of people. In finding a way to further better this improvement social media has brought to the Ghana Tourism Authority, a solution that utilizes recommendation systems on the website of the Ghana Tourism Authority was recommended.

REFERENCES

- [1] Recreation. *Cambridge English Dictionary*. Retrieved October 10, 2018, from <https://dictionary.cambridge.org/dictionary/english/recreation>
- [2] Solutions to challenges facing the Tourism Industry in Ghana. Retrieved October 9, 2018, from <http://www.ghanaweb.com/GhanaHomePage/business/Solutions-to-challenges-facing-the-Tourism-Industry-in-Ghana-451739>
- [3] Hypothesis. *Cambridge English Dictionary*. Retrieved October 10, 2018, from <https://dictionary.cambridge.org/dictionary/english/hypothesis>
- [4] Arntzen, J., Pearce, P.L. and Cottrell, S., 2008. Tourism as a shared income earner. *Botswana Notes and Record*, 39, pp. 13-22.
- [5] Morgan, A. D. 2017, July 28. Long-term effects of oil spills in Bodo, Nigeria. Retrieved October 10, 2018, from <https://www.aljazeera.com/indepth/inpictures/2017/07/long-term-effects-oil-spills-bodo-nigeria-170717090542648.html>
- [6] Queensborough Community College. Retrieved October 10, 2018, from <http://www.qcc.cuny.edu/>
- [7] King, B., Pizam, A. and Milman, A. 1993. Social impacts of tourism: Host perceptions. *Annals of tourism Research*, 20(4), pp. 650-665.
- [8] Hicks, T. n.d. Seven Steps for Effective Problem Solving in the Workplace. Retrieved October 10, 2018, from <http://www.mediate.com/articles/thicks.cfm>

- [9] Flanigan, R. L. and Obermier, T. R. 2016. An Assessment of the Use of Social Media in the Industrial Distribution Business-to-Business Market Sector. *Journal of Technology Studies*, 42(1), pp. 18-29.
- [10] Ramey, K. 2012, November 12. Technological Advancements and Their Effects on Humanity. *Use of Technology*. Retrieved October 10, 2018, from <https://www.useoftechnology.com/technological-advancements-effects-humanity/>
- [11] Singh, J. 2014, June 17. 6 Important Factors That Influence the Demand of Goods. *Economics Discussion*. Retrieved October 10, 2018, from <http://www.economicdiscussion.net/essays/economics/6-important-factors-that-influence-the-demand-of-goods/926>
- [12] Dorkenoo, B. 2013. *EXPLORING THE WAY FORWARD FOR GHANA'S TOURISM INDUSTRY THROUGH DOMESTIC TOURISM*. Ashesi University.
- [13] King, I., Lyu, M. R., & Ma, H. 2010. Introduction to Social Recommendation. In *Proceedings of the 19th international conference on World Wide Web*. New York, NY, USA: ACM, pp. 1355-1356.
- [14] Ricci, F. 2002. Travel Recommender Systems. *IEEE Intelligent Systems*, 17(6), pp. 55-57.
- [15] Shepitsen, A., Gemmell, J., Mobasher, B. and Burke, R., 2008. In *Proceedings of the 2008 ACM Conference on Recommender Systems*. New York, NY, USA: ACM, pp. 259-266.
- [16] Ghana Tourist Board. 2005. Domestic tourism statistics 2002-2004. *Domestic tourism statistics*, pp. 1-5.

APPENDICES

Item 1: Recreational activities provided by Ghanaian respondents

RECREATIONAL ACTIVITIES BY GHANAIAIAN RESPONDENTS ONLY	
Which of the following categories do you identify with?	What do you do for recreation (leisure or to have fun)?
University student	Sleep
University student	Watch movies
Recent university graduate	Swim, cook, watch series/shows/sermons, hang out with friends
University student	Play soccer
University student	N/a
University student	Sleeping
University student	Listen music, watch series and movies.
University student	Sleep
University student	Listen to music and watch movies
University student	Play soccer
University student	I swim
University student	Swimming
University student	Drive
University student	Listening to music and surfing the internet

University student	Watch movies
University student	Chat with friends
University student	Watch movies, read novels
University student	Play games
University student	Going out to eat with my girls
University student	Watch television or listen to music
University student	I play football
University student	Bake, watch series
University student	Play tennis
University student	Read books/Watch documentaries
University student	Leisure
University student	Travel
University student	Go out with friends and family
University student	Watch movies with friends, sing, hang out and chill
University student	Sleep or hang out with my friends off campus, watch movies etc
University student	Listen to music, watch movies, read novels, go out with friends, meet up with friends
National serviceman	Music

University student	Watch movies on a regular, football on weekends sometimes midweek and clubbing/partying on weekends
University student	Playing snooker
University student	Play tennis or board games
Recent university graduate	To have fun
University student	Play with friends
University student	Leisure
University student	Read
University student	Watch movies
University student	I play Ampe
University student	Take photographs
University student	Watch movies
University student	To have fun
University student	Listen to music, watch wedding videos and sleep
University student	leisure
University student	play video games
University student	Cook
Recent university graduate	Go out with friends
University student	Basketball and clubbing
University student	Have fun
University student	Watch movie or probably sleep

University student	Watch soccer, play video games and indoor games
University student	Go out with friends
University student	Movies, music, relaxing
University student	Go out with friends
University student	Movies, Tech Videos
University student	Series, video games
University student	Take pictures and pray to my God
University student	Play fifa or table tennis
University student	Write poems
University student	Read Movies and music
University student	Read
University student	Chat with firends indoors
University student	Movies
University student	Singing and reading
University student	Fun
University student	Photography, video games, watch movies
University student	Drawing
University student	Parties
University student	To have fun
University student	To have fun
University student	Reading and clubbing

University student	Play video games
University student	Visit new places
University student	Social media, go out
University student	reading, watching TV, eating, sleeping
University student	Watch a movie
University student	Play game
University student	Sleep. Read. Sing. Listen to music.
University student	Visit places
University student	Sleeping
University student	Listen to music and read books
Recent university graduate	Sleep
University student	Reading, watching movies
University student	Watch movie, converse with friends, visit places
University student	Sleep
University student	Watch movies, read novels
University student	Go out with friends
University student	Visit a nice center to relax and reflect on what I did and what I had wrong in doing.
National serviceman	Watch movies, enjoy new experiences if I can

University student	Swim
University student	Read
University student	Movies
University student	Spend time with close friends or sleep
University student	Watch movies
University student	Movies
University student	Play Games
University student	I have sex or play game.
University student	Read
University student	Watch movies
University student	Stay in my room & watch series
University student	Watch movies going out for drinks
University student	TV, movies, music, games, sleep
University student	Read
University student	Play video games or go out with friends
University student	I usually go out to watch a movie at a cinema or visit the beach or a pool.
University student	Traveling
University student	YouTube

University student	Leisure
University student	Play football
University student	Movies, Football, Games
University student	Bake, watch series
University student	Writing
University student	Fun
University student	Watch movies
University student	Parties
University student	Watch Criminal Documentaries, Read Conspiracy Theories & Watch Anime, Korean Drama and TV-Series (especially psychological-thrillers)
University student	Tennis
University student	Drag racing
University student	Watch movies
University student	Sleep
University student	Play soccer, listening to music and singing
University student	Play sports Play video games Watch movies and TV shows Go clubbing
University student	Go out to eat food I won't get at home

University student	Watch movies and play basketball.....sometimes I search on YouTube for new things that intrigue me.
University student	Sleep
National serviceman	Movie; club
University student	Dance,talk,watch videos
University student	Watch movies
University student	Hanging Out With Friends
University student	Write poems, listen to music, play video game.
University student	Sleep
University student	Watch a movie or go out with friends
University student	Play video games
University student	Go out with friends
University student	Read Listen to music Watch cartoons.
University student	Read
University student	Watch movies
University student	Music
Recent university graduate	Read and watch TV
University student	Browse the internet

University student	Hang out with friends, family and watch stuff
University student	Use social media, hang out with friends and read books
Recent university graduate	Swim
University student	Read novels or listen to music
University student	Watch movies
University student	Read
University student	Listen to preaching messages or whatsapp
National serviceman	Read and watch videos
University student	Out with friends
University student	Fun
University student	Watch movies/series, cook, hangout with friends
National serviceman	Watch movies(leisure) and write computer code (fun)
University student	Movies
University student	Watch movies
Recent university graduate	Leisure
University student	Leisure
University student	Movies
University student	Go out or do hobbies indoors
University student	Sleep, walk around, use social media

University student	Reading
National serviceman	Listen to music or watch a movie
University student	Play video games
Recent university graduate	Watch YouTube videos
Recent university graduate	Watch movies, chat with friends
University student	Read, watch videos, listen to music
University student	Reading books and watching documentaries
Recent university graduate	Watch movies
Recent university graduate	Watch movies or go out and visit friends
University student	Read or watch movies
University student	Leisure
University student	Leisure
University student	Leisure
University student	Talking with loved ones
University student	Socialise
University student	Go out and see new places
University student	I read a lot and listen to music
University student	Sleep
University student	Movies or read Novels
University student	Video games

University student	Play video games
University student	Listen to music
National serviceman	Watch stuff
University student	I watch series
University student	Have fun
University student	Playing snooker
Recent university graduate	Studying the bible and/or planning to generate business ideas
University student	Read
University student	Dance
University student	Watching movies and football matches
University student	Reading, watching movies
University student	Watch movies
University student	Sleep
National serviceman	Read
University student	Read books
University student	Watch videos
National serviceman	Go out and eat with friends, watch YouTube videos and see new places
Recent university graduate	I read , sew and also gardening
National serviceman	Read books

National serviceman	Listen to music
Recent university graduate	Watch anime
Recent university graduate	Talk to people
National serviceman	Read
Recent university graduate	I code
University student	Play Keyboard
University student	Read
National serviceman	Hangout with friends and family
University student	Movies
University student	Box Video games TV series Read Chat w friends
University student	Watch series, read, listen to music, dance
University student	Play video games, visit friends and go out
University student	Watch movies, go out with friends

Item 2: Questionnaire sent out

- Are you Ghanaian?
- Which of the following categories do you identify with?
 - University student
 - Recent University graduate
 - National Serviceman
- What do you do for recreation? (leisure or to have fun)
- What is the significance of social media in recreational activities?
- How many regions in Ghana have you visited aside having your school located in it?
- How often do you visit new places that are not as popular as the known places?
- If you have visited some regions in Ghana for tourism purposes, will you recommend that experience to your friends?

Item 3: Semi-structured discussion guide

The questions that will be asked from the representative at the ministry of tourism will be to acquire the true picture of the tourism culture in Ghana. Some question areas that would be touched on are as follows:

- What are the most patronized tourist sites in Ghana?
- What are the least patronized tourist sites in Ghana?
- Are there any tourist sites that do not bring in revenue?
- Are there any proposed remedies to the current state of the tourism sector?
 - If there are, are any of these proposed remedies in progress?
 - If not, what would be the best way to boost the tourism culture in the Ghanaian community?
- What are some of the current impediments to the tourism sector?
- What is the way forward for the tourism sector?