SECOND PHASE: TOURISM BAROMETER

CREATING A TOURISM TRACKING SYSTEM

Sponsoring Agency: Namibia Tourism Board

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ABSTRACT

Namibia's tourism industry is one of the most important parts of its economy. Thus, the ability to monitor the performance of this industry is a valuable trait. Our project improved a prototype tourism tracking system for the Namibia Tourism Board. Through the improvement of electronic questionnaires and by automating several steps in the data analysis process, we were able to increase the response rate of the survey and drastically cut the time required to produce quarterly reports.

ACKNOWLEDGEMENTS

AUTHORSHIP

Throughout the course of this project, each team member frequently critiqued and edited the others writing to help ensure a consistent writing style. As a result, both team members contributed to every section of this report. The following is a list of the primary author of each section of this paper.

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EXECUTIVE SUMMARY

Recently, the World Travel & Tourism Council (WTCC) ranked Namibia at the top of their list of countries with the most tourism growth, ahead of both Zambia and South Africa (Africa News, 2007). In addition, 18 percent of jobs in Namibia are related to tourism (Christian Science Monitor, 2008). Nations that track tourism can harness this powerful market and maximize profits and job opportunities by making projections and implementing standards. In Namibia, the Namibia Tourism Board (NTB) works towards objectives that will help strengthen the tourism industry. Tracking tourism would allow the NTB to gain a better understanding of how the tourism industry functions during various seasons, but the NTB has no efficient way for monitoring the tourism industry on a seasonal basis; current systems only allow for annual monitoring.

In 2008, a team of Worcester Polytechnic Institute (WPI) students created a prototype tourism barometer responsible for gathering information from various sectors within the tourism industry. The team broke down the tourism industry into four representative sectors:

- Accommodations
- Car Rentals
- Trophy Hunting
- Tour and Safari Operations.

They also developed a survey strategy for collecting data and created a database to store these data. Their system was designed to collect data every two months. Despite this progress, the barometer was never implemented.

In order to achieve these results, we have completed background research on tracking systems, other tourism barometers, the mathematical tools that may allow the NTB to make predictions about the future performance of the Namibian tourism industry. Smith Travel Research (STR) Global is a company whose sole purpose is to track the performance of the worldwide hotel industry. They do this by asking hotels for a select few pieces of information (e.g. total rooms available, total rooms sold, room revenue, etc.) and using that information, they can generate statistics which represent the entire hotel industry. The 2008 NTB team utilized the Scottish Tourism

Barometer (STB) as a point of reference. In addition to the STB, we have also studied the Arizona

Sun Corridor Tourism Barometer, which utilizes external sources for much of its information rather

than conducting 100% of the data collection itself. We have also explored possible ways to make

economic projections. The most promising method we have discovered would be the use of

regression analysis.

Our projecthad five main objectives:

1. Modify the tracking system in order to produce seasonal (quarterly) reports
2. Design a data storage system which is less time-consuming for the NTB to implement possessing a user-friendly interface
3. Improve the data collection process
4. Review the data collected for other sectors to confirm that they are complete and good representatives of their respective sectors of the tourism industry
5. Include air charter businesses as an additional sector in the barometer

We followed several steps to complete these objectives. First, we evaluated the prototype

tourism tracking system (TTS) that the 2008 team produced.   We conducted interviews with specific

air charter businesses to gain a thorough understanding of what data are most representative of the

performance of that industry. In order to increase the effectiveness of the survey, we talked with

various tourism association and government organizations that may already store data on Namibian

tourism businesses. Our goal was to determine whether they could provide the NTB with the

required data instead of the NTB reaching out to the many businesses or industry they represent.

Additionally we asked for opinions on the most effective survey strategy. After preparatory work

with respect to surveying was completed, the data structure of the existing NTB database was

evaluated. The database was then improved to function more efficiently with the updated data

collection forms. Likewise, the barometer also needed improvement, so that an easily accessible

template is used to generate the barometer every three months, and also in terms of data

presentation—the barometer was revised to allow the NTB to display all the new or edited data

from the questionnaires.

After the entire tracking system had been revised, the questionnaires were sent via email to the 1, 141 tourism businesses in the five sectors the NTB desired to survey. Our survey received 175 responses, an improvement of 127% over the 2008 NTB team. Additionally the Hospitality Association of Namibia (HAN) and the Ministry of Environment and Tourism (MET) agreed to provide the NTB with statistics for the barometer. This data was all entered into the new NTB database. The final produced barometer was generated to display market performance, current trends, and predictions for future market performance of the Namibian tourism industry, and sent to participating businesses and other stakeholders.

CHAPTER 1: INTRODUCTION

Tourism is an important factor in the economy of many nations. In 1950, the number of tourists globally was around 25 million, while in 2005 that number had skyrocketed to 800 million (Egmond, 2007). As these the number of tourists in the world continues to grow, the benefit of tracking tourism increases exponentially. Nations and businesses that track and predict changes in tourism can harness this powerful market and maximize profits and job opportunities. The African country of Namibia is no exception to these trends.

Between 1993 and 2007 the number of tourists traveling to Namibia had increased from about 250,000 to nearly one million, a four-fold increase (Namibia Tourism Board, "Tourist Arrival Statistics", 2007). In order to maximize the benefits of this growing industry, the Namibia Tourism Board (NTB) was formed by an Act of Parliament in 2001. The goals of this department are to promote tourism internationally and locally, to ensure that the whole of the tourism industry complies with national standards, to enforce registration and apply grades to every tourism business, to provide information to tourists, and lastly to uphold environmentally sustainable methods of tourism (*Namibia Tourism Board,* 2009). The NTB is working towards objectives that will help strengthen the tourism industry. Tracking tourism would allow the NTB to gain a better understanding of how the tourism industry functions during various seasons, but the NTB has no efficient way yet for monitoring different sectors of tourism in Namibia.

Other organizations that monitor tourism have tried to develop a tracking system by creating tourism barometers. The Scottish Tourism Barometer is published every trimester and reports on business performance, assesses past and present trends, determines future prospects, and rates the overall market performance (*Industry Barometer,* 2009). Similar examples exist around the world for different nations, regions, and particular cities (Detroit Metro Convention & Visitors Bureau, 2009; Tourism Barometer: A Measure of the Industry's Health, 2008). The NTB has created a prototype tourism barometer modeled after successful barometers like these. This barometer, created in 2008 by a team of WPI students, provides statistical data from businesses

within the tourism industry. . The new barometer was a step in the right direction, but it is still not functional.

The 2008 WPI team divided the tourism industry into four representative sectors based on key characteristics—accommodation, vehicle rental, trophy hunting, and tour and safari operations. They also developed questionnaires for collecting data and created a database to store the data. Their system was designed to collect data every two months. One barometer was published reporting on the months of January and February of 2008. Despite this progress, the tracking system needs to be improved to meet the level of effectiveness that the NTB requires of it to produce meaningful results. The air charter tourism businesses were not included in the original barometer, and a more comprehensive representation of the industry can be generated if more sectors are being monitored. Not only were participation rates of tourism businesses in the 2008 team's first wave of surveying rather low, but the NTB also was without the resources or staff to store and process the collected data after the team left. According to the NTB, the database was difficult to use, which made data collection and report generation a complicated task.

Our goal was to build upon what the previous team had accomplished in order to develop a fully functional tourism barometer for the NTB. We revised the prototype barometer to include air charter businesses as an additional sector. We aimed to improve the way that data for the barometer were collected by producing a more efficient and effective survey and providing motivation for businesses to respond. The barometer system was adjusted to collect and distribute data every quarter to gather a seasonal representation of the tourism industry and to give the NTB a realistic time interval, considering their resources, within which to publish the barometer. The barometer we developed includes projections for industry performance for coming quarters. Finally, the database that stores all of these data can efficiently be used with the barometer template by the NTB to generate the barometer in the future. These implemented changes to the tourism tracking system allow for the NTB to collect and analyze more detailed information, from more businesses, more efficiently than the previous system.

CHAPTER 2: BACKGROUND

It is important for any country to be able to understand how well its economy is performing. Just as a jigsaw puzzle is made of many pieces, the economy of a country is made up of many parts. One major piece of the economy of many countries is tourism. In order to determine the performance of tourism, standard statistics need to be established which can be monitored over time. The different sectors of tourism also need to be established and understood. Additionally, trends which emerge after tracking tourism for a time may assist in making projections about the future performance of the industry. This information can be grouped into a periodical report called a barometer.

2.1 OTHER TOURISM BAROMETERS

There is no need for the Namibia Tourism Board to create totally original work on this project. The idea of the tourism barometer has been used all over the world for many years to track the market performance of regional tourism industries. By observing and analyzing some of these other successful barometers, developers of barometer studies can pick out aspects that work well to build a stronger, more reliable system.

2.1.1 THE SCOTTISH TOURISM BAROMETER

The Scottish Tourism Board has been using a barometer to track the tourism market performance for years. This regular tracking study reports on business performance, assesses past and present trends, determines future prospects, and rates the overall market performance. Over 400 businesses in the various industries of accommodation, attractions, retail, tours, transportation, and entertainment participate in the survey (*Industry Barometer*, 2009).

Three times per year, or after every major season, the barometer describing the current market is produced. The barometer contains a wide array of data, beginning with an introduction that compares the market to the previous year, identifies factors that might have influenced changes in each sector, and ascertains future prospects for each sector. It also displays the levels of

optimism that business owners have for the upcoming seasons, relative to other years. Lastly, and perhaps most importantly, the barometer shows information about the tourists themselves. It makes comparisons on the number of tourists traveling for business or pleasure, what their home countries are, and the number of incoming tourists compared to previous years.

2.1.2 ARIZONA SUN CORRIDOR TOURISM BAROMETER

Another barometer that has proved successful for several decades is produced by the Arizona State University. Named the Arizona Sun Corridor Tourism Barometer, this barometer was the first tourism barometer applied to a metropolitan region—an area of grouped towns, cities, and counties with common businesses, terrain, or community. This barometer focuses on the components of tourism jobs, transportation, outdoor recreation activity, and international visitation.

To study these components, the barometer uses four seasonally adjusted indicators: the influx of non-residents, the National Park visitations, the hospitality and leisure employment, and scheduled air carrier landings. These indicators are obtained from various external sources rather than gathered directly. This surely saves work and increases the accuracy and validity of the data (*Tourism Barometer: A Measure of the Industry's Health*, 2008).

2.2 TRACKING HOTEL PERFORMANCE

There are many organizations and associations that monitor the performance of hotels across the world. Two such organizations are the American Hotel and Lodging Association (AH&LA) and Smith Travel Research (STR) Global. The AH&LA is an association which represents the American accommodation sector and STR Global tracks worldwide statistics on hotel performance.

2.2.1 THE AMERICAN HOTEL AND LODGING ASSOCIATION (AH&LA)

According to their website, "AH&LA is the sole national association representing all sectors and stakeholders in the lodging industry, including individual hotel property members, hotel companies, student and faculty members, and industry suppliers" (AH&LA, 2009, About Us). There

are three specific statistics that the AH&LA tracks and uses to determine the performance of the hotel industry. These statistics are occupancy percentage, average daily rate, and revenue per available room (RevPAR) (AH&LA, 2009). The following table lays out what each of these indicators represents and the calculation that is done to obtain that statistic.

Table 2.1: Standard Hotel Performance Statistics
(Lindsay Culbreath, personal communication, February 11, 2009)

Statistic	Calculation
Occupancy Percentage	(Number of Rooms Occupied) / (Total Number of Rooms Available For Sale)
Average Daily Rate	(Actual Room Revenue) / (Total Number of Rooms Sold)
RevPAR	(Actual Room Revenue) / (Number of Available Rooms)

When utilizing these statistics for reports, the AH&LA makes sure to group hotels together which are similar in size as well as similar in quality/services provided (AH&LA, 2009). For example, a small bed and breakfast would not be grouped with a five-star luxury hotel. While the AH&LA tracks these statistics, they do not actually collect the data themselves; they do not survey hotels. There are other organizations, however, whose sole purpose is to obtain the data used to create these statistics.

2.2.2 SMITH TRAVEL RESEARCH (STR) GLOBAL

STR Global is the most prominent business that tracks the performance of hotels (STR Global, 2009). STR Global collects data on over 36,000 hotels (representing five million rooms) worldwide and uses those data to produce performance reports and track performance trends.

The manner in which STR collects information is relatively simple. STR obtains data from corporate offices in order to track statistics of hotels that belong to a parent corporation. They also collect data from individual hotels that are not part of a corporation (Lindsay Culbreath, personal communication, February 11, 2009). Corporate offices are emailed Excel spreadsheets to fill out, while individual hotels log into STR's website and input their data there. Participating hotels are

required to report their information once a month. However, weekly reporting is also an option and hotels in high volume cities such as New York and Chicago can report data daily (Lindsay Culbreath, personal communication, February 11, 2009).

STR tracks the three industry standard statistics of occupancy percentage, average daily rate, and RevPAR. The STR questionnaires ask hotels to report their total number of available rooms, the number of rooms sold, and their room revenue. From these three pieces of information, STR is able to generate the three statistics. In addition, STR also calculates supply, demand, and revenue. Supply is calculated by multiplying the total number of rooms by the days in the period. Demand is the number of rooms sold and revenue is simply the room revenue (Lindsey Culbreath, personal communication, February 11, 2009). This information is stored in a database and tracked over time, allowing reports to compare current performance to previous years' performance.

STR produces two types of reports: a free report and a paid report ("Star Report"). The free report allows access to information on different aspects of a hotel's local market. The "Star Report" provides the same data; however, it also provides a comparison with competing hotels (Lindsay Culbreath, personal communication, February 11, 2009). In order to view either report, a hotel must provide STR with data from their specific hotel. The ability to view the detailed information of the STR reports has proven to be an effective incentive for hotels to voluntarily provide information on their performance

2.3 PROJECTIONS

The ability to make predictions about the direction a market is heading is a very powerful tool. There are several methods commonly used to make general predictions. STR Global makes some projections for total U.S. hotel industry performance. These projections are made mainly by the president of STR and the senior staff (Lindsay Culbreath, personal communication, February 19, 2009). They examine current trends and analyze them with respect to previous economic trends and historical data. While usually accurate, these projections are not always completely reliable,

especially in times of global recession. These projections are mainly used for presentations, such as

national and state conferences. While no projection reports are officially produced or published,

STR's predictions are often referenced and cited in newsletters and press releases.

2.3.1   LEAST-SQUARES REGRESSION METHOD

The Least-Squares Regression Method (or simply regression analysis) "measures a cost

function… using statistics to fit a cost function to all the historical data" (Horngren, 2005, p. 105).

What that means is that relationships between independent and dependent variables can be

established by plotting points on a graph and then establishing a trend line which best fits the data.

For example, in Figure 2.1, income tax rates are plotted against social spending as a percentage of

GDP. The figure illustrates the correlation between social spending and personal income tax rates.

These types of scatter plots can be used for different types of economic analysis including

projections.
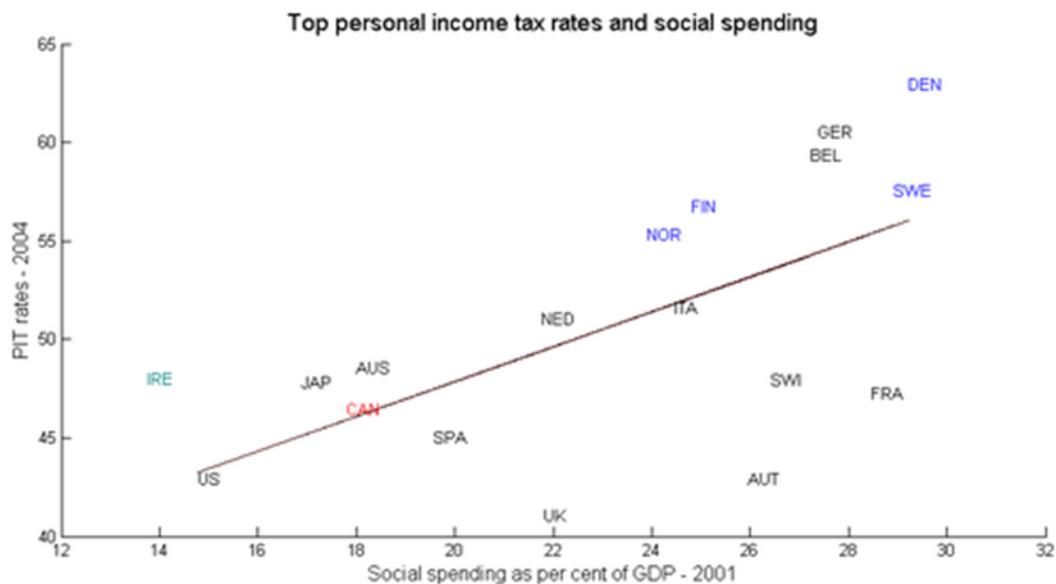
Figure 2.1: Personal Income Tax Rates as a function of Social Spending as percent of GDP
(Worthwhile Canadian Initiative, 2005, the Irish Exception)

2.4   TOURISM IN NAMIBIA

The United Nations World Tourism Organization discovered that tourism in sub-Saharan Africa has been on the rise recently with a ten percent increase in tourism between 2005 and 2006 (twenty-six million tourists in total for 2006); this staggering growth in tourism was twice the average rate of tourism growth in the world (Christian Science Monitor, 2008). Recently, the World Travel & Tourism Council (WTCC) ranked Namibia at the top of their list of countries with the most tourism growth, ahead of both Zambia and South Africa (Africa News, 2007). In addition, 17.9 percent of jobs in Namibia are related to tourism (Christian Science Monitor, 2008). Due to these facts, tourism is a very important industry for Namibia to monitor. According to Africa News (2008), a few years ago the majority of visitors to Namibia came between the months of June and September. However, that time frame has recently expanded to encompass the months between May and November. Despite the fact that tourism is very seasonal, Namibia has no reliable way to track tourism statistics in a seasonal manner. It is vital that the system developed to track tourism has the ability to group months to reflect the seasonal changes in tourism activity.

One aspect of increasing revenue from tourism is effectively marketing a country to potential tourists. Namibia's historical relationship with Germany has traditionally resulted in Germans accounting for most of the tourism in Namibia (Christian Science Monitor, 2008). However, travelers to Namibia have notably increased from other western countries such as the United States and the United Kingdom, as well as other African countries like Angola and South Africa (Africa News, 2008). Additionally, a push has recently been made to market Namibia in Asia (Martin Web-Bowen, personal communication, April 15, 2009). With these changing tourist markets, effectively tracking the home countries of tourists becomes increasingly more valuable.

There are many tourism sectors which contribute to the overall experience for a tourist. In order to properly track the tourism performance in Namibia, it is vital to understand how these sectors fit into the tourism industry and provide services to tourists.

2.4.1 ACCOMMODATIONS

Adequate accommodations are the lifeblood of any tourism industry. Therefore, it is important to understand the various types of accommodations that are available in Namibia. Accommodations can be broken down into three different subsectors based on size (number of beds) and style. One subsector includes large accommodations such as Hotels, Hotel Pensions, and Guest Houses. A smaller but significant subsector includes Lodges, Guest Farms, Tented Camps, and Resorts. The smallest types of accommodations, with usually only a few beds available are Rest Camps, Self Catering sites, Campsites, Bed and Breakfasts, and Backpacker Hostels.

2.4.2 VEHICLE RENTAL AND CAR HIRE

Transportation is another one of the most vital aspects of tourism. The Car Rental Association of Namibia (CARAN) represents seventeen of the most respectable car rental business in the country. These seventeen vehicle rental businesses account for about 95% of the business in this sector in Namibia (Gielie van Zyl, personal communication, April 6, 2009). The stated goal of the CARAN is to "protect the tourists and the car rental industry against sub-standard service and quality" (CARAN, 2008). Just as the accommodations industry in Namibia has standards they must adhere to, car rental businesses must meet certain requirements if they are to become a member of CARAN. Car rental businesses that desire to be members of CARAN must:

- Be a legally registered business
- Have at least a 5 vehicle fleet
- Provide sufficient insurance
- Provide 24 hour backup service (in case of breakdown or emergency)
- Rent vehicles which are not older than 2.5 years or have an excessive amount of mileage on them
- Regularly service and maintain vehicles

 (CARAN, 2008)

Many people who visit Namibia rent vehicles to go camping or on safaris where road conditions can be unpredictable. As such, many car rental services, such as African Tracks 4x4 Car Hire, offer vehicles including equipment for camping (African Tracks 4x4, 2009). Other companies,

such as Asco Car Hire, take it a step further and offer their clients cell phones and Garmin Navigation Systems to provide cautious travelers an easier experience (Asco Car Hire, 2009). There are also a number of international car rental businesses in Namibia like Avis, Budget and Europcar (CARAN, 2008).

2.4.3   TOUR AND SAFARI OPERATIONS

When the average person thinks of Africa, images of lions, deserts and endless savannahs generally come to mind. As such, nature tours and safaris are one of the main attractions in Namibia as they provide travelers with, what many feel, is a traditional African experience. The association in Namibia that represents the tour and safari industry is the Tour and Safari Association (TASA) (2009). TASA is a voluntary private sector body, whose stated purpose is to act "on behalf of its members to encourage development and ensure standards and reliability in the Namibian tourism industry" (TASA, 2009). Safaris in Namibia can typically last anywhere from five to seventeen days. Over the course of a safari, travelers typically get the chance to see and experience a wide variety of the natural attractions Namibia has to offer. Locations typically visited during a safari include Swakopmund, Sossuvelei, Spitzkoppe, Kamanjab, Damaraland, Fish-River Canyon, Namib Desert, and Etosha, (Southern African Routes, 2009; Experience Namibia, 2009; Mabaruli African Safaris, 2009). There are many different kinds of tours offered in Namibia with a wide range of services and experiences.

2.4.4   TROPHY HUNTING

One of the more expensive attractions of Namibia is trophy hunting—the hunting of wildlife. According to Almut Kronstbein (Cheu, C. et al, 2008), the trophy hunting sector is broken up into three categories: Farm Hunting, Free-lance professional hunters, and communal areas or concession areas. Trophy hunting is a very profitable sector in the Namibian economy (Almut Kronstbein, personal conversation, March 14, 2008; A. Dasatti, A. DeBaie, personal conversation, March 1, 2009). A related industry to the trophy hunting sector is taxidermy, where rates alone may cost

several hundred U.S. dollars for a shoulder mount and into the thousands for a full mount

(Ozondjahe Safaris, 2009, African Taxidermy). Because virtually all trophy animals killed are sent to a

taxidermists (Ronel Jansen, personal communication, April 3, 2009), the costs required to process an

animal illustrates the profitability game hunting in Namibia. The Namibian trophy hunting season is

between the months of February and November. Depending on the specific hunting experience a

tourist is looking for, different months within the February to November range are better for certain

species (Ozondjahe Safaris, 2009, African Hunting Safari Namibia). The Namibia Professional

Hunting Association (NAPHA) represents the interests of the professional hunters in Namibia

(NAPHA, 2009). NAPHA was founded in 1974 and currently has about 470 members. NAPHA's

mission statement says:

> The fundamental purpose of NAPHA is to enhance and maintain, by effective management,
> an organizational infrastructure that can serve professional hunting members, clients and
> other interest groups.
>
> Our intent is to ensure and promote ethical conduct, sustainable utilization of natural
> resources, and to secure the industry for current and future generations…
>
> (NAPHA, Mission Statement)

The Ministry of Environment and Tourism (MET) regulates and monitors trophy hunting in Namibia .

They collect information on hunter nationality as well as information on the number of animals killed

per species (R. Jansen, personal communication, April 3, 2009).

2.4.5 AIR CHARTER

Air Charter is one of the important sectors of Namibian tourism. In America, the air charter

industry is typically associated with corporate America. However, this is not the case in Namibia.

Companies such as Bay Air Aviation focus on chartering corporate clients and even work together

with car rental companies to offer comprehensive travel packages (Bay Air Aviation, 2009). Other air

charter businesses, such as Westair Wings Charter, Wings over Africa, and Scenic Air, focus on other

aspects of chartering. These companies offer customers a variety of experiences and options

including fly-in safaris, scenic flights, survey flights (for the collection of scientific data), flights for photographers, medical evacuations, as well as customer designed trips (Westair Wings Charter, 2009; Wings over Africa, 2009; Scenic Air, 2009). With long distances between tourist destinations, poor roads in areas of Namibia, and the desire to get to remote locations, air charter is an attractive aspect of Namibian tourism to many tourists.

2.5   TOURISM STAKEHOLDERS

There are many businesses and organizations that are interested in the state of the Namibian tourism industry including the government and its ministries, travel and tourism related associations, conservation and environmental organizations, financial institutions, as well as individual businesses. The primary purpose of a tourism barometer is to provide these groups with information about the state of the tourism industry. This information allows stakeholders and businesses to make informed decisions with respect to the tourism industry. The 2008 project team used the list of stakeholders compiled by the NTB and added several more stakeholders over the course of their project (C. Cheu, et al, 2008). The following sections discuss the various categories of stakeholders, their interest in the performance of the tourism industry, and a list of the stakeholders themselves.

Government and Ministries—the Namibian government sets national laws and policies that businesses must follow. The barometer could be of use when planning and budgeting for the nation's future. List of stakeholders:

- Ministry of Environment & Tourism
- Ministry of Fisheries & Marine Resources
- Ministry of Foreign Affairs
- Ministry of Mines & Energy
- Ministry of Trade and Industry
- Ministry of Defense
- Ministry of Agriculture, Water, and Forestry
- Ministry of Education
- Ministry of Finance
- Ministry of Gender Equality & Child Welfare

- Ministry of Health and Social Services
- Ministry of Home Affairs & Immigration
- Ministry of Labour & Social Welfare
- Ministry of Regional, Local Government & Housing & Rural Development
- Ministry of Safety & Security

Travel and Tourism Related Associations—Tourism and travel related associations, such as the

Namibia Tourism Board, are interested in knowing the state of the industry for planning and

marketing purposes. List of stakeholders:

- Hospitality Association of Namibia (HAN)
- Car Rental Association of Namibia (CARAN)
- Namibia Tourism Board (NTB)
- Association of Namibian Travel Agents (ANTA)
- Tour Guide Association of Namibia (TAN)
- Namibian Academy for Tourism and Hospitality (NATH)
- Air Namibia
- B & B Association
- Namibia Holiday & Travel
- Desert Express Luxury Train
- Tour and Safari Operators Association (TASA)
- Namibia Wildlife Resorts
- Tourism Related Namibian Association (TRENABA)
- Other TT Businesses, not affiliated members with any association

Conservation and Environmental Organizations—conservation and Environmental Organizations

are responsible for Namibia's most attractive feature—the environment. These organizations care

about the impact of tourism on Namibia's unique environment. List of stakeholders:

- Namibian Professional Hunters Association (NAPHA)
- Namibian Association of Protected Desert Areas (NAPDA)
- Cheetah Conservation Fund
- Desert Research Foundation of Namibia
- Namibia Community Based Tourism Assistance Trust (NACOBTA)
- Namibia Nature Foundation
- World Wildlife Fund
- Regional Tourism Organization of Southern Africa
- Scientific Society of Namibia

Financial Institutions—financial institutions are interested in the performance of the various sectors as they often provide financing and loans related to tourism. List of stakeholders:

- Standard Bank of Namibia
- Bank Windhoek Limited
- City Savings and Investment Bank
- Commercial Bank of Namibia
- First National Bank of Namibia Ltd

2.6   SUMMARY

Tourism in Namibia is a dynamic industry which plays a major role in Namibia's economy. Seasonal tracking of tourism performance is vital for stakeholders and businesses in order to reveal the effectiveness of their business strategies and policies. In addition, a system that provides accurate projections would be a powerful tool for those same business owners and stakeholders. The following list summarizes the knowledge gained during background research that most assisted in the fabricating of the methodology for this project:

1. An understanding of how accurate reports can be created surveying an entire industry

2. An understanding of how other tourism tracking systems produce barometers

3. Ways other tourism tracking systems collect and represent data

4. The mathematics of regression analysis as a potential tool for projections

5. Detailed information on the five relevant sectors and stakeholders to assist in identifying what indicators to include in the barometer

CHAPTER 3: METHODOLOGY

The goal of our project was to improve the prototype tourism tracking system that was created for the NTB in 2008. The larger goal of creating a tourism tracking system and barometer was established to monitor the performance of the tourism industry on a seasonal basis, to establish what causes changes in the industry from season to season, and to present these findings and statistics to relevant stakeholders on a quarterly basis. Using appropriate statistics, the Namibia Tourism Board, as well as relevant stakeholders, can evaluate the effectiveness of their business plans and implemented strategies. Over time, the barometer will reflect accurate records of both yearly and seasonal trends in Namibia's tourism industry. These trends will assist in projecting future performance of the industry.

In addition to generally revising and improving the prototype barometer that was created in 2008, our project did have specific objectives. First, we had to modify the system schedule to produce quarterly reports. Second, the responses collected from the quarterly surveys must be entered into the database as easily and efficiently as possible in order to minimize the time required for the NTB to create these reports. This data would be collected from questionnaires called Tourism Data Entry Forms (TDEFs). Third, the database needed to be modified so that all data are stored in a central location (this ensures that everyone accessing the database is using the same data). Fourth, air charter businesses were included as an additional sector. Another objective of our project was to improve the reliability of the quarterly survey data, as the 2008 team had a relatively low response rate. Lastly, a system for making projections of industry performance was investigated.   The overall goal was to create a fully functional system for collecting data and creating comprehensive quarterly reports.

3.1   EVALUATION OF EXISTING TOURISM TRACKING SYSTEM (TTS)

Before we began any other work, an analysis of the 2008 tourism tracking system was required. Just as an architect putting an addition onto a home must understand the layout of the

existing structure, we too desired to gain a firm understanding of the previous barometer design. We wanted to avoid duplicating already completed work on the barometer and assure that our project objectives were clear and well-defined.

Upon arrival at the Namibia Tourism Board offices, we met with our liaison, Marta Awala and began to clarify our understanding of the project objectives. Ms. Awala confirmed that all of our objectives were on track and that minor improvements could be made as our project unfolded. With her assistance we began our evaluation of the three main components of the 2008 TTS: questionnaires, database, and barometer. We evaluated the questionnaires by looking through the responses the 2008 team received to take note of trends that emerged in the way businesses responded to certain questions or types of questions. To evaluate the database, we examined its structure and interface to determine what, if any parts of it would need to be redesigned for the updated TTS. We looked to see if all the necessary tables to store data were in place. We also checked to insure that the table relationships weren't disorderly in any way as to obfuscate data or confuse less technologically skilled people who might need to make future adjustments. In evaluating the barometer, we took into consideration the overall look, the number of responses utilized for graphs, relevancy of information presented, and also feedback from interviews with the heads of various tourism associations. Conducting these evaluations early in the project was essential, because it provided direction for what changes should be made to the tracking system over the course of the project.

3.2   INCORPORATING AIR CHARTER BUSINESSES AS A SECTOR

One of the objectives of our project was the addition of air charter businesses as a sector to be monitored. In order to accomplish this, we conducted preliminarily research on air charter operations in Namibia and additionally conducted interviews with members of air charter businesses. The NTB provided a list of all registered air charter businesses in Namibia along with notations next to several specific companies which they felt were the most important to the

industry. After calling the recommended businesses, we scheduled interviews with three companies: Desert Air, Sefofane, and Wings over Africa. The goal of our interviews was to identify which data are most representative of the performance of the air charter industry. After gathering input from both the NTB as well as our interviews with air charter businesses, we created a Tourism Data Entry Form (TDEF) to be distributed to air charter businesses and created an additional sector in the NTB database.

3.3   IMPROVING EFFICIENCY OF DATA COLLECTION

There were several aspects of the previous tourism tracking systems date collection that could have been improved. The 2008 NTB team sent out 877 TDEFs and received 73 responses. We aimed to increase the number of responses to produce more reliable, accurate, and representative reports.   In addition, data entry into the database was a time consuming process which could be streamlined.

3.3.1   ESTABLISHING WAYS TO INCREASE RESPONSE RATE

Response rate in a survey is the number of questionnaires returned divided by the total number of questionnaires sent out. The 2008 NTB team's survey had roughly an 8% response rate. The individual response rates for the four sectors of trophy hunting, vehicle rental and car hire, tour and safari, and accommodation were 7.73%, 9.68%, 7.96% and 9.21% respectively. This is a statistically low sample meaning that the overall margin of error of their data would have been almost +/- 9%. Therefore, an increase in response rate was desired. We planned to use incentives similar to the ones that STR Global uses in order to increase response rate. Specifically, we decided to inform businesses that if they returned their TDEFs that they would be given access to the NTB barometer.

Initially, businesses may not have recognized the potential value of the barometer. Therefore, we emailed businesses the barometer produced in 2008 along with the questionnaires for our survey. This did two things:

1. It clearly showed how the information that they would provide would be used;

2. It showed businesses what they could gain from their participation in the survey.

STR provides free examples of their reports online to show what their real reports look like. This allows anyone, including people who don't provide STR with data, to see what kind of information they can obtain from an STR report; we used a similar approach.

It is important that a questionnaire sent to a business owner be as convenient as possible to fill out while still obtaining all the required information. A review of the interviews the 2008 NTB team conducted revealed that asking for information that a business owner would have to look up would likely decrease the chances of a response. A personal conversation with 2008 team members Allison Dassatti and Amanda DeBaie confirmed this.   They also advised us not to ask about specific amounts of money as business owners would typically leave those questions blank or give inaccurate information. They agreed with our hypothesis that clearly explaining how the report will be useful to a business owner and providing example barometer report would also be likely to help increase the response rate. Lastly, after our discussion with Allison and Amanda, we removed questions asking whether or not something increased or decreased since the same period last year, as that would require owners to either guess or look up year-old records, which is something that they would be reluctant and/or unlikely to do. If the tourism tracking system is properly implemented, the NTB can just look back at data from one year ago and draw its own conclusions.

3.3.2 EVALUATING THE FEASIBILITY OF WORKING WITH UMBRELLA ASSOCIATIONS

We conducted interviews with the heads of associations related to tourism such as the Federation of Namibian Tourism Association (FENATA), the Hospitality Association of Namibia (HAN), the Namibian Professional Hunters Association (NAPHA), the Car Rental Association of Namibia (CARAN), and the Tour and Safari Association (TASA). A recording of each of these interviews can be found in Appendix B. According to the interview transcripts of the 2008 team, they focused their

interviews on appropriate questions on the TDEF, proper phrasing/terms, relevant statistics, etc. We showed our interviewees TDEFs both from 2008 and our revised drafts to gain their feedback. However, our interviews focused on several topics, including establishing a way to maximize the response rates from businesses, possible methods to obtain the most accurate data, and lastly how to determine the most effective way to group businesses into sub-sectors.

A goal of our interviews with representatives from these Namibian associations was to discuss ways to obtain the data without making the business owners feel uncomfortable. The 2008 NTB team had problems with this, because they got many responses back from owners who were hesitant to fill out the TDEFs due to concerns over confidentiality. We asked the heads of these associations encourage their member to participate in the quarterly survey so that the NTB could receive a better response rate. We also discussed the possibility of utilizing the statistics that they generate in the NTB barometer. For example, the Hospitality Association of Namibia (HAN) tracks much of the data NTB is interested in collecting on their own, and we discussed with their CEO, Gitta Paetzold, in what manner NTB could use HAN's statistics for the NTB barometer reports.

The third objective of our interviews was to determine how effectively, and realistically, we could group businesses within a given sector together. This concern was specific to the accommodation sector as the 2008 NTB team grouped all forms of accommodation together. When talking with Ms. Paetzold from HAN, we asked for advice on grouping similar types of accommodation establishments together.

3.4   CREATING PROJECTIONS

There are two goals of the barometer, to provide a snapshot of the current state of the Namibian tourism industry and to make predictions on future performance of the industry. Achieving these two goals will allow businesses and stakeholders to make more informed decisions about everything from business plans to marketing strategies. We built upon the work of the 2008 team to further achieve these goals.

Our background section discusses simple ways to make projections. We graphed the number of tourist arrivals with respect to different variables such as exchange rate with different currencies, per capita PPP, year, bilateral donations to Namibia, etc. utilizing the scatter plots in Microsoft Excel to determine trends and create trend lines.

3.5   THE BAROMETER DATABASE

A database that stores information from collected TDEF forms was developed and used by the 2008 project team. Ideally, this database would be used regularly and maintained by the NTB for storing data pertinent to the barometer. However, the NTB has been having some difficulty finding the staff with the time and skills necessary to input data and maintain the database. Moreover, the database did not serve all the needs of the barometer—it did not contain records on air charter businesses, for example. To remedy these shortcomings, we evaluated the structure of the database and provided improvements to enable the staff at the NTB to use the database more efficiently.

3.5.1   EDITING THE DATABASE STRUCTURE

The barometer database, a Microsoft Access file, contains a collection of tables that provide the structure for all of the stored data. A series of forms correspond to these tables in a one-to-one relationship to provide a more user-friendly means of inputting data. It was necessary to create a new set of tables to include information about the Air Charter sector. We also made new forms to display this information.

3.5.2   AUTOMATING TDEF INPUT

We learned from our liaison that the previous version of the database took far too long to input TDEF data once the initial survey had been completed. The 2008 NTB team calculated that with about 80 responses to the survey (a low number by our statistical standards) it would still take about six and a half hours by a trained employee to input all of the TDEF data each quarter manually. Since NTB resources are limited, we needed to find a way to expedite the process. We explored possible methods for automating this process utilizing Excel and Access tools.

3.6   SURVEYING THE NAMIBIAN TOURISM INDUSTRY

Before summary and prediction reports can be generated for the new barometer report—the main purpose of the tourism barometer—we first collected data from our survey of the tourism industry and stored them in the barometer database. After the process of improving the efficiency of surveying was completed, the questionnaires were sufficiently improved and ready for distribution. We investigated methods to distribute the questionnaires quickly to each tourism sector.

Once the questionnaires had been returned in their completed form by the organizations in each sector, we input that data into the NTB database. Using the Microsoft Access and Excel importing tools discussed in section 3.5.2, the data can be automatically imported into the database. Automating this process saves time for the NTB staff.

3.7   GENERATING AND DISTRIBUTING THE BAROMETER

After all the data were accumulated from the surveyed businesses and organizations, the barometer was finally ready to be produced. Creating the barometer required extracting the newly entered data from the barometer database and producing statistics shown in color-coded graphs. These statistics we chose to show in the barometer were based on information we learned from our various interviews with association heads and business owners. Each sector's market representation and predictions in the barometer were limited to a single page for the sake of being clear and concise.

We created a template for the database that provides NTB employees working on the barometer with instructions on how to populate fill the graphs each quarter with current data. We generated a single barometer during the span of our project, but ideally the barometer should be generated every interval of distribution, i.e. every three months.

To simplify the distribution of the barometer, two email distribution lists were created. One list contained all of the stakeholder email addresses, and the other contained all of the businesses

that participated in the TDEF surveys. This way, the proper recipients of the barometer can all be contacted quickly. The businesses email distribution list must be revised every interval, of course, to include only those organizations that returned the TDEFs.

3.8   METHODOLOGY SUMMARY

A number of steps were involved in executing our methodology. These steps involved evaluating the existing barometer, incorporating Air Charter businesses as a sector for surveying, improving the effectiveness of our survey, adding additional information and market forecasting to the barometer, improving the NTB database, surveying each sector, and finally generating and distributing one seasonal barometer. The following figure shows which aspects of the project we focused on during specific weeks.

Week	1	2	3	4	5	6	7	8
Evaluation of Barometer	■							
Conduct Interviews		■	■	■	■			
Modify TDEFs	■	■	■	■				
Send out TDEFs					■			
Modification of Database						■	■	
Input Responses into Database							■	
Generating the Barometer							■	■
Distributing the Barometer								■

Figure 3.1: Project Timeline

CHAPTER 4: RESULTS AND ANALYSIS

The goals of our project were to improve the Tourism Tracking System by improving the barometer database, discovering if it was feasible to utilize data collected by other associations, incorporating air charter as a sector, finding an appropriate sample to survey, boosting the response rate of this survey, forming tourism market projections, and automating as many steps of the creation process as possible. We researched into the tourism industry of Namibia, mainly through conducting interviews with CEOs of tourism associations. Many of our results exist tangibly, as computer files. This chapter will explain our findings and how these findings were used to modify the tracking system. The chapter will also cover how the final versions of the files that comprise the tourism tracking system were created.

4.1   EVALUATION OF PREVIOUS TTS DATA COLLECTION METHODS

In order to conduct an efficient and relevant survey, it was important to have an understanding of the survey subjects as well as the tools available. Before any modifications were made to the tourism tracking system (TTS), we conducted a thorough evaluation of the 2008 project work and also interviewed people in the tourism industry. By evaluating the results of the 2008 barometer team, we were able to make many critical improvements to the NTB system. We learned which of their methods worked well and which were flawed, such as which questions had collected useful information on the TDEFs. Our interviews with key people in the tourism industry provided us with advice on how to cater to the businesses of each tourism sector through the TDEFs and barometer.

4.1.1   EVALUATION OF THE PREVIOUS TTS SYSTEM

We conducted an investigation of the 2008 tourism tracking system to evaluate the three components of the TTS: survey questionnaires, database, and barometer. The following sections detail the results of our evaluation.

Survey Questionnaires

The 2008 NTB team created four questionnaires, or TDEFs; one for each sector of the tourism industry they surveyed. Our evaluation of the questionnaires was done with the assistance of our liaison Marta Awala. We were specifically looking at patterns which emerged in the ways business owners answered certain questions. We also considered the statistical relevance of some of the questions asked, taking into account how the information was represented on the barometer. The following list organizes the results of our initial evaluation of the 73 available questionnaire responses:

- 81% of businesses filled out the question asking them to tick boxes representing the factors that most influence the rates they charged.

- 29% of businesses completely filled out the question asking about major capital investments. That question asked how much money a business had spent on improvements and what exact improvements the money was spent on.

- 41% of businesses completely filled out questions that asked for specific numbers (e.g. total clients, total game killed, etc.).

- 52% of businesses filled out the question asking for the percentage that their rates had changed from the year before.

- 68% of businesses responded to "increase/decrease" questions. These questions were asking the business owners opinion on how the number of clients from specific countries changed or asked for the expected change in the number of future clients. It was noted that most business only partially filled out "increase/decrease" questions, often only filling them out for a few countries or only for future/past performance questions.

Most businesses responded to the question about influencing factors, but the response rate was quite low for all of the others. These low response questions asked about financially private ideas

(29%) or involved the user going to look up specific numbers (41%). From these results we determined that questions asking about financial information was either encroaching on business owner's privacy or was information that was too difficult to look up for the purposes of the TDEF. Rather than ask for specific numbers which had to be looked up, we decided to implement questions where the answer was a multiple choice question utilizing ranges. Additionally, we saw that questions asking people to look up specific information had a low response rate and we should be careful about specific numbers we ask for on the TDEF. However, we decided to keep the "Factors Influencing Rates" on the TDEF due to its high response rate and the interesting data it gathered.

Barometer

We evaluated the barometer produced in 2008 with the following considerations: overall appearance, number of responses utilized for graphs, relevancy of information presented, and feedback from interviews. The following list details the major findings of our evaluation:

- The overall organization was visually appealing and color was nicely implemented.

- Next to several graphs were text boxes which summarized data on the adjacent graphs; these boxes took up extra space and did not present the reader with any new information, so we felt they were unnecessary

- Some graphs, in our opinion, were either incorrect or irrelevant. For example, the graph "Percentage for Types of Vehicles Offered" seemed like a graph that would not change significantly from quarter to quarter because companies are not going to change their fleets (and thus would not reflect seasonal changes in the industry). Also, the graph "Percentage for Types of Tours Given" was created from the TDEF question asking what types of tours a business offered. "Tours given" and "tours offered" are not necessarily the same thing; "tours given" seems to be an amount and "tours offered" seems to be a yes/no answer to

whether they provide the service of a particular type of tour.   For this reason, we felt that

graph was misleading.

- According to the 2008 barometer team, 70 questionnaires were returned. The number of

  responses represented on the barometer, however, was lower than this. Table 4.1

  illustrates the number of utilized responses for each page of the barometer.

Table 4.1: Utilized Responses on the Final 2008 Barometer

Page of Barometer	Number of Responses
Front Page (stats from all four sectors)	22 responses
Accommodation Page	7 responses
Tour& Safari Page	7 responses
Vehicle Rental and Car Hire Page	7 responses
Trophy Hunting Page	7 responses

Only 22 of the 70 completed questionnaires went towards displaying statistics on the barometer.

We hypothesize that this was because of the poor quality of many of the responses. The 2008 team

likely used only the 21 responses that were totally complete (29%). In every one of our interviews,

the interviewee took note of the relatively low number of businesses represented on the barometer

report. Several people, such as Almut Kronstbein of NAPHA and Martin Weimers of TASA,

commented that members of their association would probably not be very interested in a report

representing such a low percentage of their industry. We discovered that the low number of

responses represented on the barometer was due to poor response quality of the 73 received

responses which made many responses unusable for the barometer. We kept this in mind

throughout or project as an example of how both the quality and number of responses is vital to the success of a survey.

Database

In addition to the questionnaires and barometer, we conducted an evaluation of the 2008 NTB team's Microsoft Access database. The database was structured efficiently and functioned well with the 2008 TDEFs. A major issue with the 2008 database was that all the tables and forms existed in a single file. Whenever this file was copied, all of the tables and forms were copied as well. Because the data were included in each instance or copy of the file, that meant that if two or more copies of the database exist, a change in the data of one of the files would not be reflected in other copies. This created a problem with data synchronization. Because of this, we decided that the database should be "split" with all of the data on the NTB server while computers using the data base can have copies of the interface on them. Additionally, since our TDEFs would be different than the 2008 team, a new database was needed to fit a different structure of data.

4.1.2 ACCOMMODATION SECTOR

We interviewed Gitta Paetzold of the Hospitality Association of Namibia (HAN). From her we got feedback on the 2008 TTS as well as multiple pieces of advice for ways to improve the efficiency and relevance of our survey. We learned that asking a business for their "average per person per night rack rate" would be a good question to ask because it was universal across all forms of accommodations (and it was information that did not have to be looked up). She also advised us that the best way to subdivide the accommodation sector would be into the following subsectors:

Group 1: Hotel/Hotel Pension/Guest House

Group 2: Lodge/Guest Farm/Tented Camp/Resort

Group 3: Rest Camp/Self Catering/Campsite/B&B/Backpacker Hostel

She also told us that HAN tracks many of the same statistics that the NTB wanted to include on the quarterly barometer. We were informed that HAN collects this information quarterly, which matched up perfectly with the proposed schedule for the new barometer reports. According to Ms. Paetzold, HAN would be willing to provide the NTB with those statistics for the purposes of the barometer. This meant we could ask fewer questions on the Accommodation TDEF, cutting down on the length and ultimately making it simpler to fill out.

4.1.3   TROPHY HUNTING SECTOR

We conducted interviews with Almut Kronstbein of NAPHA and Ronel Jansen of the Ministry of Environment and Tourism (MET) to learn about the most efficient way to include the Trophy Hunting sector in the TTS. From Ms. Kronstbein, we learned roughly how many animals a professional hunter can kill in a quarter; this information assisted us in the creation of the revised TDEFs. Ms. Kronstbein also provided us with a list of game whose trophy rates professional hunters would be interested in. Specifically, she felt professional hunters would be interested in seeing how their rates compare to the industry average. Ms. Kronstbein told us that hunter permits, stored by the Ministry of Environment and Tourism (MET) contain much of the information that the NTB wanted to include in the quarterly barometer. Specifically, hunter permits contain hunter's nationality and number of game killed per species. We conducted an interview with Ronel Jansen of MET and found out that NTB could obtain data from them on hunter nationality every quarter. However, because information on animals killed is collected on a hunter by hunter basis, there is no central location where the data are easily available. In addition, the data are only recorded once a trophy is transported out of the country—and the time the report is filed could range from a few weeks to a few months after the actual kill. Getting the number of animals killed from the MET would have provided exact numbers, but would have been impossible to generate quarterly. We decided to keep this as a question on the revised TDEF, and obtain statistics from the MET on hunter nationality.

4.1.4 VEHICLE RENTAL SECTOR

To get feedback on the vehicle rental sector, we interviewed Gielie van Zyl of the Car Rental Association of Namibia (CARAN). One interesting aspect about the vehicle rental industry we learned from him was that CARAN represents 17 out of the 77 total vehicle rental businesses. However, those 17 businesses conduct roughly 95% of the car rental business in Namibia. He also gave us advice on rephrasing several questions on the TDEF. Mr. van Zyl recommended that we ask for total billed days rather than total clients because one client could represent any number of billed days. He also suggested grouping types of cars differently. The following table illustrates his suggested grouping of cars compared to the grouping which was used in 2008.

Table 4.2: Vehicle Rental Groupings

2008 Grouping	Gielie van Zyl's Suggested Grouping
Group A—Compact/Economy	Small Sedan
Group B—Compact/Economy	Medium Sedan
Group C—Intermediate	Luxury Sedan
Group D—Intermediate	SUV/4x4
Group E—Intermediate	Van/Bus
Group G—Premium: SUV, Pick-Ups, etc.	
Group H—Van	

Gielie's groups are easier to understand. The 2008 grouping may represent the proper industry terms, but even Gielie had difficulty distinguishing some of the groups (C,D,E). We feel his suggestions were more intuitive for Vehicle Rental businesses and for businesses of the other sectors who would be viewing the whole barometer.

4.1.5 TOUR AND SAFARI SECTOR

We conducted two interviews with members of the Tour and Safari Association (TASA) to get feedback on the Tour and Safari aspect of the TTS. From these interviews we learned that many of the larger tour and safari companies can have over 200 clients in a quarter. This helped us decide on appropriate ranges to include on the revised TDEFs. We additionally learned that "average per client per day price" would be universal to the tour and safari sector, similar to the accommodation industry's statistic "per person per night rack rate". David Cartwright, the secretary of TASA, suggested a slightly modified list of the types of tours listed on the questionnaire for this sector. The following table illustrates his suggested list compared to the 2008 list.

Table 4.3: Comparison of Types of Tours Options Between 2008 TDEF and TASA Suggestions

2008 Types of Tours Options	David Cartwright's Suggested Options
Scheduled	Budget Camping Tours
Self-Drive/FIT	Privately Guided Camping Tours
Camping	Privately Guided Accommodated Tours
Special Interest	Fly-in Packages
Group	Self-Drive Packages
Fly-In Safaris	
Other	

Mr. Cartwright had difficulty understanding the 2008 options since they were not clear as to the exact type of tour offered. He was not sure what FIT stood for, and neither did we; the 2008 team never clarified this acronym. We trusted his judgment on these options because they were very clear and concise, and he offered a professional opinion after a review of the 2008 options.

4.1.6 AIR CHARTER SECTOR

There are 18 companies registered with the Namibia Tourism Board as air charter companies. From our interviews, we learned that it is common for an air charter company to be

linked to a booking agency. As such, where to market their business was not a major concern for any of the companies we interviewed. However, through our interviews, we learned that there are three main things air charter businesses would be interested in seeing on the barometer:

Client Language/Age

Excellent customer service seemed to the primary goal of all the air charter companies. All three managers said that properly matching up their pilots with their clients was extremely important. For example, Germans account for a large portion of the tourism in Namibia. As a result of this, Analisa from Wings over Africa said that "a German pilot is gold" because he/she can best entertain German clients. Ian Durand of Sefofane echoed this by saying that it is "nice to pair pilots from the same nationality with the same groups". We also were told that the age of the clients is valuable information because the age often hints at what kind of experience they are looking for.

Popular Destinations

Knowing the places people are flying to can help manager's schedule and plan flights. All three managers we interviewed felt this way.

Type/Number of Planes

The more passenger seats there are on a plane, the more people that plane can carry from place to place. The kinds of planes an air charter company owns have a big influence on the size of tour groups they can accommodate. The number of available planes influences the number of possible customers. The managers of both Sefofane and Wings over Africa said that they would be interested in seeing information on the number and types of planes other companies were offering.

4.1.7   FIELDS TO PUBLISH ON THE BAROMETER

After the initial evaluation and data collection phase of our project, we compiled a list of the exact information we thought NTB would want to collect and the source of the data. Table 4.4 illustrates that list:

Table 4.4:   List of Information Collected in the Updated Tourism Tracking System

Source of Information	Information Obtained
Accommodation TDEF	- Type of accommodation offered - Average bed night rate - Factors which most influenced rates - Markets to enter
Trophy Hunting TDEF	- Daily fee - Trophy fees for selected animals - Animals killed per species (range) - Factors which most influenced rates - Markets to enter
Vehicle Rental TDEF	- Total billed days in a quarter - Average billed days per client - Billed days per vehicle group (range) - Average rack rate per vehicle group - Client nationality (opinion range) - Factors which most influenced rates - Markets to enter
Tour & Safari TDEF	- Types of tours offered and frequency of tours given - Average duration f trip (range) - Total number of clients (range) - Average per client per day price - Client nationality (opinion range) - Factors which most influenced rates - Markets to enter
Air Charter TDEF	- Most popular destinations - Client language (opinion range) - Client age (opinion range) - Percentage business flights versus leisure flights - Number of planes, types of planes, and frequency of use - Factors which most influenced rates - Markets to enter
HAN	- Average number of clients from different nations - Occupancy percentage (per sup-group and per national region) - Purpose of visit
MET	Hunter nationality

4.2   IMPROVING THE EFFICIENCY OF SURVEYS

In addition to the content of the survey questionnaires, we learned from our interviews that the look and layout of the questionnaire would probably have a large impact on the number of responses. From Jacqueline Asheeke, the CEO of FENATA, we learned that business owners in Namibia are hesitant to fill out forms, partially, because companies that do are sometimes audited. She also told us that owners are very secretive about their business information and also tend to fill out forms more often when business is slow because they have more time. With this interview in particular in mind, we made many formatting changes to the TDEFs with the goal of minimizing threatening/confidential questions and also minimizing the required time to fill out a form.

4.2.1   TECHNICAL CHANGES TO FORMS

When one looks at the way STR works with data, it is hard to think of a way to get that same level of detail while only asking general questions that business owners know without needing to look at any records. It is impossible to generate such specific reports without asking for exact numbers or dollar amounts. Speaking with both Marta Awala and 2008 team members, it became clear that the more details the questionnaires asked for, the lower the response rate would likely be. On the other hand, the more qualitative and fewer quantitative responses the form solicited, the less useful the barometer would be for businesses and stakeholders. Thus, we tried to identify possible features to implement in order to minimize the burden of filling out the TDEFs such as utilizing radio buttons, tick boxes, and dropdown menus and to provide ranges of values for quantitative data collection. The features of the finalized layout include:

Multiple-choice questions with the answers as ranges—a range means the exact response exists somewhere between point A and B (e.g. between 1-49 clients). Multiple choice questions collect an estimate of the data field and allow a business owner to respond without the need to look up specific numbers. Such questions maintain some level of

accuracy while making it easier and quicker for the respondent to fill out the questionnaire.

Radio buttons appear on the form next to each range option so the respondent merely has

to click on the button corresponding to the chosen answer. Additionally, radio buttons only

allow for a single answer to be selected, preventing another source of error on the

questionnaires.

Figure 4.1 Comparison of Question with Multiple Choices as Ranges

Frequency scales—Scales are another type of response used in a multiple-choice question.

They request an answer between "Never" and "Very Often" concerning a frequency. Like

the ranges, they aim to gather a general estimate in the response, sacrificing accuracy for

ease of response.

Figure 4.2 Example of Frequency Scale Answering Method

Scroll bars—the Air Charter questionnaire was the only TDEF to use this method. The scroll bar is used in a multiple choice question where the answer choices are listed underneath the scroll bar. The user drags the box on the scroll bar back and forth until the bar rests above the correct answer. In the one instance where we used this, the question asked to specify the ratio between leisure clients and business clients to match their business operation.

Figure 4.3 Example of Scroll Bar Answering Method

Check/Tick boxes—Check boxes provide a clear and consistent way to answer questions that request multiple answers. The user just check/ticks the box(es) next to the corresponding answer option by clicking on it. These were utilized mostly on the "factors which most influenced your rates" question where the user would simply tick off all applicable factors.

Figure 4.4 Example of Check/Tick Box Answering Method

Drop-down boxes—these tools provide the user with a list of options as an answer to the question. For example, we used drop-down boxes for a question where the user selected which market they would like to enter from a list containing 22 choices of countries and regions. Using this tool also restricts the user to a limited choice of answers; this would later assist with data entry. Figure 4.4 illustrates the differences between an unrestricted questions from 2008 compared with a drop-down box utilized for the current system.
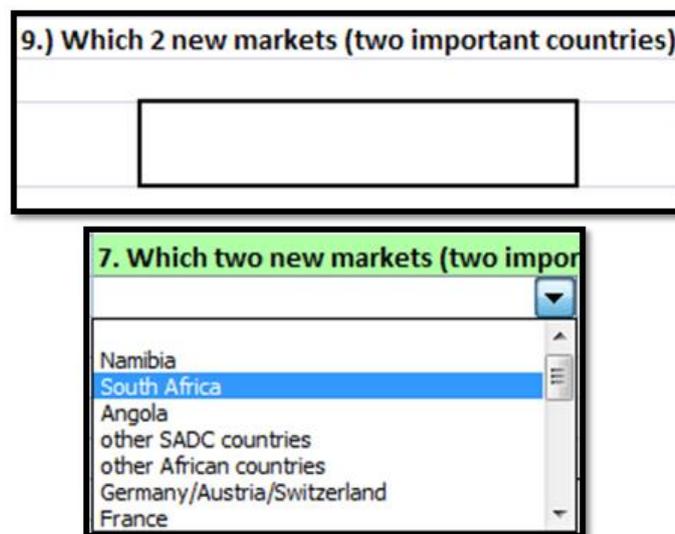
Figure 4.5 Example of Drop-down Box Answering Method

Color schemes—for questions where the user has to read multiple lines, alternating lines were given a background fill color different than default (white). We felt, based on our own analysis, our liaison's feedback, and input from many of those we interviewed, that this pattern made it much easier for the human eye to read and distinguish lines of text. Additionally, each of the five sectors had a color theme associated with it: accommodation-blue, trophy hunting-purple, vehicle rental-orange, tour and safari-green, and air charter-red.

4.2.2   Distribution Lists

Creating email distribution lists for each sector was a multistep process. The NTB has a large Excel file containing contact information for all of the registered tourism businesses in Namibia. We

manually extracted the businesses that belonged to each sector and stored them in separate Excel files. The IT department at NTB assisted us in setting up an Outlook account that would both deliver questionnaires and distribute barometer reports. Inside this account we created an address book containing five distribution lists, one for each sector that the NTB was surveying. By doing this, we eliminated the task of manually entering each business email address into the email containing the TDEFs.

4.3   NTB Database Construction

The database was and will be used to store data from the quarterly tourism tracking surveys. Based on our initial evaluation of the 2008 database, we determined that a new database needed to be constructed. This conclusion was reached because modifying the TDEFs would mean that a different database structure would have to be constructed in order to complement the new TDEFs. After the project was finished, Marta Awala took over as the main user of the database and creator of the barometer. We made it an important goal to make entirely sure she understood how to use the database. As long as someone working for the NTB understands how to create the barometer, the tourism tracking system will exist sustainably for as long as the NTB decides to continue its use.

4.3.1 Database Design

To solve the synchronization problem caused by copying the database, we implemented a method called database splitting. Database splitting occurs when one database file, containing tables and forms, is split into two database files. One contains the tables, or a "back-end"; this is a file wherein the actual data are stored. The other file contains the forms, or a "front-end"; this is essentially the user interface. Basically, the interface is where the data entry takes place, and the "back-end" is where the data is sent. The files are linked together so that the front-end can still access the data in the back-end. The back-end was placed on the server at the NTB offices, so that everyone in the office could have access to it. Finally, copies of the front-end were distributed to any staff member in the office that would be using the barometer data. Changes made to the data

using the front-end files on any office computer are reflected to the tables on the server; everyone will be accessing the same and most current data.

4.3.2 AUTOMATING TASKS

A second objective was to make the tourism tracking system as automated as possible to reduce the workload on the NTB staff. We were successful in automating several different steps of the barometer-creation process.

To make the process of inputting the TDEF data more efficient, we used a feature built into Access called the Import Excel Spreadsheet wizard. This tool locates a desired Excel file (e.g. a TDEF), identifies data from the columns of a specific worksheet within the file, and imports those data into specified data fields in the tables of the database. To assure that only and all the correct data—the answers—are taken from the TDEFs; the TDEF Excel files were broken into two worksheets. The main worksheet is the stylized interface—the one the person filling out the questionnaire sees. The other worksheet, hidden from view, utilizes cell linking to store a row containing all of the answers written on the main worksheet. The layout on this worksheet is fairly confusing for a user to interpret, but perfect for Access to read and import using the Access Import Spreadsheet wizard.

We also automated the input of the data gathered from HAN. This process is a little more complicated, but it efficiently imports all of the HAN statistics into the database. Since the HAN statistics are presented in Excel, we again used Access's Import Excel Spreadsheet wizard. The same strategy used to import the TDEFs could be applied to the HAN statistics. However, the HAN statistics are delivered to the NTB as an Excel file. In order to collect the appropriate information from this file a we created a Microsoft Word file containing a table of Excel functions. When copied and pasted into a new worksheet on the HAN statistics file, the functions activate automatically by grabbing data fields from the main page and laying them out in a manner suitable for Access to read. The user then uses the Import Excel Spreadsheet wizard to import the HAN data into a HAN statistics table in the TTS database.

4.4   SURVEYING THE TOURISM INDUSTRY

After all the preparations had been made, we put our survey into effect. This section outlines the entire distribution and collection process to gather the data needed for the revised barometer. Our survey received a total of 175 responses, which was an increase of 127% over the 73 responses that the 2008 team received.

4.4.1   DISTRIBUTION OF THE TDEFs

Email was the selected distribution method for the TDEFs. We grouped the sectors together and created distribution lists. With distribution lists in place, rather than separately emailing each business of an entire sector, we could email to the distribution list and our email would reach all recipients on the list. A letter was written to accompany the questionnaires, introducing the project and persuading businesses to respond to the survey. This letter, which can be seen in Appendix E, described the purpose of the survey, explained what a tourism barometer is, and highlighted what businesses could gain from their participation. Additionally, we included the 2008 barometer as an example to show businesses how their information would be used, but noted that the new barometer would have many different modifications and improvements over the original edition.

Businesses were given a two week deadline to return the questionnaire. We received a total of 175 responses, a great improvement over number of responses in 2008. The graph in Figure 4.5 illustrates the number of responses we received per sector.
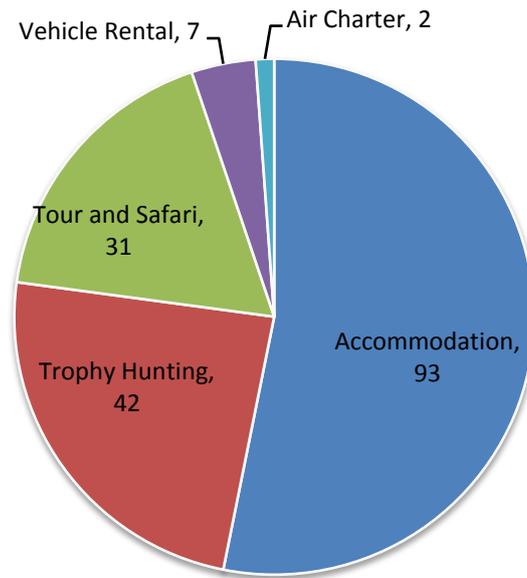
Figure 4.6 Number of Responses Per Sector

HAN's support of the barometer seemed to have helped immensely. Trophy hunting and tour and safari sectors also showed a fair amount of participation with 41 and 31 responses, respectively. Likewise, we can attribute the response rate, at least somewhat, to NAPHA and TASA's support. A low response came from the Vehicle Rental sector, with just 7 TDEFs. Gielie, of CARAN, never let us know if he pushed support for the barometer. In the Air Charter sector, only 2 questionnaires were returned. However, only 13 Air Charter businesses were reachable by email, so 2 responses is a 15.4% response rate. We realized how much smaller that Air Charter sector is than the other sectors—and that even with a high response rate, the number of actual responses would be low relative to other sectors.

4.4.2 ANALYSIS OF RESPONSES AND AUTOMATION OF INPUT

Businesses in each sector were contacted twice about completing the questionnaire. The first message included the TDEF and described the barometer and the tourism tracking system. The second message, which can be seen in Appendix F, reminded everyone that the deadline for submission of the TDEF was a week away. In this second email, we attached the questionnaires

again, in case businesses had lost the first email. The questionnaire in this email was a little bit different; it had a few improvements based on analysis of the already returned TDEFs:

- Some people wrote text into boxes which were supposed to only contain a currency value. We manually converted whatever text was written to a currency format for each response that violated this instruction.

- A problem similar to the one with currency boxes occurred with the date boxes. Businesses put dates in various formats (e.g. 4.16.09, 16/4/09) so we changed the date cell in Excel to be of a single date format (dd/mm/yy); Excel does the conversation automatically after the user enters a date into the cell. A few businesses interpreted "date" to mean the date their business was founded. We clarified this field by instead saying "Submission Date".

- Most businesses did not change the file name when they saved their form (as the instruction specified). We added an additional note in red text at the bottom of the TDEF reminding people to add their business name to the file name before they save and send it back.

- A number of businesses embedded their forms in the email or saved it as a PDF file and then sent it to us. Access cannot read these files. We decided that the instructions should more clearly state that the form should be returned as an Excel file *attachment*.

After the responses were all in, we began automatically importing the Excel sheets into Access one by one. We used the Import Excel Spreadsheet Wizard to import the 175 responses. After we looked over all the returned questionnaires for errors, it took about two man-hours of work to enter all 175 responses which is an average of about 41 seconds per TDEF. A detailed guide on barometer creation and TDEF import into Access can be seen in Appendix H.

4.5   MAKING PROJECTIONS

The NTB keeps records on annual tourism arrival statistics dating back to 1992; these reports are produced annually by the Ministry of Environment and Tourism. We planned to use these statistics for our projections. We learned in our interview with Martin Web-Bowen from TASA that

truckers are included as tourists in these statistics because they technically fit the official definition of a tourist—those who are not residents of Namibia, who stay at least one night but not longer than one year, and who are not remunerated from within Namibia ("National Planning Commission", 2001, p. 273). Since this would only affect the data for countries in close proximity to Namibia, we graphed projected statistics for tourists coming from Europe and tourists coming from the rest of the world (excluding Namibian neighbors and other close countries). This graph appeared on the "Tourist Statistics" page of the barometer.

To assist the NTB in making more projections on incoming tourists, we researched possible economic factors that might affect tourist arrivals. By graphing these variables with respect to one another, scatter plots can be created with may show trend lines. These trend lines reflect correlation between two factors and potentially reflect causation (i.e. one directly affects the other). The most interesting plots where that of countries per capita PPP versus the number of tourists from said country. These plots were shown to the NTB in addition to various plots against time such as "Tourism Arrivals vs. Time" and "Percent Change in Total Tourists vs. Time." The plots and graphs, in addition to a description of each variable can be found in Appendix G.

Our liaison, Marta Awala, told us that the NTB was most interested in the number of people from different nations and regions who are visiting Namibia. The graphs we produced do not show projections per se, but could be useful to the NTB for showing the NTB what economic factors influence whether or not people from certain nations and regions decided to visit Namibia.

4.6   REVISED BAROMETER PRODUCTION

With a database populated with the first quarter of TDEF responses, HAN statistics, and MET hunter statistics, it was possible to construct the barometer. This section describes how we created the barometer that we distributed to participants and stakeholders.

4.6.1   CREATING THE BAROMETER TEMPLATE

A template for the barometer was created so that a blueprint was in place for the NTB to reuse each quarter. This is essentially a blank barometer. We used Microsoft Word to create this template, filling it with graphs to display all the necessary statistics we outlined after our evaluation. The data displayed on the barometer are updated by linking it with an Excel file containing all the necessary statistics needed for the graphs. The barometer database creates this Excel file using queries to output the compiled summations of the stored data. In short, the Microsoft Access database provides data summaries to an Excel sheet, which provides data for the Word template.

4.6.2   CREATING THE BAROMETER

Creating the barometer every quarter takes only a few simple steps using the barometer template. We used the database filter to select only the records from quarter 1 of 2009. Since this is the first quarter of the barometer, this meant that all responses were stored. The action of filtering responses by date will be much more useful for future quarters. We ran queries within the database to find the total or summation or average of particular fields of data; these would ultimately be the statistics used for the barometer. After running the queries, the resulting data were exported into an Excel file, used to generate graphs, and then exported again into the Word template file. The final barometer report can be seen in Appendix D.

4.6.3   BAROMETER DISTRIBUTION

We made a distribution list containing all the businesses that had responded to our survey and emailed the barometer to them. Since the participants will vary every quarter, a new distribution list will need to be created every interval of distribution. We did not discover a way to automate the creation of this list, so we copied the email addresses from the emails containing the returned TDEFs and pasted them one by one into a list. We obtained the names of all other relevant

stakeholders from Marta Awala and emailed the barometer to them as well. This list can be found in section 2.3 of this report.

4.7   SUMMARY

Many factors contributed to the success of the NTB Barometer, 2009 quarter one. Automated features in the database meant easier data importation and exportation. Distribution lists meant thousands of tourism businesses could be given the questionnaire with a single email. The relatively high response rate was perhaps the greatest success. Ultimately, all the little changes to the TDEFs increasing convenience, along with support from each of the associations, resulted in a strong response rate in 3 out of 5 sectors. All stakeholders in the tourism industry and participants in the survey now have these data available to make more informed decisions. Guides explaining how to collect the proper data, as well as how to create the barometer, are in the NTB's possession. They have the knowledge available to continue the barometer in the future.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

This chapter provides conclusions of our results and analysis of various aspects of the improved tourism tracking system project. In addition, this chapter also provides recommendations for how to improve the tourism tracking system in the future.

5.1   CONCLUSIONS

The TTS developed over the course of this project is able to efficiently gather a great deal of information on five separate tourism sectors in Namibia. Additionally, the TTS is able to store data and create reports with minimal data entry. This allows for a turnaround time of one to two weeks between data collection and report publication. The specific objectives accomplished during this project were:

- Substantially modified and streamlined the existing TDEFs for four sectors of the tourism industry
- Created a completely new TDEF for the air charter sector
- Gained support of the Hospitality Association of Namibia and the Ministry of Environment and Tourism to provide the NTB with quarterly statistics for use in creating the quarterly barometer
- Created a new database to store and manage the tracking system data
- Investigated methods for making projections on the number of tourist arrivals
- Automated several steps in the tourism tracking system to make it easier to use
- Created a barometer for the first quarter of 2009

5.1.1   CONCLUSIONS ON TDEF RESPONSE RATE

One goal of the project was to increase the response rate for the TDEF questionnaires. We received 175 responses in total. This was about a 14% response rate of all tourism businesses which were contacted and 127% more responses than the 2008 NTB team received. We attributed this improved response to several factors.

Impact of TDEF Modifications—from the beginning of our project, one of the main goals was to make the questionnaires clear and concise. We brainstormed for best information to ask for, how to ask for it, and how best to represent the questions on the questionnaire. Using Excel features such as radio buttons and drop down menus assisted us by limiting the available responses to those on a

specified list. Eliminating questions which required a business to look up information shortened the amount of time it takes take to fill out a TDEF. Additionally, organizing the general layout and adding color scheme to each TDEF made them more visually appealing.

Association Support—another major factor in achieving a high response rate was getting the support of associations through our interviews with various CEO's. Several business owners made comments in their completed TDEFs that made it clear that they knew we were students from America. Because we never specified that fact in our emails, we knew that the association heads had notified their members about the details of the project. Beyond increasing the response rate, association support had another major benefit: increasing the legitimacy of the project. With an association encouraging its members to participate in the project (and some even providing data), the project became more than just the work of two college students or just the NTB; it became a group effort to help improve the tourism industry of Namibia.

Email Distribution—the 2008 NTB team suggested allowing businesses two weeks to respond to a TDEF and sending out a reminder email after one week had passed. We followed their advice and believe that it did indeed help increase our TDEF response rate. Respondents' emails came in consistently over the two week time frame rather than in clumps immediately after our first notification and reminder emails had been sent. Only 13 businesses (7%) returned the questionnaires incorrectly. These businesses returned the TDEFs either embedded in the email body or saved it as a PDF or JPG file. Additionally only three businesses contacted the NTB requesting to fill out the form by a method other than email.

5.1.2   AUTOMATION OF DATA HANDLING AND REPORTING

Adding automation was a time consuming, but key aspect of this project. There were three specific parts of the TTS that were automated: data entry to the database, database output to Excel, and Excel output to the barometer template. Essentially, we automated any process where the data would either have to be grouped in a certain manner or moved from one file to another.   Entering all the questionnaires into the database took about two man-hours of work to enter all 175

responses, or an average of about 41 seconds per TDEF. However, to look through all of the

questionnaires and make sure they were filled out properly took about six man-hours, which was

about an additional 123 seconds per TDEF. The total time spend on each questionnaire was about

two minutes—still an improvement over the five minutes the 2008 team averaged.   As adjustments

to the TDEFs are made over time, process of opening each response individually, to ensure it is filled

our properly, will no longer be necessary.

5.1.3   CURRENT AND FUTURE USES FOR THE DATABASE

The restructured database worked well with the redesigned questionnaires and also had a

cleaner and more user friendly interface. Data in the database can easily be stored and analyzed

over time, which may lead to a useful analysis of trends in tourism emerging which we were not able

to visualize over the course of this project. The features of Microsoft Access, including its abilities to

export data to Excel, made it a good program to choose for data storage.

5.1.4   THE FINAL BAROMETER

The barometer we produced was an eight page document. Because of how we conducted

our survey, we were able to display a wide variety of data relating to each sector. We wanted to

strike a balance—present as much data as possible without creating a cluttered or crowded report.

When we graphically represented the statistics we gathered, we focused on informing people of

trends and how their respective industry is doing with respect to the industry average. The final

barometer can be seen in Appendix D.

5.2   RECOMMENDATIONS

After following our methodology to create a barometer, we learned about what could be

done differently to improve the tourism tracking system. This section includes recommendations for

making the data collection process and barometer creation process smoother, and on how to

construct a better barometer.

This section will also discuss ways to maximize the chances for the barometer being

continued by NTB well into the future. Our project successfully generated a barometer for the first

quarter of 2009. But for the tourism tracking system to serve its purpose, it needs to generate a barometer every quarter. We have supplied some recommendations for the NTB on how to best maintain the system in place so that the quarterly distribution goal is possible.

5.2.1 DISTRIBUTING AND COLLECTING QUESTIONNAIRES

There are several changes that could be implemented that would decrease the amount of process time in dealing with the TDEFs. Many minor changes, along with the continuation of the same specific strategies that we used, will make data collection and importation a simple and efficient step.

Distributing the questionnaires is done through email, and the NTB should remain opposed to using any other method. It was a main objective to keep the tourism tracking system as electronically automated as possible. Figure 5.1 has a checklist of things to remember when emailing the questionnaires which should make the process as smooth as possible.

1. Does the email have an appropriate subject line?

2. Is the correct TDEF attached, depending on the recipients?

3. Are all the necessary recipients going to receive the email? Does the distribution list need altering?

4. Does the email message try to persuade Namibian business owners to participate in the survey?

5. Does the barometer email address have the ability to both send and receive emails?

Figure 5.1: Checklist for Questionnaire Distribution

Below we provide a list of recommendations that would alleviate some of the difficulties that could potentially be encountered in the collection and distribution process of the questionnaires and the barometer.

1. We recommend that barometer report not be included with the questionnaire distribution emails in order to assure that the businesses with slow connections do not encounter too much difficulty receiving their TDEF.

2. We recommend that the Excel files be programmed to restrict the type of input in some of the data fields. Specifically, it would be desirable to do this to currency and date fields. (e.g. "$50" rather than "50 US Dollars"); we neither had the time nor experience to do this task. This would assure the Access database could import those fields.

3. The NTB Registration Number of each business distinguishes unique records within the database, so it is a required field on the questionnaires. Currently, if the field is left blank, an NTB staff person has to look up the NTB number and fill it in before importing the TDEF into the Access database. Programming the Excel sheet to require the user to fill in this field would facilitate the data importation process.

4. The barometer is designed to be published every quarter. Table 5.2 below provides a suggested schedule for an annual cycle of dates related to the production of the barometer.

Table 5.1: Suggested Schedule for Quarterly TDEF and Barometer Distribution

Quarter	Months	TDEF Distribution Date	Reminder Date	Deadline Date	Barometer Distribution
1	Jan-Mar	April 1	April 8	April 14	May
2	Apr-Jun	July 1	July 8	July 14	August
3	Jul-Sep	October 1	October 8	October 14	November
4	Oct-Dec	January 1	January 8	January 14	February

5.2.2 MANAGING THE DATABASE

The database should be kept in a functional condition. Since the database was split into two files—data and interface—it means that a master copy of the data exists on the server at all times. The server should be backed up regularly to keep the data safe. Additionally, the interface files can be copied as many times as needed. Whenever an employee at the NTB is required to have access to the database, this can easily be accomplished by putting a copy of the front end on his or her computer.   We recommend one copy of the front end be kept on the server for safety and reference.

5.2.3 GATHERING BAROMETER FEEDBACK

We did not have the time to discover what business owners and stakeholders thought about the barometer. We attempted to identify the most representative variables in each sector to display on the barometer. But now that the first quarterly barometer has been completed, it is important to learn from the recipients if it was useful to them. We recommend the NTB contact the association heads of HAN, NAPHA, CARAN, and TASA to discover what their members thought. This will help the NTB identify the most and least useful and parts of the barometer and allow for better decisions regarding the future of the barometer.

5.2.4 COMBINE AIR CHARTER WITH TOUR AND SAFARI SECTORS

Due to the small size of the air charter sector and its close relationship with the tour and safari sector, we recommend that future barometers attempt to combine these two sectors. Air charter businesses do not market to clients or create any tour packages—they work only through tour operators. For example, Sefofane has a business deal with Wilderness Safaris. When Wilderness Safaris sells a fly-in package, they contract exclusively with Sefofane to do the flying.

We have several suggestions to include information relevant to the air charter businesses in the barometer without requiring a distinct sector. For one, we recommend that the two questions regarding client age and client language be simply moved to the Tour and Safari TDEF. New

questions may also be implemented on the tour and safari TDEF such as "How often do you require the service of an air charter company?" or "what factors influence fly-in tour packages?" Air charter companies may also be included in the tour and safari distribution list because a fly-in safari requires a plane to be chartered.

5.2.5 FUTURE IMPROVEMENTS AND OTHER RECOMMENDATIONS

We recognize the fact that NTB may want to change some features of the tourism tracking system in the future. As the goal of the barometer is to show market performance and track trends, the NTB may realize that new variables may be interesting to incorporate into the barometer, and old variables may not be as useful to monitor anymore.

In order to make these changes, we recommend that someone experienced with Microsoft Office—specifically Access, Excel, and Word—be allocated to the task. The tourism tracking system heavily utilizes all three of those programs, with each piece of software dependent on the others. Since the Access database was the only part of the TTS to use code—most of the system was created with standard Office features-- and has been documented, the task should not require a professional computer programmer, just someone very familiar with the software.

5.3 SUMMARY

The main objective of our project was to improve upon the prototype tourism tracking system established by the 2008 barometer team. We ultimately succeeded by making improvements to multiple aspects of the system, hence enabling the NTB to produce a barometer every quarter. By modifying the survey questionnaires and method of distribution, we gained a better response rate from most tourism sectors and gathered more representative data. We created a new database to store the results of the survey, and automated the importation process of the data. The database was also programmed to automatically generate statistics which could be used for the barometer. A barometer template—serving essentially as a blank barometer—was created so that creating the barometer is as simple as viewing the statistics in the database and copying them into the template to generate all necessary graphs. We gathered statistics and

evaluated whether they should be incorporated into the barometer, and decided that the sector is too small enough provide representative performance statistics. We created a barometer for the first quarter of 2009, proving that our modifications to the tourism tracking system previously in place were successful, and showing the NTB exactly how the process is done. The NTB has all the resources and knowledge it needs now to create a quarterly barometer.

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Appendix A: The Namibia Tourism Board

The Namibian Tourism Board (NTB) was established on April 2nd, 2001 by an Act of

parliament with the goal of regulating tourism in Namibia as well as effectively marketing Namibia to

international tourists (Namibia-1on1.com, 2009). The NTB is in charge or bridging the public and

private sectors in the implementation of Namibians national tourism policy (Namibia Tourism Board,

2009). It is the only recognized national tourism organization. The stated mandate of the NTB is to:

-Promote Namibia's tourism industry both internationally and locally.
-Ensure that services rendered and facilities provided to tourists comply with the prescribed
standards.
-Register and grade accommodation establishments, and other tourism related businesses.
-Promote the training of persons engaged in the tourism industry.
-Promote the development of environmentally sustainable tourism by actively supporting
the long-term conservation, maintenance and development of the natural resources base of
Namibia.
-Provide advice and guidance to persons engaged in the tourism industry.

The Namibia Tourism Board has minimum requirements for businesses which wish to be

part of the tourism industry (NTB, 2009). The requirements the NTB has for specific parts of the

tourism industry set the standard for tourism in Namibia. Requirements for businesses include

adequate safety, hygiene, and services for visitors. In addition to minimum standards, businesses of

notable high quality often receive "star grades" to denote them as a choice business (NTB. 2009).

The NTB often works with the Federation of Namibia Tourism Associations (Marta Awala, personal

communication, February 2, 2009).

The Namibia Tourism Board is financed in several ways. The NTB is granted some funding

from the government. In addition, the NTB collects fee's from businesses for registering with them

and for the services of surveying and grading of those businesses (NTB, 2009). Other sources of

income include the Tourism Levy which is filled out by businesses monthly and paid to the NTB. In

addition to financial reporting, these forms are used to determine which countries account for the majority of Namibian visitors (NTB, 2009).

A board of directors, consisting of five members (two from the private sector and an additional three government organizations such as Ministries of Environment & Tourism, Finance, and Trade and Industry) appointed by the Minister of Environment and Tourism, is the governing body of the NTB. The board appoints the NTB executive (NTB, 2009). There are roughly fifty people employed at the main NTB location (Marta Awala, personal communication, February 2, 2009). In addition to the head office in Namibia's capital city of Windhoek, the NTB has offices in Johannesburg, Cape Town, London, and Frankfurt.

Appendix B: Interviews

Phone Interview #1 with Smith Travel Research (STR) Global

Date: February 11, 2009
Interviewer/Secretary: John Meade
Interviewee: Lindsay Culbreth

1. **How many sites does your Association represent?**

   Worldwide roughly 36,000 hotels and 5 million rooms

2. **Do you use a sample or a census when you collect data?**

   We have a census of all hotels worldwide. We collect data from individual hotels if there are independent or corporate data if the hotel is part of a corporation

3. **How do you obtain data from those sites?**

   Corporate offices are sent excel files to fill out. Individual hotels have a website which they can log into and provide data there.

4. **Is participation required or optional?**

   It is optional.

5. **What incentives are there to participate?**

   If a hotel provides data they can view the report for free. Then they can compare their performance to other hotels in their region or nation.

6. **How often do you collect data?**

   There are different report options. A monthly report is required. However a weekly report is also an option (hotels can fill out reports once a week). High volume areas such as New York and Chicago also have daily reports.

7. **What do you do with the data you obtain?**

   Hotel data goes towards reports. The data is also used for other types of reports such as regional reports and global reports. Customers can request customized reports (e.g. their specific city)

8. **How are these reports distributed?**

   All via e-mail

9. **Do you know of any specific changes that were made as a result of the reports STR produced?**

Reports can help determine whether rates should be increased or decreased. They can also tell how a competing hotel has performed recently, for example, if another hotel participated in a conference recently and your hotel hasn't. However, I do not know of any specific examples.

10. **Thank you Lindsay you have been very helpful. May I contact you again in the next day or two if I have any further questions?**

You're welcome. Yes you may contact me again, my extension is 3317.

Phone Interview #2 with Smith Travel Research (STR) Global

Date: February 13, 2009
Interviewer: John Meade
Secretary: Garret Doe
Interviewee: Lindsay Culbreth

1. **Do you have data on Namibia or Africa in general?**

   We have some data from the combined Middle-East and Africa region. This data is tracked the same way as the rest of our tracked regions.

2. **I've heard that the 3 standard statics for hotel performance are occupancy percentage, average daily rate, and RevPAR. Do you track all three of those?**

   We do! We collect total rooms available, rooms sold, room revenue. We then can make calculations like RevPAR, supply and demand information with this data.

3. **To clarify, businesses which don't give you information must pay to view your reports?**

   Two different reports:

   Free = hotel survey reports if they provide information, compared to the different segments of the local market instead of competitors, see samples online…

   Paid report or "Star Report"= still have to provide data but they get comparisons to competitors.

   Neither report can be gotten without providing information.

4. **Do you ensure that the data you get is honest?**

   Data department goes through that analyzes data to make sure it looks correct. Otherwise just have to believe what they are providing is accurate.

5. **Do you make projections?**

   We have total US projections. I have not gone back and looked at past projections. We think we are pretty on target. Considering the current economy, projections are not completely reliable.

Phone Interview #3 with Smith Travel Research (STR) Global

Date: February 19, 2009
Interviewer: John Meade
Secretary: Garret Doe
Interviewee: Lindsay Culbreth

1. **Does your data track where bookings come from?**

   No, we just collect those three pieces of information, nothing about the individual customers. However, it is something you could collect from individual hotels.

2. **Last time we spoke, you told me that STR can make total U.S. Projections, I was wondering if you could tell me a little more about that.**

   The President and senior staff primarily work with projections. They look at economic trends and historical data to generate projections.

3. **How do you publish the projections you make?**

   Projections are mainly used in presentations, for example state and national conferences. No physical reports are published. However, the projections are sometimes used in newsletters and press releases.

4. **Going back to the statistics you track, what kind of a sample do you use when collecting your data?**

   We use a 60% sample.

5. **We located a PDF online of Global Hotel performance for December 2008, as well as one for the state of Ohio for 2007 comparing cities to each other as well as to the U.S. average. Are these spreadsheets your free reports?**

   The free reports that we publish every month evaluate national performance. We also write articles and pick places we want to review. We might have picked Ohio to study one year and a different state the next year.

4. **Last time we spoke, you told me that STR can calculate revenue, supply, and demand by asking for information on rooms available, rooms sold, room revenue. How do you make the calculations for supply?**

   Supply is calculated my multiplying the total number of rooms by the number of days in the period.

5. **For demand?**

   Demand is the total rooms sold.

6. **Is "revenue" different "room revenue"?**

   They are the same thing.

7. **Would it be possible to send me a copy of one of the paid reports for free? As I am a student, and this is for an academic project, the report can be out of date.**

I will e-mail you a sample report. However I cannot release the paid reports. For some more information you could also check out Hsyndicate.com/org

Date: February 13, 2009
Interviewer: Garret Doe
Secretary: John Meade
Interviewee: Dr. Tim Tyrell

1. **Do you use a sample or a census when you collect data?**

   I collect published data on the number of airplanes that land in Arizona.

2. **How often do you collect and group data (e.g. monthly, seasonally, yearly reports?)**

   I track data monthly. However, I look at a year's worth of data and divide it up to de-seasonalize it in order to view de-seasonlized trends.

3. **How are these reports distributed?**

   I just post the data on my website. Occasionally I am contacted directly about my data.

4. **Have you made changes based on the findings generated through the tracking of the overall performance of the industry?**

   My data just explains air travel patterns to people. I tend not to ask about specific changes made as a result of my data.

5. **What type of database storage do you use?**

   I store all of the information and statistics I get in excel.

6. **Do you have advice on other agencies or people we may contact?**

   You could just do a Google search for other tourism barometers.

Interview with Professor John O'Connor

Date: February 27, 2009
Interviewer: Garret Doe
Secretary: John Meade
Interviewee: Professor John O'Connor (WPI Economics Department)

1. **What general information do you think would be important to know in order to accurately track tourism performance in a country?**

   It would be important to know about the country and who goes there. The country of origin of tourists would be very important to know.

2. **What factors of a tourist's country of origin would be important for us to know in order to make projections?**

   It is very important to take into account the exchange rate and whether or not it's based on or related to another currency. Tourists will think about how much it will cost them to travel to Namibia. For example, people may think "How far will the Euro get me in Namibia?" You should track the cost of the Namibian currency with respect to the countries from which tourists come, specifically the euro if Germany accounts for most tourists. You should also track how the countries of tourists are doing economically, looking at GDP specifically. With an understanding of this, you could certainly make general projections.

3. **Would there be a way to make more mathematical projections?**

   Certainly! You could look at tourism in the country as a <u>function</u> of something. Some examples would be:

   Tourism (GDP in countries of origin)

   Tourism (Euro exchange rate to the Namibian dollar)

   Tourism (cost of a hotel room in Namibia compared to other African countries)

   Tourism (cost of flights from Germany to Namibia)

   It would be a modeling project in some respects as you would model variables to determine which variables have the greatest influence on the performance of the Namibian tourism industry.

   Make a dependent equation, for example, the number of days a tourist spends in Namibia as a function of something. Then plug in a dependent variable (such as tourism performance in 2001, 2002, 2003, 2004) and then plug in an independent variable (such as GDP of Germany, marketing expenses in Germany, cost of airline tickets from major locations, the rates that businesses are currently charging, etc.). After that, plug the equation and data in a machine to show correlation of dependent variables. Sometimes, a variable that people believe is very important turns out to not be so important. This a good approach that is very numeric.

4. **Are there any other math or economic concepts that you think we should look into?**

   Yes, you could look into econometrics and psychometrics. Also look in to regression analysis with respect to cost, that is what you will need to know in order to analyze the tourism as a function of a variable graphs. The coefficients you come up with in regression analysis can help determine a ranking of importance of individual variables.

5. **What should we look into with respect to marketing?**

   You should look into marketing expenses. For example, how much money is spent on marketing in Germany? Who pays for the offices which the tourism board has in other countries? The people who decided to put the tourism board in Germany, London, and the other cities probably had specific reasons as to why they chose those locations.

   Think about it with respect to yourselves, what would convince you to travel to Namibia? Try talking to travel agencies about what reasons tourists travel to Namibia. Promoting tourism in other countries seems like a major question. It sounds like right now the supply is there, but the demand isn't. Try to establish what most affects the demand for tourism in Namibia. It could be marketing expenses, tourism agencies, economic conditions in major countries, etc. Anything could potentially have a noticeable effect on the demand for tourism in Namibia.

   You cannot control variables such as scenery and rainfall. However, the end goal will be to affect the variables that affect tourism performance.

6. **What do tourists usually think about when traveling to a county like Namibia?**

   Prices that sectors charge are very important. Prices influence everything from getting there, staying there, and anything you do there.

7. **Is there anything we should look into with respect to specific businesses?**

   Look into the websites of companies. They can have an impact of travelers. Also look into whether or not hotels advertise abroad. Look into airline cost and availability. For example, a new service from Amsterdam to Namibia may become available, and that would increase the number of tourists from that area.

   Look into whether or not any travel agencies run specials to Namibia, people like to go on organized tours, especially if it is a country not often visited. Ask about the frequency of these tours, how much they cost, and what hotels are used. Also keep in mind that often there are standard tours and also more extensive tours.

8. **Last year's team had an issue with the response rate after the questionnaires were e-mailed out. Do you have any advice on how to improve response rates?**

   Yes, always promise that you will give them the results of the study. Also ensure that the study will be valuable to them, that there's something in it for them. Explain how you will be able to isolate variables and eventually increase performance. Talk about how the report will stimulate tourism. Make sure that the information is convincing.

Personal Conversation with Allison Dassatti and Amanda Debaie (Members of the 2008 NTB Team)

Date: March 1, 2009
Interviewer: Garret Doe
Secretary: John Meade

1. **Which did you find were the most resourceful questions on your questionnaires?**

   Ask questions about what you think that business or association would find important. They will be more likely to respond and be interested. See the filled in TDEFs when you get there to see exactly how the businesses responded.

2. **How else do you think we can get a better response rate?**

   Well you can't really ask about data that is too private, like how much money they made. They will either make up a figure or withhold the information due to competition worry. Stress that you are doing this barometer to help them and make sure that they know it.

   Any data that they have to go look up is bad. It means it will be a lot of work for them to complete.

3. **(They went back to answer more about Question 1)**
   Another question that proved very useful was one like 7B on the Trophy Hunting Questionnaire. ("Which factors have influenced your daily fees during <period>"?)

4. **Any other pieces of advice?**

   Be explicit on your directions of the questionnaire. That means noting clearly where they should use checkboxes, x's, write-ins, and etc. This will make it much easier to read and input into the database.

   **The remainder of the interview was spent discussing activities to do while in Namibia and the kind of work environment we should expect, irrelevant to the project per se.

Interview with Gitta Paetzold (CEO of the Hospitality Association of Namibia)

Date: March 24, 2009
Interviewer: Garret Doe
Secretary: John Meade

1. **How long have you worked in the tourism industry?**

   I used to be a journalist. However, I had an inroad into the tourism industry as a journalist and joined the industry in 1997. I thought it was a dynamic and challenging industry.

2. **How long have you worked for HAN?**

   About ten years. I served on a voluntary organization and was offered a position with HAN. As CEO I do a lot of work with the database and administration. I represent the association with NTB and other organizations. I hear out the concerns of members of HAN. HAN is an organization available to hotels so they can work together rather than all run to the NTB or other organizations separately. Businesses join HAN for convenience, it is a place where people can share ideas and develop new trends together.

3. **What does your position entail?**

   I sit in office and do things from weekly news letter to answering questions. HAN is sort of a watchdog; it looks out for concerns that might affect the accommodation industry. Private sectors feed HAN with information and HAN deals with it. HAN doesn't do marketing (other associations do). We have a beautiful website and all members have one page. There is variance in the size of the hotels. HAN is not a regulatory organization; some places get 35% commission while some get 5%. I collect information from members and pass it along to be discusses between the different associations.

4. **So hotels aren't required to follow recommendations.**

   HAN recommendations are purely recommendations as we have no jurisdiction. Recommendations are there as a guide line, but we don't they don't have to give 20% commission to company X or Y. NTB and the government have regulations and laws and businesses must follow those. Every business must be registered with NTB.

   A real professional drive for tourism happened in the late 80's just before independence. Activities at the coast like sand boarding and quad-biking are recent. Places like Etosha have been around drawing tourists for a while however.

5. **[Show sample barometer] This is a sample of the barometer that was produced last year using actual data from the tourism industry. The barometer's purpose is to highlight seasonal market performance and make predictions for different tourism sectors. These are the indicators for the Accommodation industry that last year's NTB barometer team came up with. We want to decide if we should add, edit, or remove anything else.**

HAN collects statistics similar to the ones that you have here. We sat down with the NTB and worked out what information we should ask. We gave this to last year's team. The Euro carriers come to Namibia because of the exchange rate, which is currently 1:13. Predictions are difficult and wide varieties of predictions are out there.

Your data matches up with HAN data and you have a good choice of factors. I could e-mail records form 2008. Marta should have them.

6. **[Show sample TDEF] Tourism Data Entry Forms, or TDEFs, will be distributed to businesses within each sector so data can be collected to create the barometer. All of our questions revolve around the theme of simplicity—participants should have the ability to complete the forms without having to go look anything up, and the forms contain the type of questions that can be answered with tick boxes.**

I could send you much of these statistics as HAN tracks the same information. Statistics reflect the tourism statistics and NTB could give us the required statistics. HAN and NTB form are developed together. People are lazy when it comes to administration. They get irritated with marketing and forms and administration.

I would target specific groups such as large hotels. HAN sample is small, only 120 businesses. Send out our forms and work with NTB.

   a. **Do you feel the value ranges are appropriate?**

      Yes, the ranges are appropriate. Europe and Germany are still the strongest markets. They are very reliable. France and Italy are very seasonal (only travel in august). Combined countries are fine. Overall good form.

   b. **[Show the breakdown of accommodations] These are the various kinds of accommodations we have found are available in Namibia. For the purposes of our project we want to group similar forms of accommodations together (i.e. not compare a hotel and campsite as if they are the same). What do you think of the options we have here?**

      The options are all correct. There are no resorts in Namibia (although some businesses claim that they are). The NTB has specific specifications for a business to meet in order to be classified as a resort and no business currently meets those

   c. **Could we group any of these options together?**
      Yes you could group them like this:

         1. Hotel/Hotel Pension/Guest House
         2. Lodge/Guest Farm/Tented Camp/Resort
         3. Rest Camp/Self Catering/Campsite/B&B/Backpacker Hostel

7. **We believe that we will receive a higher response rate if every business takes the barometer seriously and is well informed on the project. Would it be possible for HAN to contact its member businesses and inform them of the benefits of completing the TDEF before we actually distribute the TDEF?**

   You can write motivational text, explain the cause, project and goal. I will e-mail businesses saying that your project is worthwhile and they should take 5 minutes to fill out the form. Say that you're only here until May.

8. **We are trying to establish a way to monitor how rack rates increase or decrease from year to year and from season to season. If we were going to ask for one or two rates that would indicate the rack rates of that specific business, what would they be?**

   Ask what is your per person per night rack rate. That would include everything from hotels to campsites. Say that it is a general standard that covers all of the accommodations industry on the TDEF.

9. **Are there any hotels that you feel we could interview?**

   - Safari Hotel. A lady by the name of Dorothy Diver would be a good person to talk to
   - Windhoek Country Club, can speak for a golf club, hotel and casino. Tony Barcher is the general manager and Daphni Martin would also be a good person to speak with there.
   - Wilderness safaris are also important as they attract Americans and have many locations, speak with Jane Meyer

10. **Do you have any other feedback about the barometer?**

    Good progress from last year. You seem economically and scientifically minded. Emphasize that your will help businesses make more informed decisions.

Interview with Almut Kronstbein (CEO of NAPHA)

Date: March 24, 2009
Interviewer: Garret Doe
Secretary: John Meade

1. **How long have you worked in the tourism industry?**

   16 years

2. **What does your position entail?**

   NAPHA aims to create an environment where hunters can function to their highest potential. We try to please all members of the organization. We address changes in regulations and NTB policies, etc. so that hunters can operate to the best of their ability.

3. **[Show sample barometer] This is a sample of the barometer that was produced last year using actual data from the tourism industry. The barometer's purpose is to highlight current market performance and make predictions for different tourism sectors.**
   These are the indicators for the Trophy hunting industry that last year's NTB barometer team came up with. We want to decide if we should add, edit, or remove anything else.

   I notice that you got a very small feedback.   You need to have more feedback to have a more encompassing view. Members must submit the same info to the ministry of environment of tourism, so you should get the data from them because business owners do not want to fill out forms. Also, my people must have a license before they are allowed to hunt. These hunter permits have most of the information you will need. Within 30 days of issuing, these permits must be returned; hunters must report back to the Ministry of Environment and Tourism, if they don't, they will lose their licenses. They report statistics like number of animal shots, the age of animal, etc. They also will have information on what countries tourists come from. Note too that there is a difference between outfitters and guides.

4. **[Show sample TDEF] Tourism Data Entry Forms, or TDEFs, will be distributed to businesses within each sector so data can be collected to create the barometer. All of our questions revolve around the theme of simplicity—participants should have the ability to complete the forms without having to go look anything up, and the forms contain the type of questions that can be answered with tick boxes.**

   If you want to find out why hunters are coming to Namibia, you must ask the hunter, not the professional guide. You could ask people why they prefer hunting here over hunting other places.

   a. **Do you feel the value ranges are appropriate?**

   You can cut off the number of animals hunted after 20. Hunters are only allowed two kills of each species. Professional guides may only take two hunters at the same time, so one

person can only take 16 hunters within 8 weeks. Also, be aware that hunters are very low in February. This means that the higher boxes will not be ticked. You could leave the questionnaire high if it is going to represent high and low months.

5. **Would asking what the daily rate for a single hunter per day be a good indicator of the overall daily rates? (i.e. not asking for both single, double, experienced, child, etc.)**

That is information on their websites so they might not want to list it again. However this information is not tracked by Ministry of Environment and Tourism.

6. **Do the same things influence trophy and daily rates (is it redundant to ask this twice)**

Leave it in separately and see how people respond. Labor is paid by the trophy rates so it could be an important indicator.

7. **Are there any specific animals that would be good representatives for all trophy rates (e.g. Kudu, Springbok, and Blesbok were listed as the most commonly hunted animals in 2008)?**

[Checks off animals on the TDEF that we should track the trophy rate of]
The Black faced impala is endemic…it isn't hunted very often but it is an interesting and popular hunt. Invasive species, such as wildebeest, blesbok and common impala, are all over the place but not really a Namibian species. Some people may not hunt a species that they know are not endemic—they only want to hunt real Namibian species.

8. **We believe that we will receive a higher response rate if every business takes the barometer seriously and is well informed on the project. Would it be possible for NAPHA to contact its member businesses and inform them of the benefits of completing the TDEF before we actually distribute the TDEF?**

Yes, yes. Just don't be negative when you send out e-mails. Put the project in a positive light. Thank people for replying last year and show the response from last year (sample barometer).

9. **Do you have any other feedback about the barometer?**

Namibia is known for Kudu, Oryx, and Springbok as our yearly figures will show. Hunters might be more interested in yearly hunting numbers, rather than monthly. Natural factors may influence the number of animals that are able to be found.
You might want to add to introduction letter that that you would be interested in speaking with individual guides. I cannot tell you specific members to interview since I watch out for all of my members…it would be unfair to single out a handful from the 470 guides.

An interesting study has been done on hunters on where they choose to hunt and why by Peter Lindsey. You might want to see that.

Interview with Jacqueline Asheeke (CEO of FENATA)

Date: March 25, 2009
Interviewer: Garret Doe
Secretary: John Meade

1. **How long have you worked in the tourism industry?**

   6 years

2. **How long have you worked for FENATA**

   All 6 years have been for FENATA

3. **What does your position entail?**

   I'm CEO. I represent the tourism industry as a collective. FENATA is an umbrella of the entire tourism industry. FENATA believes that it is important to support the environment so that tourism can be sustained. The country is the product and it must be preserved. If it is not preserved, tourism will die in Namibia. I lobby on behalf of the industry to ensure the strength of the industry. I work a lot with Information collection and data dissemination. I have to know this data to do this work

4. **Can you tell us a little bit about FENATA's relationship with NTB?**

   NTB is our partner. The NTB needs to work with FENATA in order to accomplish growth of the tourism industry. Without regulations, the sectors don't have standards. We want regulations and standards, and an even playing field. Undercutting the system only gains short term products and the expense of the long-term product. Destination marketing is very important to both of us. Government perspective is job creation, not profit making. FENATA's goal is profit making. Profit has to be economic and social… not just money. Government stability is very important; tourist will not travel to a country that is in meltdown.

5. **So as you know, last year several WPI students developed a prototype barometer. Our project is basically to take their work, modify their system slightly, add a tourism sector to the barometer, and make the tracking system fully operational. Do you have any feedback or thoughts on last year's project?**

   Only 10 percent of HAN members responded , people don't like to respond. If you sid down with them you have a better chance of getting good responses. Labor act is requiring laborers to do this or this, and getting a 10% response is good. Being part of an organization is helpful, but if forms are required they would quit. HAN doesn't even represent 10% of the accommodations sector. Trust issue, financial issue. Companies who are visable get audited, and it hapend recently… leading to strong hesitance to filling out forms.

6. **Last year's team had a very low response rate, so another goal of our project is to increase the response rate. One way we are attempting to do this is by making the TDEFs as quick**

and user-friendly as possible *[show TDEF, explain tick system, etc.].* **What do you think of these forms?**

You would probably want to ask for bed nights rather than clients. As far as the responses you will get, the ones that are doing the worst lie the most. You might want to take our purpose of visit as people don't ask why a tourists is staying at an accommodation. You might want to look into Gondwana Desert Collection, it is a group of hotels. Speak with the managing director Manfred Goldbeck. High repeat visitor rate. Geography is a permanent negative effect on tourism. Namibia has the best blue white diamonds in the world. Namibia does not privatize natural resources, then Europeans would come in and rule the industry. Dabiers is 49, government is 51. None messes with dabiers… no one… not even OPEC

7. **Is there an association that represents air charter?**

Air charter is a member of TASA. It is kind of like a subsector.

8. **Are there any places you can tell us about where we could get some of the statistics we are asking for on the forms to save time?**

Arrival forms are the forms of the Ministry of Home Affairs. The forms will have reason for travel, but it will not be compiled until later than you need it by.

9. **In order to give business incentive to participate, when we send out the forms, we will emphasize how they will get the results of barometer within a few weeks of returning the form. We will also include an example barometer to show them the beneficial information they can obtain by participating. Do you think these will assist in increasing our response rate?**

2009 will be a tight financial year; statistics will be very important coming up.

10. **Next week we will be interviewing several Air Charter businesses to incorporate that sector into the barometer. What parts of that industry do you think will be important to track?**

Pilots must file how many people are on a particular plane and the destination, ask for copies of the forms, it will make things easier. You should track charters they take to air strips. Flights to airstrips are indicators of high end tourists. Oranjemund take out (business), can know someone flying out of Eros to islands outside of Caprivi will be a high end tourists. Flights to private land strips or islands are indicators of high end tourists (also look at number of people on plane). Onguma is a high end safari location, track flights there. Sefofane (speak to Rob Moffet) good place to get information. Stay away from flights from Eros to Swakopmund. Also stay away from any municipal air port, any diamond area… just private landing strips.

Interview with Gielie van Zyl (CEO of CARAN)

Date: April 8, 2009
Interviewer: Garret Doe
Secretary: John Meade

1. **How long have you worked in the tourism industry?**

   8 years

2. **How long have you worked for CARAN?**

   All 8 years

3. **What does your position entail?**

   I am a CEO at CARAN. To tell you about CARAN, anyone is free to join the association. They are not forced to be a member (but it does cost them money to be a part). CARAN takes care of its members when it comes to issues concerning tourism to make sure that the opinion of things that affect car rental are communicated both ways.

   17 members make up CARAN. Those 17 do 95% of the business within the country.

   CARAN has certain standards for members that they must meet before they can join.

4. **[Show sample barometer] This is a sample of the barometer that was produced last year using actual data from the tourism industry. The barometer's purpose is to highlight seasonal market performance and make predictions for different tourism sectors. Which indicators do you feel are important to the businesses and stakeholders of the Car Hire industry?**

   Group G –does it include luxury vehicles?

   These results must be skewed because by far A,B,C—the sedans—should have all the weight.

   You should ask not how many rentals, but how many billed days. It is dependant on the number of days so asking billed days will give a more accurate representation.

5. **Does CARAN track any of these statistics on its own?**

   Not really, no. This will be useful. Say that you're doing this independently so that nobody is worried. Say you won't share this data with anyone else.

6. **[Show sample TDEF] Tourism Data Entry Forms, or TDEFs, will be distributed to businesses within each sector so data can be collected to create the barometer. All of our questions revolve around the theme of simplicity—participants should have the ability to complete the forms without having to go look anything up, and the forms contain the type of questions that can be answered with tick boxes.**

   Change rental days to billed days. To make this into a range, 0-50 would be the minimum. Everything else could just be multiplied by 5. This will give a good range of billed days.

   …SUVs and 4x4s during the high tourist seasons are more popular…

Make sure they understand that rack rates are their published rack rates, and not any confidential data.

(On question #5 about factors influencing rates) Fuel prices actually do not affect car hire companies because customers pay for fuel. Clarify the question so that businesses accurately fill out answers. Companies give our prices to tour operators far in advance, so customers can see brochures of rack rates, and they can request that rate even though the data was published much earlier. Rates have been locked in for 2010 already.

(On question #6 about number of tourists from X Nationality) Companies don't really track where customers come from. Avis does 1000 rentals a month, so they would need a bigger scale of ranges than other companies. Avis doesn't even track nationality. People would not complete that question accurately. What might work would be a ranking system where the businesses compare one country to another for popularity.

7. **We are trying to establish a way to monitor how rates increase or decrease from year to year and from season to season. If we were going to ask for one or two rates that would indicate the rates of that specific business, what would they be? (per bed per night example)**

   Rates should be broken up into car groups: small sedan, medium sedan, luxury sedan, SUV/4x4, and maybe vans/buses (8-10 seats). Group A, B, and C are all very similar. You could take away the groups classified by letters and refer to them this way instead. Much less confusing.

8. **We believe that we will receive a higher response rate if every business takes the barometer seriously and is well informed on the project. Would it be possible for CARAN to contact its member businesses and inform them of the benefits of completing the questionnaire before we actually distribute it?**
   Yes, gladly.

9. **Do you have any other feedback about the barometer?**
   None at this time.

Interview with David Cartwright (Secretary of TASA)

Date: April 14, 2009
Location: Rivendell Guest House
Interviewer: John Meade
Secretary: Garret Doe

1. **How long have you worked in the tourism industry?**

    13 years. I've worked in South Africa, Botswana, and Namibia.

2. **We were referred to you by TASA, what is your relationship with them?**

    I have been the secretary of TASA for 12 months.

3. **What does your position entail?**

    I keep members informed and aware of issues and information, I also write letters and things like that. I help create the monthly news letter. TASA has associate members in other countries as well such as South Africa and the UK.

4. **[Show sample barometer] This is a sample of the barometer that was produced last year using actual data from the tourism industry. The barometer's purpose is to highlight seasonal market performance and make predictions for different tourism sectors. These are the indicators for the Accommodation industry that last year's NTB barometer team came up with. We want to decide if we should add, edit, or remove anything else.**

    Getting people to get back to you will be the issue. People are always busy, secretive about their business, and some are also just lazy when it comes to forms.

5. **[Show sample TDEF] Tourism Data Entry Forms, or TDEFs, will be distributed to businesses within each sector so data can be collected to create the barometer. All of our questions revolve around the theme of simplicity—participants should have the ability to complete the forms without having to go look anything up, and the forms contain the type of questions that can be answered with tick boxes.**

    People don't always think in quarters, they think in high season, low season, etc. You also should add a "u" to labor as you have spelled it the American way. You also may want to re-word the question "why do you want to enter these countries" because it seems a little awkward phrased like that.

    a. **Do you feel the value ranges are appropriate?**

        People probably have a good idea of where tourists are coming from, so the ranges are good.

    b. **Could we break down Tour and Safari into multiple sub-sectors (give accommodations example)**

    Budget camping tours will be cheap compared to luxury tours for example. [Wrote his idea for a break-down on the example TDEF] The way you have it would probably work as well though.

    c. **We are trying to establish a way to monitor how rack rates increase or decrease from year to year and from season to season. If we were going to ask for one or two rates that would indicate the rack rates of that specific business, what would they be?**

    Average cost per client per day is something that most businesses could probably give you.

6. **Do you have any other feedback about the barometer?**

    Ask about tourists from Russia and China. People are trying to attract tourists from China and this would be a good way to show if that is working. I would defiantly break down Asia.

7. **Is there anyone else you feel that we could speak to about our project?**

You could speak to my associate Martin. He may also be of some help.

Interview with Martin Web-Bowen of TASA

Date: April 15, 2009
Interviewer: John Meade
Secretary: Garret Doe
Attending: Tristin Cowley

1. **How long have you worked in the tourism industry?**

    The last ten years

2. **We were referred to you by TASA, what is your relationship with them?**

    I am the chairman of TASA, and this is my fourth year on the board.

3. **What does your position entail?**

    TASA is a private sector association representing tour operators on different levels.
    Permanent CEO is employed however, board members are non-paid volunteers. We
    support new operators coming into the market and establish and uphold standards. There
    are about 140 members of TASA and 190 registered tour and safari businesses with the NTB.

4. **What do members of TASA gain from being a member of your association?**

    Some people are very optimistic. While some ask "what will the association do for me?" On
    a national level, it's more beneficial for everyone to have the same goals but they don't
    always think that way.

5. **[Show sample barometer] This is a sample of the barometer that was produced last year
    using actual data from the tourism industry. The barometer's purpose is to highlight
    seasonal market performance and make predictions for different tourism sectors.
    These are the indicators for the Accommodation industry that last year's NTB barometer
    team came up with. We want to decide if we should add, edit, or remove anything else.**

    Yes, it will be interesting to see trends. For example, the bulk of Chinese tourists are coming
    to sell cheap things and go to casinos. They aren't coming to look at cheetahs and animals.
    Is the money well spent in china? Yes, because the market is HUGE, so hopefully this
    barometer sees how much bang for our buck we get.

Interview with Thys Rall (Manager of Desert Air)

Date: March 31, 2009
Interviewer: Garret Doe
Secretary: John Meade
Attending: Assistant Friar (info@desertair.com.na)

1. **How long have you worked in the Air Charter industry?**

    Friar: 5 years

2. **How long have you worked for Desert Air**

    Friar: 5 years. Desert Air has been operated since 1996 and Thys Rall has been there since the beginning.

3. **What does your position entail?**

    Friar: Scheduling the flights, ground tending

4. **What kind of customers do you typically receive?**

    Friar: Corporate clients, architects, and engineers
    We aren't involved in tourism very much, but are looking to be.

5. **As you can see, each sector has its own indicators to measure the market performance. What indicators would be important to organizations within the Air Charter industry?**

    Thys: How many people, where they fly to, and what they would like to see. The pilot is there to keep the passengers happy.

6. **[Show sample TDEF] Tourism Data Entry Forms, or TDEFs, will be distributed to businesses within each sector so data can be collected to create the barometer. All of our questions revolve around the theme of simplicity—participants should have the ability to complete the forms without having to go look anything up, and the forms contain the type of questions that can be answered with tick boxes.**

    a. **Which questions should we include to gain data for the indicators we just discussed?**

        Thys: We would be interested in which destinations are clients flying to. For example, hubs, coast, source flare area, the south (fish river canyon…etc), northwest, Damarland, Gokoland, Etosha Region, Caprivi, Crossover (like Botswana, Angolla, Victoria Falls, Zimbabwe and Zambia)

We would like it to be every 2 months. By including low months it would skew the data (like including December with October (one of the best months))

We also would like to know amount of flights, destinations, number of passengers, nationality. However, we do NOT track nationality. We get information from tour operators and they do not tell us the nationality of the group. We only know if they request specific German.

b. **[Show Accommodation TDEF] The Accommodation sector is broken down into subsectors—does the Air Charter Industry have a breakdown as well?**

Thys: We have statistics on business and tourism.

c. **Our theme is to have rough estimate ranges rather than exact numbers…for the questions we are including, what would be appropriate ranges to include?**

Thys: Not more than 1000 per month.
Friar: We will be prepared to have all of the information ready. We have all the information you require except for nationality.

7. **From our research, some indicators of Air Charter industry might be number of flights to private air strips, flights from Eros to Caprivi, and flights to Onguma. We were told these would be good ways to track high end tourists, would you agree?**

You should include the regions, the destinations. There is a difference between corporate and tourism. There are corporate destinations and tourist destinations as well. Just make sure to distinguish between the two. Not necessary to talk about private air strips. Most are already private strips.

8. **Do you recommend we interview anyone else specifically who could help us create the Air Charter sector of the barometer?**

Thys & Friar: West Air, Wings over Africa, something from Swakopmund, basically any Air Charter businesses. Scenic Air would be good also, speak with Owen Severtson

9. **Do you have any other feedback or questions for us about the barometer?**

(Explain how the collection/distribution system works…that it is totally free)

Interview with Ian Du Rand (Managing Director of Sefofane)

Date: March 31, 2009
Interviewer: Garret Doe
Secretary: John Meade

1. **How long have you worked in the Air Charter industry?**

   15 years. 3 months in the Air Charter business.

2. **How long have you worked for Sefofane?**

   3 months.

3. **What does your position entail?**

   Basically I'm the managing director of Sefofane. Were all attached of the wilderness group. There is a Sefofane in Zambia, Namibia, etc. Our main client is the wilderness group…about 2/3 of our clientele. The rest are from other operators (tour operators).

4. **What does your company do?**

   All tourism flights. We don't do any business flights. We do many flights a day, but we might do about 4 business flights a year or something.

5. **[Show sample barometer] This is a sample of the barometer that was produced last year using actual data from the tourism industry. The barometer's purpose is to highlight seasonal market performance and make predictions for different tourism sectors.**

   As you can see, each sector has its own indicators to measure the market performance. What indicators would be important to organizations within the Air Charter industry? (rates?)

   We are interested in a barometer. The guys next door want to know how many Germans, Americans, etc.—where should we market. What we look at is more locally, how many people go where?   If we get an indication of where people go then we develop our flying. Also the type of aircraft that are used is interesting information.

   75% of our traffic goes in a clockwise direction—we developed a circuit. We aren't marketing the product; the lodges are marketing for us.   Wilderness does all the marketing for us. They know who are coming so they market and target those markets. We have a very strong Italian and German market. We put together the product and then they SELL the product…they actually sell the product for us.

   The average rate would be very valuable to us along with most popular destination points. Quote: "If you want to make a little bit of money in aviation, then start with a lot."

   It would be nice to pair pilots from the same nationality with the same groups. Currently we employ 23 pilots.

You need to understand the nationalities of clients and how to deal with them. (French, American, Italian…all different behaviors) But if accept them for who they are they can be dealt with…it's just who they are. It's good to understand the people! Something like this would probably help us with this.

We're very focused on safety. We're all about the guest experience. Customers experience with a pilot. The slightest thing can go wrong.

6. **[Show sample TDEF] Tourism Data Entry Forms, or TDEFs, will be distributed to businesses within each sector so data can be collected to create the barometer. All of our questions revolve around the theme of simplicity—participants should have the ability to complete the forms without having to go look anything up, and the forms contain the type of questions that can be answered with tick boxes.**

   a. **Which questions should we include to gain data for the indicators we just discussed?**

   We already have a report that generates numbers like this. But in Air Charter, when you see a number, it could be the same person. We work on a seat rate (seat legs). (Equivalent to bed nights in the accommodation industry). Windhoek down to Sossusvlei is about $2000N. Private charter would be $6000 but you can put 4 in the plane.

   For every km that is flown, parts are being used, fuel is being burned. These are fixed costs. Aircraft costing X per month, air pilots Y, etc. Variable costs are you are going to use so much money per km. More flights the better help fixed costs go away.

   In our game, foreign exchange has a big influence. We are a dollar based asset.
   Fuel is a factor.
   Maintenance is a factor.
   Electricity and food might be a factor.
   But I wouldn't say what affects a hotel would affect us.
   We think a lot about where to put aircraft and how to do schedules. If we can get an edge by putting the aircraft out cheaper without compromising on safety then we achieve half the game.

7. **Do you have any other feedback or questions for us about the barometer?**

   No, not right now.

Interview with Analisa (General Manager of Wings over Africa)
Date: April 1, 2009
Interviewer: Garret Doe
Secretary: John Meade

1. **How long have you worked in the Air Charter industry?**

   One year and four months, all for Wings over Africa.

2. **What does your position entail?**

   I am the general manager. I act at the safety officer, give quotes, dispatch aircrafts, and quality management.

3. **What kind of customers do you typically receive?**

   Very much corporate, a lot of safaris though. We receive a lot of Germans, a flight every Monday for just Germans tourists. I'd say it's about 50-50 currently between leisure and business flights.

4. **[Show sample barometer] This is a sample of the barometer that was produced last year using actual data from the tourism industry. The barometer's purpose is to highlight seasonal market performance and make predictions for different tourism sectors.**

   As you can see, each sector has its own indicators to measure the market performance. What indicators would be important to organizations within the Air Charter industry?

   I think air safaris will decrease in the coming months. I would be interested in seeing what tourists are coming to Namibia and what types of tours they would be interested in, eg. personal planes vs. seats, types of accommodations, would they like to have a pilot speak the same language as them (a German pilot is gold), would they like pilots to have certain requirements or experience, average age of clients, where they are flying too, types of planes other companies have, etc. Planes aren't the same as seats. We rent an entire plane unlike Sefofane. We take a group and stay with them for seven days. If the pilot and guest get a long that is great for us, we have good customer loyalty.

5. **[Show sample TDEF] Tourism Data Entry Forms, or TDEFs, will be distributed to businesses within each sector so data can be collected to create the barometer. All of our questions revolve around the theme of simplicity—participants should have the ability to complete the forms without having to go look anything up, and the forms contain the type of questions that can be answered with tick boxes.**

a. **Our theme is to have estimate ranges rather than exact numbers…for the questions we are including, what would be appropriate ranges to include for number of clients, number of flights, etc.**

Would take too long if it was not electronic. Quickest and easier form I would most likely return.

Last year was busy for us. We flew 64 in January 2008 and 150 this January.

Bigger aircrafts can take more people at a time. Can now take 9 people can take 13 March is the best month for us, which is when the season starts. There was a plane crash last September due to plastic in the engine. There was a large dock in clients then, we only had 20 flights that month.

We got two new 13 seat planes since last year and also have faster planes. That helps us fly more people.

Where people are flying would be interesting, but tour companies book though. Booking companies would track that.

6. **Do you have any other feedback or questions for us about the barometer?**

Not right now, feel free to e-mail me at wrld@iafrica.com.na

Appendix C: The Tourism Data Entry Forms

Accommodation

NTB Tourism Data Entry Form (TDEF):

Accommodation Sector
January - March 2009

Name of Business:	
NTB Registration Number:	
Submission Date (dd/mm/yyyy):	
Contact Email:	

Deadline to return this form: **Tuesday, April 28, 2009**

INSTRUCTIONS:

The following questions apply to the period from January to March of 2009.

When you are finished, change the file name to include your business, and email this completed form back as an attachment to the NTB before the deadline.

Email to: barometer@namibiatourism.com.na

1. What type of accommodation does your establishment offer?

- ◉ Hotel/Hotel Pension/Guest House
- ○ Lodge/Guest Farm/Tented Camp/Resort
- ○ Rest Camp/Self Catering/Campsite/B&B/Backpacker Hostel

2. What is your average bed night rate (per person per night)? Answer in NAMIBIAN DOLLARS.

N [   ]

3. Which factors have most influenced your rack rates this quarter? (Choose top THREE)

- ☐ Food prices
- ☐ Fuel prices
- ☐ Electricity prices
- ☐ Labour costs
- ☐ Season
- ☐ Interest rates
- ☐ Taxes
- ☐ Exchange rate
- ☐ Other

4. Which two new markets (two important countries) would you like to enter? Choose up to TWO.

[▼] Country 1 (choose one)

[▼] Country 2 (choose one)

Why do you wish to enter these markets?

5. If you have any comments, questions, or concerns let us know.

FINISHED!

Don't forget to add your business name into the file name when you save this form and email it back as an attachment. (e.g. TDEF ACCOMMODATION Q1 2009 Garret's Lodge)

Thank you for taking the time to participate in the NTB's quarterly tourism survey!

Trophy Hunting

NTB Tourism Data Entry Form (TDEF):

Namibia Tourism Board

Name of Business:	
NTB Registration Number:	
Submission Date (dd/mm/yy):	
Contact Person:	

Deadline to return this form: **Tuesday, April 28, 2009**

INSTRUCTIONS:

The following questions apply to the period from February to March of 2009.

When you are finished, change the file name to include your business, and email this completed form back as an attachment to the NTB before the deadline.

Email to: barometer@namibiatourism.com.na

1. What is your current daily fee for ONE hunter? Please give answer in US DOLLARS.

2. Which THREE factors have most influenced your daily fees this past quarter?

- ☐ Food prices
- ☐ Fuel prices
- ☐ Electricity prices
- ☐ Labour costs
- ☐ Interest rates
- ☐ Taxes
- ☐ Exchange rate
- ☐ Season
- ☐ Accommodation costs
- ☐ Vehicle Rental Costs
- ☐ Other

3. What are your current trophy fees for the following animals? Please give answers in US DOLLARS.
NOTE: If you do not hunt a particular animal, please leave the box blank.

Cheetah		Oryx	
Eland		Red Hartbeest	
Impala (black-faced)		Springbok	
Kudu		Warthog	
Leopard		Zebra (Hartmann's)	

4. Which THREE factors have most influenced your trophy rates this past quarter?

- ☐ Food prices
- ☐ Fuel prices
- ☐ Electricity prices
- ☐ Labour costs
- ☐ Interest rates
- ☐ Taxes
- ☐ Exchange rate
- ☐ Season
- ☐ Accommodation costs
- ☐ Vehicle rental costs
- ☐ Other

5. For each species, select the range that represents the number of animals killed this past quarter.

	0	1-4	5-9	10-14	15-19	20+
Blesbok	◉	○	○	○	○	○
Buffalo	◉	○	○	○	○	○
Crocodile	◉	○	○	○	○	○
Dik-dik	◉	○	○	○	○	○
Eland	◉	○	○	○	○	○
Elephant	◉	○	○	○	○	○
Giraffe	◉	○	○	○	○	○

Grey duiker	◉	○	○	○	○	○
Hippopotamus	◉	○	○	○	○	○
Impala, black-faced	◉	○	○	○	○	○
Impala, common	◉	○	○	○	○	○
Klipspringer	◉	○	○	○	○	○
Kudu	◉	○	○	○	○	○
Lechwe	◉	○	○	○	○	○
Oryx	◉	○	○	○	○	○
Ostrich	◉	○	○	○	○	○
Red hartebeest	◉	○	○	○	○	○
Roan antelope	◉	○	○	○	○	○
Sable antelope	◉	○	○	○	○	○
Springbok	◉	○	○	○	○	○
Steenbok	◉	○	○	○	○	○
Warthog	◉	○	○	○	○	○
Waterbuck	◉	○	○	○	○	○
Wildebeest, blue	◉	○	○	○	○	○
Wildebeest, black	◉	○	○	○	○	○
Zebra, Burchell's	◉	○	○	○	○	○
Zebra, Hartmann's mtn	◉	○	○	○	○	○
Cheetah	◉	○	○	○	○	○
Leopard	◉	○	○	○	○	○
Lion	◉	○	○	○	○	○

5. Which two new markets (two important countries) would you like to enter?

[▼]   Country 1 (choose one)

[▼]   Country 2 (choose one)

Why do you wish to enter these countries?

[   ]

6. If you have any comments, questions, or concerns let us know.

[   ]

FINISHED!

Don't forget to add your business name into the file name when you save this form and email it back as an attachment. (e.g. TDEF TROPHY HUNTING Q1 2009 Garret's Hunting Lodge)
Thank you for taking the time to participate in the NTB's quarterly tourism survey!

Vehicle Rental

NTB Tourism Data Entry Form (TDEF):

Vehicle Rental & Car Hire Sector

January - March 2009

Name of Business:	
NTB Registration Number:	
Submission Date (dd/mm/yy):	
Contact Email:	

Namibia Tourism Board

Deadline to return this form: **4/28/2009**

INSTRUCTIONS:

The following questions apply to the period from January to March of 2009.

When you are finished, change the file name to include your business, and email this completed form back to the NTB before the deadline.

Email to: barometer@namibiatourism.com.na

1. Total number of billed days this past quarter?

- ⦿ 0-50
- ○ 251-375
- ○ 626-750
- ○ 51-150
- ○ 376-500
- ○ 751-1000
- ○ 151-250
- ○ 501-625
- ○ 1001+

2. For EACH vehicle group, select the number of billed days this past quarter

	0	1-50	51-150	151-250	251-375	376-500	501+
Small Sedan	⦿	○	○	○	○	○	○
Medium Sedan	⦿	○	○	○	○	○	○
Luxury Sedan	⦿	○	○	○	○	○	○
SUV/4x4	⦿	○	○	○	○	○	○
Van/Bus	⦿	○	○	○	○	○	○

3. What is your average number of billed days per client?

- ⦿ 1-4 days
- ○ 13-16 days
- ○ 5-8 days
- ○ 17-20 days
- ○ 9-12 days
- ○ 21+ days

4. What are your average advertised rack rates for each group? (Answer in NAMIBIAN DOLLARS)

Small Sedan	N	
Medium Sedan	N	
Luxury Sedan	N	
SUVs/4x4	N	
Vans/Buses	N	

5. Which factors have influenced your rack rates this quarter? (choose top THREE)

- ☐ Food prices
- ☐ Interest rates
- ☐ Fuel prices
- ☐ Taxes
- ☐ Electricity prices
- ☐ Exchange rate
- ☐ Labour costs
- ☐ Other
- ☐ Season

6. About how often did you receive clients from these countries/regions.

	Never	Rarely	Sometimes	Often	Very Often
Namibia	●	○	○	○	○
South Africa	●	○	○	○	○
Angola	●	○	○	○	○
other SADC countries	●	○	○	○	○
other African countries	●	○	○	○	○
Germany/Austria/Switzerland	●	○	○	○	○
France	●	○	○	○	○
Italy	●	○	○	○	○
UK & Ireland	●	○	○	○	○
Scandinavia	●	○	○	○	○
Spain	●	○	○	○	○
Portugal	●	○	○	○	○
Belgium/Lux./Netherlands	●	○	○	○	○
other European countries	●	○	○	○	○
USA & Canada	●	○	○	○	○
South America	●	○	○	○	○
Australasia and Indonesia	●	○	○	○	○
China	●	○	○	○	○
Russia	●	○	○	○	○
India	●	○	○	○	○
other Asia	●	○	○	○	○
other Countries	●	○	○	○	○

7. Which two new markets (two important countries) would you like to enter?

▼ Country 1 (choose one)

▼ Country 2 (choose one)

Why do you wish to enter these countries?

8. If you have any comments, questions, or concerns let us know.

FINISHED!

Don't forget to add your business name into the file name when you save this form and email it back as an attachment. (e.g. TDEF VEHICLE RENTAL Q1 2009 Garret's Car Hire)

Thank you for taking the time to participate in the NTB's quarterly tourism survey!

Tour and Safari

NTB Tourism Data Entry Form (TDEF):

Tour and Safari Sector

January - March 2009

Namibia Tourism Board

Name of Business:	
NTB Registration Number:	
Submission Date (dd/mm/yy):	
Contact Email:	

Deadline to return this form: **29 April 2009**

INSTRUCTIONS:

The following questions apply to the period from January to March of 2009.

When you are finished, change the file name to include your business, and email this completed form as an attachment back to the NTB before the deadline.

Email to: barometer@namibiatourism.com.na

1. Tour Information: Select the types of tours that your business offers. Then select how frequently that type of tour was given this past quarter.

<u>Note</u>: If your company does not offer a type of tour, leave the frequency box blank.

Budget Camping Tours:	▾
Privately Guided Camping Tours:	▾
Privately Guided Accomodated Tours:	▾
Fly-in Packages:	▾
Self-Drive Packages:	▾

2. Average duration of trip this past quarter.

- ● 1-4 days
- ○ 5-8 days
- ○ 9-12 days
- ○ 13-16 days
- ○ 17-20 days
- ○ 21+ days

3. Total number of clients this past quarter.

- ● 0
- ○ 1-49
- ○ 50-99
- ○ 100-149
- ○ 150-199
- ○ 200+

4. For <u>EACH</u> country/region, select the range representing the number of clients this past quarter.

	Never	Rarely	Sometimes	Often	Very Often
Namibia	●	○	○	○	○
South Africa	●	○	○	○	○
Angola	●	○	○	○	○
other SADC countries	●	○	○	○	○
other African countries	●	○	○	○	○

Germany/Austria/Switzerland	◉	○	○	○	○
France	◉	○	○	○	○
Italy	◉	○	○	○	○
UK & Ireland	◉	○	○	○	○
Scandanavia	◉	○	○	○	○
Spain	◉	○	○	○	○
Portugal	◉	○	○	○	○
Belgium/Lux./Netherlands	◉	○	○	○	○
other European countries	◉	○	○	○	○

USA & Canada	◉	○	○	○	○
South America	◉	○	○	○	○
Australasia and Indonesia	◉	○	○	○	○
China	◉	○	○	○	○
Russia	◉	○	○	○	○
India	◉	○	○	○	○
other Asia	◉	○	○	○	○
other countries	◉	○	○	○	○

5. What is your average per client per day price? Please answer in <u>NAMIBIAN DOLLARS.</u>

N [   ]

6. Which factors have most influenced your prices this past quarter (tick top <u>THREE</u>)

☐ Food prices   ☐ Interest rates   ☐ Accommodation costs

☐ Fuel prices   ☐ Taxes   ☐ Vehicle rental costs

☐ Electricity prices   ☐ Exchange rate   ☐ Other

☐ Labour costs   ☐ Season

7. Which two new markets (two important countries) would you like to enter?

[▼] Country 1 (choose one)

[▼] Country 2 (choose one)

Why do you wish to increase business from these markets?

[   ]

8. If you have any comments, questions, or concerns let us know.

[   ]

FINISHED!

Don't forget to add <u>your business name </u>into the file name when you save this form and
email it back as an attachment. (e.g. TDEF TOUR AND SAFARI Q1 2009 Garret's Tours)

Thank you for taking the time to participate in the NTB's quarterly tourism survey!

Air Charter

NTB Tourism Data Entry Form (TDEF):			Air Charter Sector
			January - March 2009

Name of Business:	
NTB Registration Number:	
Submission Date (dd/mm/yy):	
Contact Email:	

Namibia Tourism Board

Deadline to return this form: **28-Apr-09**

INSTRUCTIONS:

The following questions apply to the period from January to March of 2009.

When you are finished, change the file name to include your business, and email this completed form back as an attachment to the NTB before the deadline.

Email to: barometer@namibiatourism.com.na

1. What were your most popular destinations this past quarter? (select <u>three</u> regions)

☐ Caprivi	☐ Kunene	☐ Otjozondjupa
☐ Erongo	☐ Ohangwena	☐ South Africa
☐ Hardap	☐ Omaheke	☐ Angola
☐ Karas	☐ Omusati	☐ Botswana
☐ Kavango	☐ Oshana	☐ Zambia
☐ Khomas	☐ Oshikoto	

2. How often did you receive clients who spoke:

	Never	Rarely	Sometimes	Often	Very Often
English	◉	○	○	○	○
German	◉	○	○	○	○
French	◉	○	○	○	○
Italian	◉	○	○	○	○
Spanish	◉	○	○	○	○
Dutch	◉	○	○	○	○
Swedish/Norweg./Danish	◉	○	○	○	○
Portuguese	◉	○	○	○	○
other European language	◉	○	○	○	○
Afrikaans	◉	○	○	○	○
other African language	◉	○	○	○	○
Chinese	◉	○	○	○	○
other Asian language	◉	○	○	○	○

3. How often did you receive clients whose ages were:

	Never	Rarely	Sometimes	Often	Very Often
0-18	●	○	○	○	○
19-29	●	○	○	○	○
30-49	●	○	○	○	○
50+	●	○	○	○	○

4. Business flights vs. Leisure flights this past quarter:
Drag the bar to the location that represents the percentage of business/leisure flights

Leisure   **Business**

◄					▥					►
100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

5. Plane Info: In the first box, type the number of operable planes your company currently has that seat the specified number of passengers. Then select how frequently that type of plane was used this past quarter. If you do not have one of the planes listed below, leave both boxes blank.

1-4 Passengers:		Planes	▼
5 Passengers:		Planes	▼
6 Passengers:		Planes	▼
7 Passengers:		Planes	▼
8 Passengers:		Planes	▼
9 Passengers:		Planes	▼
10 Passengers:		Planes	▼
11+ Passengers:		Planes	▼

6. Which factors have most influenced your prices this past quarter (tick top THREE)

☐ Food prices	☐ Interest rates	☐ Accommodation costs
☐ Fuel prices	☐ Taxes	☐ Vehicle rental costs
☐ Electricity prices	☐ Exchange rate	☐ Other
☐ Labour costs	☐ Season	

7. Which two new markets (two important countries) would you like to enter?

              ▼ Country 1 (choose one)

              ▼ Country 2 (choose one)

Why do you wish to enter these countries?

8. If you have any comments, questions, or concerns let us know.

FINISHED!

Don't forget to add your business name into the file name when you save this form and email it back as an attachment. (e.g. TDEF AIR CHARTER Q1 2009 Garret's Charters)

Thank you for taking the time to participate in the NTB's quarterly tourism survey!

Ministry of Environment and Tourism TDEF

NTB Tourism Data Entry Form (TDEF):FEBRUARY - MARCH 2009

The Ministry of Environment and Tourism	
Date of Submission:	
Contact:	

Please return this form by: **Tuesday, April 28, 2009**

INSTRUCTIONS:

The following questions apply to the period from February to March of 2009.

To fill out this form, simply write in answers where requested.

Please enter the total number of hunters from each nation/region during this p

	Number of hunters
Namibia	
South Africa	
Angola	
other SADC countries	
other African countries	
Germany/Austria/Switzerland	
France	
Italy	
UK & Ireland	
Scandanavia	
Spain	
Portugal	
Belgium/Lux./Netherlands	
other European countries	
USA & Canada	
China	
Russia	
India	
Other Asia	
Australasia & Indonesia	
South America	
Other countries	

Appendix D: The Barometer

The Namibia Tourism Barometer

"Bringing Tourism News to Namibia"

Quarter 1, 2009

Greetings!

This is the first issue of the NTB's quarterly tourism barometer.

So what is the Namibia Tourism Barometer? The barometer is the final product of a tourism tracking system which publishes a quarterly report on four different sectors of Namibia's tourism industry. The purpose of this quarterly report is to illustrate business performance within various tourism sectors, show tourism statistics and industry averages, and also to provide market predictions for the future. The information in this report will hopefully assist in the comparison of individual business performance against industry averages and allow business owners to make more educated decisions.

We would like to thank all those businesses who participated in our survey that made this barometer possible. Over 175 businesses returned TDEFs to the NTB—a great response rate for the first publication of the barometer. In most cases, these data were certainly sufficient to display some very interesting statistics

and trends!

Special thanks to all of the associations which assisted us in researching the tourism industry in Namibia: HAN, NAPHA, FENATA, CARAN, and TASA. Thank you to HAN and MET for providing us with additional statistics, allowing us to shorten the number of questions on the TDEFs.

We hope you find the information contained in this barometer useful. Look forward to another barometer next quarter!

Top 5 Desired Markets To Enter:

1) Germany/Austria/Switz.
2) USA & Canada
3) UK & Ireland
4) Scandinavia
5) France

Includes:	• Accommodation Sector (2) • Tour and Safari Sector (3) • Trophy Hunting Sector (4)	• Vehicle Rental (5) • Tourist Arrival Projections (6) • Client Nationality Statistics (7-8)

Accommodation Sector

Data provided from a sample of 93 accommodation establishments except where noted

Average Bed Night Rack Rates

Group 1	Hotel/Hotel Pension/Guest House	N$ 382
Group 2	Lodge/Guest Farm/Tented Camp/Resorts	N$ 724
Group 3	Rest Camp/Self Catering/Campsite/B&B/Backpacker Hostel	N$ 295

Occupancy Percentage: Type of Accomodation†
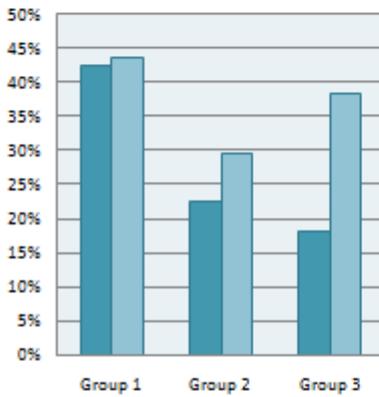
Occupancy Percentage: Region†
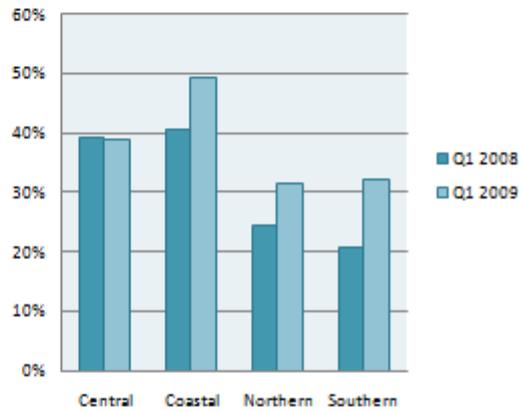
† Data provided courtesy of the Hospitality Association of Namibia

Factors Most Influencing Rack Rates
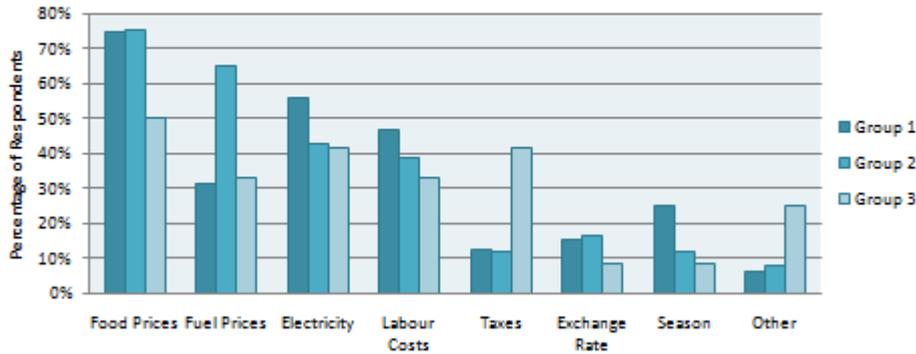
Tour and Safari Sector

Data provided from a sample of 31 tour and safari operators

Frequency of Tours Given

Number of Responses

Legend:
- Very Often
- Often
- Sometimes
- Rarely
- Never

Categories: Budget Camping, Privatly Guided Camping, Privately Guided Accommodated, Fly-in, Self-Drive

Average Length of Tour (days)

- 1-4: 13%
- 5-8: 30%
- 9-12: 44%
- 13-16: 9%
- 17-20: 4%
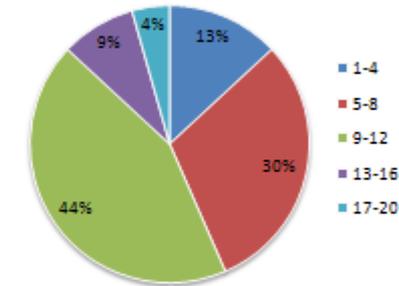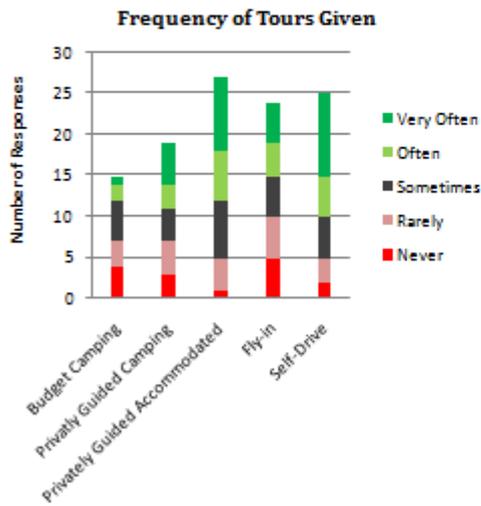
The average per client per day price this quarter was:

N$ 1,455

Total Number of Clients

- 0: 7%
- 1-49: 61%
- 50-99: 6%
- 100-149: 10%
- 150-199: 3%
- 200+: 13%
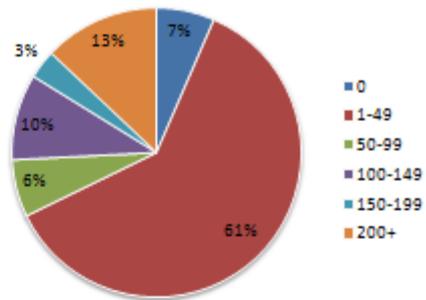
Factors Most Influencing Tour and Safari Rates

Percentage of Respondents

Categories: Fuel, Accommodation Costs, Food, Exchange Rate, Vehicle Rental Costs, Labour, Taxes, Interest Rates, Other, Season, Electricity
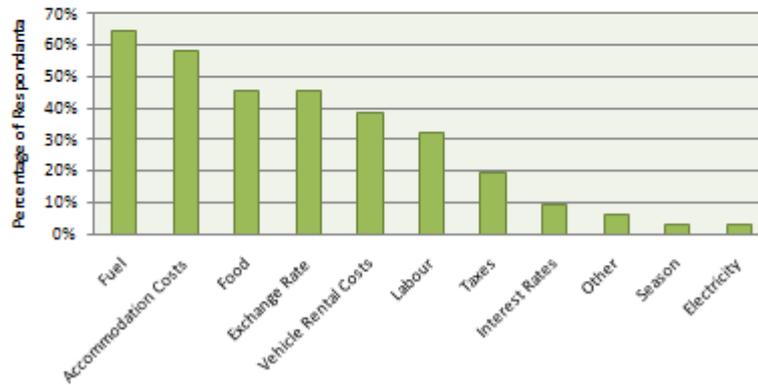
Game Killed
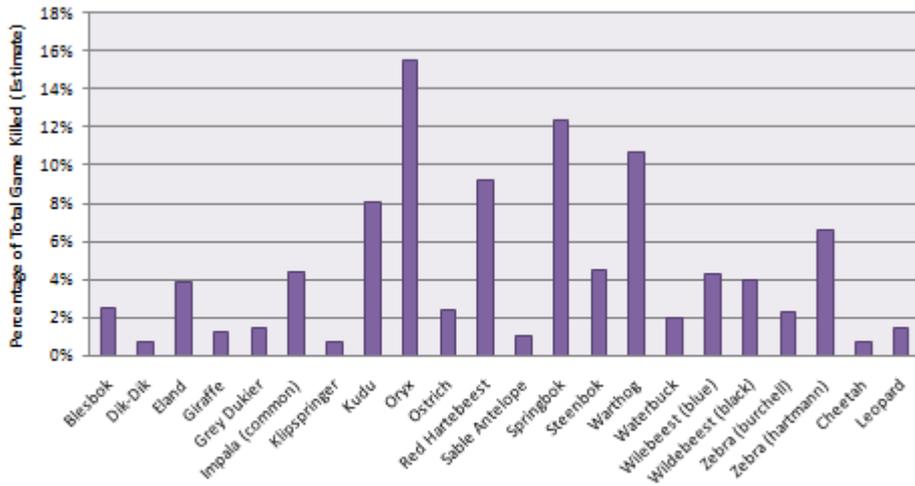
Average Fees (US Dollars)
Avg. Daily Fee $282

Cheetah	$2,977	Oryx	$568
Eland	$1,630	Red Hartebeest	$586
Impala (black-faced)	$1,780	Springbok	$435
Kudu	$1,002	Warthog	$413
Leopard	$3,634	Zebra (Hartmann's Mtn.)	$948

Factors Most Influencing Trophy Hunting Rates
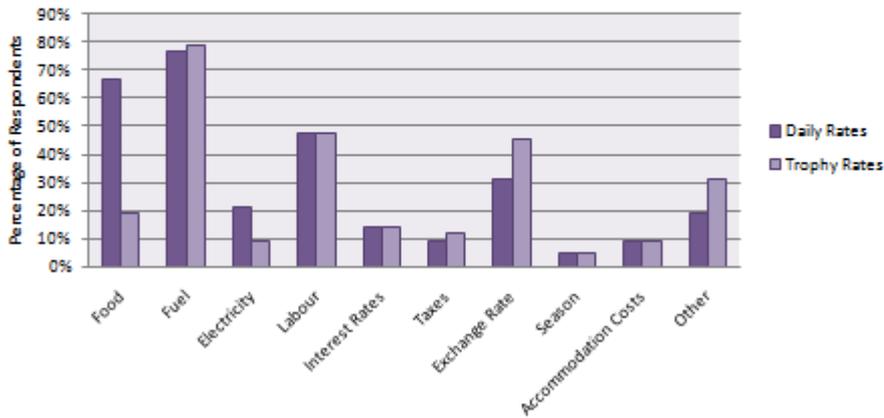
Vehicle Rental Sector

Data provided from a sample of 7 vehicle rental businesses

Vehicle Rates	
Vehicle Type	**Average Advertised Rate**
Small Sedan	N$ 535
Medium Sedan	N$ 588
Luxury Sedan	[insufficient data]
SUV's/4x4	N$ 989
Vans/Buses	N$ 1,289

The average number of billed days per rental this quarter was:

8 Days

Total Number of Billed Days

251+ 14%
151-250 14%
0-50 43%
51-150 29%
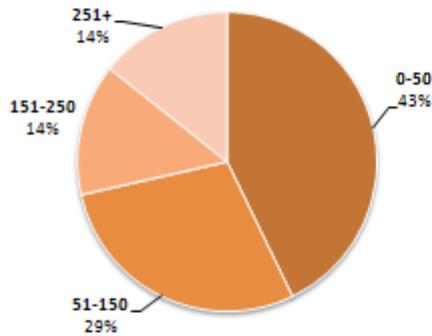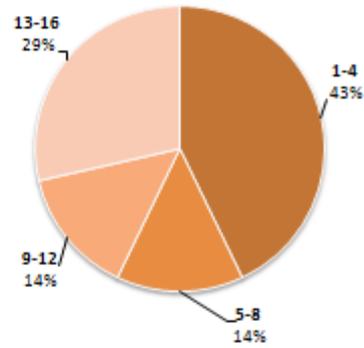
Average Length of Rental (days)

13-16 29%
1-4 43%
9-12 14%
5-8 14%

Factors Most Influencing Vehicle Rental Costs

(Bar chart — Percentage of Responses vs. factors: Fuel Prices ~57%, Labour Costs ~72%, Season ~57%, Interest Rates ~29%, Taxes ~43%, Exchange Rate ~57%, Other ~14%)
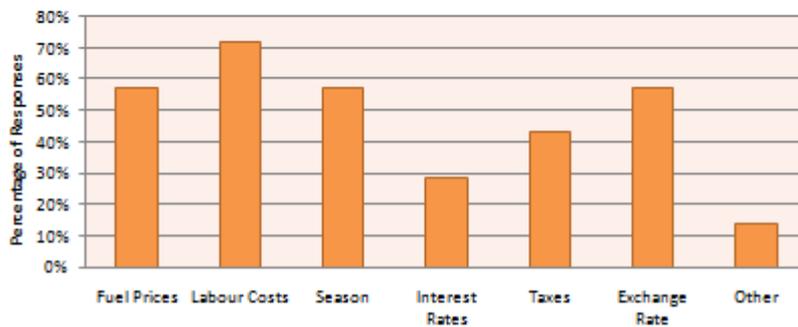
Tourist Statistics

Tourist Arrivals
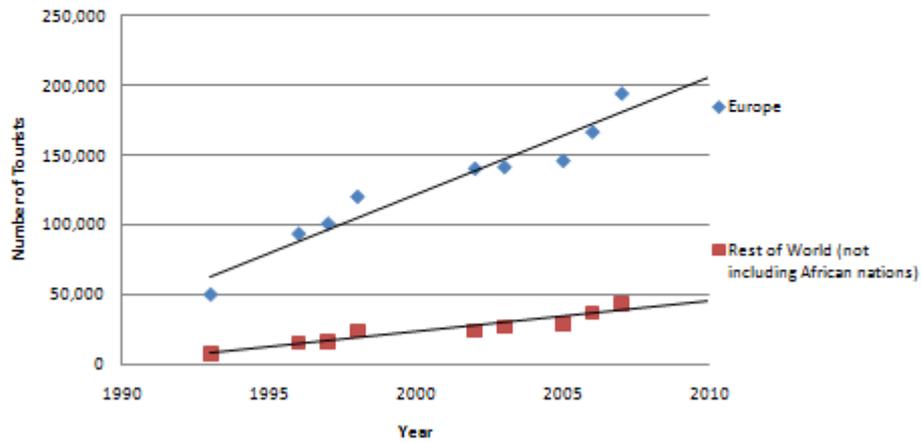
If current trends continue, then the number of tourists from Europe is expected to increase by 4.0% next year and 4.4% from the rest of the world (not including African nations).

Number of Trophy Hunters from... *

Africa   Europe   Rest of the World
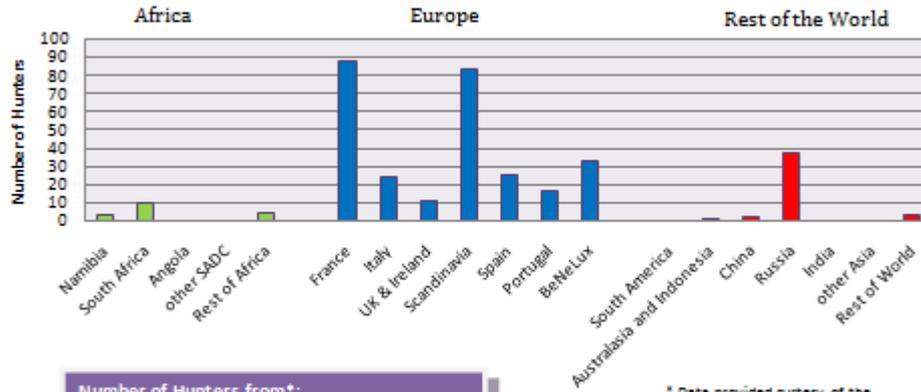
Number of Hunters from*:	
German Speaking Nations:	828
other Europe:	161
USA & Canada:	294
Note: These regions are not shown on the above graph	

* Data provided curtesy of the Ministry of Environment and Tourism

Frequency of Tour and Safari Clients From...
based on a Sample of 31 tour and safari operators
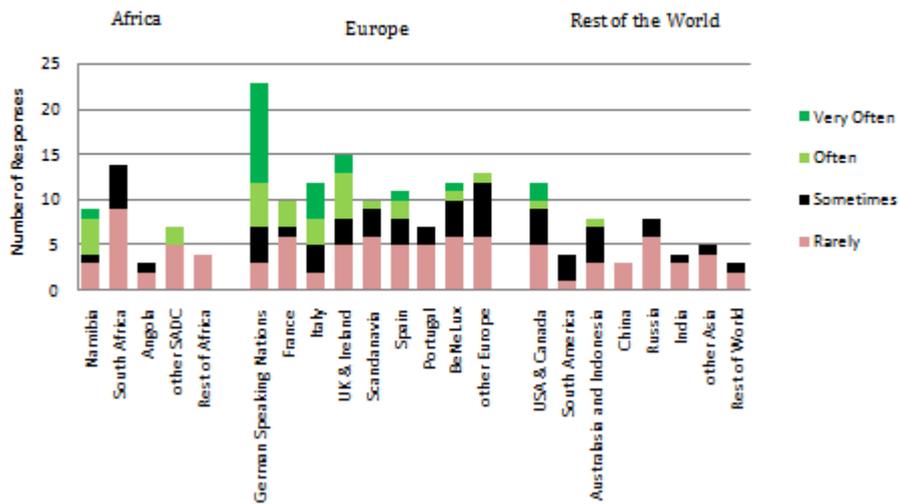
Africa   Europe   Rest of the World

Legend:
- Very Often
- Often
- Sometimes
- Rarely

Accommodation Client Nationality †

Africa   Europe   Rest of the World
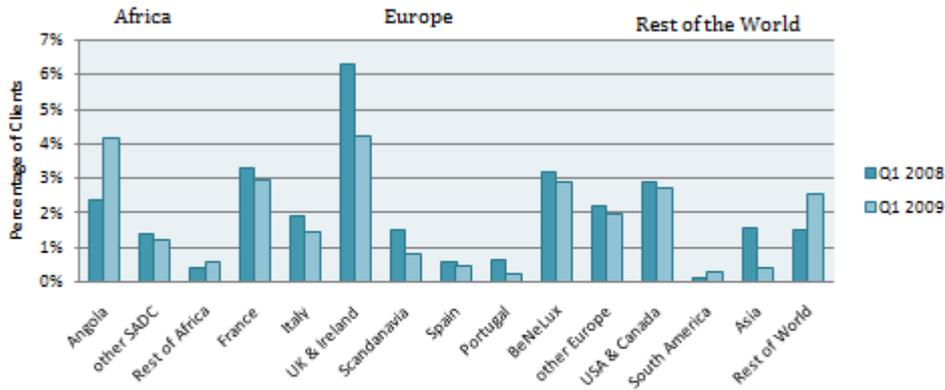
† Data provided courtesy of the Hospitality Association of Namibia

Accommodation Client Nationality †
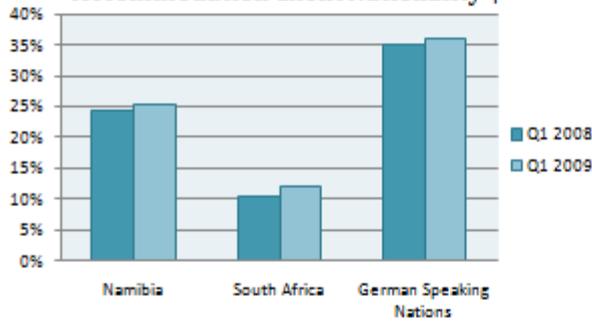
Frequency of Vehicle Rental Clients from...
based on a sample of 7 vehicle rental businesses

Africa   Europe   Rest of the World
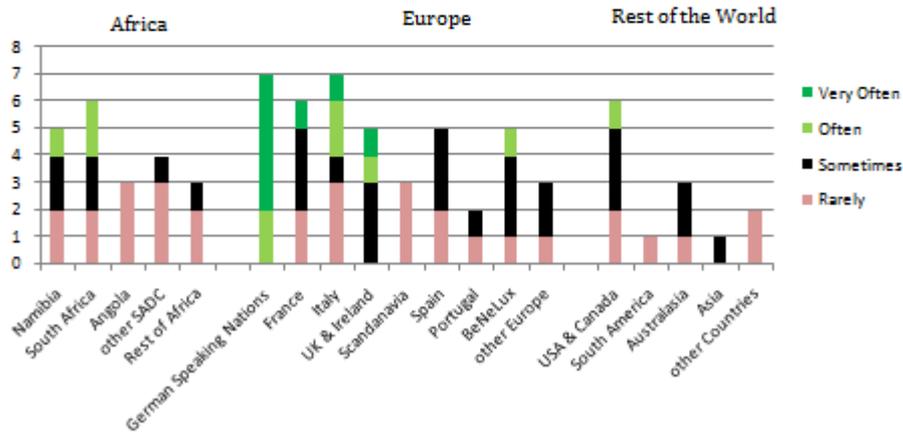
Appendix E: Body of Initial Email

Subject Line: NTB Tourism Barometer

Greetings!

This email serves to inform you about the NTB's seasonal Tourism Barometer.

What is a tourism barometer? It is the final product of a tourism tracking system which collects and publishes data from various tourism sectors. It will provide quarterly updates on:

- Business performance within various tourism sectors

- Multiple statistics on tourists (number, nationality, etc.)

- Market predictions for upcoming seasons

If this wealth of knowledge sounds interesting to you, we urge you to be a part of this barometer. All it takes on your part is the completion of a Tourism Data Entry Form (TDEF) that the NTB will email out quarterly (see attached). This Excel file can easily be completed in about <u>5 minutes</u> and *does not* require a detailed lookup of any statistics. Your confidentiality will be maintained.

To participate:

1. Fill out the attached Excel file

2. Save the completed form with your business name in the file name

3. Send that file back to this address (barometer@namibiatourism.com.na)

You will be given two weeks to complete and return the form. Those who participate will have FREE access to the barometer for the corresponding quarter within just <u>a matter of weeks</u>. An example of the barometer produced last year is also attached. The new barometer will be a similar but much improved version.

This process will be repeated every quarter so that the barometer is constantly being generated to highlight up-to-date tourism market performance.

We thank you for your time and participation with the NTB tourism barometer.

Sincerely,

 The Namibia Tourism Board
Garret Doe
John Meade
Phone: +061-290-6032

Appendix F: Body of Reminder Email

Subject Line: NTB Barometer: Reminder

Hello again!

We wanted to thank all the many businesses that have completed the Tourism Data Entry Forms and returned them to us. We've had a great response rate so far. The more businesses that respond, the more accurate and valuable the information on the barometer will be!

We just wanted to remind those businesses who have not yet completed the questionnaires, and would like to, that there is about a <u>week left until the deadline</u> for this quarter.

Remember, the NTB barometer provides quarterly updates on:

- Business performance for various tourism sectors (Accommodation, Air Charter, Tour and Safari, Trophy Hunting, and Vehicle Rental)
- Multiple statistics on the tourists themselves (number, nationality, etc.)
- Market predictions for upcoming seasons

If you want to participate, just fill out the attached file. It shouldn't take longer than <u>5 minutes</u>, and does not request any information you would have to look up! All your submitted answers will be kept completely confidential on an individual level.

To participate:

1. Fill out the attached Excel file
2. Save the completed form with your business name added to the file name
3. Send that file back to this address (barometer@namibiatourism.com.na)

Those who participate in the survey will receive a <u>FREE</u> copy of the barometer once all the questionnaires have been collected. This is intended to be the first of many quarterly barometer reports from the NTB. This process will be repeated every quarter so that the barometer is constantly being generated to highlight up-to-date tourism market performance.

We thank you for your time and participation.

The NTB Barometer team,
Garret Doe
John Meade
Phone: +061-290-6032

Appendix G: Projections

DEFINITION OF VARIABLES:

Tourism Arrivals—the number of tourists that arrive in Namibia.

In the following graphs, all tourist arrival statistics were taken from the Ministry of Environment and Tourism's "Annual Visitor Arrival Statistics" reports which are available for every year between 1993 and 2007 (with the exception of 2004).

Time—in the following graphs, time is represented as a year

Percent Changes in Total Tourist—the change in the number of tourists from the previous year

GDP—gross domestic product

GDP PPP (purchasing power parity)—"the sum value of all goods and services produced in a country valued at prices prevailing in the United States" (index Mundi, 2008).

GDP per capita PPP (purchasing power parity)—per capita GDP PPP is simply GDP PPP for a given year divided by the population of the country for that given year (index Mundi, 2008).

In the following graphs, GDP per capita PPP data was obtained from the website index Mundi (2008).

GRAPHS:

Tourist Arrival Statistics—This graph plots the total number of tourists coming to Namibia in addition to plotting the number of tourists from Africa, Europe, and Other Countries. The R^2 value for each of the trend lines is greater than 0.9, meaning that the trend line is an accurate estimate of the data. Due to the accuracy of the trend line, forecasting can be done with this graph. These basic projections can be calculated algebraically by equating the slope (i.e. the first number of the equation with an "x" at the end) of the trend line to the number of tourists more Namibia receives per year. For example, if the equation showed a slope of 100 for the number of tourists from Europe that means that, on average, 100 more European's come each year than the year before.

Tourist Arrival Statistics

$y = 46032x - 9E+07$
$R^2 = 0.9194$

$y = 30978x - 6E+07$
$R^2 = 0.9359$

$y = 8336.4x - 2E+07$
$R^2 = 0.9306$

$y = 2126.6x - 4E+06$
$R^2 = 0.9006$

Legend:
- ◆ Total
- ■ Africa
- ▲ Europe
- ✕ Other

(Y-axis: Number of Tourists, X-axis: Year 1992–2007)
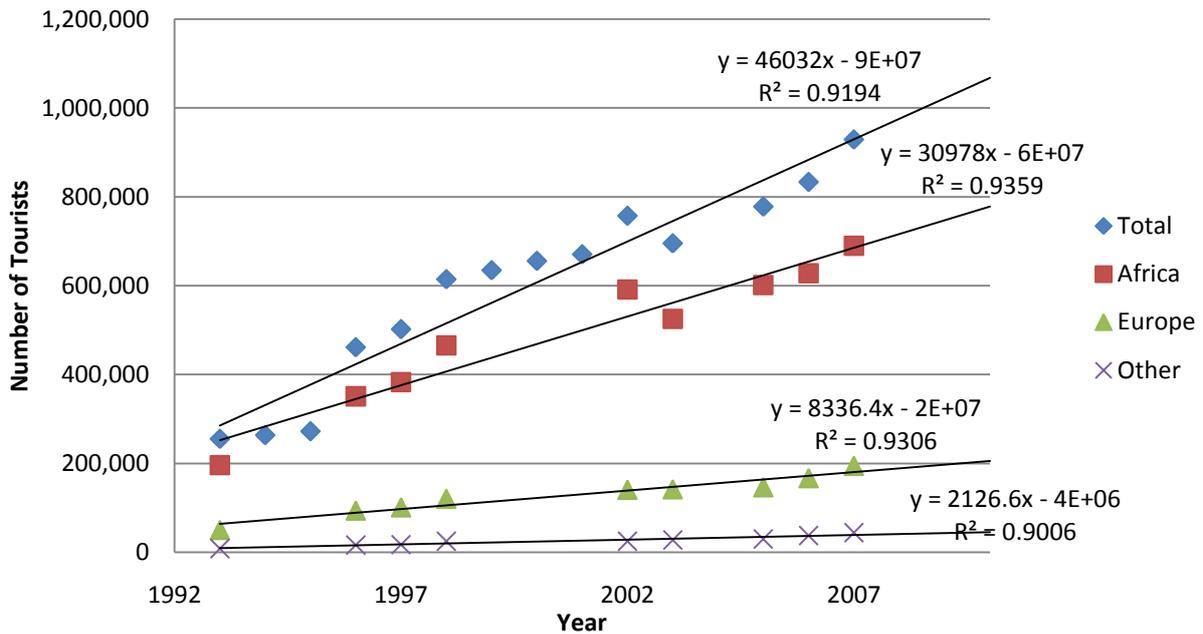
Percent Change in Total Tourists—this graph compares the number of tourists from a given year to the year before it. Due to the fact that the number of tourists is virtually always increasing from year to year, we decided to graph the changes in the <u>rate of increase</u> from year to year. For example the graph below shows a sharp increase in the percentage more tourists Namibia got in 1996 when compared to 1995. A more in depth study into this topic may reveal a specific reason why the number of tourists drastically increased in 1996. Understanding factors which cause fluctuations in tourist arrivals may assist in making projections.

Percent Change Total Tourists

(Y-axis: Percent Change in Tourists, X-axis: Year 1993–2007)
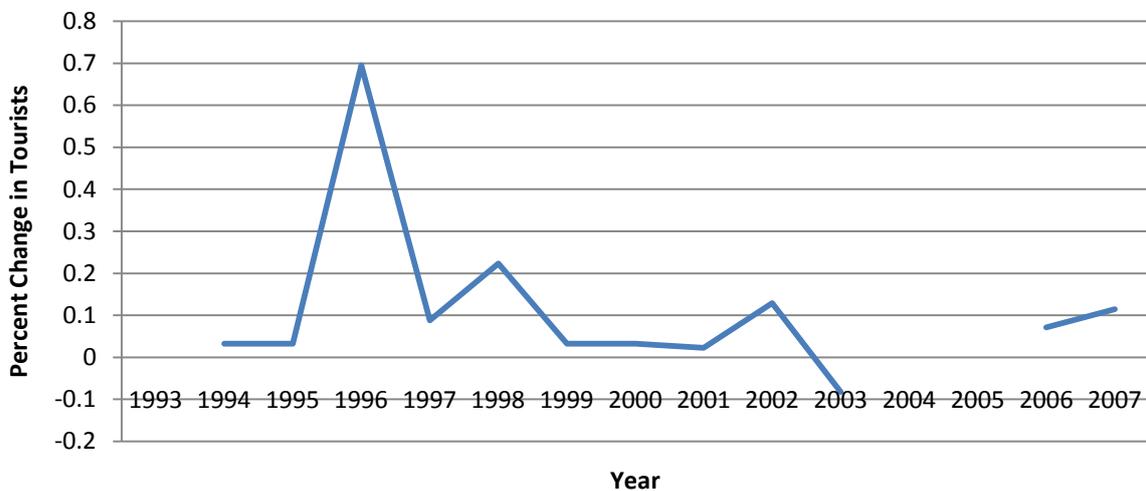
GDP per capita PPP vs. Tourist Arrivals—these graphs proved to be the most interesting of the ones we generated. Our methodology outlined the process of establishing a relationship between tourist arrivals and some external factor. GDP per capita PPP is basically the average purchasing power of a given currency per citizen; it takes into account factors such as national GDP, exchange rate, and population. This statistic proved to have a very close relationship with the number of tourists arriving in Namibia from a given country or region. These scatter plots were created by graphing tourists arrivals against the GDP per capita PPP for that year. The following graphs illustrate this finding. Further research can determine whether or not this is causation or simply correlation. However, if is causation, than monitoring the GDP per capita PPP of various nations may be of great assistance in making projections.

World GDP per capita PPP vs Total Tourists

$R^2 = 0.9103$

World GDP per capita PPP vs *(x-axis: 500,000 to 1,000,000)*

EU per capita PPP vs. # European Tourists

$R^2 = 0.999$

EU per capita PPP vs *# European Tourists*
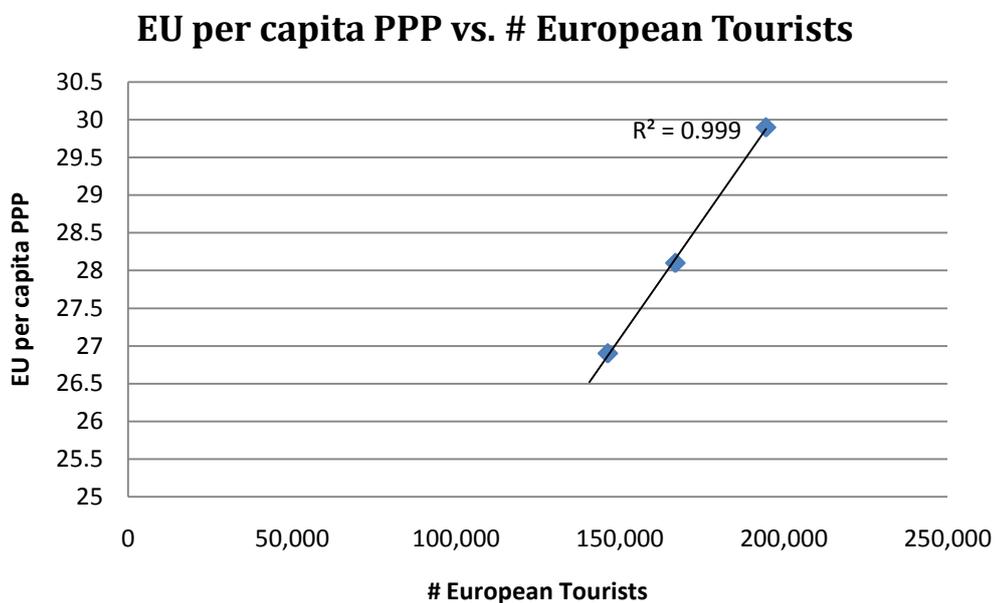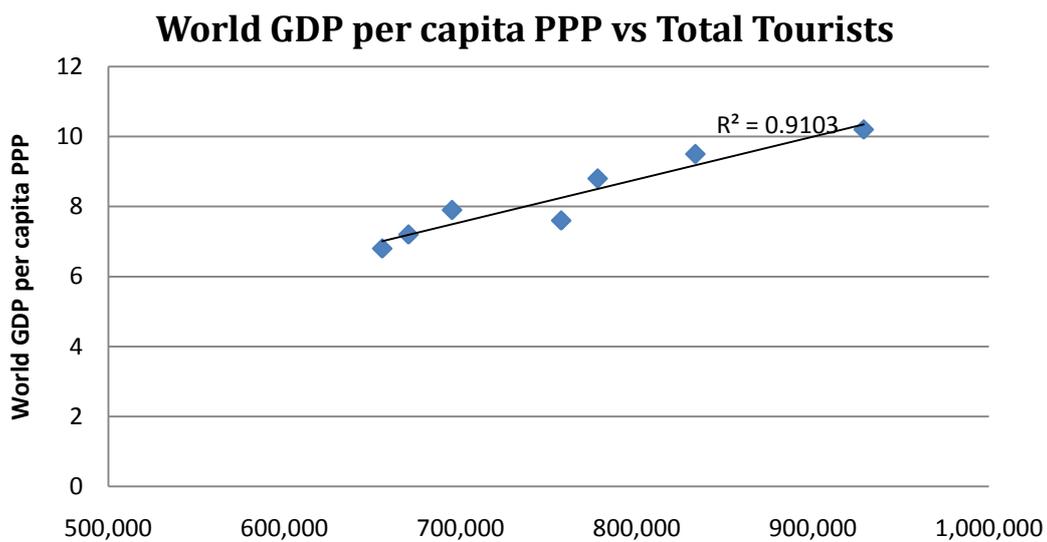
USA per capita PPP vs. US Tourists

R² = 0.9126

USA per capita PPP
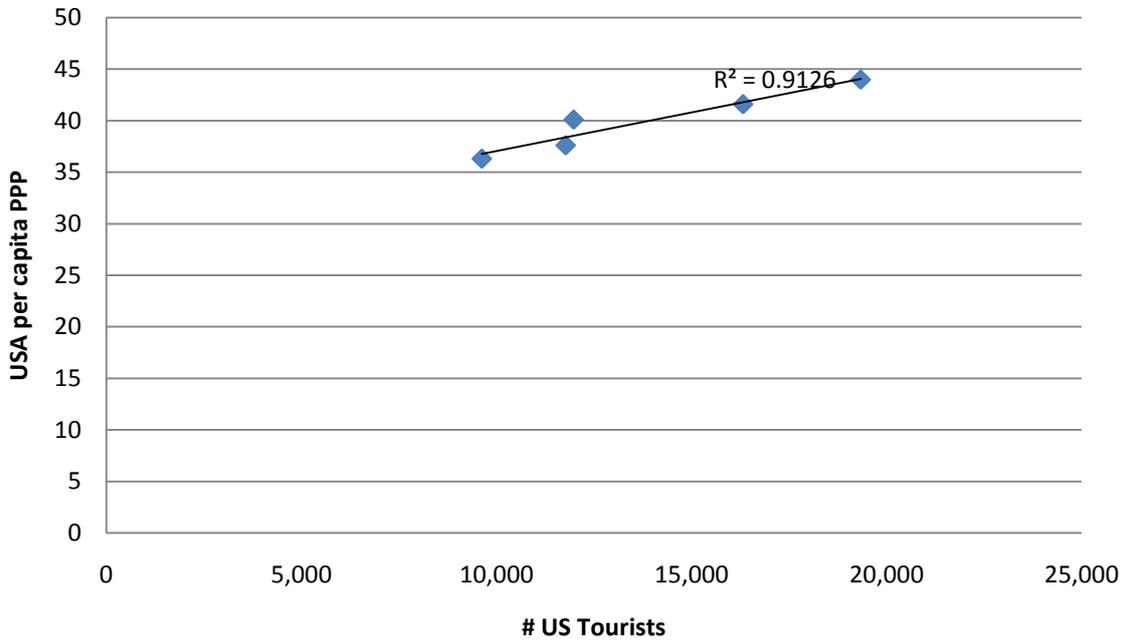
US Tourists

Germany per capita PPP vs. German Tourists

R² = 0.8566

Germany per capita PPP

US Tourists
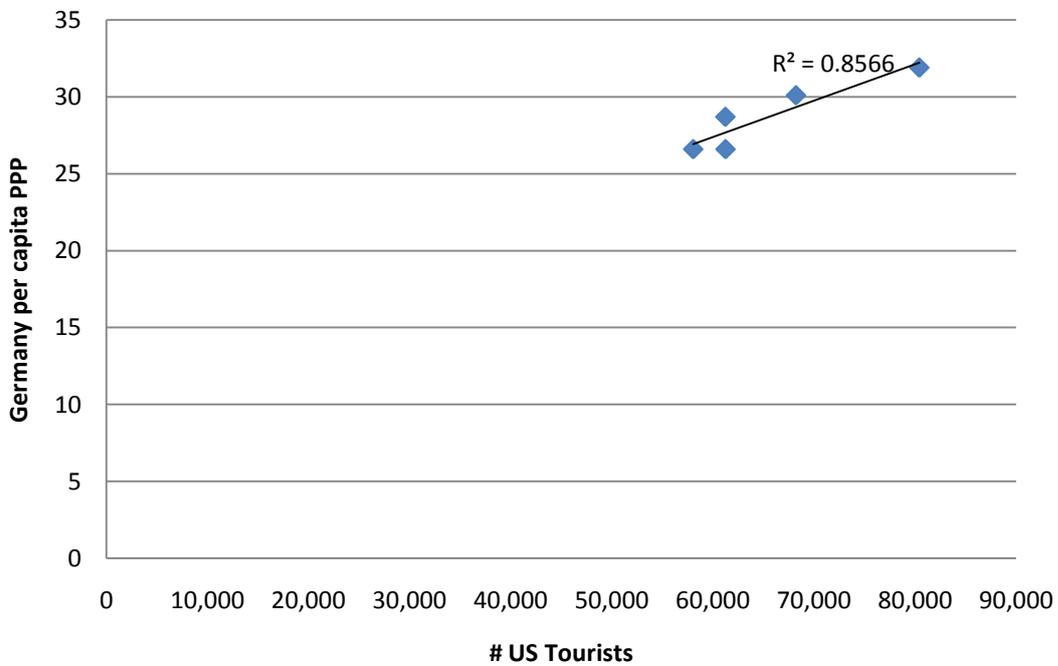
Easy Guide to Making a NTB Barometer

Garret Doe: gdoe@wpi.edu

John Meade: jmeade@wpi.edu

Welcome to the barometer creation guide.

We wanted to make it really simple for the NTB to create barometers. The process is already quite automated, but since there are many months between quarters, we realized all of the steps would be difficult to memorize. So we made this easy-to-follow, step-by-step guide.

Also, should the NTB decide to teach or hire someone else to work the barometer creation process, this guide will come in handy as a training tool.

By following the steps listed in the following chapters, you will learn how to successfully create a tourism barometer.

Let's get to it.

Barometer Creation Process

I.   **Modify the TDEFs**

II.   **Email each sector**

III.   **Import the TDEFs**

IV.   **Complete the Template**

v.   **Distribute the Barometer**

Modify the TDEFs

The TDEF (Tourism Data Entry Form) is used to collect data from each business.

Before the TDEFs can be emailed out to each sector, each has to be modified very slightly. Each of the dates circled below in red should be updated to represent the proper quarter and deadline:

This must be done for the 4 TDEFs of each sector, and also the MET questionnaire.

After the changes have been made, save the file according to the sector, quarter, and year:
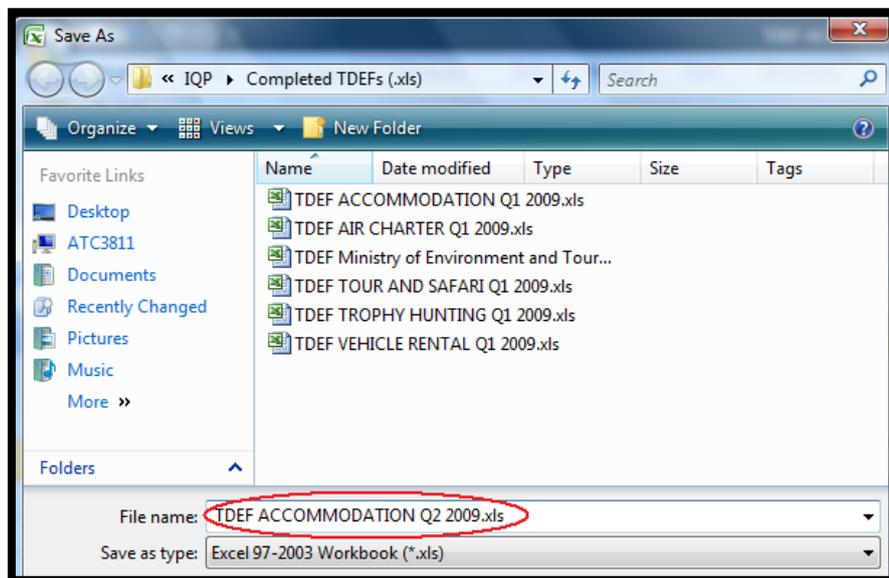
Store each of these blank TDEFs somewhere they can be easier accessed again.

Email Each Sector

Now that each of the TDEFs has been modified, they are ready to be emailed to each sector.

A distribution list is a collection of email addresses—an email to the distribution list will reach each of the addresses in the collection. Distribution lists have already been created for each sector containing all of the many businesses within that sector, but they may need modifying to add new contacts or remove those that are out of date.

To add/edit/remove contacts, click on Contacts in the lower left of the screen, double-click the distribution list you wish to modify, and then either click the "add new" button or select one of the existing contacts from the list to edit/remove:
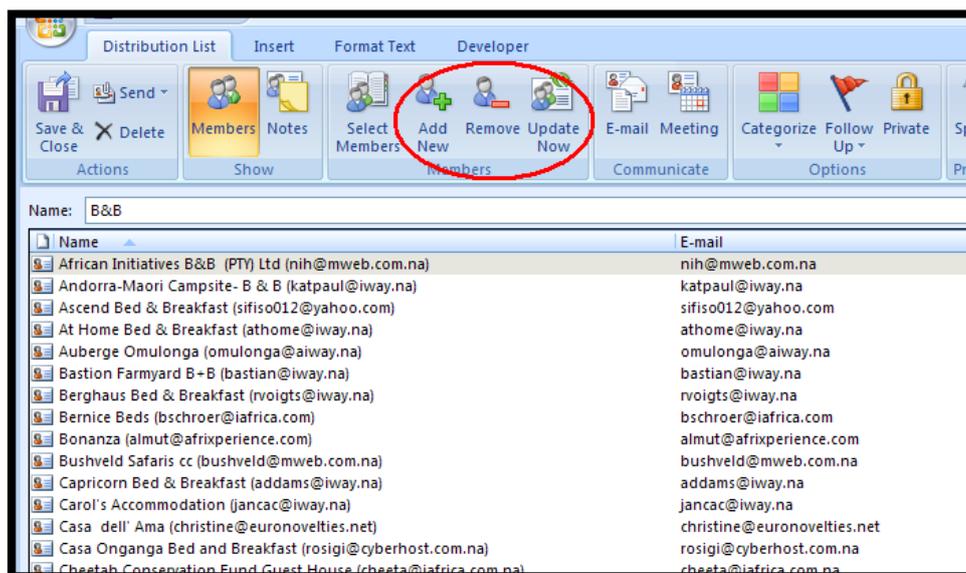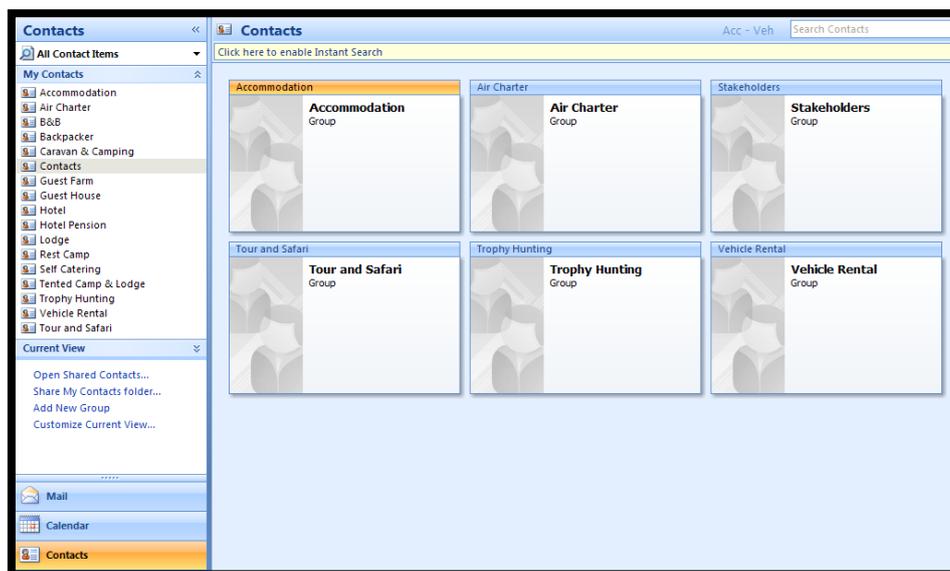
Once you are satisfied with the distribution lists, it is time to send out the emails. Send <u>one email per sector</u>, attaching the corresponding TDEF. The body of the email should highlight the qualities of

a tourism barometer while kindly requesting businesses to complete and return the TDEF. Shown here is an example of the email header:
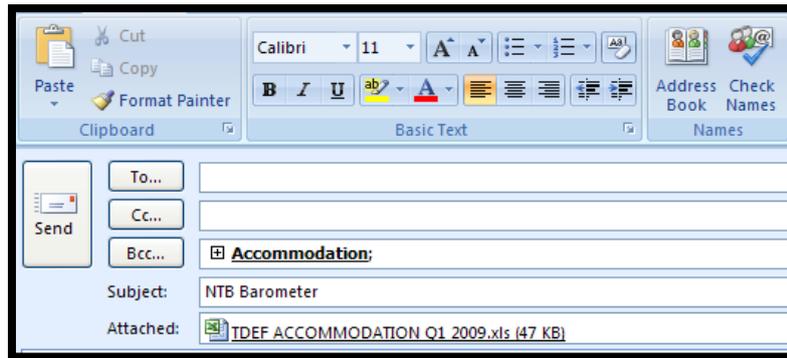
And here is the email body we used for the first questionnaire distribution. Use this letter to get ideas for what would go well with the TDEFs of future quarters:

Greetings!

This email serves to inform you about the NTB's seasonal Tourism Barometer.

What is a tourism barometer? It is the final product of a tourism tracking system which collects and publishes data from various tourism sectors. It will provide quarterly updates on:

- Business performance within various tourism sectors
- Multiple statistics on tourists (number, nationality, etc.)
- Market predictions for upcoming seasons

If this wealth of knowledge sounds interesting to you, we urge you to be a part of this barometer. All it takes on your part is the completion of a Tourism Data Entry Form (TDEF) that the NTB will email out quarterly (see attached). This Excel file can easily be completed in about 5 minutes and *does not* require a detailed lookup of any statistics. Your confidentiality will be maintained.

To participate:

1) Fill out the attached Excel file
2) Save the completed form with your business name in the file name
3) Send that file back to this address (barometer@namibiatourism.com.na)

You will be given two weeks to complete and return the form. Those who participate will have FREE access to the barometer for the corresponding quarter within just a matter of weeks. An example of the barometer produced last year is also attached. The new barometer will be a similar but much improved version.

This process will be repeated every quarter so that the barometer is constantly being generated to highlight up-to-date tourism market performance.

We thank you for your time and participation with the NTB tourism barometer.

Sincerely,

The Namibia Tourism Board
Garret Doe
John Meade
Phone: +061-290-6032

After one week, send a reminder email, thanking those who have already participated while encouraging those who have not yet send back their questionnaires. Attach the TDEF again to assure that businesses have a copy of it.

Import the TDEFs

Two weeks have passed, and now the deadline is up. It is time to store all returned questionnaires into the barometer database.

First, go through all of the emails containing returned TDEFs. Save the attached file in a folder somewhere you can access it again. We recommend creating folders with the same name as the sectors, so they are easier to keep track of:
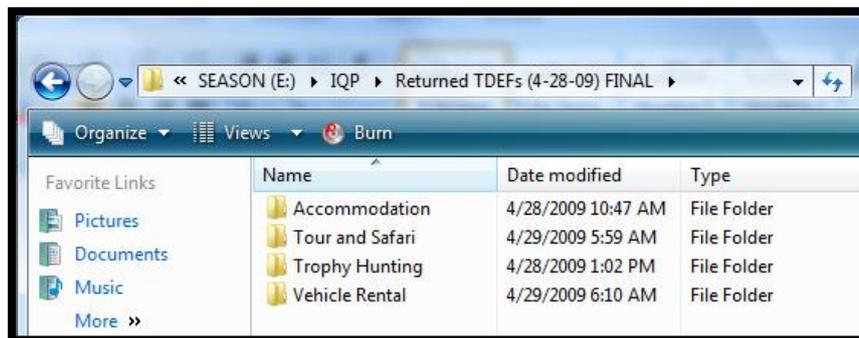
Some businesses may not have attached an Excel file, but instead embedded the questionnaire within the email. This type of response cannot be automatically imported. You can either reply to the email, requesting the business send it back as an attachment, OR open up a blank TDEF and copy all of the answers over, saving it into one of the folders shown above.

Once all of the TDEFs have been saved into folders, the import process can begin.

Open up the Microsoft Access database, titled "Barometer Database". You should see the following:
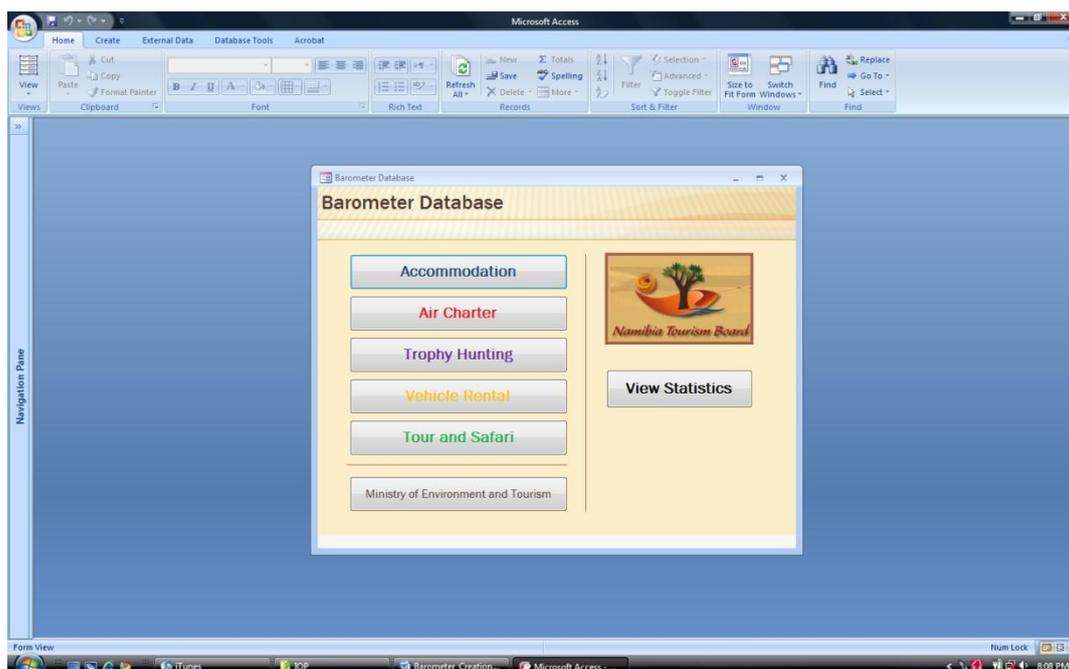
At the top, click the tab named "External Data", and then under Import, click "Excel":

You should be prompted with the screen below.
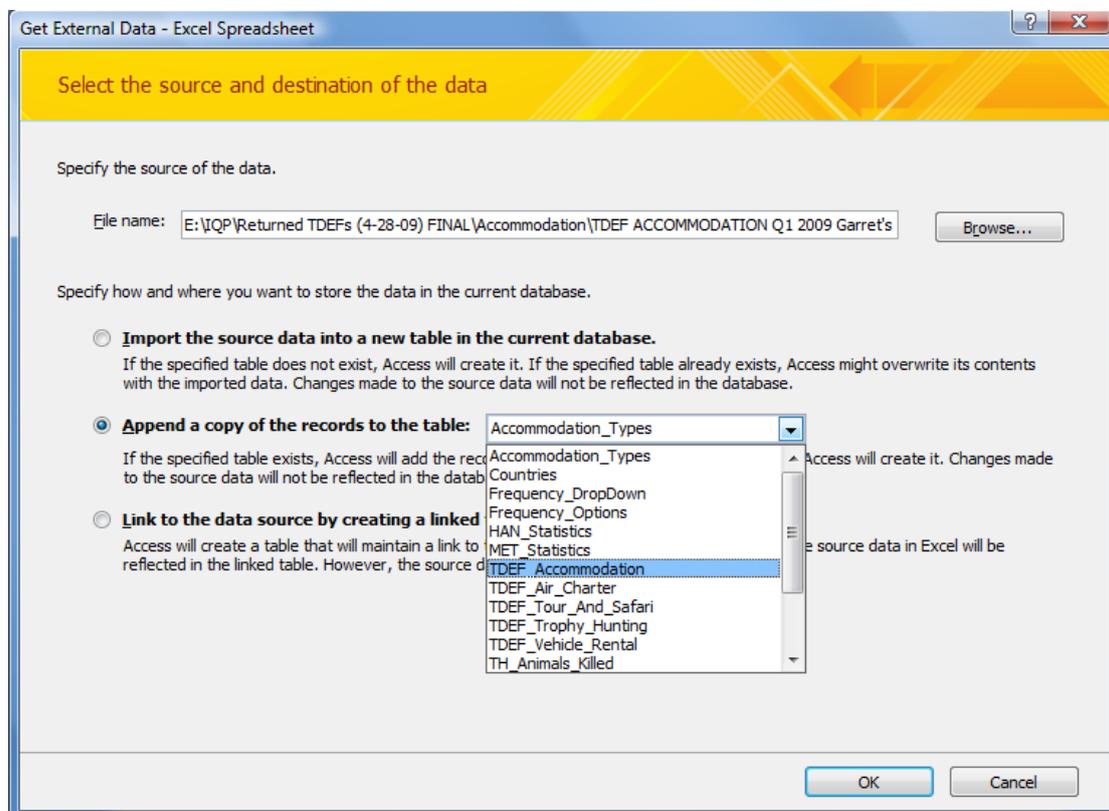
Navigate to the file you would like to import by clicking "Browse" in the top right. After you've located the file (you should have found the TDEF you want to import), choose the option called "Append a copy of the records to the table:", and select the appropriate table from the drop-down list. The only tables you should be importing to are prefixed with "TDEF_".

When you are finished, press OK.
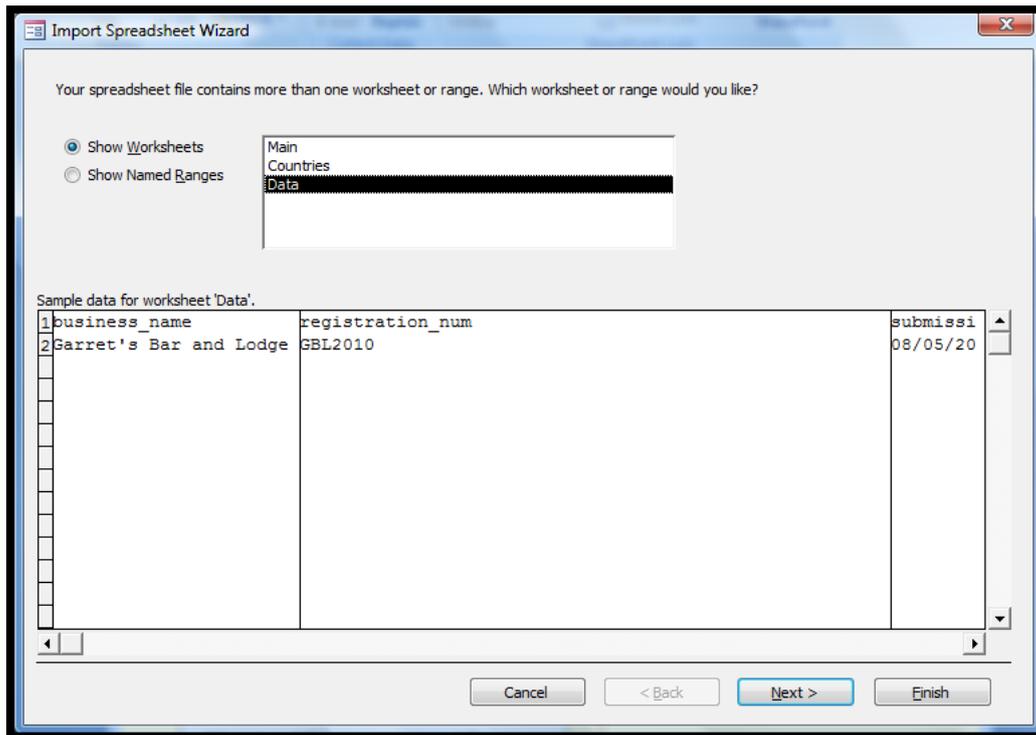
The next screen asks about which part of the Excel file to import. Click on "Data" in the list at the top. This is the spreadsheet that Access can read. Then, click "Finish" (you can skip Next).
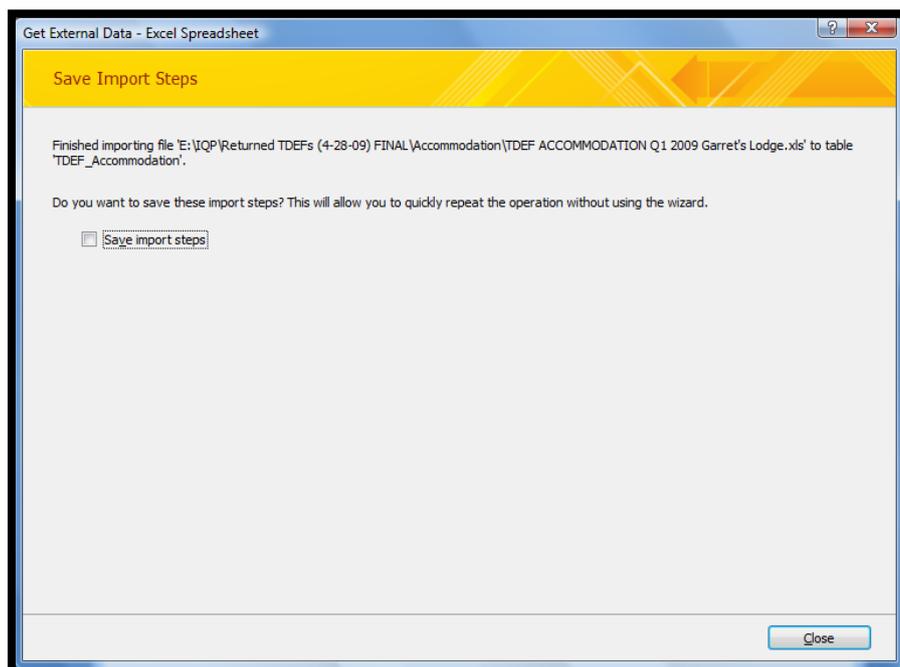
The last screen asks if you would like to save the import steps. Unfortunately, Access would only save the steps for this particular TDEF file, and you don't want to import the same TDEF again. Leave the box unchecked and press "Close".

You have successfully imported a TDEF! You must repeat this process again for each of the TDEFs until they are all imported into the database.

It may be easy to lose track of which TDEFs have been imported and which have not. Use any method you like to help you remember, but we suggest these possibilities:

Make a list

Organize the files in a list, changing the size of the window so that you can only view 10 files per column. Get out a piece of paper and make tally marks after each import, until you reach 10. Then you'll know you're ready to move onto the next column.
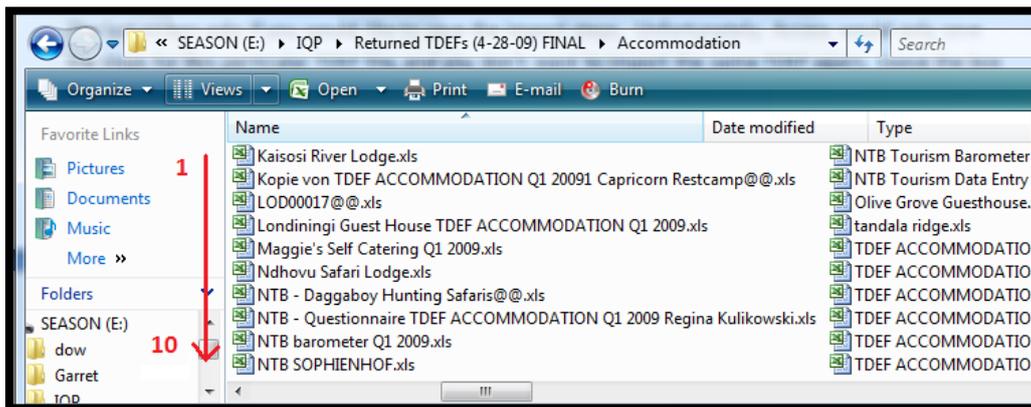
Rename the files

Change the file name of each TDEF you've already imported. Use any keyword you like to assist you.
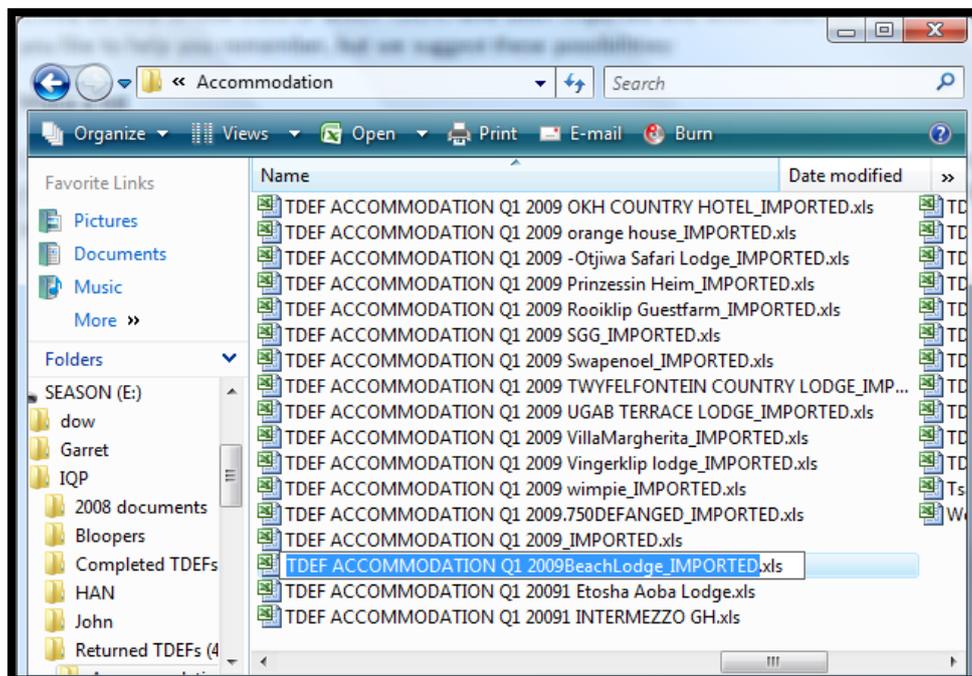
We have been using Accommodation as an example for importing, but you must do the same with the other sectors as well. Make sure to select the correct table to append the records to.

If you choose the incorrect table, or have already imported that TDEF, you will receive an error. Double-check that you haven't imported the record already, and make sure that you selected the correct table on the first screen of the import Excel process.

Complete the Template

All of the returned TDEFs are now stored within the database. Now it is time to create the barometer.

In order to create the barometer, both the Word template and Access database need to be opened. The database automatically organizes all the statistics that the barometer displays. The main tool used in order to create the most of the barometer is right clicking on the graph you with to modify, selecting "Edit Data…" and then modifying the Excel sheet which pops up to include the data from the database. Additionally, some statistics, such as "Average Bed Night Rate," do not require the use of Excel and simply involve manually typing in statistics calculated from Access into the barometer template. First we will go over an example like this and then proceed with examples of creating other graphs for the barometer.

Average Rates:

Click on "View Statistics" on the main form of the database.

This form should appear:
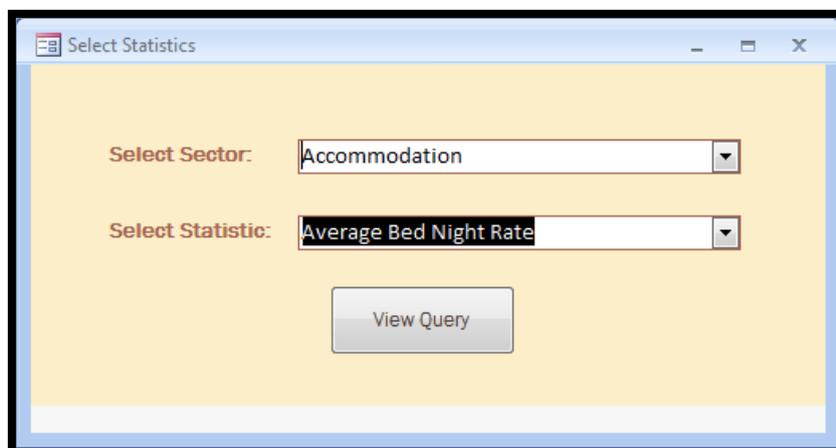
To view a particular statistic, first select the sector it belongs to, and then select the statistic from the second dropdown box. Clicking on View Query will show you the statistic, but first prompts you to enter the Start and End dates to specify a window of time. This enables you to view statistics by quarter, multiple quarters, yearly, etc. Make sure you enter this date in <u>American Date Format (m/d/yy)</u>—month goes first!

Using the selected options in the above picture, Access uses a query to generate these statistics:

AccommodationAvgBedNightRate		
accommodation_type	AvgOfavg_bednight_rate	CountOfavg
Hotel/Hotel Pension/Guest House	$381.96	32
Lodge/Guest Farm/Tented Camp/Resort	$723.26	49
Rest Camp/Self Catering/Campsite/B&B/Backpacker Hostel	$295.42	12

As you can see, the math is done for you. All you have to do is type the numbers directly into the barometer template as shown below.

Average Bed Night Rack Rates

Group 1	Hotel/Hotel Pension/Guest House	N$ 382
Group 2	Lodge/Guest Farm/Tented Camp/Resorts	N$ 724
Group 3	Rest Camp/Self Catering/Campsite/B&B/Backpacker Hostel	N$ 295

This same process is used for the "Average per client per day price" on the tour and safari page, the "Average Fees" table on the trophy hunting page, and "Vehicle Rates" on the vehicle rental page.

Factors Most Influencing Rates Graphs:

This type of graph was used for each sector. To create this graph right click on the graph in the template and select "Edit Data…" Then open up the appropriate statistic in the access database. Enter the data the number of times a factor was selected into the appropriate fields in Excel and the graph is automatically changed. The example below illustrates the accommodation frequency table in excel, with the three sub-sectors represented. Note: DO NOT modify the data in the percentage columns… that data automatically is calculated for you!
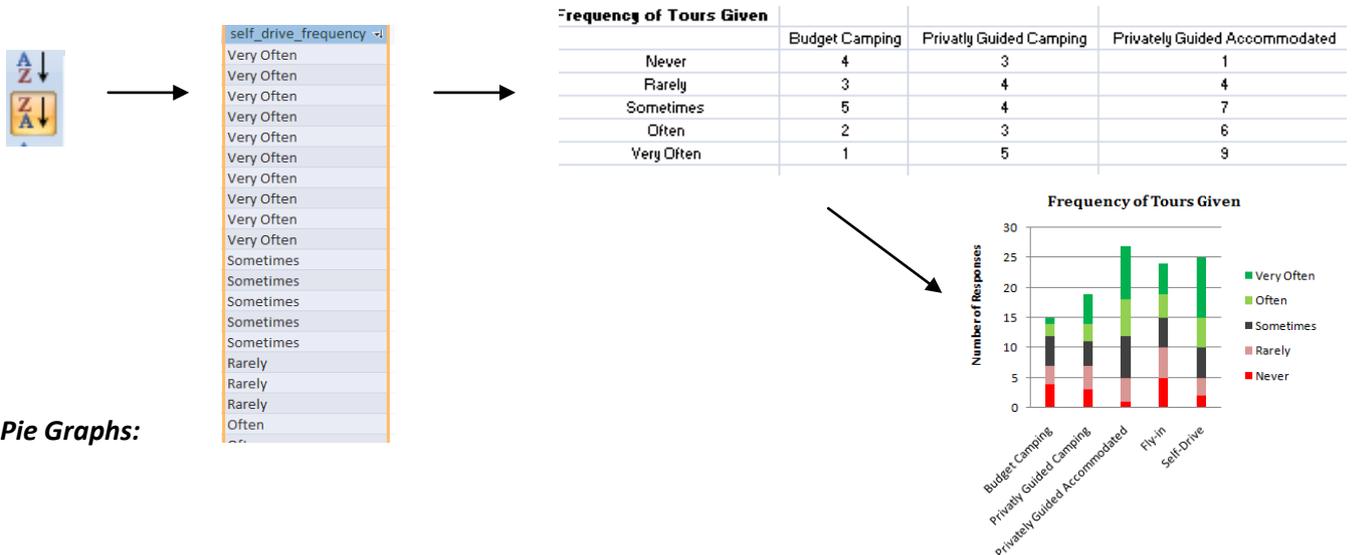
accommodation_type	Food Factor	Fuel Factor	Electricity Fa	Labour Facto
Hotel/Hotel Pension/Guest House	24	10	18	15
Lodge/Guest Farm/Tented Camp/Resort	37	32	21	19
p/Self Catering/Campsite/B&B/Backpacker Hostel	6	4	5	4

Factors Most Influencing Rates

Factors	Group 1	Group 1	Group 2	Group 1	Group 3	Group 1
Food Prices	24	75%	37	76%	6	50%
Fuel Prices	10	31%	32	65%	4	33%
Electricity	18	56%	21	43%	5	42%
Labour Costs	15	47%	19	39%	4	33%
Taxes	4	13%	6	12%	5	42%
Exchange Rate	5	16%	8	16%	1	8%
Season	8	25%	6	12%	1	8%
Other	2	6%	4	8%	3	25%
Total Respondents	32		49		12	

Factors Most Influencing Rack Rates
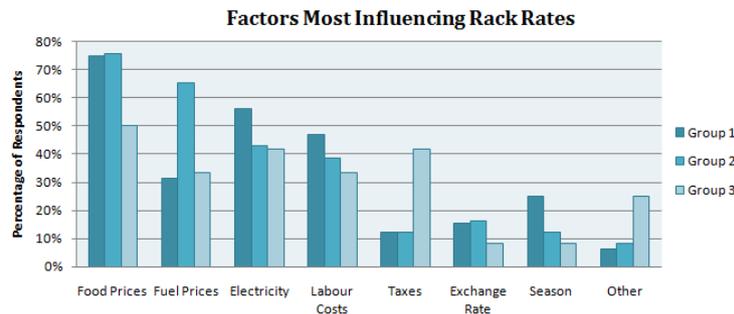
Stacked Bar Graphs:

Stacked bar graphs were utilized where a business owner was asked his opinion on how frequently a business received clients from a certain nation, gave a particular type of tour, etc. In order to modify the template for one of these graphs, first look up the correct statistic in Access. The statistics are simply listed in Access rather than added up or averaged. Thus, you must sort each column individually (select either A→Z or Z→A) and then manually count the number of times a response was selected. Select "Edit Data…" for the appropriate graph, and then fill in the table with the number of times each frequency was selected for each option.

self_drive_frequency
Very Often
Very Often
Very Often
Very Often
Very Often
Very Often
Very Often
Very Often
Very Often
Very Often
Sometimes
Sometimes
Sometimes
Sometimes
Sometimes
Rarely
Rarely
Rarely
Often

Frequency of Tours Given

	Budget Camping	Privately Guided Camping	Privately Guided Accommodated
Never	4	3	1
Rarely	3	4	4
Sometimes	5	4	7
Often	2	3	6
Very Often	1	5	9

Frequency of Tours Given

Pie Graphs:

Pie Graphs follow a similar process to that of stacked bar graphs. Select "Edit Data…" on the appropriate graph. Then look up the proper statistic in Access, sort each column and then enter the number of times an answer was selected in the proper cell in the Excel table.

Game Killed:

Game killed follows a similar process to stacked bar graphs in that there is a table in Excel where the frequency an option was selected is input. After entering this data, Excel calculates the estimate percentage of total kills that a specific trophy represents. Again, do not type anything in the percentage box, which is automatically calculated. If an animal was not hunted this past quarter, blank spots will be on the barometer. In order to remove this, a new graph will need to be created. To do this, simply hold down the CTRL key while selecting all the PERCENTAGES of animals which had been hunted this past quarter (do NOT select the animals themselves or the estimate total). After all the percentages have been selected, click "Insert Column Graph" (choose the standard graph) from the top menu. A graph should appear with bars representing the percentages, but the x-axis should just be a series of numbers. To replace these numbers with the animal names, right click on the axis, click "select data", and then click "Edit" under "horizontal axis." After doing this, hold down the CTRL key while selecting all of the animal names which correspond to the percentages selected and hit enter. The animal names should now be under the percentages.

Front Page:

Because the front page of the barometer is purely text, this should be deleted and rewritten each quarter to represent current industry trends.

HAN Stats:

To utilize HAN stats open up the file "HAN Worksheet" and copy the table. Then open up the most recent HAN report. Open sheet 2 and past the table from "HAN Worksheet" into cell A1. Then select the top to row of the excel sheet and select "copy." Then open up the file "Template File-HAN," right click in cell A1 and select "Paste Special," and then select "Values." This should create the proper graphs in the template file. If you with to compare current HAN stats with the previous quarter or from a year ago, complete the process exactly the same for the other sheet, but only copy the second row into the HAN template. The graphs should then automatically have comparison bar.

MET Stats:

MET stats must be added up and grouped into appropriate categories by hand. After this is done, they should be entered into the appropriate form on the database. To graph MET stats simply open up MET statistic and manually type in the values into the MET Template.
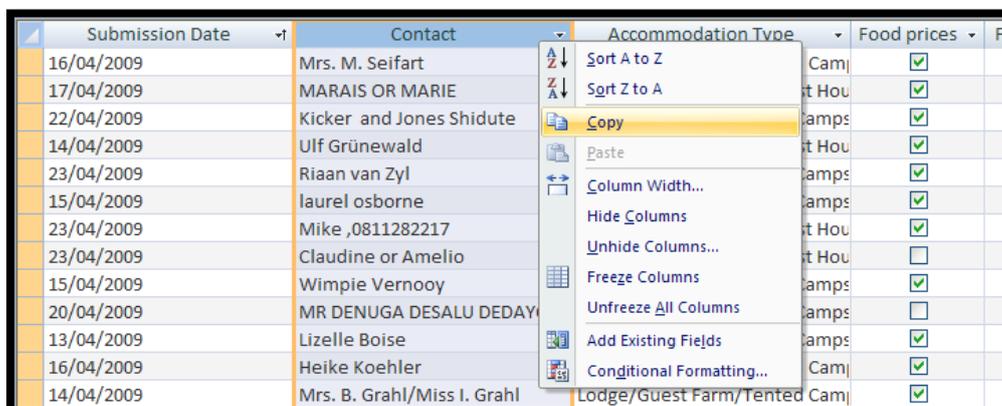
Distribute the Barometer

The barometer is complete, but you are not finished yet! Now you will show the finished product to all the businesses that participated in the survey as well as the tourism industry stakeholders.

If the businesses followed directions, their contact email should be stored within their TDEF record. This will allow you to easily gather all the participants' addresses.

Open up the form for the sector you wish to email to (specify the time window with the pop up boxes). Right-click on the title bar and select "Datasheet View".
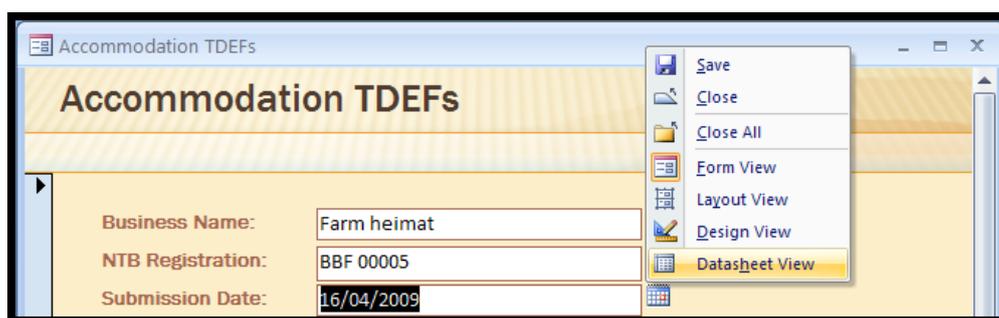
Next, right-click on the Contact column so that all entries in that column are selected, and select "Copy". Note that in the picture, the contacts are people. With the version you will be using, the contacts will all be email addresses. If they are not, then you will have to look up the email address for that business yourself.

Open up a blank Excel sheet, highlight one of the columns, and paste the data. With email addresses, it should look something like this:
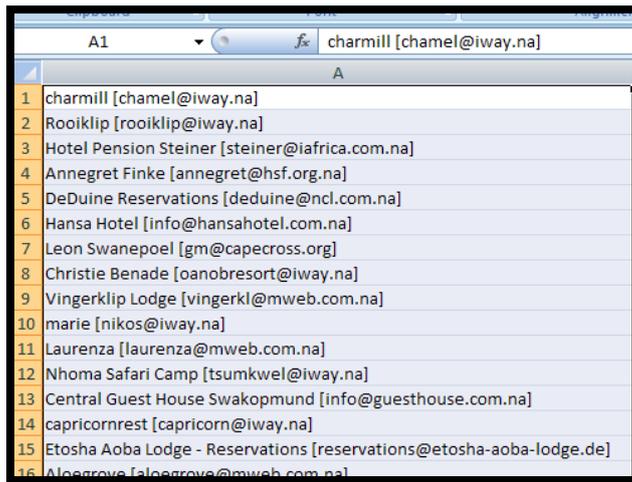
Repeat this task for each sector. You should end up with a file that looks like this, with one column per sector:
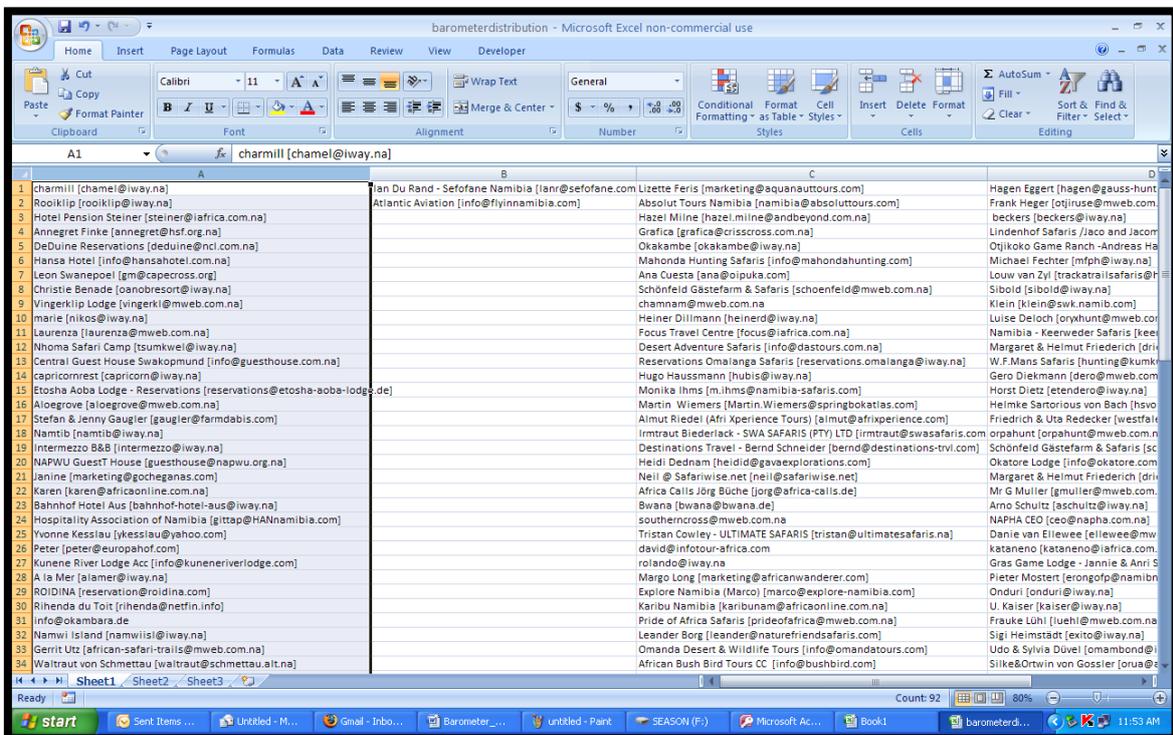
Select all of the emails by clicking the button shown in the picture below. Right-click and press "copy".

Now you can just paste this into the "Bcc" (blind cc) box in your email, and it will be sent to all the participants. Also, don't forget to send it to the Stakeholders (distribution list).

Just attach the barometer file, write up a short email body, and voila! The barometer has been sent. You are done for this quarter!

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