

Tourist Information Kiosks in the City of Windhoek



**Sponsored by:
The City of Windhoek's
Corporate Communications and Tourism Division**

Adam Basilio

Melissa Byrne

Linsley Kelly

Robert Lavado



Tourist Information Kiosks in the City of Windhoek

An Interactive Qualifying Project
Submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
In partial fulfillment of the requirements for the
Degree of Bachelor of Science
By

Adam Basilio

Melissa Byrne

Linsley Kelly

Robert Lavado



Date: May 5, 2006

Submitted to:
WPI Professors:
Chrysanthe Demetry
Richard Vaz

City of Windhoek, Corporate Communications and Tourism Division:
Manfred !Gaeb

Abstract

Tourism is the third largest contributor to Namibia's GDP; however, the Capital City of Windhoek has not yet fully benefited from this. Access to information was identified as a weakness in the 2006 Tourism Strategy; one proposed solution is the implementation of 24-hour touch screen tourist information kiosks. Drawing from our interviews with tourism stakeholders we made recommendations regarding the design and placement of these kiosks. We also determined a maintenance plan and budget to ensure the long-term functionality of the kiosks.

Executive Summary

Currently, tourism is Namibia's third largest contributor to its Gross Domestic Product (GDP), after mining and fishing respectively. Tourism was also predicted to grow by 6.8% per annum between 2000 and 2010 by Wharton Econometric Forecasting Associates (WEFA). However, the capital City of Windhoek has not seen these benefits as much as other regions of Namibia. For this reason the City of Windhoek has developed a strategy for tourism growth.

In 2001 the City of Windhoek conducted tourist surveys, as part of their Tourism Strategy, which identified a number of strengths and weakness of the city as a tourist destination. The limitations which Windhoek hopes to overcome are its difficulty to get around, the lack of information within the city, and the lack of knowledge of the various cultural aspects within Windhoek. The City has two manned information centers which are only open from 07h30 to 16h30 on weekdays; however, these limited hours are problematic for many tourists.

One of the solutions the City has identified to address these weaknesses is the implementation of 24 hour touch screen information kiosks throughout the city. Also, partnership with local banks and Telecom Namibia could provide a one-stop visitor information center. The goals of our project were to recommend feasible design and location for the placement of these kiosks as well as to develop a sustainability plan which would address both maintenance and financial support. To address these goals our objectives were to analyze tourists' expectations of current information services, to determine suitable locations and structures for the kiosks, and to ensure the sustainability of the kiosks.

Suitable Kiosk Locations

In order to determine suitable locations for kiosk placement, we interviewed 50 tourists throughout the City of Windhoek in various locations of tourist attraction. We also conducted a number of site visits to areas of tourist interest to gauge their suitability for kiosk placement. Additionally, to investigate the option of creating a "one-stop visitor information center" we interviewed bank managers of Bank Windhoek and Standard Bank, and the marketing manager of Telecom Namibia to gauge their interest in collaboration on such a project. We also interviewed various city officials to establish the City's ability to maintain the kiosks as well as to determine the safety within the city.

From interviews with the managers of Telecom Namibia, Standard Bank, and Bank Windhoek we found that Standard Bank has four ATMs which they are currently looking at placement for; once our recommendations are finalized they will review the locations we recommend and will consider placing these ATMs nearby. Telecom

Namibia assured us that once locations were determined that those areas would be equipped with a payphone. Through our tourist interviews we determined that placing a kiosk near an ATM, telephone, major accommodations, bureau de change, or a current information center would be desirable. We also determined that it was important the kiosks be placed in a visible and central location within a well lit, high tourist traffic area that is available 24 hours a day, to maximize the tourist usage and safety. Finally, since most kiosk systems are not suited for outdoor locations, indoor locations or partially indoor locations were reviewed. From this research we determined the following location criteria for kiosk placement:

- **High tourist traffic**
- **Well lit**
- **Accessible 24 hours per day**
- **Visible/central locations**
- **Near ATMs and/or telephones**
- **Near a major accommodation**
- **Near a bureau de change**
- **Near a current information center**
- **Protected from the elements**

These criteria were then used to evaluate seventeen different locations throughout the City of Windhoek. Based on our site visits and interviews with tourists, banks, Telecom Namibia, and city officials, the locations we recommend for kiosks are:

- **Post Street Mall Main Walkway-** *With the high tourist traffic in the Post Street Mall, and a current information center being located here, we recommend that a kiosk be located in this area.*
- **Independence Avenue Information Center-** *This location is at a current information center; placement outside this location is advised as it helps overcome the limitation of the center's hours.*
- **Kalahari Sands Mall-** *The Kalahari Sands Hotel is the second largest hotel in the City of Windhoek and is a stop on many organized tours.*
- **Safari Court and Hotel –** *The Safari Court is the largest hotel in Windhoek and a large number of conferences are held at the Safari Conference Center; this would allow for the parastatal visitors who stay at the hotel to get information.*
- **Hosea Kutako Airport –** *Hosea Kutako is the entry point of many travelers entering Windhoek by air.*
- **Maerua Mall-** *The Maerua Mall is the largest shopping complex in Windhoek.*

Information Content of Kiosks

To analyze tourists' expectations of current information services we also drew from our tourist interviews. From the interviews we determined what types of information tourists are looking for. We found that tourists within the City of Windhoek were interested in a variety of information, particularly the attractions and historical and cultural aspects of the city.

The City currently possesses a database which it operates in its two manned information centers. It contains many listings of the types of information tourists are currently looking for. This database is currently organized into 81 main categories. These categories are both excessive and too specific for use in a kiosk setting. From our analysis of the categories currently in the database as well as information that tourists are currently looking for we were able to establish nine main categories. The database's current 81 categories can be combined into the nine main categories to be used as the buttons within the touch screen interface. These categories are:

- **Accommodations**
- **Dining**
- **Services**
- **Explore Windhoek**
- **Events and Attractions**
- **Health and Safety**
- **Transportation**
- **Shopping**
- **Arts and Culture**

The City of Windhoek's Tourism Strategy identifies visitors' lack of knowledge of historical and cultural aspects of the city as a major weakness of the tourism industry. As we reviewed the database we noticed that attractions within Katutura were missing. Prior to suggesting inclusion of the Katutura markets, shops, and restaurants in the database, we determined if these areas were capable of handling a possible increase in tourist traffic. We found that the merchants at the Single Quarters and Soweto markets, Incubation Center, Penduka, and Ohjikandu Den all are ready for a possible increase because a majority of the merchants spoke English and German and several of these markets already had relatively high tourist traffic. From this and other interviews conducted with city officials and tourists, we were able to develop the following recommended additions to the database:

- **Safety tips**
- **Pictures of attractions**
- **Directions to establishments**
- **Katutura markets and attractions**
- **City maps**

To accommodate the largest number of tourists possible recommend that the database be made available in multiple languages, including English, German, French, and Afrikaans. In order to facilitate the improvement of the database, we recommend the City work with the Information Technology Department to make these necessary changes to the database. We also recommend that the Tourism Division work closely with the IT department to ensure that the information on the kiosks is kept up-to-date.

Suitable Kiosk Design

We investigated commercially-available software to serve as the kiosk interface, along with commercially-available kiosk structures and upgrades. In order to find a suitable interface we compared three different software applications to use as the

interface of the kiosk. We analyzed the option of custom designing software as well as Kiosk-In-A-Box software and SiteKiosk for price, interface ease of use, integration with the current database, and advertising space. We also compared three commercially available structures to determine a suitable structure for the kiosks. We reviewed systems from IBM, Mass Multimedia, Inc, and I-Touchsystems for price, upgrades, and structure material. Based on our analysis of software and structures, we make the following recommendations for the kiosk system:

- **We recommend that the City of Windhoek purchase I-Touchsystems freestanding kiosks with resistive touch screen.** *Based on its features and pricing of the kiosks reviewed, I-Touchsystems had the most durable structure.*
- **We recommend upgrading the kiosks from a 38cm (15inch) monitor to a 48cm (19 inch) monitor.** *This will allow for more information to be displayed on the screen as well as allow for ample advertising space.*
- **We recommend that kiosks in areas that can be monitored closely, such as the Independence Avenue Information Center and the Post Street Mall, be upgraded to include a thermal printer to allow for users to print the information they receive.** *These two recommended locations are near current information centers and could be monitored for printing problems to expedite the resolution of any problems that may occur. Coin acceptors should be purchased to charge a 50c fee per printout.*
- **We recommend that the City of Windhoek purchase the SiteKiosk software as the interface for the kiosk system.** *The SiteKiosk software has a more user friendly interface and it is easier to edit the pages of the interface. Another advantage of this software is its utilization of HTML programming; this could allow for the pages created for the user interface to be utilized as the City's tourism website.*

Kiosk Sustainability

To ensure the long term sustainability and functionality of the kiosks we developed a maintenance plan. To supplement the cost incurred from the maintenance plan we interviewed businesses in Windhoek to assess their interest in advertising on the kiosks and to determine a feasible cost.

In order to help keep the kiosks functional, we recommend that the City of Windhoek implement a routine maintenance plan. Based on research of previous implementation and maintenance plans for kiosks as well as the recommendations of the manufacturer, we recommend that this include:

- **Cleaning and checking all components for malfunctions every 60 days**
- **Budgeting for replacement of touch-screen monitors every 3 years**
- **Budgeting for replacement of the entire system after 6 years**
- **Purchasing 1 “swap-out” unit per 5 kiosks**

This additional kiosk could be used for maintenance purposes as well as acting as a mobile kiosk which the City could use during special events in places where there is not currently a kiosk.

These timelines are merely suggestions for budgeting which we found through our research. We do not recommend that any parts of the kiosk be replaced unless they are malfunctioning. We estimate that maintenance of the kiosk systems will cost N\$ 4 000 per year per kiosk. The N\$ 4 000 would cover both the routine maintenance as well as budgeting for the replacement parts of the system.

To fund the cost of this maintenance, we recommend the City sell advertising space on the kiosk. Through interviews of 26 tourism related businesses in the City of Windhoek we analyzed how much local businesses spend on advertising per year. In addition, we researched current means of advertising and their pricing to compare this with the average advertising expenses. From our research and interviews we recommend a three-level pricing scheme for the advertising as shown in Table 1 below. With this pricing strategy, the City would only need to sell five advertisements at the lowest level the first year to cover the necessary maintenance budget. If some businesses choose to advertise at higher levels, the number of businesses needed will decrease.

Table 1: Levels and prices of advertising on information kiosks

Advertising Level	Price for 1st year	Price/year
Banner on Main Page	N\$ 2 500	N\$ 5 000
Full Screen Advertisement on Attraction Screen + Banner	N\$ 5 000	N\$ 10 000
Advertisement on Printout + Full Screen Ad + Banner	N\$ 7 500	N\$ 15 000

We also reviewed the budget that the City has for initiation of its pilot program for the kiosks. The total cost for implementation of this program is estimated at N\$ 183 300. This price includes the costs of two kiosk systems and one “swap-out” unit as described in the maintenance plan. This budget will also provide sufficient funds to purchase three each of software licenses, printers, and coin acceptors. Also, the costs of erecting necessary enclosures, the construction of the interface and database, the costs of shipping, and a 20% contingency, which will provide for any exchange rate or price fluctuations, are all included within the final budget. We determined that the N\$ 200 000 budgeted for the first year is sufficient for the placement of the pilot program.

From our research and analysis we found that implementing touch screen information kiosks is a feasible method for the City of Windhoek to use in correlation with their Tourism Strategy to increase information available to tourists throughout the city. It is our hope that with our recommendations the City of Windhoek can implement and maintain the kiosks in strategic locations to better the tourism industry. This project combined with the other initiatives of the Tourism Division could help in making Windhoek a more tourist-friendly destination within Namibia.

Acknowledgements

We would like to thank all those people who supported us and our project throughout our stay in Windhoek.

City of Windhoek Corporate Communications and Tourism Division

Ndangi Katoma

Manfred !Gaeb

Gladys Fernandez

Grace Kamuingona

Mariah Hamata

Fischer Thataone

City Police Chief

Chief Abraham Kanime

Our Drivers

Jeremiah Katjiuanjo

Kennedy Chunga

City of Windhoek IT Department

Janie Van Rensburg

Louie Van Wyk

Our Translator

Nessy Shimwafeni

Accredited Tour Guides of Windhoek

Standard Bank

Bank Windhoek

Telecom Namibia

James Praschak, representative of Miles Media, Corp.

WPI Professors

Professor Chrysanthe Demetry

Professor Richard Vaz

All of the tourists and businesses who took the time to answer our questions.

Authorship

We all contributed equally in the research, data analysis, and writing. A breakdown of the writing distribution can be seen as follows:

Section – Main Writer(s), Major Editor(s), Reviewer(s)

Executive Summary – Robert Lavado, Adam Basilio & Melissa Byrne, All

Abstract – Melissa Byrne, Adam Basilio, All

Introduction – Adam Basilio, Melissa Byrne, All

Background

Tourism in Windhoek and Namibia – Linsley Kelly, Robert Lavado, All

Limitations and Opportunities for Improvement of Windhoek's Tourism Industry – Melissa Byrne, Adam Basilio, All

Windhoek's Way Forward – Adam Basilio, Melissa Byrne, All

Information Kiosks and their Role in Tourism – Robert Lavado, Linsley Kelly, All

Methodology

Analyze Tourist Expectations of Information Services – Melissa Byrne, Adam Basilio, All

Determining Suitable Locations and Structure – Linsley Kelly, Adam Basilio, All

Sustainability of Kiosks – Robert Lavado, Melissa Byrne, All

Findings and Analysis

Decisive Factors in Kiosk Location – Melissa Byrne, Adam Basilio, All

Information Needs of Tourists in Windhoek – Linsley Kelly, Adam Basilio & Melissa Byrne, All

Kiosk Structure and Software – Adam Basilio & Melissa Byrne, Linsley Kelly, All

Kiosk Sustainability – Linsley Kelly, Robert Lavado, All

Recommendations and Conclusions

Placement of Kiosks – Robert Lavado, Adam Basilio & Melissa Byrne, All

Suitable Kiosk System – Adam Basilio, Melissa Byrne, All

Overall Kiosk Sustainability – Robert Lavado, Melissa Byrne, All

Implementation Plan – Linsley Kelly, Adam Basilio, All

Recommendations for Future Research – Melissa Byrne, Robert Lavado, All

Appendices Compiled by All

Table of Contents

Abstract	ii
Acknowledgements	viii
Authorship	ix
Table of Contents	x
Table of Figures	xii
Table of Tables	xiii
Glossary of Terms and Abbreviations	xiv
Introduction	1
Background	3
<i>Tourism in Windhoek and Namibia</i>	3
<i>Limitations and Opportunities for Improvement of Windhoek’s Tourism Industry</i>	5
<i>Windhoek’s Way Forward</i>	6
<i>Information Kiosks and Their Role in Tourism</i>	8
Methodology	12
<i>Determining Suitable Content for Information Kiosks</i>	12
<i>Determining Suitable Locations and Structure</i>	14
<i>Ensuring the Sustainability of Kiosks</i>	15
Findings and Analysis	17
<i>Decisive Factors in Kiosk Location</i>	17
<i>Information Needs of Tourists in Windhoek</i>	24
<i>Kiosk Structure and Software</i>	27
<i>Kiosk Sustainability</i>	30
Conclusions and Recommendations	34
<i>Placement of Kiosks</i>	34
<i>Suitable Kiosk System</i>	35
<i>Overall Kiosk Sustainability</i>	38
<i>Kiosk Implementation Plan and Budget</i>	39
<i>Recommendations for Future Research and Implementation</i>	41
Appendix A: Sponsor Profile	45
Appendix B: Proceedings from a Teleconference with Miles Media Group, Inc. <i>Representative, Mr. Praschak</i>	47
Appendix C	49
<i>Interview Plan for Tourists</i>	49
<i>Results of Tourist Interviews</i>	50

Appendix D	60
<i>Interview Plan for Businesses</i>	60
<i>Results of Business Interviews</i>	61
Appendix E	65
<i>Interview Plan for Managers of Marketplaces in Katutura</i>	65
<i>Interview Results of Katutura Market Managers</i>	66
Appendix F	70
<i>Interview Plan for Banks</i>	70
<i>Standard Bank Interview Results</i>	71
<i>Bank Windhoek Interview Results</i>	72
Appendix G	73
<i>Telecom Interview Plan</i>	73
<i>Telecom Interview Results</i>	74
Appendix H	75
<i>Interview Plan for Merchants in Katutura</i>	75
<i>Merchant Interview Results</i>	76
Appendix I	80
<i>Pictures of Recommended Locations</i>	80
<i>Post Street Mall Main Walkway</i>	80
<i>Independence Avenue Information Center</i>	81
<i>Kalahari Sands Mall</i>	82
<i>Safari Court & Hotel</i>	83
<i>Hosea Kutako Airport</i>	84
<i>Maerua Mall</i>	85
Appendix J: Site Kiosk Order Form	87
Appendix K: Database Analysis Table	88
Appendix L: Software Design Flow Chart	89
Appendix M: Recommended Signage	90
Appendix N: Kiosk Pilot Program Implementation Timeline	91

Table of Figures

Figure 1: <i>Actual Tourists Compared to Total Foreigners Between 1993 and 2003 (Directorate of Tourism, 2004)</i>	3
Figure 2: <i>Survey Results for Most Important Kiosk Features. Fourth Annual Kiosk Benchmark Study (2004)</i>	9
Figure 3: <i>Nationality of Tourists Interviewed v. Tourist Border Crossing Statistics for 2004</i>	17
Figure 4: <i>Tourists' First Tasks upon Arrival to Windhoek</i>	18
Figure 5: <i>Where Tourists Look for Information</i>	19
Figure 7: <i>Types of Information Tourists Look for in Windhoek</i>	26
Figure 8: <i>Kiosk Structures from I-Touchsystems, IBM Anyplace Kiosk, and Mass Multimedia, Inc.</i>	28
Figure 9: <i>Kiosk-in-a-Box Software Editing Interface</i>	29
Figure 10: <i>SiteKiosk Software Editing Interface</i>	29
Figure 11: <i>Distribution of Types of Tourism Related Businesses in Windhoek V. Our Study</i>	31
Figure 12: <i>Monthly Advertising Expenses of Interviewed Businesses</i>	32
Figure 13: <i>I-Touchsystem's Freestanding Kiosk</i>	36

Table of Tables

Table 1: <i>Strengths and Weaknesses of Windhoek as a Tourist Destination as Defined in the City of Windhoek's Tourism Strategy (2006)</i>	6
Table 2: <i>Evaluation of Potential Kiosk Locations</i>	22
Table 3: <i>Kiosk Structure Comparison</i>	27
Table 4: <i>Maintenance and Replacement Costs per Kiosk</i>	31
Table 5: <i>Budget Overview for Pilot Program and Additional Kiosks</i>	33
Table 6: <i>Price Breakdown for Advertisements on the Kiosk</i>	39

Glossary of Terms and Abbreviations

Backpacker – Traveler with very little prior planning and low accommodation budget

Database – Electronic compilation of data to support an information system

FENATA – Federation of Namibian Tourism Associations

Interface – End-user interaction with any computerized system

Katutura – An area with informal settlements just outside the City of Windhoek, Namibia

Kiosks – Dispense information such as maps pamphlets and other literature

LAN – Local Area Network

NACOBTA - Namibia Community Based Tourism Association

Networked – Computer systems connected together via a central server

NTB – Namibia Tourism Board

Organized Tour – Type of travel arrangement where very little planning is left for the tourist. All planning by tourist is done through travel agency in advance of trip.

Parastatal – Semi-government institution

Self-Drive tourist – Traveler with some prior planning, usually only accommodations and transportation have been pre-arranged

Standalone – Computer system that runs without a network connection

Telecom – Communications provider of Namibia

Tourism – A temporary movement of people to destinations outside their normal places of work and residence.

Tourist – A person staying away from their home for at least one night, but not more than twelve months

WTO - World Tourism Organization

VFR – Tourists Visiting Friends or Relatives

Introduction

Tourism has the ability to bring revenue into a country from outside its borders. According to the World Tourism Organization, tourism is one of the main sources of economic development in most emergent countries. Tourism is also one of the few non-depleting resources that can be utilized by countries. As a result, many nations and cities around the world have implemented economic development plans with strategies focusing on tourism (Mak, 2004). Currently tourism is Namibia's third largest contributor to its Gross Domestic Product (GDP), with the mining and fishing industries being the first and second largest contributors respectively. Tourism, however, is on the rise and is predicted to surpass fishing and become Namibia's second largest contributor to its GDP.

Namibian officials believe that Namibia stands to benefit from improvements in its tourism industry. Acknowledging the benefits that tourism can have on the economy, the City of Windhoek's Corporate Communications and Tourism Division has recently approved a Tourism Strategy to promote tourism within the city. Windhoek's Corporate Communications and Tourism Division hopes to accomplish this promotion of tourism by lengthening the amount of time the average tourist spends in the city and encouraging a number of return visits, thus increasing the amount of money spent within the city by tourists. The Tourism Strategy proposes possible methods to achieve these goals, including implementing new products to attract tourists to Windhoek, as well as improving current services available to tourists.

The City's tourism strategy also addresses potential weaknesses in Windhoek's current tourism industry. These weaknesses were identified in surveys conducted in 2001 of tourists traveling to Windhoek. One such weakness was the lack of information available to tourists. From the results of these surveys the City of Windhoek's Corporate Communications and Tourism Division believes there is a need for a more informed tourist. There are currently two manned information centers located throughout the city with limited hours of operation; these hours are 07h30 to 16h30 on weekdays and the centers are not open on weekends or holidays. These limited hours make it difficult for tourists who arrive late at night or on holidays to acquire information. Another limitation is the amount and type of information available within the centers. Much of the information is only available through brochures with some major tourist attractions missing. Also, the location of one of the centers is not ideal; it is not always easy for visitors to find which makes it hard for them to access information they might need.

According to Manfred !Gaeb, the Section Head of the Tourism Division, "it is an electronic age and this information needs to be available 24 hours a day via an electronic

medium” (M. !Gaeb, personal communication, 27 January 2006). The Tourism Division has made the decision to implement touch screen information kiosks throughout the City of Windhoek in response to the lack of information identified in the 2006 Tourism Strategy. The funding for a pilot program of two kiosks has been secured for the implementation of the systems. According to Werner van Zijl, the designer of the City’s current tourism database utilized in it’s manned information centers, an “end-user touch-screen system would be ideal since it fits in with the world-wide trend for end users to determine their own needs” (W. van Zijl, electronic communication 1 April 2006). These kiosks could allow tourists to gain information easily at a more accessible location than the current centers, even when the information centers are closed. Currently the City has approved a budget to install two kiosks as a pilot study. If the pilot program is successful the City plans to install additional kiosks throughout the city.

The goal of our project was therefore to make recommendations on the design and placement of these kiosks throughout the city. In order to achieve our goal we interviewed tourists to determine the type of information they are seeking and where they would find this information most useful. We also interviewed local business owners to determine their interest in advertising on the system as well as what they currently spend on advertising. These interviews allowed us to determine a suitable cost for such advertisements. The revenue generated from this paid advertising is meant to keep the system financially sustained. In order to allow for continued success and usability of the kiosks we developed a maintenance plan, which detailed when each component of the kiosk would need to be replaced as well as how much these parts would cost.

If our project is successful, the Tourism Division will be able to purchase and install the kiosks at the recommended locations, giving tourists the ability to gain access to information 24 hours a day. The installation of unmanned kiosks is a major step towards achieving the objectives of the City of Windhoek’s Tourism Strategy. Implementing tourist information kiosks is the first of many steps to improving Windhoek’s tourism industry. This project combined with the other initiatives of the Tourism Division could help in making Windhoek a more tourist-friendly destination within Namibia.

Background

In this chapter we will first discuss the benefits of tourism on a developing economy, particularly within Windhoek and Namibia. From this point we will describe the current attractions within Windhoek and Namibia and the problems that Windhoek is facing in its current tourist information infrastructure. We will then elaborate on the current steps that are being taken by the City of Windhoek through its tourism strategy to address these problems and the currently available technologies that could aid in their solution.

Tourism in Windhoek and Namibia

To begin to understand the needs of tourists one must first understand what exactly tourism is. The World Tourism Organization's accepted definition of tourism is: "The activities of persons traveling to and staying in places outside their usual environment for at least one night but not more than one consecutive year for leisure, business and other purposes" (Tourism Strategy, 2006). Tourism is also considered a non depleting resource, since it is not dependent on natural depleting products. The tourism industry is currently Namibia's third largest contributor to its GDP, and is predicted to surpass fishing and become Namibia's second largest contributor to its GDP. According to Wharton Econometric Forecasting Associates (WEFA), it is estimated that tourism in Namibia will increase by 6.8% per year between 2000 and 2010 (Tourism Strategy, 2006).

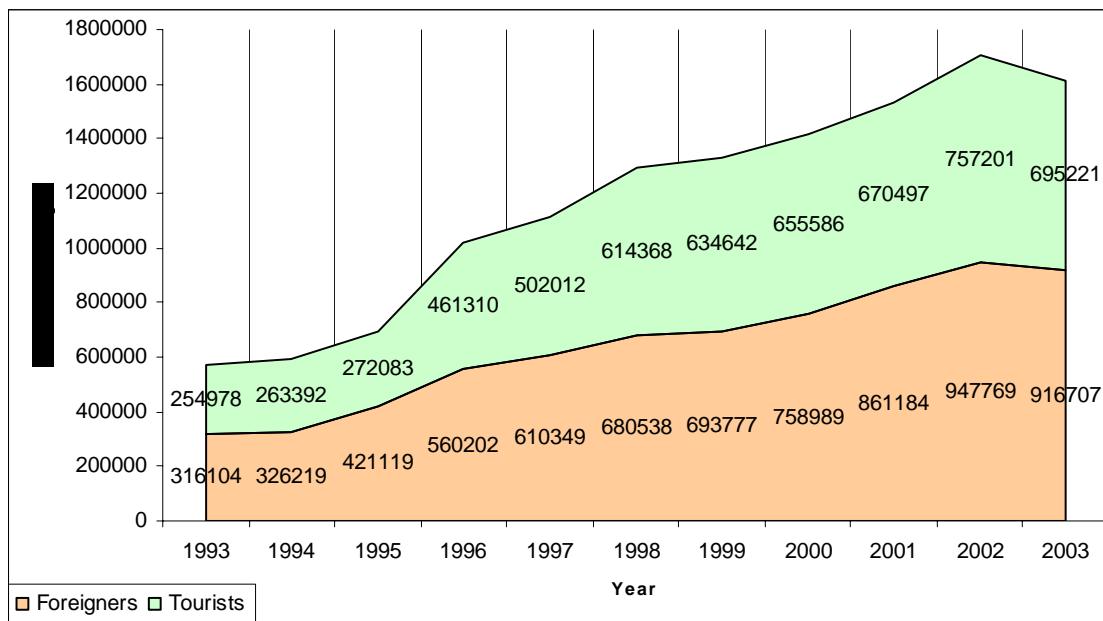


Figure 1: Actual tourists compared to total foreigners between 1993 and 2003 (Directorate of Tourism, 2004)

Additionally, the growth in tourism can be seen in border crossing statistics. In 1993, 255 000 tourists visited Namibia; that number increased to 695 000 in the year 2003 (Directorate of Tourism, 2004). The data shown in Figure 1 compare the number of foreigners entering Namibia to the number of tourists. As seen, during this 10 year period, tourism within Namibia has tripled. With this increase it can be noticed that the total number of tourists has risen consistently with the rise in total number of visitors to Namibia.

In 2004 Namibia's Ministry of Environment and Tourism released a statistical report about tourists traveling to Namibia. According to this statistical report, there were 167 162 people classified as tourists entering the country by air, making tourists account for 82.9% of the 201 587 travelers entering Namibia by air in that year. Of these tourists entering the country by air 73% were entering Namibia for leisure or holiday as compared to 12% for business and 15% visiting friends or relatives (VFR) (Directorate of Tourism, 2004).

According to the Namibia's Ministry of Environment and Tourism, leisure visitors spend more than visitors in the other categories. They have found that 72% of tourists arriving in Namibia by air have disposable incomes and that these tourists are able and willing to contribute to Namibia's economy. Air travelers, however, only accounted for 24.7% of the total Namibian arrivals. The remaining percentage of tourists entered through various border crossing stations (Directorate of Tourism, 2004). These statistics however, need to be considered cautiously since current immigration laws require business travelers to obtain work visas in advance of their trips. In many cases these business travelers claim to be tourists in order to enter the country for 3-5 days without prior arrangements (Conference on Increasing Windhoek's Role in Namibian Tourism, 2006).

The Namibia Statistical Report also gives an idea of the average population of tourists to Namibia through nationality, and other statistics received through border crossings. According to statistics the percentages of tourists traveling from specific countries are as follows: South Africa 28%, Germany 27%, UK and other European nations 27%, all other African countries 7.7%, USA 4.8%, and Australia 0.7%. Of those tourists entering by air, 90.2% arrived at Hosea Kutako International Airport. Also recorded in the findings was length of stay, age, and sex. The average length of stay in Namibia is eight to fourteen days, while the average stay in Windhoek was only 1.25 days (Directorate of Tourism, 2004).

Travelers come to Namibia for the numerous game parks, such as Etosha National Park, one of the largest wildlife preserves in Africa covering around 22 270km² (Namibia

Tourism Board, 2003). Other activities for travelers outside of Windhoek include skydiving, sand skiing and boarding, golfing, and fishing.

Accommodations within Windhoek range from hotels to campgrounds. According to current tourism statistics, frequented tourist eateries include a variety of cuisines and atmospheres. The city also offers nightclubs, cinemas, and theatres. There are plenty of places to shop in Windhoek for necessities, souvenirs, and locally traded items such as gemstones, leatherwork, and woodcarvings. Windhoek also provides many cultural and historical opportunities to tourists from local architecture to tours of Katutura, an informal settlement just outside the city (McIntyre, 2003).

The City of Windhoek has made tourism a high priority. The division in charge of this initiative is the Corporate Communications and Tourism Division. In order to help tourists find information about what to do in Windhoek and encourage them to stay, the Division currently operates two manned information centers in the Central Business District of the city. In addition to these manned information centers, the City operates a website which includes accommodation, attractions, and tips for tourists, among other information which could be useful. Furthermore, the City currently possesses a database containing the tourism information which is utilized within the manned information centers. The database contains a listing of all tourism-related businesses categorized by type. Most of the listings provide the user with an address and telephone number for the business of interest.

Limitations and Opportunities for Improvement of Windhoek's Tourism Industry

It has been mentioned that often tourists come to Namibia with an impression of what they will see. Often times their impression is not Windhoek. According to the Conference on Increasing Windhoek's Role in Namibian Tourism it was addressed that, tourists are traveling to Namibia for the game, deserts, and wide open space that Namibia has to offer. A theme in several sessions of the conference was that the trend of not staying in Windhoek is largely due to the way that Namibia is marketed; the history and culture of Namibia, which is centered in Windhoek, is not the focus of Namibia's marketing (Conference on Increasing Windhoek's Role in Namibian Tourism, 2006). The City of Windhoek and the Namibia Tourism Board thus feel that this marketing strategy causes many tourists only remain in the city for a night before continuing onto other destinations in the country or the continent (Directorate of Tourism, 2004).

In 2001, the City of Windhoek conducted tourist surveys as part of the development of its tourism strategy. One of the aspect of the 2001 survey identified tourist's perceptions of the strengths and weaknesses of Windhoek as a tourist destination. As shown in Table 1, one of the weaknesses identified by tourists in this

2001 survey was access to information. It was suggested by the Section Head of Windhoek’s Tourism Division that this lack of available information is likely to contribute to tourists’ tendency to continue in their travels without taking advantage of the many cultural and historical opportunities within the city (M. !Gaeb, personal communication, 27 January 2006). The 2001 tourist interviews also indicate that 85% of those surveyed believed that it is important to visit Windhoek when coming to Namibia, yet only 69% would encourage others to visit and only 41% were considering a return visit to the city (Tourism Strategy, 2006).

Table 1: Strengths and weaknesses of Windhoek as a tourist destination as defined in the City of Windhoek's Tourism Strategy (2006)

STRENGTHS	WEAKNESSES
Relaxed mix of race and culture	Difficult to get around
Availability of goods and services	Crime and insecurity
Cleanliness	Lack of cultural aspects and African image
Rich heritage and heritage sites	Very little to do
Beautiful sceneries and surroundings	Lack of information
Peace and stillness	No facilities for children
	Closing of businesses, service centres and tourism attractions on weekends

Windhoek currently has plenty to attract tourists, but as identified by the 2001 tourist interviews, the city is not easily navigated and its businesses, service centers, and primary tourism attractions close in the early evenings on weekdays. Many of these attractions are opened for limited hours on the weekends if at all (Tourism Strategy, 2006).

According to the 2001 tourist interviews, the usefulness of the City’s current information centers is limited. The Centers’ current hours of operation are from 07h30-16h30 and the centers are not open on holidays or weekends. Another limitation of the current centers is the amount and type of information available. These limitations were identified as problematic because a tourist arriving in the city late at night or on the weekend may not have full access to information necessary to make an informed decision on what to do in Windhoek (Tourism Strategy, 2006).

Windhoek’s Way Forward

As stated in the City of Windhoek’s Tourism Strategy, Windhoek, as the capital of Namibia and the center for government and business, has an obligation to remain economically sound and stable. For this reason, the City developed its Tourism Strategy which was guided by the following principles for tourism development within the city:

- Tourism will be private sector driven
 - The Windhoek City Council will provide the enabling framework for the industry to flourish
 - Tourism development will be supported by sustainable environmental practices
 - Tourism development is dependent on the establishment and co-operation and close partnerships among key stakeholders
 - Tourism will be used as a development tool for the empowerment of previously neglected communities and should particularly focus on the empowerment of women in such communities
 - Tourism development will support the economic, social and environmental goals and policies of the government.
- (Tourism Strategy, 2006)

Windhoek's Tourism Strategy addresses five key areas. The strategy begins by drafting a tourism profile of the City of Windhoek through an identification of Windhoek's tourism strengths and weaknesses as identified in 2001 tourist surveys, which were discussed in the previous section. From this profile, recommendations on how to make Windhoek a more tourism-friendly city as well as the need to develop new tourism products within the city were determined. These recommendations included an increase in the operating hours of businesses, increase in security throughout the city, and developing a better means of distributing information to tourists. The strategy also focuses on the development of promotions to attract tourists to the city as well as inform residents of the values of tourism. The final focus of the strategy is the development of organization and structures to fully implement the strategy's objectives. One proposed method of developing structures to implement the strategy's objectives is creating a means for visitors to Windhoek to access relevant information 24 hours per day (Tourism Strategy, 2006).

To address some of the weaknesses identified in the Tourism Strategy, the Corporate Communications and Tourism Division believes that installing 24-hour touch-screen information kiosks may help visitors obtain information about the city more readily during their stay in Windhoek, discover the opportunities Windhoek has to offer, navigate the city more easily through the integration of city maps, and increase cultural awareness. The goal of the kiosks would be to catch the attention of tourists and dispense information concerning the activities within Windhoek. In this way it is hoped that tourists will choose longer stays within the city. The main weakness which a 24-hour information kiosk would address is the lack of information. The Corporate Communications and Tourism Division has received funding of N\$200 000 to install two kiosks as a pilot study. Should these kiosks successfully address the lack of information

issue within the city, future funding will be granted to install additional kiosks throughout the city.

Information Kiosks and Their Role in Tourism

In this section we will present important considerations for the implementation of kiosks through the review of various case studies of prior kiosk projects. Information kiosks are used in a variety of different settings and manners, from health care to grocery shopping. Kiosk developers emphasize that with each application, the type of information or service and target population that is desired should be established. The use of kiosks can be very advantageous as they have the ability to enhance the amount of information being dispensed without increasing the necessary number of man hours. With the kiosk technology users could obtain information 24 hours per day. Kiosks are also easily updated and can be placed in easily accessible and central tourist locations.

The self service and information kiosk industry has numerous technologies currently available. Current technology for information kiosks utilizes touch-screen technology to ease navigation through the system, in addition to advanced features to enable telephone calls, printing, card swiping, credit card ordering, and internet access. Additionally, current systems have the option of providing dedicated advertising area on each screen in order to provide revenue from the system.

According to the Fourth Annual Kiosk Benchmark Study, the top-rated technology by a survey of respondents was touch screens, as seen in Figure 2. Internet connection came second, followed by remote management. Printers were still considered important, as well as credit card acceptance. The study also notes that emerging technologies include video and plasma displays, which have come down in price and can help draw users, as well as signature capture and wireless internet connections (Fourth Annual Kiosk Benchmark Study, 2004).

Software can greatly add to the user experience at a kiosk. For kiosks with telephone capabilities, software can automatically connect a tourist to local restaurants or the nearest hotel to make reservations. With further development and access, an internet connection can directly connect the user to a local company's website to gain more information or make a booking directly from the kiosk. If the kiosk is enabled with credit card ordering technology, the user even has the option of pre-paying for lodging from the kiosk. A kiosk with printing capabilities can print out driving or walking directions to local destinations and hotspots. There is a broad range of applications for the current information kiosk technologies (Fourth Annual Kiosk Benchmark Study, 2004).

Important Technologies

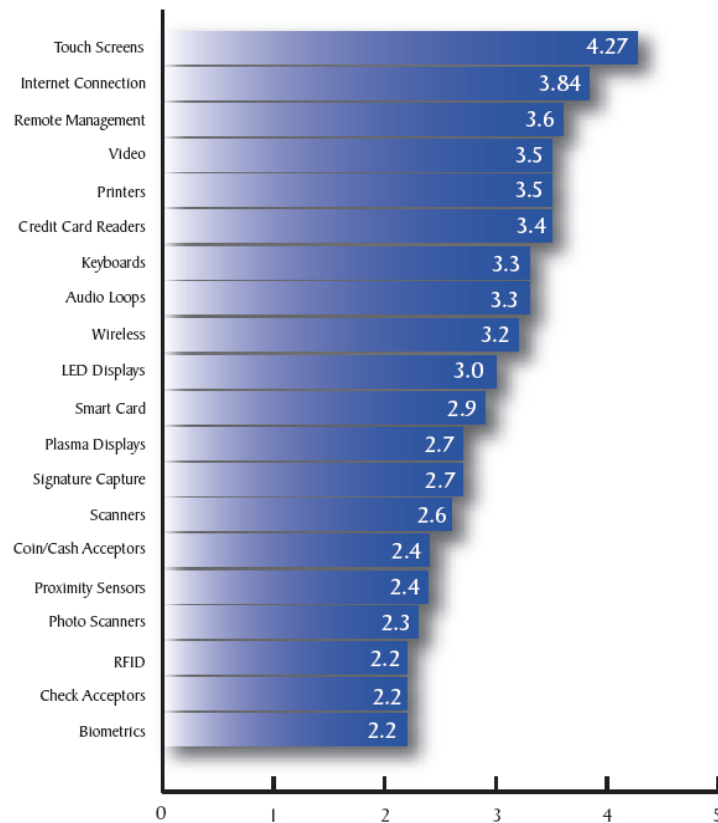


Figure 2: Survey results for most important kiosk features. Fourth Annual Kiosk Benchmark Study (2004)

Networked kiosks allow for usage statistics, remote access of hardware and software, status monitoring, technical reports, and database management (eCONTEX, 2004). Taking a strategy from Scotland might help in addressing how to create the necessary network connections for kiosks. To allow networking of their kiosks, the Scotland designers chose to locate the kiosks adjacent to existing phone booths (Hoskins, 2005). In this way, the designers were able to use the existing phone line for an internet connection to the kiosk. It was also possible to include with the kiosk an automatic teller machine (ATM), because of the internet use of this design. They were also able to function as a wireless hot spot for travelers.

According to the article *Getting it Across*, the information the user receives from the system is important; many unsuccessful designs occur when the designers forget to take into account that the target population for the kiosk is often “computer novices” (Borcher, Deussen, Knorz, 1995). As stated by James Praschak, the average user’s attention span is only five to seven minutes (J. Praschak, personal communication, 6 February 2006). The article *Getting it Across* elaborated that if the information cannot

be found in that time, any chance of appealing to that person is lost. Information must be organized in such a way that it is easy to read and find. Essentially, a person who has never used a computer in his or her life should be able to walk up the system and easily find the information they are looking for (Borcher et al., 1995).

The structure of the actual desk should also be considered. There are many styles and materials which can be used in kiosk construction. Most kiosks are built of metal, wood, plastic, or a combination of these materials (Kiosk Marketplace, 2006). Whereas wood is easy to use and provides a more sophisticated look for the kiosk, it can be heavy and cost more than metal. Also due to the thickness of the material fewer components might be able to fit in the interior of the structure. Metal can be more easily erected into many more shapes than wood. Also, metal is more durable and resistant to the elements than wood, thus if the kiosks are placed outdoors, wood would not be an acceptable building material. Some kiosks are made from injection molded plastic. However, creating a mold for the project often can cost upwards of approximately N\$480 000 (Kiosk Marketplace, 2006).

When considering the implementation of outdoor kiosks another important consideration is the effect of rainwater. The structures should have waterproof gaskets to prevent moisture from entering the internal electronics and to ensure continued functionality. Another consideration is the effect of the sun within the region. In direct sunlight, the touch screen will be difficult to see. Thus, the touch screen should have an extra bright monitor to allow the user to easily see it in sunlight or have a shaded or covered viewing area (Kaszycki, 2005).

While a custom desk design has the ability to produce a kiosk that exactly fits the user's needs, cost for these structures is high. There are multiple companies that have commercially available kiosks. The purchase of one of these structures could prove to be more economical when working with tight budgets.

IBM, Mass Multimedia Inc., and I-Touchsystems are three examples of these companies. These companies all have both freestanding and wall mounted kiosks. Their designs allow for many components or upgrades to be made such as the addition of thermal printers or larger monitors.

According to James Praschak, a technology officer for Miles Media Group, Inc., kiosk technology has a limited life span. Miles Media Group is a tourism company that has installed and removed over 400 information kiosks in 15 cities across the United States. Mr. Praschak went on to say that, in the US, tourism kiosks were very popular towards the beginning of the internet revolution. The kiosks themselves had an internet feel to them providing tourists with a novelty that enticed their use. However as the internet began to grow, and more information was readily available to travelers before

they reached their destination, the need for tourism kiosks diminished. Tourists now arrive at their destination already knowing where to go and what to see (J. Praschak, personal communication, 6 February 2006). Because of this, it may be that in many countries information kiosks are only a temporary solution to a tourist information problem.

Methodology

The goal of this project was to make recommendations on the design and placement of tourist information kiosks in the City of Windhoek, as well as to develop a sustainability plan to aide in the continued usability of the system. In this chapter we will describe how we set out to attain these goals. We will begin by discussing how we determined the information content for the kiosks. We will then describe how we determined suitable locations to place the kiosks, as well as how we reviewed the various software products and kiosk structures. Lastly, we will illustrate how we investigated issues that would affect the long term sustainability of information kiosks.

Determining Suitable Content for Information Kiosks

In order to establish the information content for the kiosks, we determined several research questions to answer. To assess whether the database the tourism division currently uses can be integrated into a kiosk setting we determined what type of information tourists, both domestic and international, are seeking. We used the results of these questions to formulate recommended changes to make the database more usable in a kiosk setting.

The City conducted a survey in 2001 to establish the strengths and weaknesses of the City's tourism industry. To answer our research questions we first began analyzing the data that was gathered through these surveys. After reviewing the results of these surveys that were reported in the City of Windhoek's Tourism Strategy, we were able to narrow down the focus of the data that we would need to collect, as a large portion of the surveys pertained to our research.

In order to gain information that was not revealed in the 2001 surveys, we created semi-structured interviews to give to tourists within Windhoek. These surveys were designed to be approximately five minutes in length. We planned to offer incentives, including dinner for two at the Kalahari Sands and free city tours to achieve a high response rate. However we found many tourists were willing to answer our questions and were not interested in the incentives due to restraints on their time in Windhoek. We asked questions on the type of information tourists are looking for as well as where they look for this information. The guidelines for the interviews can be found in Appendix C.

In order to establish areas of high tourist traffic where the interviews would take place, we conducted site visits prior to conducting the interviews. We conducted site visits to both airports in Windhoek, as well as shopping centers and hotels. Based on these initial visits we determined that conducting interviews at shopping centers such as the Maerua Mall and the Central Business District, and hotels such as the Kalahari Sands,

the Roof of Africa, the Arebbusch Travel Lodge and the Safari Court Hotel would be most effective.

At these locations we interviewed mostly English speaking tourists; however, we were able to make use of a German translator who aided us in collecting data from the large percentage of German tourists traveling to Windhoek. Accredited tour guides, after seeing us interviewing tourists at the Independence Ave. Information Center and hearing about our project, also distributed the interview questions at the conclusion of city tours. To determine if the demographic breakdown of our sample was representative of the people traveling to Windhoek we asked tourists their primary residence during the interview and compared this to current entry statistics from border posts.

Additionally we contacted local parastatal organizations, including the Ministry of Education and the Ministry of Trade and Industry. These organizations bring in a large number of domestic tourists to Windhoek throughout the year for business meetings. These tourists still require information when they travel to Windhoek, which could be provided to them through a computerized touch screen information kiosk. We interviewed these domestic tourists, at conferences held at the Safari Court Conference Center, to determine their information needs in Windhoek as well as their interest in using touch screen information kiosks.

After completing the tourist interviews the data collected were examined. The information we gathered from these tourist interviews was compiled and analyzed with a focus on patterns found within the tourist responses. We analyzed the interviews to determine what information might be relevant to tourists coming to Windhoek that is not already in the database used at the City's information centers.

We also assessed the usability of the current database for tourists in a kiosk setting. The data we collected from interviews of tourists was used to determine the adequacy of information provided in the database and what additions needed to be made. Its usability was tested by examining its contents and current programming style. We assumed that most users are computer novices and we considered the ease of use while examining the database's interface. From this assessment, we compiled a list of changes to be made for the database to be integrated into a kiosk setting. We also researched specialized kiosk software to act as the user interface. We reviewed these software products for ease of use, integration with the current database, advertising space, and cost.

One possible addition to the database was attractions in Katutura, specifically the marketplaces, Ohjikandu Den, and the Penduka Craft Center. Since placing these establishments in the tourism database could lead to a possible increase in tourist traffic we assessed the ability of these businesses to handle this possible increase through a

series of interviews. We interviewed both market managers and merchants within Single Quarters, Soweto, and Tukondjeni marketplaces as well as the Incubator center; in addition we interviewed the manager of the Penduka Craft Center and the owner of Ohjikandu Den.

When interviewing the merchants within Katutura we designed our interview questions to determine their ability to communicate with tourists and their overall opinion of having tourists in the marketplaces. We also interviewed the managers of the marketplaces in order to determine the safety of the marketplaces and current advertising strategies; we also asked about tourist traffic to the marketplace and the ability of the marketplace and merchants to handle a possible increased tourist flow. The interview guideline for these interviews can be found in Appendix E and Appendix F.

Determining Suitable Locations and Structure

To find appropriate locations to place the information kiosks we determined where tourists first look for information and where they might find it most helpful in the initial stages of their trip. We also evaluated the recommendations of kiosk placement from our sponsor to determine feasible locations for the structures. Additionally, to determine an appropriate structure, we researched various kiosk models from IBM, I-Touchsystems, and Mass Multimedia, Inc. to find a suitable model for Windhoek's current tourist industry.

In addition to determining suitable information content for the kiosks, our tourist interviews also focused on where tourists look for information and where information could be placed that might be beneficial in the city, since this information was not addressed in the City's 2001 surveys. Through our interviews, we determined where tourists typically look for information and their first few tasks upon arrival. We used this information to evaluate where tourists might utilize information kiosks. The interviews we conducted throughout Katutura were also used to assess the feasibility of placing a kiosk within one of the marketplaces.

During our initial site visits to determine areas of high tourist traffic we also determined locations to evaluate for kiosk placement. From these site visits as well as recommendations from our sponsor we evaluated seventeen possible locations. To ensure that we choose suitable locations we developed a set of criteria to look for during secondary site visits based on background research and the tourist interviews. We evaluated the initial seventeen areas against these criteria to formulate recommendations for placement of the kiosks.

The vision of a "one-stop visitor center" was specifically mentioned in the City of Windhoek's 2006 Tourism strategy. This vision would allow a user not only to obtain

information about the various attractions in Windhoek, but also make hotel or restaurant reservations using a strategically placed telephone as well as withdraw money from a nearby ATM. In order to investigate the feasibility of this, we interviewed the marketing managers for both Standard Bank and Bank Windhoek to assess their interest in this strategic placement of ATMs.

In order for us to consider the user's safety in the kiosks' placement we contacted Telecom Namibia and the City Police. We contacted Telecom Namibia to gauge their interest in regards to telephone placement near information kiosks. Having telephone access near the information kiosks not only creates an additional convenience for users, but may also provide a level of safety. To promote the safety of tourists traveling to Windhoek, we interviewed the Chief of the City Police to prevent kiosks from being located in areas of high crime.

In addition to location, we also evaluated the suitability of various kiosk systems to be placed at these locations. We examined products from IBM, Mass Multimedia, Inc, and I-Touchsystems. In order to find a suitable system and structure for the tourism needs of the City of Windhoek, we evaluated each product based on the structure material and type, the available upgrades for the systems and structures, as well as the price of the system.

Ensuring the Sustainability of Kiosks

To determine if the City of Windhoek's will be able to supplement the maintenance budget through the use of advertising space on the kiosk we conducted business interviews. We interviewed businesses that rely on tourist traffic for some portion of their business and are currently included in the tourism database. To obtain responses that might be representative of the overall views of local business owners we attempted to keep the business sampling equal between different categories of businesses such as restaurants, shops, accommodations, and services. Due to time constraints these interviews were conducted over the phone so that the time required to arrange a meeting and travel to each business individually could be more effectively utilized. We also analyzed the budget the City currently has for the pilot program of two kiosks.

We conducted these interviews to determine what methods the businesses currently use for advertising as well as what their current advertising expenditures are. We also introduced the idea of advertising on the 24-hour kiosk to gauge their interest in possibly paying to utilize advertising space on the kiosk and to establish approximately how much they would be willing to spend. This potential revenue could aid in the maintenance and sustainability of the information kiosks in future years. The guidelines we used for these interviews can be found in Appendix D.

Another aspect of sustainability we considered is ensuring that the kiosks remain functional at all times. This is important because if a tourist attempts to obtain information from a kiosk and is unable to do so at any time, the experience both of the information kiosk and of Windhoek may not be positive. To do this we developed a plan for maintaining the kiosk, identifying potential problems as well as a component replacement timeline. These were developed through research of previous implementation and maintenance plans for kiosks as well as the recommendations of the manufacturer.

In the development of the maintenance plan for the information kiosks, we met with Janie Van Rensburg, the Strategy Executive of Information Technology for the City of Windhoek. The purpose of conducting this interview was for us to initially assess the capabilities and willingness of the City of Windhoek's IT Department to maintain the infrastructure on which the kiosks will operate as well as support the software on which the kiosks will run. We also held a second meeting to discuss the findings of our research as well as to assess the hardware and software that the IT department would be most willing to support, to determine a feasible maintenance plan and the ability of the IT department to handle the plan.

Findings and Analysis

In this chapter we will present the findings from our research on the implementation of tourist information kiosks in the City of Windhoek. We will begin by discussing our location criteria which was developed as a result of our tourist interviews and site visits. We then used these criteria to evaluate possible kiosk locations. Also based on our tourist interviews we analyzed the information needs of tourists. From this analysis we will discuss our review of the current tourism database. We will then present our review of available kiosk hardware and software. Lastly we will discuss our research on the maintenance and implementation of the kiosk systems.

Decisive Factors in Kiosk Location

In this section we will first discuss our sampling of tourists. We then report the finding of these interviews relevant to kiosk location. From this and interviews with the Chief of City Police and Bank Managers we came up with a listing of location criteria. We will then use these criteria to evaluate possible locations throughout the city.

Our interviews with tourists, when compared with border crossing statistics, appeared to be a reasonable approximation of the nationality of the overall tourist population entering Namibia. As seen in Figure 3, demographic representation of our survey was similar to that of the statistics of border crossing of tourists entering Namibia. The German population of tourist which we sampled was significantly higher than border crossing statistics at 42%.

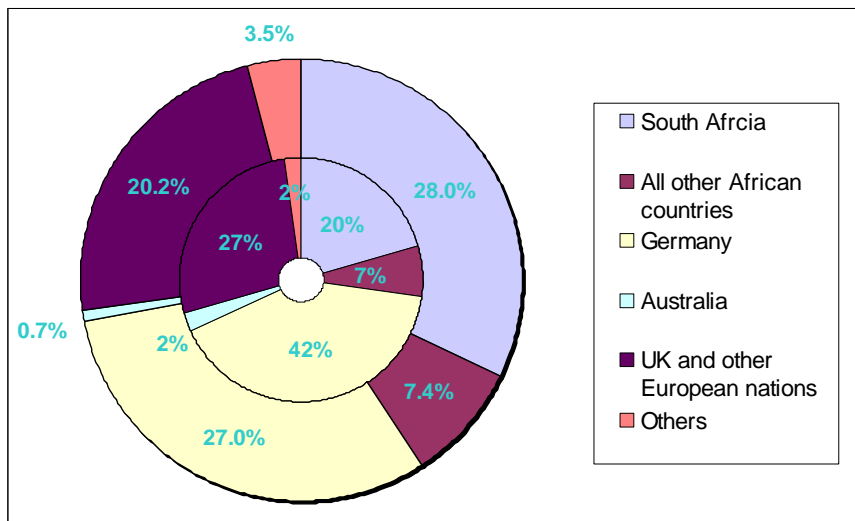


Figure 3: Nationality of Tourists Interviewed v. Tourist Border Crossing Statistics. Inner ring represents our survey demographics and the outer ring is Namibian border crossing statistics for 2004.

In the tourists' responses to our interview questions, patterns emerged based on the type of tourist that we interviewed. All tourists interviewed were split into three categories as follows based on definition of these tourists as described in the City of Windhoek's Tourism Strategy:

- Tourists on organized tours
- Self-drive, backpacker, and tourists visiting friends and relatives (VFR)
- Business travelers

The category that each interviewee fit into was determined by asking the tourist how much of their trip they planned both prior to arrival and once they arrived in Windhoek. Business travelers were distinguished by either identifying themselves as a business traveler or they were interviewed at a parastatal conference.

Our background research shows that tourists typically look for information within the first few hours of their trip; for this reason we reviewed the first tasks of tourists upon arrival when considering kiosk locations. As can be seen in Figure 4, finding accommodations was the most commonly identified first task, as it was the response of 60-70% of each group of tourists. The next most common initial task identified by the tourists whom we interviewed varied between the categories of tourists. For those on organized tours, 42% identified exchanging currency as their next most important initial task, whereas 19% of self-drive, backpackers, and VFR tourists identified finding transportation as their second most important initial task. For business travelers there was much variation between their next tasks; these tasks varied from resting to finding means of communication such as Internet cafes or phones to call home.

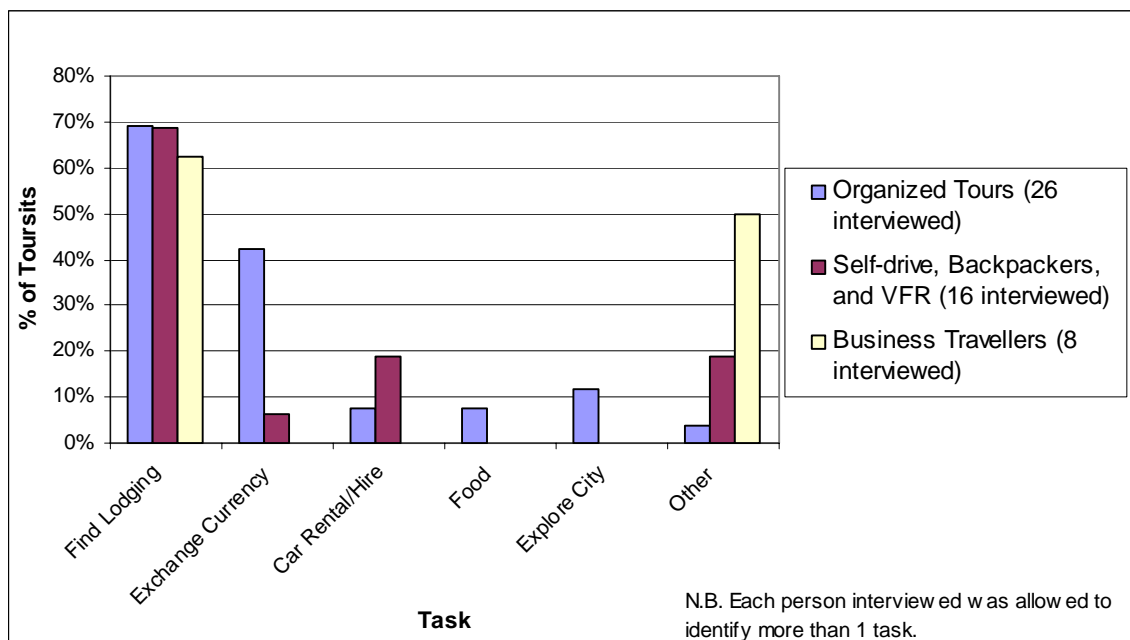


Figure 4: Tourists' First Tasks upon Arrival to Windhoek

Another consideration in developing kiosk location criteria was where tourists are currently looking for information. Figure 5 shows that many tourists, regardless of the type of traveler they were, said they usually looked for information at City’s information centers or bureaus, their hotel, and the airport. The proximity of some of the interviews conducted within the Central Business District to the City’s information centers may have affected answers given by some tourists; however, some tourists interviewed at other sites also gave this answer.

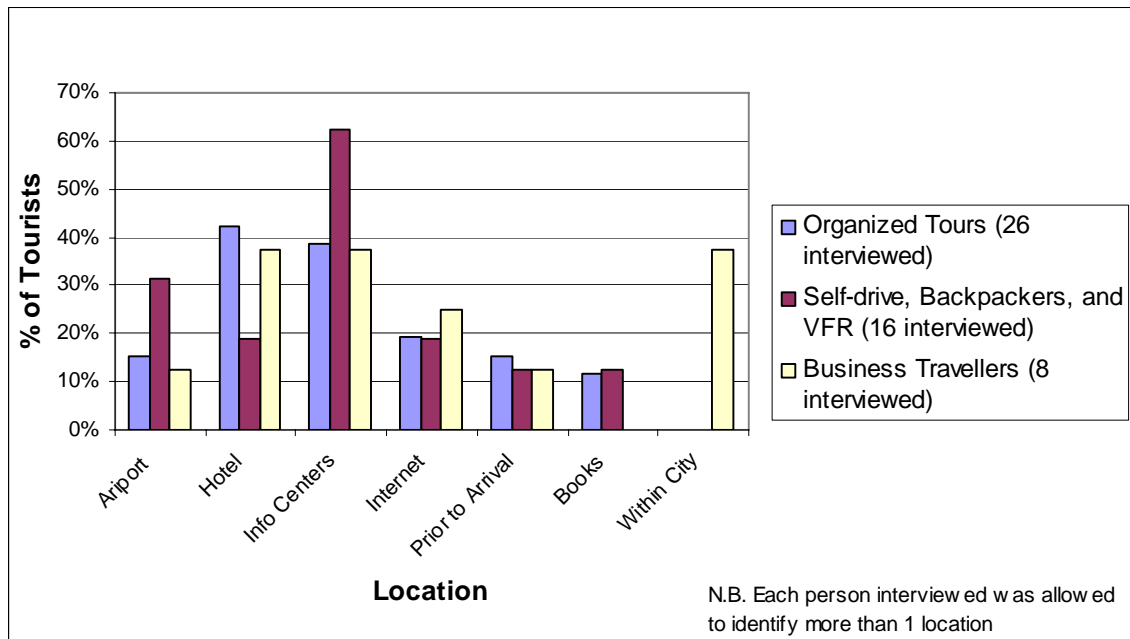


Figure 5: Where Tourists Look for Information

An interview with Abraham Kanime, the Chief of City Police in Windhoek, was conducted to find areas of low crime concentration with respect to crimes against tourists and vandalism of property. Chief Kanime reported that, since the inception of the City Police in 2005, there has been an 80% decrease in tourist related crimes due to the profiling tactics used by their officers. We were unable to acquire crime statistics for specific locations, however we were told, “Anywhere in Windhoek that is of tourist attraction is safe to place a kiosk” (A. Kanime, personal communication, 11 April 2006). However, Chief Kanime also pointed out that the City Police can not make everywhere in the city 100% safe at all times, and that it is also the responsibility of the visitors to Windhoek to take standard safety precautions.

Through our interview we also discovered that currently there are Closed Circuit Televisions (CCTV) monitoring the CBD and major shopping complexes as well as plain clothed City Police officers patrolling the post street mall area 24 hours per day. It is planned that by 2007-2008 all tourist attractions within the City of Windhoek will be under 24-hour video surveillance. Chief Kanime requested that we inform the City

Police of the finalized kiosk locations so that the City Police can make any necessary increases to the patrols and security measures taken in those locations. For this reason Mr. Kanime suggested that we include safety tips within the kiosks' user interface. The City currently has a printed brochure of safety tips for tourists distributed in its manned information centers. We believe that this same information can be made available in electronic form on the kiosk interface.

From interviews with officials from both Bank Windhoek and Standard bank we determined that both banks are interested in having ATM's located near the kiosks. Where the point of these interviews was to determine which ATMs were frequented most often by international tourists, it was found that neither bank kept this sort of information. Standard Bank does however have four unplaced ATMs and was interested in the idea of placing ATMs near tourist information kiosks. Since the bank had this interest the marketing manager, with whom we spoke, requested that the final locations be provided to them so that they could determine whether they would want to place ATMs at these locations. For transcripts of these interviews please refer to Appendix F.

In addition to Standard Bank being interested and willing to place an ATM near the kiosk systems, through our interview with Telecom, we found that they are also interested in placing a telephone adjacent to any kiosk system. Through this interview we also found that the kiosk would need its own dedicated line for network connection and thus would not be able to use the same connection as the telephone for networking. However, the process of laying the lines could be completed for both simultaneously and would not require any additional labor or costs. The text of this interview can be found in Appendix G.

Based upon our interviews with the City Police, banks, phone companies, and the analysis of our tourist interviews, we established the following list of criteria for kiosk location.

- **High Tourist Traffic** – *To try and target the largest number of tourists, areas which have the highest flow of tourists are preferred.*
- **Well lit** – *To promote the safety of the area and make the kiosk as visible as possible 24 hours per day.*
- **Accessible 24 hours per day** – *For the kiosks to meet the goals of the City, they need to be available for use 24 hours per day. This means that wherever the kiosks are placed must be accessible and secure at all times.*
- **Near ATMs and/or telephones** – *In order to promote a “one-stop-visitor center” where visitors to Windhoek can get information on the city, obtain local currency and make any reservations or contact that they may need. Telephones also add an additional level of safety where visitors can report crimes or ATM fraud as soon as possible. Telephones can also aide in the maintenance of the systems to report errors that have occurred immediately.*

- **Protected from the elements** – *Since most kiosk systems are not suited for outdoor locations, indoor locations or partial indoor locations were reviewed. For locations that are not already protected from the elements, enclosures may be constructed to allow for placement of the kiosk if the location is found to be promising in several other areas.*
- **Visible/Central locations** – *To allow tourists to easily locate the kiosks to obtain information.*
- **Near a major accommodation** – *Thirty-four percent of tourists interviewed identified their hotel as the first place they look for information and 68% of tourists interviewed identified finding their lodging as their first task upon arrival.*
- **Near a bureau de change** – *Seventy-five percent of tourists entering Namibia are from outside of Africa and 24% of tourists interviewed identified exchanging currency as their first task upon arrival.*
- **Proximity to current information center** – *Forty-six percent of the tourist we interviewed identified information centers as the first place they look for information. Should at least one of the kiosks be placed near an existing information center, information would be available at these locations 24-hours a day and signage could be combined to identify where information can be found. However, the locations should not be limited to areas near current information centers as the intention is to make information available in various areas of tourist traffic within the city.*

It was improbable to expect that any location would meet all of these criteria therefore the locations which exhibited a majority of these criteria were considered for kiosk placement. However, we required that all final locations be well lit, have 24-hour access, be visible or central locations and have the necessary enclosure or ability to add an enclosure, in order to protect the components of the kiosks. Not all kiosks need to be located near ATMs, telephones, hotels, bureau de changes or current information centers. We do advise, however that the full set of kiosk locations, taken together, be placed in the proximity of these types of venues.

Once we established these criteria we reviewed seventeen possible locations. Three of these locations were recommended by our sponsor. The others were locations of tourist attraction within the city. We then were able to determine a variety of locations throughout the City of Windhoek which fit in with our tourist identified locations as well as meeting several of the above criteria. Once we established these locations, we conducted site visits to evaluate each location more critically against each criterion. The results of these evaluations can be found in Table 2.

Table 2: Evaluation of Potential Kiosk Locations

	High Tourist Traffic	Well lit area	Available 24 hours per day	Near ATMs and Telephones	Indoor location	Visible/Central locations	Near major accommodations	Near bureau de change	Near current information center
Post St. Mall	X	X	X	X		X		X	X
Maerua Mall	X	X	X	X	X				
Wernhill Park Mall				X	X	X		X	X
Game Centre						X			
Hidas Mall			X	X	X				
Town Square Mall	X	X		X	X	X		X	X
Mutual Platz	X	X	X		X	X			X
Independence Ave.	X	X	X	X		X	X	X	X
Arrebuch Travel Lodge	X					X	X		
Roof of Africa	X	X			X	X	X		
Kalahari Sands Hotel	X	X	X	X	X	X	X	X	X
Safari Court & Hotel	X	X			X	X	X	X	
Hosea Katakwa Airport	X	X	X	X	X	X		X	X
Eros Airport		X	X	X	X	X			X
Single Quarters Market	X	X							
Soweto Market		X				X			
Tukanjeni Market		X				X			

Based on the evaluation of locations we determined the following locations to be most desirable. Six locations have been identified because the Corporate Communications and Tourism Division is interested in five locations, however we find it important for the City to have one back-up location in case one of the first five can not be used. Within each general location we have identified more specific possible kiosk locations. Please refer to Appendix I for pictures of each of the following locations.

1. **Post Street Mall Main Walkway-** In our surveys 46% of tourists indicated that they use the current information centers. With the high tourist traffic in the Post Street Mall, and a current information center being located here, it is suitable for a kiosk to be located in this area. *The following locations are well lit, are accessible 24-hours a day, are near current ATMs, are visible and central locations, near a bureau de change, and are close to one of the City's current information centers. The locations are not indoors, however, and would need enclosures built around them for protection from the elements.*
 - a. **Near the meteorite sculpture-** This is the central focal point of the Post Street Mall.
 - b. **Beneath the FNB Clock Tower-** This location is where many tourists enter the mall as they walk down Independence Avenue.
 - c. **Within the Town Square Shopping Complex near the Standard Bank ATM-** This area contains many eateries for tourists and is the location of

the main branch of Standard Bank. This could allow for the City to partner with Standard Bank for the networking of the kiosks.

2. **Independence Avenue Information Center-** This location is also near a current information center, which is where 46% of tourists we interviewed stated that they gather the information they need. Placement outside this location is advised as it overcomes the limitation of the center's hours. Any tourist who comes upon the center after hours will be able to retrieve information from the kiosk. We are, however, aware that there are plans to relocate this information center to a hotel being constructed at the center's current location. Accordingly, the new location should be reevaluated based on the location criteria. *The Independence Ave Information Center is well lit, is accessible 24-hours a day, near current ATMs and telephones, is a visible and central location, is across the street from the Kalahari Sands Hotel and Casino, is near a bureau de change, and is at a current information center. This location would be indoors as it could be placed under the large overhang outside the center or could have an enclosure built around it.*
3. **Kalahari Sands Mall** – The Kalahari Sands Hotel is the second largest hotel in the City of Windhoek and is a stop on many organized tours. *Each of the following locations are well lit, have 24-hour accessibility, are near current ATMs and telephones, are visible and central locations, are indoors, are located within the Kalahari Sands Hotel and Casino building, are near bureau de changes, and close to current information centers.*
 - a. **Ground level near Independence Ave. entrance-** Placement of the kiosk in this spot can attract traffic from both patrons of the Kalahari Sands and other tourists walking on Independence Ave.
 - b. **Upper level near ATMs and bureau de change-** Placement here would also be suitable. If this location is used it has the possibility of partnership with Standard Bank as they have two ATMs located in this area.
4. **Safari Court and Hotel** – The Safari Court and Hotel is the largest hotel in Windhoek. A large number of conferences are held at the Safari conference center and many business travelers stay at the hotel and are lacking information about the city. *Each of the following locations are well lit, are accessible 24-hours a day, are near current telephones, are visible and central locations, are indoors, and are near the information desk of the hotel where money can be exchanged.*
 - a. **Safari Court lobby-** The primary location we have established for location of a kiosk is within the Safari Court lobby. This location mainly attracts travelers on tour using Safari and business travelers as this location also has a few conference centers attached to it.
 - b. **Safari Hotel lobby-** Should the Safari Court lobby not be usable for kiosk placement, using the Safari Hotel lobby would be suitable.
5. **Hosea Kutako Airport** - The management of the airport is aware of the possibility of placing a kiosk within their establishment. However, there were difficulties in obtaining permissions to complete a portion of our study at the airport, causing us to believe there could be challenges to overcome before a

kiosk could be placed in this location. This could be due to the fact that there currently is a privately run information center located at the airport. *The locations within this location are well lit, accessible 24-hours a day, near current ATM's and telephones, are indoors, are both a visible and central location, are near a bureau de change, and are near a current information center (however it is a privately run information center).*

- a. **Next to the bureau de change-** On the arrivals side of the airport, across from where passengers exit the baggage claim, there is a bureau de change, ATM, a tourist information center, as well as an airport information counter. This area has a relatively high flow rate as it is the area which many tourists not immediately leaving the airport will visit.
 - b. **Next to car rental-** Next to the strip of car rental desks located on the arrival side of the airport. Many tourists, particularly self-drive tourists, will make this their first stop in their travels.
6. **Maerua Mall** – The Maerua Mall is the largest shopping complex in Windhoek and has recently undergone construction to more than double its size. *The building itself is open 24 hours per day and under constant security. Locations within the mall are well lit, near current ATMs, are visible, and are indoors. Within the mall there are no bureaux de changes or information centers.*
- a. **Near any of the ATMs-** There are many ATMs within the mall as well as an “ATM mall” on the lower level near the covered parking entrance. This mall contains ATMs of Standard Bank, Bank Windhoek, and First National Bank.
 - b. **Entrance on the uncovered parking side of the mall (either the new or the old section)-** This is a major entrance to the mall and also is the place where many taxis drop off their fares.
 - c. **Entrance near the covered parking side of the mall-** This is the other point of entry for the mall thus causing high traffic at this location.

Information Needs of Tourists in Windhoek

In this section we discuss the types of information which tourist look for in the city. From this we draw conclusions on the type of information to be included in the kiosks. From our review of the current database we will examine the idea of using it as the information source for the kiosks. While doing this, we noticed Katutura; a major cultural center for Windhoek is missing. We then discuss our findings of the interviews conducted within the markets of Katutura to determine if they are ready for a possible increase in tourism.

In order to assess what information should be included in the kiosks we asked tourists what information they are looking for when they travel to a city. We also interviewed a number of business travelers to determine if they might find information kiosks helpful during their stays in Windhoek. We were able to identify patterns in what

types of information travelers were looking for based on the responses to our interview questions. The same categories of travelers were used as in the previous section.

Most of the travelers in Windhoek were looking for information on accommodations, art and cultural aspects of the city, and restaurants, as shown in Figure 6. There were a variety of responses to this question from all types of tourists, and tourists were allowed to give multiple answers to this question. Forty-two percent of tourists whom we interviewed on organized tours listed attractions as among the type of information they were most interested in when traveling. For the self-drivers, backpackers, and VFRs, 31% identified lodging as the most important type of information they were seeking. For the self drive, backpacker, and VFR tourists, the desired types of information were fairly split; historical and cultural aspects of the city, maps, and restaurants each received 19% of the responses from our interviews for the self-drive, backpackers, and VFR as well as those on organized tours.

In our interviews we found that 82% of the tourists looked for information upon their arrival in Windhoek; this suggests that information kiosks would be utilized. Information kiosks may allow these tourists to obtain the information they are seeking more quickly than from a manned information center. Most of the tourists who were not looking for information claimed that they had found the information they required through other means prior to arrival or were on an organized tour which provided them with activities and information about Windhoek.

Since many parastatal business travelers are from the Southern African region and often times from within Namibia, the travelers whom we interviewed at a parastatal conference had many varying interests regarding what information they would look for. As seen in Figure 6, 50% of those that we interviewed said they would be interested in finding more information on the historical and cultural aspects of the city. Some of the business travelers interviewed said they often had their entire day taken up by a conference, but 25% expressed an interest in getting information on restaurants in Windhoek and the nightlife. Other travelers were spending an extra day in Windhoek after the conferences ended and hoped to see more of the attractions within the city. Some of the travelers expressed interest in the kiosk project and inquired as to its implementation. All the business travelers expressed an interest in using an information kiosk should it be available.

We also reviewed the City's current tourism database for usability, ease of access, and inclusiveness. We found that a majority of the information tourists were looking for was already included in the database. However Katutura, a major cultural and historical section of Windhoek, city maps, and safety tips for tourists are not included in the database.

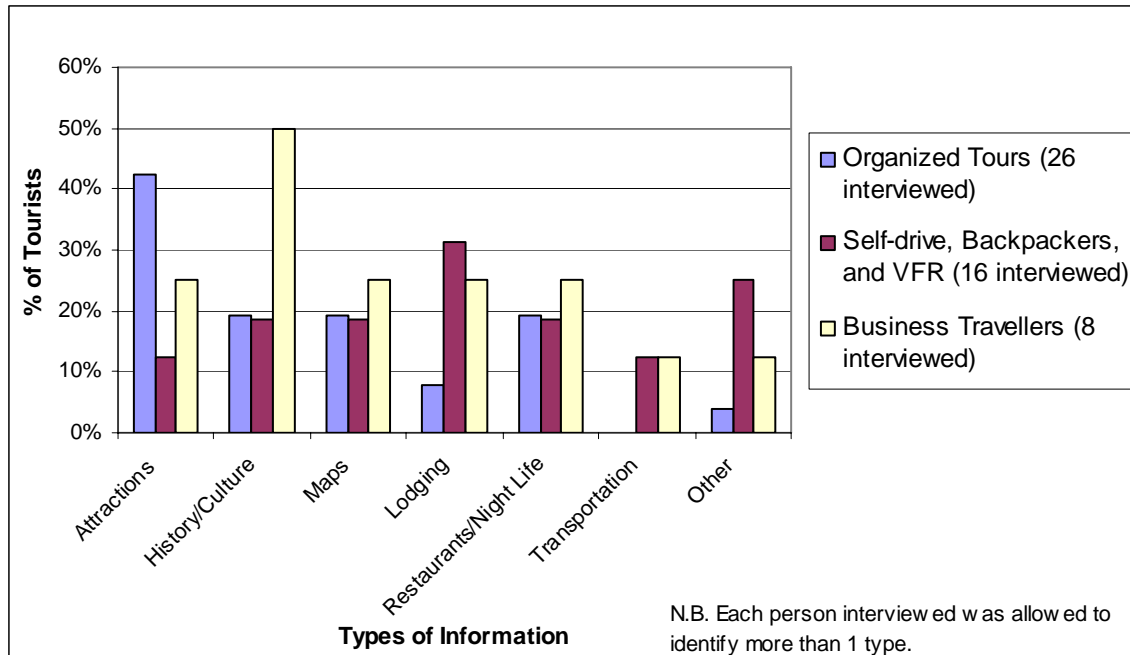


Figure 6: Types of Information Tourists Look for in Windhoek

Another problem we found was an excess of categories causing a difficulty in finding the desired information. There were over 81 main categories of information divided into 197 sub-categories. We found that many of these 81 main categories can be combined to form nine main categories for the kiosks. Appendix K shows an analysis table of this reorganization. The database analysis table in shows the information tourists are looking for, the current organization of the database and the possible combination of categories to improve its organization, allowing for it to be more easily integrated into a kiosk interface.

We also noticed that some of the categories were empty and have no sub listings, and that some of the addresses are missing, or are not exact. The current database is also only available in English. For this reason, the database would need to be translated into multiple languages for use in a kiosk setting.

While we were reviewing the database for content that was missing we noticed that Katutura was not included as a tourist destination. In order to keep the kiosk systems in parallel with the City of Windhoek's Tourism Strategy to promote Windhoek as a historical and cultural center of Namibia, we determined it was important to include information about these important aspects of Namibian history. To do this we addressed the readiness of the markets in Katutura to accept a possible increase in tourist traffic. We conducted interviews of the market managers and the merchants to understand whether or not the merchants could interact with tourists effectively, their opinions of tourists, and the current tourist patterns in the markets.

The merchants and market managers whom we interviewed in Single Quarters and Soweto markets, Penduka, Ohjikandu Den and the Incubation Center all demonstrated that most tourists would be able to interact with the merchants as over 85% of those interviewed said they spoke enough English to do business. However in Tukondjeni only 30% of those interviewed spoke English. In addition to speaking English, several merchants also spoke German as well as Afrikaans and native languages.

From our analysis of the market merchants and managers, we found that the markets would be able to handle an increase in tourist flow and therefore should be included in the database. We also found that Single Quarters and Soweto seemed the most equipped of the marketplaces to be included in the database; Penduka and Ohjikandu Den also were also well equipped to handle inclusion in the database.

Kiosk Structure and Software

To create a positive user experience it was important to review the different structure and software options available. The software and structures were evaluated for cost, design, as well as the feelings of the City of Windhoek’s IT Department.

We reviewed three different companies that sell kiosks commercially and the models that they offer. The models were evaluated based on features and price of the model. IBM, Mass Multimedia Inc, and I-Touchsystems kiosk models were all evaluated. A comparison of the kiosk structures can be seen in Table 3, and photos of the systems can be seen in Figure 7.

IBM’s kiosk is the most inexpensive base model which sells at approximately N\$ 12 000. The base model includes the computer and touch-screen. However, IBM has discontinued selling the stand. Because of this, a custom structure would have to be built. With the budget of this project, it was not feasible for us to recommend having a custom designed structure created.

Table 3: Kiosk Structure Comparison

	IBM	Mass Multimedia Inc.	I-Touchsystems
Price	N\$ 12 000 + stand	N\$ 10 200-N\$ 11 200 +computer	N\$ 12 000- N\$ 18 000
Printer	Yes	Yes	Yes
Stand Material	None	Wood	Metal
Structure Type	None	Free-standing	Wall/desk-mount, free-standing

Mass Multimedia Inc. sells a base model kiosk structure, which costs approximately N\$ 12 800. This price only includes a wood laminate kiosk structure and touch-screen. This wood structure is less resistant to vandalism and environment changes such as humidity. The cost of a computer to run the kiosk would then have to be added to this price; this would be approximately N\$ 10 000 over the cost of the structure.

I-Touchsystems has a variety of freestanding, desk-mount, and wall-mount kiosks. The freestanding kiosks range in price from approximately N\$ 17 000 to N\$ 20 000 based on the size and type of the touch-screen. These kiosks also have the ability to include an eight centimeter wide thermal printer. Wall-mount and desk-mount kiosks range from approximately N\$ 15 000 to N\$ 18 000 based on the type of touch-screen used.

All three systems included the ability to include a thermal printer. The addition of a printer would provide tourists with the ability to print desired information and directions to establishments. However this would create an additional aspect for maintenance as paper will need to be replaced. The use of thermal printers could eliminate the need for ink replacement.



Figure 7: Kiosk Structures from (left to right) I-Touchsystems (kioskproducts.com), IBM Anyplace Kiosk (ibm.com), and Mass Multimedia, Inc (touchscreens.com)

We also reviewed two different types of kiosk software that could be used as the user interface. One software product, Kiosk-in-a-Box, costs approximately N\$ 3 000 for the first license and N\$ 750 for each additional site license. This software allows for an unlimited number of unique screens. It also has the ability to retrieve information from an existing database file as well as report usage statistics into a database file, and be updated via a file transfer protocol. Kiosk-in-a-box utilizes its own, in-software editing scripts. This means that editing pages on the interface can be time consuming. As seen in Figure 8, each page must be created as an image and imported to the software using its in-software editing.

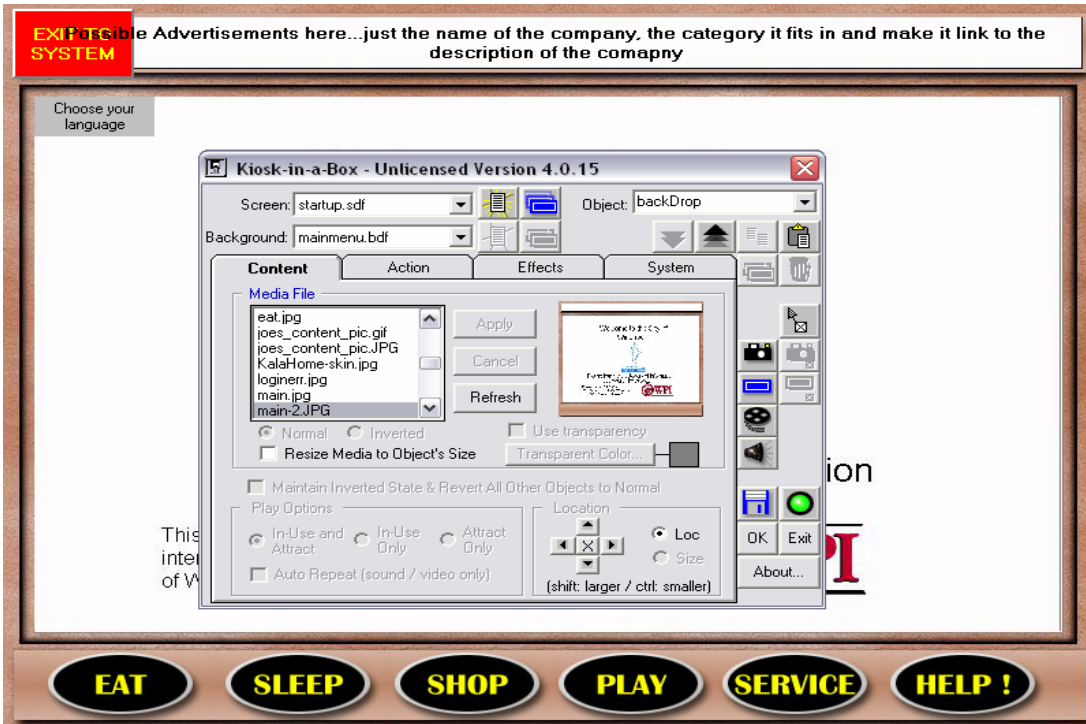


Figure 8: Kiosk-in-a-box software editing interface

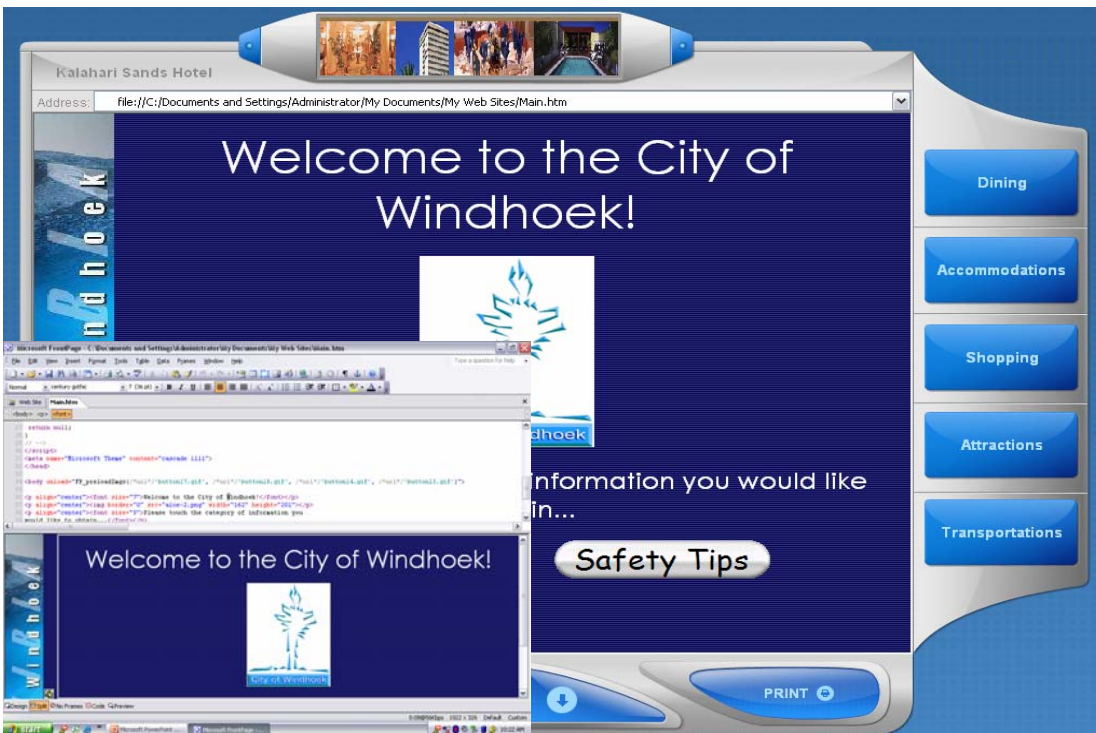


Figure 9: SiteKiosk software editing interface

In addition to Kiosk-in-a-box, we also reviewed the SiteKiosk software. The price per license for SiteKiosk is approximately N\$ 730 each, for the first fourteen. This software has the capability to have unlimited pages, as it pulls from an HTML webpage. As seen in Figure 9, the border with navigation buttons is a “skin,” while the center page is a simple HTML webpage. HTML web pages are completely customizable and usage statistics as well as integration with Microsoft Access or SQL databases are possible. The interface “skin” can also be altered using HTML. In this way the nine main buttons can be listed along the right side and bottom of the screen. One of the advantages of this interface is that the HTML script can be used almost directly as the City’s Tourism Webpage. Additionally, the SiteKiosk software is less expensive to acquire than the Kiosk-in-a-box software package. Both software packages, the interface is set up to incorporate advertising. In this way, the City can easily use advertising as a means of supplementing maintenance costs.

Kiosk Sustainability

In this section we will discuss our research on maintenance for the kiosk systems. We will then review the results of our business interviews. Finally we will discuss why advertising is a viable means for supplementing the maintenance budget.

Electronic kiosks have been known to last an average of three to five years; however, with good maintenance durable machines have lasted about ten years (buyerzone.com 2006). For this reason it is important to develop a maintenance plan. We found that Continental Airlines currently uses over 900 kiosks as a means of check-in for their passengers. This company checks and cleans their systems every 60 days. They believe that, because of this routine maintenance plan, they have never had more than four kiosks malfunctioning at any given time (Bodine, 2005). Also, according to BuyerZone.com, touch-screen monitors begin to malfunction after about three years of intense use and cost about N\$ 3 000 to replace.

We also met with the Strategic Executive of Information Technology for the City of Windhoek who expressed that the IT department is willing to undertake the maintenance of the kiosks. He also recommended that as part of implementation a “swap-out unit” be purchased. Since the various components of the kiosks are manufactured outside of Namibia, any items that needed repair as well as replacement parts must be shipped from outside the country. This can cause long periods of time with malfunctioning kiosks. By having a “swap-out unit” on hand, this unit can quickly be switched with the malfunctioning one, lessening down time. With the exception of parts, the IT department does not charge the other divisions within the City for their work.

With these maintenance suggestions it can be estimated that kiosk maintenance will cost approximately N\$ 4 000 per kiosk per year as shown in Table 4. These estimates were made with current pricing and do not take into account possible fluctuation in exchange rates or inflation.

Table 4: Maintenance and Replacement Costs per Kiosk

Expenses	Cost	Cost/Year
Monitor replacement	N\$ 3 000 at 3 yrs	N\$ 1 000
Labor	N\$ 0	N\$ 0
Total kiosk replacement	N\$ 18 000 at 6yrs	N\$ 3 000
Paper	cost covered by 50c price per page	N\$ 0
Total yearly budget per kiosk		N\$ 4 000

To explore how financial support for kiosk maintenance and replacement could be obtained, we researched the possibility of having businesses advertise on the system. We conducted phone interviews of 26 businesses throughout Windhoek which were a portion of the 371 tourism stakeholders. Figure 10 shows the distribution of businesses which we interviewed compared to the distribution of tourism related business types throughout the City of Windhoek.

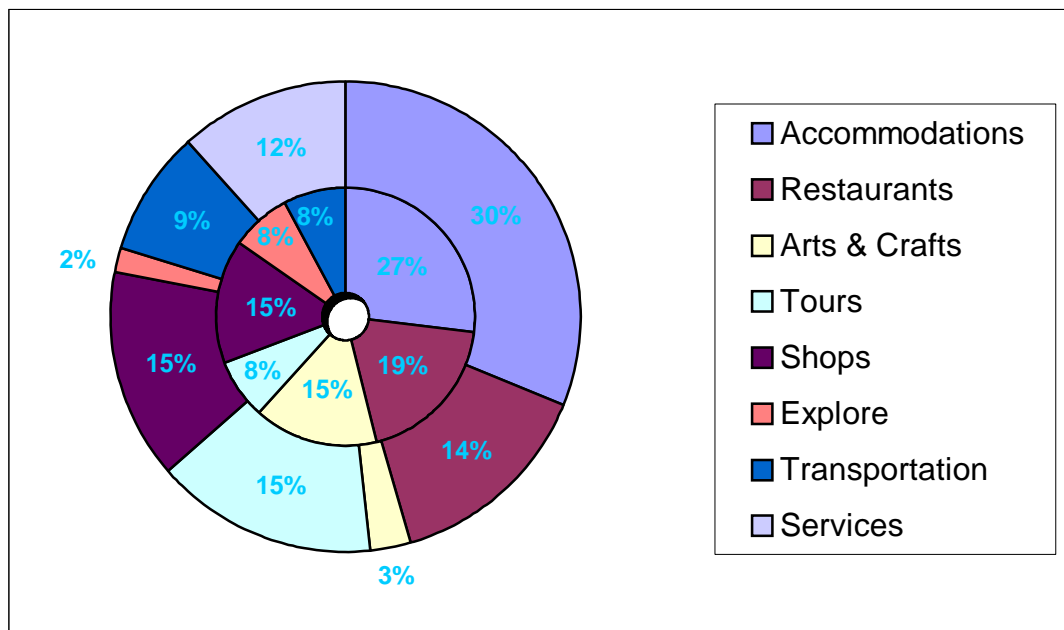


Figure 10: Distribution of Types of Tourism Related Businesses in Windhoek V. Our Study; inner ring shows our study, the outer ring shows the businesses in Windhoek.

During our interviews, we asked businesses how much money their business currently spends on advertising. Thirty-six percent of the businesses interviewed reported spending over N\$ 800 a month while 19% mentioned spending less than N\$ 500, as can be seen in Figure 11. However 35% of the businesses interviewed were unsure, unwilling or were unable to identify the amount they currently spend on advertising. This high refusal rate may be due to the timing of our interviews; many

business owners mentioned it was close to the end of their fiscal year and therefore their books had been given to their accountants. Many of the businesses spending over N\$ 800 a month targeted international tourists in their advertising. These included listings and advertisements within guide books, such as *Lonely Planet*, ads in *Flamingo* magazine, and brochures in information centers. Of these businesses targeting international travelers, all claimed that over 50% of their business was from tourism. Most businesses that spend less than N\$ 500 a month use local forms of advertising. There were some extremes in the data; one particular business claimed to spend N\$ 200 000 per month on advertising while another claimed to spend N\$ 0.

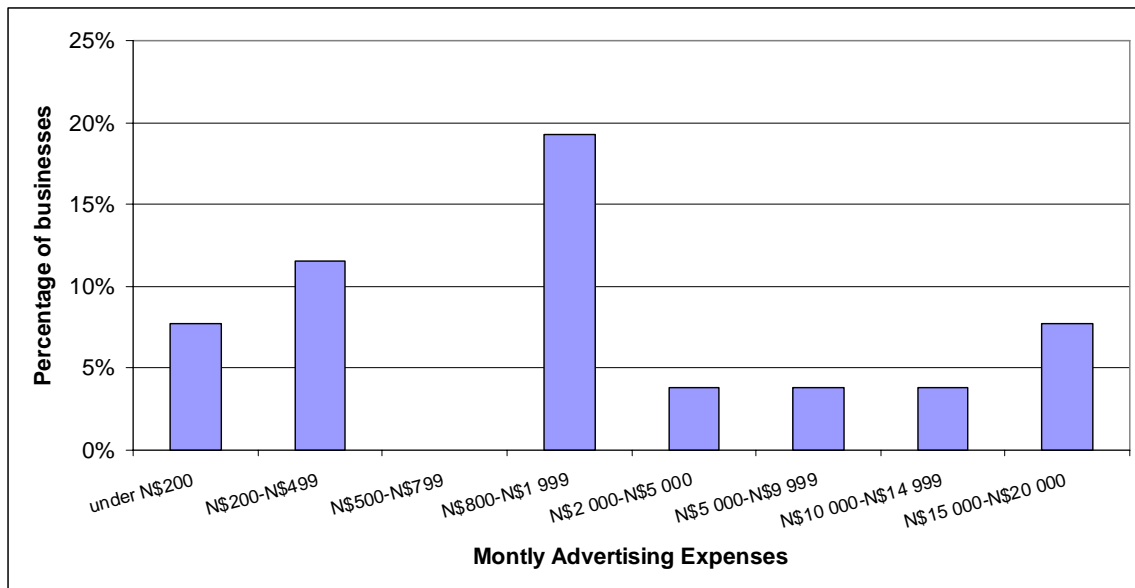


Figure 11: Monthly Advertising Expenses of Interviewed Businesses

Eighty-five percent of businesses we interviewed expressed an interest in advertising on an information kiosks; this interest depended on the finalized cost of advertising, and the location of the kiosks. Many businesses added that they would like a way to track how many tourists see their advertisement to gauge a return on their investment. Since the kiosk software products have the ability to collect statistics about the number of people accessing each page, this type of information could be made available to businesses. Based on this data we found that advertising on the kiosks is an idea that will be accepted by a majority of businesses and should be able to supplement the costs of maintenance for the kiosks.

From our research into cost of implementation plans, cost of information kiosks and upgraded components we developed a budget for the implementation of the both the pilot program and future kiosks. As can be seen in Table 5, we received the estimated cost of upgrades from I-Touchsystems as well as an estimated shipping cost. We also received an estimated cost to have enclosures built from Retief Sales Solutions. The

database/interface construction costs were estimated off of the original cost of building the current database. Based on the fluctuation of the exchange rate from Euros to Namibian dollars, and in trying to account for any unforeseen expenses we decided that a 20% contingency would be acceptable for this project.

Table 5: Budget overview for pilot program and additional kiosks

Pilot Program	Budgeted Cost	Each Additional Kiosk	Budgeted Cost
Kiosk cost x 3	N\$ 54 000	Kiosk cost	N\$ 18 000
Software x 3	N\$ 2 200	Software	N\$ 730
Coin acceptor x 3	N\$ 12 600	Shipping	N\$ 2 700
Printer x 3	N\$ 11 000	Enclosure/Construction	N\$ 17 000
Enclosure/Construction x 2	N\$ 40 000	20% Contingency	N\$ 8 000
Database/interface construction	N\$ 25 000	Total	N\$ 46 430
Shipping x 3	N\$ 8 500		
20% Contingency	N\$ 30 000		
Total	N\$ 183 300		

Conclusions and Recommendations

Through interviews and research our team has formulated conclusions and recommendations for information kiosks in the City of Windhoek. In this chapter, we will make recommendations on the placement of the kiosks throughout the city, as well as describe the conclusions of our research on both the software and hardware of the kiosk system. Overall sustainability of the information kiosks was evaluated and a plan for the project's implementation will be presented. Finally, we will make recommendations for future research to be done, in conjunction with the implementation of our project, to better tourism throughout the City of Windhoek.

Placement of Kiosks

Based on interviews with tourists and other tourism stakeholders as well as our own site visits we developed criteria for evaluating possible kiosk locations. These criteria include:

- **Well lit area**
- **Visible or central locations**
- **24-hour access**
- **Indoor locations or locations in which an enclosure could be erected**
- **Areas of high tourist traffic**
- **Locations near ATMs, telephones, major accommodations, bureaux de change, or current information centers**

We evaluated a total of seventeen locations against these criteria. From this analysis we recommend the kiosks be placed in the following locations in the order presented.

Within each general location we have identified more specific kiosk locations, photographs of these locations can be found in Appendix I. For the pilot program of two information kiosks we recommend the first two locations be used.

1. **Post Street Mall Main Walkway-** *With the high tourist traffic in the Post Street Mall, and a current information center being located here, we recommend that a kiosk be located in this area.*
 - a. **Near the meteorite sculpture-** This area is more central and visible than the current information center within the Post Street Mall.
 - b. **Beneath the FNB Clock Tower-** This area is highly visible to visitors who are walking along Independence Avenue and also those exiting the Post Street Mall area.
 - c. **Within the Town Square Shopping Complex near the Standard Bank ATM-** This location has high tourist traffic and is in close proximity to both an ATM and a current information center.

2. **Independence Avenue Information Center-** *This location is at a current information center; placement outside this location is advised as it helps overcome the limitation of the center's hours.*
3. **Kalahari Sands Mall-** *The Kalahari Sands Hotel is the second largest hotel in the City of Windhoek and is a stop on many organized tours.*
 - a. **Ground level near Independence Ave. entrance** - We recommend placement of the kiosk in this spot as it can attract traffic from both patrons of the Kalahari Sands and other tourists walking on Independence Ave.
 - b. **Upper level near ATMs** - If this location is used it has the possibility of partnership with Standard Bank as they have two ATMs located in this area.
4. **Safari Court and Hotel** - *This is the largest hotel in Windhoek and a large number of conferences are held at the Safari Conference Center, this would allow for the parastatal visitors who stay at the hotel to get information.*
 - a. **Safari Court lobby** - To attract travelers on tour using Safari as well as business travelers.
 - b. **Safari Hotel lobby** - Should the Safari Court lobby not be usable for kiosk placement, we recommend using the Safari Hotel lobby.
5. **Hosea Kutako Airport** - *This is the entry point of many travelers entering Windhoek.*
 - a. **Next to bureau de change** - This location also contains an ATM, tourist information center, and an airport information counter. This area has a relatively high flow rate, as it is the area that many tourists not immediately leaving the airport will visit.
 - b. **Next to car rental** - Many tourists, particularly self-drive tourists, will make this their first stop in their travels.
6. **Maerua Mall-** *The Maerua Mall is the largest shopping complex in Windhoek.*
 - a. **Entrance near the uncovered parking area** – This entrance is the most common entry point to the mall for visitors. It not only attracts visitors that are driving themselves to the mall but is also where a taxi rank is located.
 - b. **Entrance near the covered parking area** – This entrance is the other entry point to the mall thus attracting a high flow of visitors.
 - c. **Near the ATM mall on the first floor** – As identified through our tourist interviews, placement near ATMs is desirable.

Suitable Kiosk System

Based on our research and an analysis of various kiosk systems and upgrades we were able to make recommendations on the most suitable kiosk system for the City of Windhoek's tourism needs. The following section outlines our recommendations.

- **We recommend that the City of Windhoek purchase I-Touchsystems freestanding kiosks with resistive touch screen.** *Based on its features and*

pricing of the kiosks reviewed, I-Touchsystems had the most durable structure. They also are partners with the company who manufactures the recommended software. The systems cost about N\$ 18 000 each.

- **We recommend upgrading the kiosks from a 38cm (15inch) monitor to a 48cm (19 inch) monitor.** *This will allow for more information to be displayed on the screen as well as allow for ample advertising space.*



Figure 12: I-Touchsystem's freestanding kiosk (graphic taken from kioskproducts.com)

- **We recommend that kiosks in areas that can be monitored closely, such as the Independence Avenue Information Center and the Post Street Mall, be upgraded to include a thermal printer to allow for users to print the information they receive.** *These two recommended locations are near current information centers and these kiosks could be monitored for printing problems to expedite the resolution of any problems that may occur.*
- **We recommend that that City purchase external coin acceptors to allow for a 50c fee to be charged per printout for kiosk systems with printers.** *We recommend 50c because this is the standard photocopy price at local City facilities and will discourage excessive printing while still allowing tourists affordable access to printing their information. This nominal fee will also help the City by covering the paper costs incurred.*
- **We recommend that the City of Windhoek purchase the SiteKiosk software as the interface for the kiosk system.** *The SiteKiosk software can be obtained for N\$730 per license from SiteKiosk.com or using the order form in Appendix J. The SiteKiosk software has a more user friendly interface and is easier to edit the pages of the interface. Another advantage of this software is its utilization of HTML programming; this could allow for the pages created for the user interface to be utilized as the City's tourism website.*

- **We recommend that the kiosks run “standalone” during the day but still be networked to allow for easy updating.** *This means that all information which the kiosks will dispense should be loaded onto the local machine which could be updated on a regular basis to ensure that the information is current. Having the information loaded locally on to the kiosk system would allow for the user to easily and quickly navigate through the kiosk interface, as opposed to having to wait for each page to load should the system retrieve all the information from a network. Based on our background research, it is recommended that users be able to locate the information they desire within five to seven minutes with no prior computer knowledge to prevent frustration. With the systems networked, the IT department can dial into the local machine remotely and upgrade the software and database on a regular basis.*
- **We recommend that the City reorganize its current database to allow for an easier interface and integration in a kiosk setting.** *The City currently possesses a tourism database which is utilized by the information officers at the manned information centers. The organization of this database, however, is not desirable for use in a kiosk setting. This five to seven minute time frame for a user to obtain their information can also be achieved through the reorganization of the database. The current database contains 81 main categories with 197 sub-categories. Nine main categories would be more suitable in a kiosk setting, because it will make the kiosk more navigable. Appendix K shows the main categories of information that we recommend as well as the categories from the current database that can be organized into each of the main categories. A recommended flow from main categories to sub-categories of information for the interface design can be found in Appendix L. These main categories are:*
 - *Accommodations*
 - *Dining*
 - *Services*
 - *Events and Attractions*
 - *Explore Windhoek*
 - *Transportation*
 - *Arts and Culture*
 - *Shopping*
 - *City Maps*
 - *Health and Safety Tips*
- **We recommend other improvements to the database, including filling in any incomplete addresses and contact information as well as adding pictures of the various businesses, a description of the business if available, and directions to the establishment. We also recommend that each business have its own unique page.** *These additions will allow the businesses to be easily located and contacted by tourists.*
- **We recommend that the buttons within the touch screen interface be between 2.5cm and 5cm in size on the screen.** *This size allows users to accurately and quickly obtain their desired information. The buttons should also be spaced with 1 cm on all sides between each button.*

- **We recommend that the information within the interface of the kiosk be available in at least German and English.** *The City of Windhoek's Tourism Strategy shows that a large majority of tourists traveling to Namibia speak either German or English. Afrikaans and French are also recommended to appeal to domestic and other European tourists. This would require the translation of the current database into these languages.*
- **We recommend that the Tourism Division and the IT Department keep in close contact to insure that the kiosk database be updated at least once a month.** *This is to ensure that all tourists using the kiosk have the most up-to-date information available. If the Tourism Division obtains new information they should contact the IT Department as soon as possible to ensure updates.*

Overall Kiosk Sustainability

We reviewed case studies and buyers' guides for various kiosks to determine what sort of maintenance should be done. We also reviewed the current budget to insure that funds are available to keep the kiosks functional in the upcoming years.

- **We recommend that the IT department visit each kiosk every 60 days in order to insure that all components of the kiosk are still functioning properly.** *Research shows that Continental Airlines has had much success with their kiosks following this maintenance schedule. The IT department of the City of Windhoek has indicated that they have the capacity to handle such a maintenance plan. During this scheduled visit, the internal components of the system should also be cleaned and dusted to prevent damage to them.*
- **We recommend that the City of Windhoek be prepared to replace the monitors after about three to four years of use. However, no components of the kiosk should be replaced unless they are not in proper working order.** *As research shows, the touch-screen component of the monitors will be less effective in time. A replacement monitor costs approximately N\$ 3 000.*
- **We recommend that the City of Windhoek be prepared to replace the kiosk systems after about 6 years. However, a kiosk does not need to be replaced until it is no longer functioning properly.** *Through our research, we found that kiosk systems typically last 3-5 years, however with proper and regular maintenance, can last up to ten years. The replacement of a kiosk system may cost about N\$ 18 000.*
- **We recommend the purchase of one extra kiosk for every five kiosks the City operates.** *This kiosk can be kept in storage and used to replace a malfunctioning kiosk while the City waits for replacement parts. This would enable the IT department to take the malfunctioning kiosk for in-house repairs, which was identified as their preferred method of repairs in our interview with the Strategy Executive of Information Technology. This extra kiosk can also function as a mobile kiosk to be used during major festivals and events. If the City is holding a major conference or festival in an area that currently does not have a kiosk, the*

extra kiosk can be placed there for the duration of the festival to target this flow of visitors.

- **We recommend having three different levels of advertising on the kiosks with varying levels of cost fund the costs of maintenance and replacement.** *From an analysis of the results of our business interviews with respect to the amount of money the businesses currently spend on advertising, we were able to determine a price range that would be suitable for the highest number of businesses. The breakdown for this can be seen in Table 6.*
- **We also recommend that the City run a promotion for advertising for the first year, giving businesses the first six months of advertising free.** *This “evaluation” period would allow the City to collect usage statistics to allow businesses to evaluate whether the return on investment for this new method of advertisement is worth the costs.*

Table 6: Price Breakdown for Advertisements on the Kiosk

Advertising Level	Price for 1st year	Price/year
Banner on Main Page	N\$ 2 500	N\$ 5 000
Full Screen Advertisement on Attraction Screen + Banner	N\$ 5 000	N\$ 10 000
Advertisement on Printout + Full Screen Ad + Banner	N\$ 7 500	N\$ 15 000

Given the estimated maintenance and replacement budget per kiosk per year and the three kiosks we recommend for the pilot program, the City will need approximately N\$ 18 000 per year. In this way the tourism division would have to sell a minimum of eight advertisements at the lowest level the first year and four for each additional year. Advertisements at higher levels generate more revenue and thus would require fewer businesses to purchase advertising space.

Once the initial phase of the project is completed and more kiosks are placed throughout the city, assuming a maximum of ten kiosks, the City would need N\$ 60 000 per year for the maintenance of the systems. This can be achieved through the Tourism Division selling advertising space to a minimum of twelve businesses at the lowest level.

Kiosk Implementation Plan and Budget

In order to ensure a smooth transition in the implementation of the kiosk project, we reviewed case studies of past kiosk projects to help formulate a plan for the City of Windhoek. We recommend the following steps be completed, in the order below when implementing the kiosk project. A seventeen-week implementation timeline can be found in Appendix N.

1. **Secure Recommended Locations** – *First and foremost, before the kiosk project can be undertaken, the Tourism Division should secure the final locations for placement of the kiosks. In the case of some of our recommended locations, the City owns the properties; however, the Tourism Division must seek approval from the proper divisions before placement. In other cases, the property is owned by*

- private entities. The Tourism Division must contact the owners or managers of these properties for approval of the placement of kiosks in these locations.*
2. **Order Kiosks** – *Once the locations of the kiosk are approved and secured, the IT Department should order the I-Touchsystems freestanding model with 19 inch resistive touch screen. For the two systems that are to include printers, the printers and coin acceptors should also be purchased at this time.*
 3. **Prepare User Interface** –
 - a. **Restructure Database and Create User Interface** - While the delivery of the kiosks is awaited, we recommend the IT Department begin the preparation of the software and user interface. If necessary these can be done by an outside consultant. Once the database is restructured, the user interface can be created to retrieve the necessary information from the updated database.
 - b. **Purchase Software Licenses** - The IT Department should order the SiteKiosk software licenses through the order sheet in Appendix J.
 4. **Construct Necessary Enclosures and Connections** –
 - a. **Build Necessary Enclosures** – We recommend that the Tourism Division contract out the construction of any enclosures that need to be built. As quoted by Retief Sales Promotion these enclosures should cost about N\$ 17 000
 - b. **Install Electric and Network Connections** – We recommend that the IT Department contract an electrician to install any additional electrical outlets that are needed. For locations where the IT Department currently has a network infrastructure, the proper connections should be made. Otherwise the IT Department should contact Telecom Namibia for installation of a phone line.
 - c. **Contact Telecom** – Both the IT Department and the Tourism Division should contact Telecom Namibia with the locations of the kiosks so that payphones can be placed. If Telecom is providing the network connection for a particular location it is important to have their workers place the proper line at this location.
 5. **Contact Standard Bank about Kiosk Locations and ATM Placement** – *Standard Bank expressed an interest in placing ATMs near the kiosks. Once the locations have been secured, we recommend that the Tourism Division contact Standard Bank with these locations to establish their continued desire to place their ATMs with the information kiosks.*
 6. **Organize Initial Businesses for Advertising** – *We recommend that the Tourism Division contact local tourism-related business to find businesses interested in advertising on the kiosk. We recommend that the Tourism Division be responsible for the advertisements on the kiosks because through contacting local marketing firms, the average commission for such work was 40%. With this high commission, the City would have to sell twice as much advertising space in order to cover the costs of maintenance and replacement for the kiosks.*

7. **Prepare Signage to Identify Locations of Kiosks and Information Centers to Tourists** – *We recommend the Tourism Division contact the City Transportation Department to have the necessary signage printed to identify the locations of the new information kiosks as well as updated signs identifying the locations of the current information centers. A sample design can be found in Appendix M and we recommend the size of the sign should be one half meter by one meter. The design and installation of the signs can be done by the City Transportation Department and will not impact the budget of the project.*
8. **Load and Test Software on Kiosks** – *Once the database has been updated, the software has been purchased and received, the user interface has been completed, and the kiosks have been delivered, we recommend that the IT Department load the software to be extensively tested to identify any flaws in the design or programming of the software.*
9. **Make Necessary Changes to Software** – *We recommend that any flaws identified by the IT Department be remedied before the installation of the kiosks.*
10. **Install Kiosks and Signage** – *Once the software has been tested and the signage has been created, we recommend that the posting of the signage and installation of the kiosks be done simultaneously so as to not have unidentified kiosks or misleading signs.*
 - a. **Post Signage**- *We recommend the Tourism Division post the signage.*
 - b. **Place and Secure Kiosks** – *We recommend that the IT Department install the kiosks.*

The total cost of the implementation of the kiosk pilot program is estimated at N\$ 183 300. This price includes the costs of three kiosks, software licenses, printers, and coin acceptors. Also, the costs of erecting necessary enclosures, the construction of the interface and the database, the costs of shipping, as well as a 20% contingency are all included within the final budget. Prices for each part of this implementation can be found in Table 5 in the previous chapter. The City’s budget for the pilot study was N\$ 200 000. This recommended budget fall within those funds allotted by the city council for the initial phase of this project.

Recommendations for Future Research and Implementation

After completing our research we found that the opportunity for future work exists. Because of this, we recommend future research and implementation to ensure the continued use of the kiosks by tourists.

- **We recommend that a study be done after approximately five years of the kiosk implementation to determine if a need still exists for the kiosks and if the City should continue with the kiosk maintenance and replacement.** *Our research, along with the research conducted by the City of Windhoek, shows that there is a need for tourist information. Though some people do try to search*

online prior to their arrival, they indicated that finding the information they need isn't always easy, as some tourist-related establishments do not have websites. These kiosks will provide tourists with that internet feel in searching for information once they arrive. However, as the country develops technologically, more information may be available to tourists prior to their arrival and the need for information kiosks may diminish, as the information kiosk interface and database can double as the City of Windhoek's tourism website.

- **We recommend that the kiosk locations be incorporated into the City walking guide and other maps.** *These maps can then be distributed to local hotels, restaurants, and shops for tourists to take and use in order to locate the kiosks for their information needs.*

From our research and analysis we found that implementing touch screen information kiosks is a feasible method for the City of Windhoek to use in correlation with their Tourism Strategy to increase information available to tourists throughout the city. It is our hope that with our recommendations the City of Windhoek can implement and maintain the kiosks in strategic locations to better the tourism industry. This project combined with the other initiatives of the Tourism Division could help in making Windhoek a more tourist-friendly destination within Namibia.

References

- Belden, T. (2005, November 22). Enhancing area tourism with touch of a screen. *The Philadelphia Inquirer*.
- Bodine, K. (2005, December 20). Is Your Hardware Hard to Use?. *Kiosk Magazine Online*.
- Borchers, J., Deussen, O., Knorz, C. (1995). Getting It Across: Layout Issues for Kiosk Systems. *SIGCHI Bulletin*, 27(4), 68-74.
- Bosselman, F. P., Peterson, C. A., & McCarthy C. (1999). *Managing Tourism Growth: Issues and Applications*. Washington, D.C.: Island Press.
- BuyerZone.com (2005). *Kiosk Buyers Guide*. Retrieved April 12, 2006 from http://www.buyerzone.com/retail/interactive_kiosks/buyers_guide1.html.
- City of Windhoek (2006). Capital Tourism Strategy 2006-2010, Windhoek, Namibia: City of Windhoek.
- Directorate of Tourism (2004). Namibia Statistical Report 2004. Republic of Namibia: Namibian Tourism Board.
- eCONTEX (2004). Interactive Touch Screen Kiosk Solutions. United Kingdom. <http://www.i-kiosk.co.uk/brochures/eCONTEX_brochure.pdf>.
- ELO Touchsystems (2006). *Strategies for Successful Kiosk Implementation*. Retrieved April 13, 2006 from <http://www.elotouch.com/markets/casestudies/kioskwp.asp>.
- Hoskins, R. (2005, July 20). BT helps to launch first touch screen kiosks for tourists in Scotland. *M2 Presswire*.
- Kaszycki, P. (2005). *Outdoor Considerations*. Retrieved January 28, 2006 <http://protechkiosk.com/outdoor.html>.
- Kiosk Marketplace (2006). *Choosing the Right Enclosure for Your Kiosk Project*. Net World Alliance.
- Mak, J. (2004). *Tourism and the economy*. Honolulu, Hawaii: University of Hawaii Press.
- Mathieson, A. & Wall, G. (1982). *Tourism: economic, physical and social impacts*. London: Longman Group Limited.

- McIntyre, C. (2003). *Namibia The Bradt Travel Guide* (3rd ed.). London: Bradt Travel Guides.
- Namibia Airports Company (2005). *Hosea Kutako International Airport Statistics*. Retrieved January 25, 2006, from http://www.airports.com.na/hosea_air.htm.
- Namibia (2006). *Britannica Student Encyclopedia*. Retrieved February 1, 2006, from Encyclopedia Britannica Premium Service <http://www.britannica.com/ebi/article-9276021>.
- Namibia Tourism Board (2003). Tourism. Retrieved January 28, 2006, from <http://www.namibiatourism.com.na/tourism.htm>.
- Proceedings of Fourth Annual Kiosk Benchmark Study*. (2004). Retrieved February 16, 2006, from http://www.edgellcommunications.com/main/download.php?_id=28.
- Rowley, J. (1995). Multimedia kiosks in retailing. *International Journal of Retail & Distribution Management*, 23(5).
- Walvis Bay Development Corridor (2000). *Investment Opportunities in Tourism Development*. Walvis Bay Development Corridor.

Appendix A: Sponsor Profile

The sponsor for the project, tourist information kiosks in Windhoek, is the City of Windhoek's Corporate Communication and Tourism Division. Manfred !Gaeb the liaison for this project is also the section head of the tourism division.

One of the mission statements for the City of Windhoek is to promote tourism. The City sees a major problem with the tourism of Windhoek as the lack of information available to tourists. Currently tourists arrive in Windhoek during times when information centers are closed, including late evenings, weekends, and holidays. The City wants to make information available to tourists 24 hours a day, 365 days a year. Doing so may increase the amount of time tourists remain in Windhoek as well as the amount of money spent within the city. This would lead to economic growth and the development of the city.

The sponsor's mission for this project is to create a way to increase the amount of information a tourist in the City of Windhoek possesses. The sponsor believes that the availability of these kiosks would facilitate the constant need of information and guidance that people visiting the city may require, as well as attract travelers to remain in the city longer. Tourism is just one part of the major mission of our sponsor. Overall, the sponsor hopes to make Windhoek a better, stronger, more economically diverse and stable environment and ultimately improve the lives of everyone living in and around the city. By stimulating the economic growth of the capital city, Namibia as a whole will undergo an increase in development, economically, culturally, and commercially.

For the success of this project, resources from the sponsor are necessary. Since the sponsor is the tourism division, information of the local tourist industry was provided. Information for other factors that may effect the placement of kiosks and construction such as crime rates were obtained from other sources within the local government. The sponsoring organization is focused directly on the development of tourism and was used as a resource of expertise on tourism strategies and development.

One of the problems of the project was to determine if the approved budget is enough to for a pilot program of two kiosks. The current budget for this project is N\$ 200 000, which will be continued into the 2006/2007 financial year. This amount is approved by the City of Windhoek, for the materials construction and placement of two kiosks. The current availability of networking technology within the city may also be provided by the sponsor and liaison. The current availability will be essential, to determine if and how the desks should be linked and monitored.

Organizations have been identified by the City of Windhoek's 2006 Tourism Strategy as important stake holders in the capital tourism strategy. They include the

Namibia Tourism Board, the Hospitality Association of Namibia, the Ministry of Environment and Tourism, the Namibia Community Based Tourism Association (NACOBTA), Namibia Chamber of Commerce and Industry (Windhoek Council), Ministry of Home Affairs, as well as other various community-based organizations, airline operators and other tourism operators. The tourism division, has established lines of communication at least and working relationships at best, with each of these organizations within Namibia.

Windhoek's tourism strategy encompasses all of the above mentioned organizations and its main goal is to create a united front led by the Tourism Division. The purpose of the strategy is to increase the number of tourists coming to Windhoek from both within Namibia and abroad, increase the length of each visitor's stay, increase the amount of money spent per visitor in the city and increase the number of return visits to Windhoek. "The report observes that this will be possible with security guaranteed which will be possible with introduction of the City Police. Although the strategy will be coordinated and implemented by the Corporate Communications and Tourism Division, the division of security service and the department of planning urbanization and environment in the City of Windhoek will be fully involved. For the strategy to be successful, the support of individuals and organizations outside the council will be critical." (Namibia Economist 2002).

Within the national government, in a discussion paper published by the directorate of Environmental affairs of the Ministry of Environment and Tourism, Michael Nokokure Humavindu, *Economics without markets: Policy inference from nature-bases tourism studies in Namibia* offered suggestions of a collecting rents from businesses to build and sustain the tourism industry in Namibia. Additionally, numerous other research and discussion papers have been written by the Ministry of Environment and Tourism relating to the City of Windhoek's Tourism Strategy.

Appendix B

Proceedings from a Teleconference with Miles Media Group, Inc. Representative, Mr. Praschak

Q: How did you decide where to place your kiosks?

A: The kiosks were placed in conjunction with print products that the company produces. We placed them in prime tourist traffic locations: major hotels, chambers of commerce, airports. You want to focus on getting them as soon as you can. If they're shopping or eating in restaurants, then it's too late. They've made up their mind as to what they want to do. We found it important to tell the owners of the location that they would be placed free of charge and all repairs would be taken care of by us. People won't let you install them if they have to worry about them breaking.

Q: You had mentioned that you had to remove all your kiosks. Why did you feel that the kiosks were no longer serving your purposes?

A: We had over 400 kiosks installed and just finished removing the last of them. We feel it was due to a changing demographic. When we first started putting them out, the internet was just beginning to develop. The kiosk had an internet like feel to it and thus provided the tourists with a novelty item. Unfortunately with the rise of internet the need for information kiosks died a very fast death. Now you only see them mainly in a retail setting. With the internet more people were planning their vacations at home and didn't need the information once they got there. Thus we changed our focus from kiosks to the See Magazine websites.

Q: What type of information were you trying to promote through the use of kiosks?

A: Mainly where to stay, attractions, and restaurants. You basically want to look at the big 5. The top five things people are coming for and try to promote those as best as you can.

Q: Where you able to record the amount of use your kiosks was getting?

A: At the time we were installing our kiosks the internet connection was very slow and only dial-up modems were available. Thus we choose to go for a stand alone structure instead of a networked. We mainly choose this because waiting for pages to load off of a main server would have taken too long. People are impatient. You have a 5-7 minute window in which you have the user's attention. They need to be able to easily access the information within the first few screens. They need to be able to quickly go back to the homepage or the previous screen rapidly incase they make a mistake. The buttons need to be about 1.5 in. in order for them to easily hit them.

Q: Did you use commercially available software to operate your kiosks?

A: We set up our kiosks to run an html source code which we preloaded onto the machine. Microsoft Internet Explorer comes with a kiosk mode built in. We were able set this up and then let Internet Explorer pull from the source code as our

database. This made things really easy as a kiosk application is just basically repackaging a website. This required though that we had to make sure each computer had a CD drive in it so that we could send someone out with a disc to update the source code.

Q: What type of features did you offer on your kiosk, such as printer etc.?

A: We didn't offer a printer with our machines. It could be a nice feature to allow someone to print the information they want, but it is extra maintenance. Someone will then have to go out and replace paper and ink on a regular basis. Maintenance is a big issue with kiosks.

Q: What type of maintenance is required?

A: The database or source code has to be updated routinely. If they're stand alone someone has to go out and do that. Monthly someone needs to open them up and clean out the dust bunnies to keep everything running. These machines should all be on APC battery backups which need to be replaced every two years. As far as the touch-screen goes there are two choices, LCD touch-panel or CRT touch-panel. The CRTs hold up better against abuse, but the touch-panel feature needs to be replaced after 3 years. Most of the time you can just get away with pulling them out and sending them back to the manufacturer for refurbishing. Then you can put the refurbished monitor back in for only about (US)\$300 or \$400.

Q: How did you go about choosing a desk structure?

A: You need your desk structure to be very strong because people will kick the crap out of these things. Around the office we joked around using the term putting a computer in a coffin. You want the box to be appealing and fancy to draw people to it, but it also needs to fit in with the environment around it. Another option is to have it sense when people are near and kick into an audio loop to try and draw people in. IBM makes a kiosk contains a proximity sensor to do this.

Q: Are there any other recommendations you have for a kiosk project?

A: You want to try to appeal to as many senses as possible. Possibly use video clips or sound in addition to your typical text. Kiosks also form a one-on-one relationship with the user. You might be able to crowd two or three people around, but typically it's a one user at a time thing. This doesn't work out for large groups trying to use the kiosks. One option that has been used before is installing a larger screen above the kiosk to allow others in the group standing behind the user the ability to see what they're seeing. Lastly make sure they can maneuver through the system to get to the meaningful information fast.

Appendix C

Interview Plan for Tourists

Purpose: By conducting interviews with tourists we would like to determine what information or amount of planning tourists are doing prior to their arrival in Windhoek and how much they are looking for when they get to Windhoek. This would tie back to making recommendations on what type of information needs to be included in the kiosks. The interviews also focus on where tourists are looking for information which would allow us to make recommendations on locations. The first question of “where are you traveling from?” helps us to determine if we have achieved a stratified sampling similar to that of current statistics of travelers to Windhoek.

Hi...We are [insert names]. We are students from the United States working with the Corporate Communications and Tourism Division here in Windhoek. We are working on a project to evaluate the need and feasibility of implementing 24-hour touch-screen tourist information kiosks throughout the City of Windhoek to increase the amount of information tourists have access to about the City of Windhoek. We would like to include the opinions of tourists like you. Your participation in this interview would help the tourism board future tourists greatly. Would you mind if we asked you a few simple questions about your trip? For your participation in our study you will receive (*insert incentive from tourism board here*). This shouldn't take more than 10 minutes of your time. We will not be using your name within our report.

Where is your primary residence?

How long are you staying in Windhoek? Namibia?

What aspects of your trip have you planned? How much did you plan prior to your arrival? Were you able to do a lot of internet planning or use a travel agent? Did you use Windhoek's tourism website?

What were your first tasks upon arrival in Windhoek? Find hotel? Exchange money?

How much did you plan once you arrived? Where was the first place you looked for information in Windhoek?

What type of information do you look for when you first arrive at a destination? What if any of this information did you have trouble finding?

When traveling, where do you look for information? Airport? Hotel?

Is there anything else you would like to add?

Thank you very much for you time and we hope that you enjoy your stay in Windhoek!

Results of Tourist Interviews

Interview Location

- 1) Central Business District
- 2) Central Business District
- 3) Central Business District
- 4) Central Business District
- 5) Central Business District
- 6) Central Business District
- 7) Central Business District
- 8) Central Business District
- 9) Central Business District
- 10) Conclusion of a city tour
- 11) Conclusion of a city tour
- 12) Conclusion of a city tour
- 13) Central Business District
- 14) Conclusion of a city tour
- 15) Conclusion of a city tour
- 16) Arebbusch Travel Lodge
- 17) Arebbusch Travel Lodge
- 18) Central Business District
- 19) Roof of Africa Hotel
- 20) Roof of Africa Hotel
- 21) Roof of Africa Hotel
- 22) Roof of Africa Hotel
- 23) Roof of Africa Hotel
- 24) Safari Hotel
- 25) Safari Hotel
- 26) Safari Hotel
- 27) Central Business District
- 28) Central Business District
- 29) Maerua Mall
- 30) Maerua Mall
- 31) Maerua Mall
- 32) Central Business District
- 33) Central Business District
- 34) Central Business District
- 35) Central Business District
- 36) Central Business District
- 37) Central Business District
- 38) Central Business District
- 39) Central Business District
- 40) Central Business District
- 41) Central Business District
- 42) Central Business District
- 43) Central Business District
- 44) Parastatal Conference
- 45) Parastatal Conference
- 46) Parastatal Conference
- 47) Parastatal Conference
- 48) Parastatal Conference
- 49) Parastatal Conference
- 50) Parastatal Conference

Where Is your Primary Residence?

- 1) USA
- 2) USA
- 3) South Africa
- 4) Germany
- 5) Israel
- 6) Belgium
- 7) United Kingdom
- 8) Germany
- 9) Bulgaria
- 10) Germany
- 11) England
- 12) Namibia
- 13) Germany
- 14) Germany
- 15) Germany
- 16) South Africa
- 17) South Africa
- 18) Germany
- 19) Germany
- 20) Australia
- 21) South Africa
- 22) Tanzania
- 23) South Africa
- 24) England
- 25) Germany
- 26) Germany
- 27) Switzerland
- 28) Italy
- 29) France
- 30) Botswana
- 31) Namibia
- 32) Germany
- 33) Germany
- 34) Germany

- | | |
|-----------------|------------------|
| 35) England | 44) South Africa |
| 36) Germany | 45) Namibia |
| 37) Germany | 46) Namibia |
| 38) Finland | 47) South Africa |
| 39) Germany | 48) South Africa |
| 40) Netherlands | 49) Tanzania |
| 41) Germany | 50) South Africa |
| 42) Finland | |
| 43) Germany | |

How long are you staying in Windhoek? Namibia?

- 1) Seven days in Windhoek, twenty-one in Namibia
- 2) Twenty-one days in Windhoek, Sixty in Namibia
- 3) Two days in Windhoek, two in Namibia
- 4) One day in Windhoek, twenty-four in Namibia
- 5) Unsure in Windhoek, ninety days in Namibia
- 6) Two days in Windhoek, ten in Namibia
- 7) Two days in Windhoek, seven in Namibia
- 8) Two days in Windhoek, seven in Namibia
- 9) Ten days in Windhoek, ten in Namibia
- 10) Two days in Windhoek, fourteen in Namibia
- 11) One day in Windhoek, one in Namibia
- 12) Twenty-one days in Windhoek, resident of Namibia
- 13) Seven days in Windhoek, twenty-one in Namibia
- 14) Two days in Windhoek, twenty-one in Namibia
- 15) Three days in Windhoek, three in Namibia
- 16) Seven days in Windhoek, eighteen in Namibia
- 17) Two days in Windhoek, two in Namibia
- 18) Two days in Windhoek, eight in Namibia
- 19) Five days in Windhoek, unsure in Namibia
- 20) Three days in Windhoek, fourteen in Namibia
- 21) Three days in Windhoek, three in Namibia
- 22) Fourteen days in Windhoek, fourteen in Namibia
- 23) Seven days in Windhoek, seven in Namibia
- 24) Four days in Windhoek, fourteen in Namibia
- 25) Two days in Windhoek, eight in Namibia
- 26) Four days in Windhoek, seventeen in Namibia
- 27) Two days in Windhoek, thirty in Namibia
- 28) Three days in Windhoek, seven in Namibia
- 29) Three days in Windhoek, seven in Namibia
- 30) Two days in Windhoek, two in Namibia
- 31) Three days in Windhoek, resident of Namibia
- 32) Two days in Windhoek, ten in Namibia
- 33) Two days in Windhoek, fourteen in Namibia
- 34) Two days in Windhoek, fourteen in Namibia
- 35) Seven days in Windhoek, twenty-one in Namibia

- 36) Two days in Windhoek, seven in Namibia
- 37) Five days in Windhoek, five in Namibia
- 38) Seven days in Windhoek, seven in Namibia
- 39) Half a day in Windhoek, five in Namibia
- 40) Seven days in Windhoek, twenty-one in Namibia
- 41) One day in Windhoek, ten in Namibia
- 42) Four in Windhoek, twenty-one in Namibia
- 43) Four days in Windhoek, ten in Namibia
- 44) Four days in Windhoek, four in Namibia
- 45) Five days in Windhoek, resident of Namibia
- 46) Two days in Windhoek, resident of Namibia
- 47) Six days in Windhoek, six in Namibia
- 48) Seven days in Windhoek, seven in Namibia
- 49) Seven days in Windhoek, seven in Namibia
- 50) Seven days in Windhoek, seven in Namibia

What Aspects of your Trip have you Planned...?

- 1) Visiting His Sister who lives in Namibia and would like to go to Swakopmund and Etosha. Mostly just being brought around city by his sister. Did not use Windhoek's Tourism website
- 2) Attempted to plan a lot of trip online but was frustrated with high price of booking from the US. Found some tour companies websites but also a lot of dead links. She did not use the Windhoek tourism website.
- 3) Here on business, but hoping to come back for holiday. Made plans for accommodations and business appointments.
- 4) Paid for and planned entire trip from Germany. Did not use the Windhoek tourism website
- 5) Has not planned any aspects of her trip and used the tourism website prior to arrival. Knew about a few attractions
- 6) Planned everything before arrival, knew from previous visit last year
- 7) Had just finalized details 30 minutes prior to interview
- 8) Had previously planned accommodations and was part of an organized tour
- 9) Planned accommodations prior to arrival
- 10) Planned ½ a year in advance, learned about Namibia through word of mouth, planned through travel agent in Germany
- 11) Planned accommodations prior to arrival
- 12) Planned most of trip prior to arrival, looked online but did not use City of Windhoek's Tourism website
- 13) Has written about traditions and German influence on Namibia. Used tourism website
- 14) Made plans to see desert and Etosha. Used website and newspaper
- 15) Used website to plan touring. Used a travel agent. Did not use tourism website
- 16) Planned everything before arrival
- 17) Planned entire trip in advance
- 18) Planned everything prior to arrival

- 19) Did not plan much prior to arrival. Used Internet and Travel agent somewhat. Used tourism website
- 20) Did not plan much prior to arrival, used internet and has been in touch with a travel agent, did not use tourism website
- 21) Planned through a travel agent prior to arrival. Did not use tourism website.
- 22) Planned hotel prior to arrival, through someone in Windhoek. Did not use the tourism website.
- 23) Planned trip prior to arrival, used internet, used tourism website, but only for Visa
- 24) Planned most of it from England, through tour company, Swako etc.
- 25) Planned accommodations and 4 day safari in Etosha. Did not use the tourism website, did not know one existed
- 26) Planned trip prior to arrival used travel agent and did self planning. Did not use tourism website
- 27) Planned tour of country accommodations, and transportation prior to arrival
- 28) Planned trip to Swako, hotel and transportation. Did not use tourism website
- 29) Planned hotel and trip to skeleton coast prior to arrival
- 30) Planned accommodations prior to arrival
- 31) Planned train trip on desert express prior to arrival
- 32) Planned part of their trip prior to their arrival themselves, planned over internet and with tour operator, has a private contact here. Did not use website
- 33) Planned mostly with a group 9 months in advance, through a tour operator. Did not use tourism website
- 34) Planned tour in advance booked it themselves using internet and tour operator. Used the tourism website
- 35) Did not plan much prior to arrival, figuring it out as he goes along
- 36) Planned an organized tour 9 months prior through a tour operator. Looked on the internet but not at the tourism website
- 37) Talked to a tour operator, and planned over internet
- 38) Visiting friends has been here before, just going with it. Has used the tourism website
- 39) Planned most of trip prior to arrival, planned trip to Etosha and lodging. Did not use tourism website
- 40) Planned most of trip through travel agent in Holland
- 41) Planned trip prior to arrival using internet and travel agent. They did not use the tourism website
- 42) Planning as they go. Used tourism website some
- 43) Planned most of trip prior to arrival, here on tour, used Germany touring and ATC, didn't use tourism website
- 44) Here translating for a conference, does not have a lot of free time, except Saturday morning. Most of trip was planned for conference
- 45) Have a normal schedule at the conference, has time to venture out after 5. Hasn't seen many flyers, and nothing really available.
- 46) Spending most of time at conference but would be interested in finding out what there is to do around the City.
- 47) Planned conference, no time outside that
- 48) Planned only to come to conference

- 49) Planned meetings before arrival
- 50) Planned accommodations, meetings and activities prior to arrival

What were you first tasks upon arrival in Windhoek?

- 1) First tasks are usually getting to hotel from the airport.
- 2) Upon arrival first task is finding transportation.
- 3) First tasks when arriving is meet appointments
- 4) First task upon arrival was getting to hotel.
- 5) First task upon arrival is finding accommodations within Windhoek
- 6) First task is to drink a Windhoek Lager, change money, find hotel, and explore city.
- 7) First task upon arrival, find accommodations, transportations, and meet representatives of the church. First task on this trip was to meet representative of church who brought individual to hotel
- 8) First tasks upon arrival were to find accommodations, and meet friends
- 9) First task upon arrival is find hotel.
- 10) First tasks upon arrival were to find accommodations and exchange money.
- 11) First tasks upon arrival were to exchange money and find a city map
- 12) First Tasks upon arrival was to find hotel
- 13) First task was to meet twelve day tour to south and north
- 14) First tasks upon arrival is to exchange money
- 15) First task was to exchange money
- 16) First task is get to hotel
- 17) First task upon arrival is to get to hotel
- 18) First task was a sight seeing tour around Windhoek
- 19) First task upon arrival was to rent a car
- 20) First tasks upon arrival were to get transportation and accommodations
- 21) First task upon arrival is meet ride at airport.
- 22) First tasks upon arrival were to be received at the airport and go to hotel
- 23) First task upon arrival was to get a car
- 24) First tasks upon arrival was tour then hotel
- 25) First task were finding hotel and finding food
- 26) First task was too find hotel
- 27) First tasks upon arrival were too find accommodations exchange money and find an internet café
- 28) First tasks upon arrival are finding hotel and a nice restaurant with local game
- 29) Get to hotel, then walked around to see things in the city
- 30) First tasks are to check into hotel and go look around city (Kalahari Sands and Post St. mall)
- 31) First task was to find daughter
- 32) First tasks were to check into hotel and change money
- 33) First task was to check in and change money
- 34) Changed money at airport upon arrival
- 35) First tasks upon arrival were to find hotel and exchange money
- 36) First task was to change money
- 37) First task was to change money

- 38) First task was to find transportation from airport, get to guesthouse and go into town
- 39) Collected by guest farm upon arrival
- 40) They are on a safari trip which started in Cape Town
- 41) First tasks upon arrival were to change money and rent a car. Had trouble changing money at the airport
- 42) First task was to go to campsite
- 43) First task, was guests at a private farm
- 44) First task was to be taken to hotel by a shuttle
- 45) First task was to come to hotel and conference
- 46) First task were to get to hotel and walk around town
- 47) First task is to find hotel
- 48) First task was to get to hotel
- 49) first task was sleep
- 50) First task is find hotel and determine how easy it is to call home

How much did you plan once you arrived...?

- 1) Mostly followed his sister, and allowed her to plan within the city.
- 2) Most of trip
- 3) Looked in information center, hoping to get brochures to plan return visit as a holiday
- 4) Planned everything before arrival, will spend 17days with organized group and travel alone for final 5.
- 5) Hotel and all aspects of trip.
- 6) Not much was planned on arrival
- 7) Planned nothing upon arrival.
- 8) Everything was planned by travel agent, went on one extra tour in Windhoek
- 9) First place looked for information was tourist agencies
- 10) Looked in hotel for information first
- 11) First looked for information in information centers
- 12) Looked for information at Windhoek tourist information centers
- 13) Did not look at tourism information office for information
- 14) Planned shopping upon arrival, and looked for information there.
- 15) Received some information from a friend upon arrival
- 16) Planned nothing upon arrival
- 17) Planned dining upon arrival
- 18) Looks for information on internet and in newspaper
- 19) Someone else planned trip from Windhoek. Looks for information in hotel first.
- 20) Planned hotels and meetings upon arrival. Is half here on work
- 21) Has been to Namibia and Windhoek previously
- 22) Did not plan much upon arrival but took some brochures from hotel
- 23) Did not plan much upon arrival, looked for information at airport and car rental
- 24) Stayed here, walked to botanical gardens, museums, meals, walking around city, information was not hard to find
- 25) Planned a city tour and hiking and camping trip upon arrival
- 26) Planned most of trip before

- 27) Planned a city tour upon arrival, and looked for brochures in information centers about museums
- 28) Planned trips and daily activities and museum visits upon arrival
- 29) Planned hiking trip and brewery tour upon arrival.
- 30) Planned food and shopping upon arrival
- 31) Playing trip by ear, has not planned much here
- 32) Planned accommodations and shopping upon arrival
- 33) Planned shopping and attractions in Windhoek. Did not have trouble finding information
- 34) Just getting a feel for the city and planning attractions for last day after traveling around. Looked for information on internet and in guidebooks
- 35) Planning entire trip here
- 36) Planned attractions within city upon arrival
- 37) Planned shopping and tourist attractions upon arrival, looks for information at tourist bureau
- 38) Planned some on arrival looked for information at airport and over internet
- 39) everything was planned prior to arrival
- 40) Planned on touring
- 41) Planned driving on arrival
- 42) Planning everything here. Looking for information in information centers and lonely planet
- 43) Everything was pre booked even stops
- 44) Will be looking around at the end of conference.
- 45) Walk around city
- 46) Not sure
- 47) No time
- 48) Planned meetings
- 49) Planned various meetings and visits to different places in Windhoek
- 50) Not much was planned on arrival

What type of information do you look for...?

- 1) First information he looks for is maps and brochures
- 2) Looks for brochures and maps
- 3) Looking for information on accommodations and tours of Namibia
- 4) First information looked for when arriving at a destination is sight seeing and tour information
- 5) First information looked for is a place to stay, has not had trouble finding information on accommodations.
- 6) Look for Important things to visit here, and walk around
- 7) Looks for accommodations, food, and a safe place to look around upon arrival
- 8) First look for information on currency exchange, directions, and how to get downtown upon arrival.
- 9) Looks for executive rates upon arrival at a destination
- 10) Looks for good accommodations upon arrival
- 11) Looks for good food.
- 12) Looks for Car Hire or Avis upon arrival

- 13) Looks for special information about German group in Windhoek and Namibia, as well as information about life in Windhoek.
- 14) First looks for Information news, and books.
- 15) First information looked for when arriving in Windhoek find hotel and look for dinner and book shops
- 16) Looks for information about dining list of different site seeing, and after hour's activities. Found all info in one brochure
- 17) Looks for information on where to stay and general attractions upon arrival
- 18) Looks for information on tours upon arrival
- 19) Looks for information on the city. Had difficulty finding it
- 20) Looks for accommodations and rates, and ways to get around city upon arrival. Had some difficulty finding this information
- 21) Did not need to look for information upon arrival.
- 22) Looks for map, brochures and museum information upon arrival in a destination
- 23) Looks for street maps and city maps and places of interest upon arrival
- 24) Books before leaflets. Maps. Wildlife, trees, museums, walks
- 25) Looks for information on historical and cultural aspects of city, things not online
- 26) Brought all information from Germany
- 27) Looks for street maps food information, sight seeing, cultural information and safety information.
- 28) Looks for information on maps, food guides, and historical information.
- 29) Looks for information on sightseeing, good restaurants and interesting events
- 30) Looks for information on where to stay and what there is to do, and what events are going on
- 31) Usually looks for information before hand, looks for information on current events
- 32) Looks for information on historic buildings, museums and attractions
- 33) Looks for information on history and people and cultural aspects of city
- 34) Looks for information on restaurants and hotels and attractions. Has not had difficulty finding information
- 35) Looks for an internet café first, is having trouble finding information within the city
- 36) Looks for information on attractions Looks in a guidebook or on the internet has not had difficulties
- 37) Looks for history and site seeing information, has not had difficulty
- 38) Looks for a really good map that has more then just the center of town. No trouble finding one.
- 39) Looks for information in guidebook and information centers
- 40) Look for tourism sites and meet people
- 41) Look for tours and sightseeing when arriving at a destination
- 42) Look for information on accommodations, food and hiking
- 43) Didn't have to look
- 44) Usually looks for information on botanical gardens, safaris or hiking, Nature activities
- 45) Looks for information involving arts and culture, and something about city and church life

- 46) Looks for what is going on in the city
- 47) Interested in food, night clubs, shopping and public gardens
- 48) Looks for information on sightseeing and maps
- 49) Looks for maps
- 50) Looks for accommodations, transport between city and airport, and taxi information

When traveling, where do you look for information?

- 1) First looks in hotels and information centers and offices for information.
- 2) After arrival has interviewed one tour company and stopped at the Namibian Tourism Board, as well as the city's information center
- 3) First place looked for information is the tourism office or information centers
- 4) Looks for information in local information centers first.
- 5) Looked for information in the city info centers.
- 6) Looks for information in books, airport, internet
- 7) Looks in tourist information centers for information
- 8) When traveling get information from travel agent, internet and catalogs.
- 9) Looks for information at airport first
- 10) When traveling looks for information at Germany Travel
- 11) Looks for information at the airport and currency exchange
- 12) Looks for information on internet and through websites
- 13) Not sure
- 14) First looks for information in hotels
- 15) Looks for most information at home, and some in hotels
- 16) Looks for information in brochures, and two info centers
- 17) Looks for information on the internet
- 18) No time in airport to look for information.
- 19) Doesn't look at airport for information, sometimes hotel
- 20) First looks for information on the internet.
- 21) Usually looks for information on the internet
- 22) Looks for information in airport and info centers
- 23) Looks for information in hotel when traveling
- 24) Looks for information in hotels and Info centers
- 25) Looks for information at hotel and information centers as well as talking to locals
- 26) Looks for information at city's information desks or centers
- 27) When traveling looks information at Information centers at airport, the hotel and where it's visible
- 28) Looks for information at hotel and information centers, or asks driver
- 29) Looks for information at airport, and maybe info center
- 30) Looks for information at hotel, info centers and through friends
- 31) Looks for information at information bureau
- 32) Haven't yet looked for information, mostly using guide book
- 33) Looks for information at hotel and through tour guides
- 34) First looks for information at airport and then at hotels
- 35) Looks for information at airport
- 36) Looks in a guidebook

- 37) Looks at tourist bureau
- 38) Looks at airport and over internet
- 39) Information centers
- 40) Mostly plan at home, use lonely planet and sometimes hotel
- 41) Look for information at lodges and talks to other people.
- 42) Look for information at campsite or hotel
- 43) Usually uses a private travel agent
- 44) Usually looks on internet or at an information bureau
- 45) Looks in hotels/ accommodations at tourist info centers and petrol stations
- 46) Would look near a central point of city, like near Kalahari sands
- 47) Looks for information at tourist office or hotel
- 48) Looks around city
- 49) Looks in malls
- 50) Internet, hotel and airport

Additional Comments

- 2) When first arriving looks for cost of tours, car hires and itineraries. Found most maps to be inadequate and outdated. Found a lot of the information she was looking for was not available. Even maps from 2005 were misleading.
- 6) Most disappointing thing, everything is closed on weekends, even Info centers
- 12) First time traveling here in seven years
- 13) Windhoek lacks tourists which is bad for the capital. Has only seen a few tourists in Windhoek. Is contemplating moving here.
- 16) Information centers were sufficient
- 17) Have to hunt around for information
- 19) Looks for information about interesting things in the city to see
- 23) Hotel is really the only place you can look.
- 27) Information should be in well lit areas.
- 31) Word of mouth is good, but more info centers in Windhoek would be nice
- 32) Didn't have problems finding information because they didn't really look for it, Windhoek is not very attractive.
- 33) Found city to be very friendly
- 36) Attractive but not very African
- 45) Variety in information is good, because different people look for different things depending on their personality
- 47) Tourist office is hard to find
- 48) Would be interested in using kiosk
- 49) Hasn't yet gotten into city, would be interested in using kiosk
- 50) Would be interested in using kiosk

Appendix D

Interview Plan for Businesses

Purpose: In order to establish a means for the kiosks to be self-sustainable, the kiosks must generate some form of revenue. We have established that this revenue can be through dedicated advertising space on the kiosks or through a listing fee that business must pay to be listed on the kiosks. These questions are designed to determine if businesses are willing or have the means to pay for such forms of marketing for their businesses.

Hi...We are [insert names]. We are students from the United States working with the Corporate Communications and Tourism Division of the City of Windhoek. We are working evaluate the feasibility of implementing 24-hour computerized touch-screen tourist information kiosks throughout the City of Windhoek. In accessing the City's ability to install the kiosks, we would like to include the opinions of local business owners/managers, like you. The kiosk project is intended to increase tourism and thus stimulate an increase in business activity. Any information that you provide to us will remain confidential and won't be shared with the City of Windhoek. Would you mind answering a few questions?

About how much of your business is based off of tourist traffic? Do you see a lot of tourists coming into your establishment?

What is your opinion of tourists in your establishment?

What methods do you currently use to promote your business?

Approximately how much do you currently spend on these promotions?

What are your thoughts towards advertising on a computerized tourist information kiosk?

Do you have anything you would like to add?

Results of Business Interviews

Category:

- | | |
|--------------------|--------------------|
| 1) Arts & Crafts | 14) Tours |
| 2) Restaurant | 15) Explore |
| 3) Accommodations | 16) Arts & Crafts |
| 4) Explore | 17) Shops |
| 5) Accommodation | 18) Shops |
| 6) Shops | 19) Transportation |
| 7) Tour | 20) Accommodations |
| 8) Restaurant | 21) Shops |
| 9) Restaurant | 22) Accommodations |
| 10) Accommodations | 23) Arts & Crafts |
| 11) Restaurant | 24) Accommodations |
| 12) Transportation | 25) Restaurant |
| 13) Arts & Crafts | 26) Accommodation |

About how much of your business is based off of tourist traffic?

- 1) 95% We get a lot of locals but in terms of sales most tourists buy something
- 2) Decent percentage of tourists
- 3) Most
- 4) No idea
- 5) All
- 6) Not much because of location
- 7) Most
- 8) Some
- 9) 10-20%
- 10) About 30%, mostly businessmen
- 11) At least 70%
- 12) Most
- 13) Don't know
- 14) Not sure, quite a bit
- 15) About 40%
- 16) About 25%
- 17) About 35%
- 18) Don't know
- 19) Limited amount of walk-in also some local
- 20) Most
- 21) Everything
- 22) About 50% a lot of Business people from SA
- 23) Some traffic, also a lot of South African people
- 24) About 80%
- 25) About 45%
- 26) Most, only book 30-40% of capacity

What would your opinion be if there were to be an increase in tourists frequenting your establishment?

- 1) Definitely wants more tourists frequenting business. They're currently getting around 25000 ppl/ year. Namibia Craft Center gets more then museums if that's the case the whole of Windhoek isn't getting enough
- 2) Wants more tourists to come to her establishment, thinks it's a cool place and wants to expand to a bed and breakfast
- 3) Interested in increase
- 4) Interested in increase
- 5) Interested in increase
- 6) Interested in increasing they're tourist traffic, currently have a tourist section.
- 7) Interested in increase
- 8) Interested in increase
- 9) Would like to see increase
- 10) Increase would be ok
- 11) Increase would be great
- 12) Increase would be good
- 13) Good for business to make money in Namibia
- 14) It would be good
- 15) Refused to answer
- 16) An increase would be fine
- 17) Would be interested
- 18) Refused to answer
- 19) Would be interested in an increase
- 20) Would be interested
- 21) Would definitely be interested
- 22) Would be interested
- 23) It would be good for business
- 24) Increased tourism would be good
- 25) Increase would be ok
- 26) Increase would be great

What methods do you currently use to promote your business?

- 1) Currently uses brochures, in most of guide books Tourism expos, some tour groups Border post etc distributes brochures. A frames on the side walk
- 2) Through word of mouth, most tourists come on their own or with face to face tours.
- 3) Currently do international advertising. Only advertise if there is a way to check they're return on the investment.
- 4) A lot of different ways of advertising
- 5) Coast to Coast, Guide Books, Lonely Planet, Word of Mouth and Back Packers handbooks
- 6) Currently use Redstate, Colour Gem and are on some tourist maps
- 7) Tourism magazines
- 8) Radio, and Newspapers
- 9) Web based advertising
- 10) Advertises through local media, travel guides, and direct marketing
- 11) Advertises on bookmarks at local shops and in Flamingo Magazine

- 12) Websites, publications, Travel new, flamingo magazine
- 13) Posters for events
- 14) Brochures in info centers, backpackers, hotels, word of mouth, magazines
- 15) Namibian newspapers, good website, and word of mouth
- 16) Posters for Exhibitions throughout the city. Send invitations to members. Telecom
- 17) Ad in Flamingo and some magazines in countries and pamphlets
- 18) Already has lots of ads going on
- 19) Limited ads, locally, some brochures
- 20) Currently advertises online and flyers and newspapers
- 21) Put ads in magazines all over on map
- 22) Registered with Namibia Tourism Board. Uses brochures, and B&B association, ads in where to stay, and welcome to Namibia and travel magazine
- 23) Not much, catalogs, flyers not up to date
- 24) Has a webpage at Google, ad in where to stay magazine. As well as Welcome to Namibia and Africa Magazine. Also in list of accommodations
- 25) Has ads in newspaper and magazines. Word of mouth
- 26) Advertise through webpage, Tour operators and Accommodations guides at Nam Tourism

Approximately how much do you currently spend on these promotions?

- 1) \$150,000 per year
- 2) \$0
- 3) No Response
- 4) No Response
- 5) \$550 annually
- 6) Willing to spend: \$200 a month
- 7) \$3500 annually
- 8) Currently Varies from month to month, \$200-\$500 a month
- 9) Not sure, website is costly
- 10) About 1% of monthly income
- 11) About \$200,000 a month
- 12) Not sure.
- 13) Varies, around \$100000 yearly
- 14) Not sure
- 15) Around \$200,000
- 16) Not sure
- 17) Too much, \$30-50,000 per year
- 18) Don't know
- 19) 10% of amount spent at least 10X that in return
- 20) About \$20,000 a year
- 21) Not sure
- 22) Around \$11,000
- 23) Around \$10,000
- 24) Around \$20,000 a year
- 25) About \$15,000 per year
- 26) Not sure

What are your thoughts towards advertising on a computerized tourist information kiosk?

- 1) Possibly Depending on cost and location
- 2) Possibly depending on cost and help she might receive
- 3) Possibly if there was a way to track amount of business coming in from kiosks
- 4) Would be interested depending on location of Kiosks
- 5) Would be interested depending on location of Kiosks
- 6) Would be willing to think about it
- 7) Interested, but might not use to it, but feels most people have already planned.
- 8) Sounds interesting
- 9) Would be interested depending cost
- 10) Might be interested depends on the market and the response
- 11) Would be interested depending on cost, doesn't want to spend too much...
- 12) Good method of advertisement. Very handy
- 13) Individual events are promoted
- 14) yes interested
- 15) probably not interested
- 16) Interested depending on cost
- 17) Maybe, wants to see kiosk
- 18) Is not interested in placing more advertisements
- 19) Interested in looking at it need to see the return
- 20) Might be interested once it's implemented, wants to see it and how it works
- 21) Would be interested depending on cost and what it looks like
- 22) Interested depending on cost and location
- 23) Not sure, would depend on cost
- 24) Depends on price, would be good, but most people might already have a place to stay
- 25) Might be a good idea if it's not too expensive
- 26) Most guest book in advance so maybe not, would only attract campers and backpackers

Do you have anything you would like to add?

- 1) If tourism is not driven by the city its not going to improve, should contact Marco Brink from Broll
- 4) Looks for security and travelers hanging around in Windhoek.
- 7) Local businesses like coffee shops and hotels would be stupid not too, but might not be a good idea for their business because Windhoek does not get a lot of walk in traffic.
- 8) Feels it would be very important to have photos along with descriptions willing to help support city and country
- 12) Might not be feasible for car rental, because most people already have that planned
- 14) Would be nice to have that advertising space
- 19) Would be willing to pay around \$500 a month, with a trial contract for 3 months.
- 21) Advertising should cost as little as possible

Appendix E

Interview Plan for Managers of Marketplaces in Katutura

Purpose:

The purpose of interviewing these city officials is to give us a better insight to the market as whole's readiness to adapt and handle a possible increase in tourism. We also hope to gain insight to the opinion of the City division in charge of the marketplaces in regards to tourism within the marketplaces in addition to crime statistics within Katutura especially in and around the marketplaces.

Introduction:

Hello! We are students from the United States working with the Corporate Communications and Tourism Division of the City of Windhoek. We are working on a project to evaluate the feasibility of implementing 24-hour touch-screen tourist information kiosks throughout the City of Windhoek. We are trying to assess the readiness of markets in Katutura to handle a possible increase in tourist visiting the market. Would you mind talking with us about tourism within the markets in Katutura? Your name and any personal information will not be included anywhere in our report. Do you have any questions for us before we begin?

What are the current tourist trends in the market? What are people looking for in the markets? Are they buying or just looking? Are they coming on tours or alone?

About how many tourists do you usually see come in a day, week, month?

Are the merchants able or willing to have/see more tourists come to the market?

Since a majority of tourist traveling to Namibia speak German or English as one of their primary languages, would the merchants be able to communicate effectively for their purposes with tourists?

How would you rate the current safety of the markets?

What is currently in place that would give tourists a sense of safety or security in the markets?
...Car guards/City Police patrols

What does the City do currently to advertise the existence of these markets? What are the costs that are incurred from this advertising? Would the City be interested in possibly advertising on tourist information kiosks if they are implemented?

Interview Results of Katutura Market Managers

Single Quarters Market

What are the current tourist trends in the market? What are people looking for in the markets?

Are they buying or just looking? Are they coming on tours or alone?

Most of the time they don't come into the office. The tourists just go out, so you don't even know internet kiosk place. Almost everyday you see a group of them walking around talking to people, eating traditional food, not really purchasing things though.

About how many tourists do you usually see come in a day, week, month?

Big bus everyday with more than 20 people. At least 3 times a week if not everyday. Mostly groups on tours, not too many people coming on their own.

Are the merchants able or willing to have/see more tourists come to the market?

Very much, they would like more money, if they could get tourists more interested in their products.

Since a majority of tourist traveling to Namibia speak German or English as one of their primary languages, would the merchants be able to communicate effectively for their purposes with tourists?

Mostly a lot Namibians are trying to speak English. Most can communicate in English, only a few cannot, it's not a problem really. The office is also always here to translate, but normally people are just looking around.

How would you rate the current safety of the markets?

Very safe place, there is 24 hour security

What is currently in place that would give tourists a sense of safety or security in the markets?

...Car guards/City Police patrols

City police patrols, no car guard, the security at the each gate look after the cars near them, additionally City Police patrols watch cars.

What does the City do currently to advertise the existence of these markets? What are the costs that are incurred from this advertising? Would the City be interested in possibly advertising on tourist information kiosks if they are implemented?

We normally have market days, make tents for each market, setup in town and take their products to show. This promotes the market. Also leaflets to show people what they are selling. Market days are at the end of the months, playing music to get more people to come around and buy more. Leaflets cost a lot of money and more advertising is needed. A kiosk could be something very nice to have that is always there.

Soweto

What are the current tourist trends in the market? What are people looking for in the markets? Are they buying or just looking? Are they coming on tours or alone?

We don't keep data. Intercity tours come and the tour guide will take them around, some buy things and taste the foods. Most don't come into the office.

About how many tourists do you usually see come in a day, week, month?

I see tourists about 2 or 3 times per month. They are looking around and shopping. They come in a group usually of 3-6 people.

Are the merchants able or willing to have/see more tourists come to the market?

Yes, obviously I would assume. Especially those selling local products like clothing Herero dresses or dolls.

Since a majority of tourists traveling to Namibia speak German or English as one of their primary languages, would the merchants be able to communicate effectively for their purposes with tourists?

On a scale of 1 to 10, 5 would be able to but also they have the guidance of the tour guides who speak the local languages and English.

How would you rate the current safety of the markets?

There is 24-hour security in place. The guards are responsible for the infrastructure itself. You cannot however rule out vandalism of kiosk. Security personnel are in touch with the City Police in case of problems. The market is open from 7-22 always secure.

What is currently in place that would give tourists a sense of safety of security in the markets?... car guards, City Police patrols, etc.

The City Police have contracted a security company to man the gates. Manning the gates to search people for weapons alcohol and patrolling too to make sure everything is running ok.

What does the City do currently to advertise the existence of these markets? What are the costs that are incurred from this advertising? Would the City be interested in possibly advertising on the tourist information kiosks if they are implemented?

We advertise through pamphlets that companies develop and distribute to target embassies. We host promotional events and have local radio stations come to broadcast live. Also have competitions to try and attract people and tourists. The brochures all together cost about N\$ 200 000 the radio broadcast costs about N\$ 6 000. Yes definitely, the kiosk would contribute more to the development of the market itself and bring people here.

SME Incubator Center

What are the current tourist trends in the market? What are people looking for in the markets? Are they buying or just looking? Are they coming on tours or alone?

Tourists are curious to see what happens here, they usually stay in the City or go out on the township tours (or others) with tour guides, so for the most part, people come on tours

About how many tourists do you usually see come in a day, week, month?

very minimally if at all

Are the merchants able or willing to have/see more tourists come to the market?

It would be nice to have people come and go to the shops here to help and support the tenants by purchasing things. They would love to see more tourists, one out cry is that the concept is very new. The incubator center is not well known or advertised, especially to tourists.

Since a majority of tourist traveling to Namibia speak German or English as one of their primary languages, would the merchants be able to communicate effectively for their purposes with tourists?

The majority of the tenants are very good with English, German not so much.

How would you rate the current safety of the markets?

The current safety is very good

What is currently in place that would give tourists a sense of safety or security in the markets? ...Car guards/City Police patrols

There are currently 24 hour security guards and the entire grounds is fenced with an electric fence. They are also in constant contact with the City Police. Safety is therefore not a threat here.

What does the City do currently to advertise the existence of these markets? What are the costs that are incurred from this advertising? Would the City be interested in possibly advertising on tourist information kiosks if they are implemented?

The City currently has budgeted in an item for advertising in the markets. Currently they have periodical showcases of entrepreneurs and their products, Market Days in town center, Zoo Park with live radio broadcasts, they also put ads in local papers and magazines.

Penduka

What are the current tourist trends in the market? What are people looking for in the markets? Are they buying or just looking? Are they coming on tours or alone?

Not always but sometimes if it is the right season for tourists to come to Namibia.

Are the merchants able or willing to have/see more tourists come to the market?

Yes, almost 75% of the products are exported and local buyers are low so we would like to have more tourists coming.

Since a majority of tourists traveling to Namibia speak German or English as one of their primary languages, would the merchants be able to communicate effectively for their purposes with tourists?

German is sometimes difficult and if the tourist comes alone without a tour guide it is hard. English is fine and other local languages as well.

What does the City do currently to advertise the existence of these markets? What are the costs that are incurred from this advertising? Would the City be interested in possibly advertising on the tourist information kiosks if they are implemented?

We advertise through television ads and leaflets. Used to advertise at the airport. We try to put leaflets in hotels all around the City and also newspaper ads and sometimes radio ads. The TV ads are free but the newspaper ads are expensive, for a 2cm by 6cm it's about N\$ 250-300. Sure if I can advertise on the kiosks that would be good if it is affordable.

Appendix F

Interview Plan for Banks

Purpose: In order to create a “one stop visitor center” we interviewed banks to discuss the feasibility of partnering the kiosk with ATMs. This partnership would allow tourists to obtain cash as well as get information. There is also a possibility of the ATM and kiosk sharing an internet connection allowing the kiosk to be networked.

Hi...We are [insert names]. We are students from the United States working with the Corporate Communications and Tourism Division of the City of Windhoek. We are working evaluate the feasibility of implementing 24-hour computerized touch-screen tourist information kiosks throughout the City of Windhoek. In assessing the City’s ability to install the kiosks, we would like to include the opinions of local bank officials, like you. We are also evaluating the possibility of placing kiosks near ATMs, and would like to discuss your banks interest in a possible partnership. The kiosk project is intended to increase tourism and thus stimulate an increase in business activity. Would you mind answering a few questions?

How much business is from tourism? Is money exchange a large portion of daily business?

Do you know the amount of business and/or revenue generated from non account holder use of ATM’s?

Do you think it would be beneficial to include ATMs in tourist information kiosks? Why or why not?

Do you think it would be beneficial for you and/or users of a tourist information kiosk to advertise on the system?

Standard Bank Interview Results

How much business is from tourism? Is money exchange a large portion of daily business?

Will send Manfred statistics on use of ATMs by foreigners and bureaux de changes.

Do you know the amount of business and/or revenue generated from non account holder use of ATM's?

Felt current ATMS with high transactions may not be enough justification to place kiosk near an ATM. Would be interested in placing new ATM if the site for information kiosks would be viable for banks.

Do you think it would be beneficial to include ATMs in tourist information kiosks? Why or why not?

Is interested in placing an ATM near and Information kiosk because it would be beneficial to the ATM and the bank to be near the info kiosk and high tourist traffics.

Do you think it would be beneficial for you and/or users of a tourist information kiosk to advertise on the system?

Yes it would be beneficial, advertising is always helpful.

Additional Comments

Bank currently has 8 ATMs on order and has exact locations for 4. The other 4 do not have definite placement.

Bank Windhoek Interview Results

How much business is from tourism? Is money exchange a large portion of daily business?

Bank officials will send Manfred statistics on ATM use of foreign transaction and Bureau De Change Exchange statistics

Do you know the amount of business and/or revenue generated from non account holder use of ATM's?

Would find kiosks beneficial in attracting tourists to use their ATM, and would be interested as long as link to kiosk does not slow ATM.

Do you think it would be beneficial to include ATMs in tourist information kiosks? Why or why not?

Ye would be interested in partnership. They currently have a partnership with American express and are looking into a partnership in internet cafes with Telecom.

Do you think it would be beneficial for you and/or users of a tourist information kiosk to advertise on the system?

Yes would probably be beneficial for tourist related businesses.

Additional Comments

Have an ATM mall that is covered, guarded and currently open 24 hours a day. Is interested but needs more information.

Appendix G

Telecom Interview Plan

Purpose: In order to create a “one stop visitor center” we interviewed Telecom Namibia to discuss the feasibility of placing payphones near the kiosks. This placement would allow tourists to call and make reservation at hotels or restaurants, as well as adding a level of safety to the kiosks allowing tourists to call for help if needed. There is also a possibility of the kiosks network connection to be placed along with the phone line.

We are working with Windhoek’s Corporate Communications and Tourism Department to evaluate the implementation of 24-hour touch-screen tourist information kiosks. We are currently looking into the design and placement of the kiosks along with the possibility of using them to create a one-stop visitor center for tourists to accomplish their many needs. In this way a tourist can get the information he or she needs off of the system and then use the telephone to make a reservation. We are also working with banks to see if they would consider placement of ATMs near the proposed kiosk locations so that a tourist might also be able to withdraw money. The inclusion of a phone also will also provide added safety so especially with the inclusion of ATMs. Visitors can report theft quickly and report ATM fraud should it occur. The locations are currently being decided through our research which will conclude in early May. It is the intention of the City to place these kiosks as soon as possible. Currently background research has shown that a one-stop information center of this type has been successful in Scotland. We are interested in finding out if you would like to join on such a venture. If you could please respond to the following questions it would be greatly appreciated.

Would you be interested in joining such a project by locating areas where there currently are payphones, or by placing a payphone at a location to be determined?

Do you think it would be beneficial for your company to place phones in locations near tourist information kiosks?

If phones are placed near the kiosks, will the kiosk be able to use the same line for a network connection?

Telecom Interview Results

Would you be interested in joining such a project by locating areas where there currently are payphones, or by placing a payphone at a location to be determined?

Telecom Namibia is continuously striving to enhance the telecommunications experience of our customers and we are confident that this project will have mutual benefit to our common customers. We can assure you that places identified will be equipped with one of our ranges of public payphones.

Do you think it would be beneficial for your company to place phones in locations near tourist information kiosks?

Yes, because placement of our payphones is primarily depended on the availability of customers and secured infrastructure like a Kiosk.

If phones are placed near the kiosks, will the kiosk be able to use the same line for a network connection?

No, the payphone system requires a dedicated line for calling and an additional line for network connection would be recommended.

Appendix H

Interview Plan for Merchants in Katutura

Purpose:

The purpose of interviewing merchants within the marketplaces in Katutura is to determine the market's readiness for a possible increase in tourism as a result of placing tourist information kiosks in locations within Katutura. Adding information about Katutura to the tourist information kiosks could result in an increased tourist flow. Therefore we intend to assess the capabilities of the merchants to handle this increase in tourism through these interviews.

Introduction:

Hello! We are students from the United States working with the Corporate Communications and Tourism Division of the City of Windhoek. We are working on a project to evaluate the feasibility of implementing 24-hour touch-screen tourist information kiosks throughout the City of Windhoek. We are trying to assess the readiness of merchants like you to handle a possible increase in tourist visiting the market. Would you mind talking with us about your business and tourism within the markets? Only the information you provide will be used, your name or any personal details will not be included in our final report. Do you have any questions for us before we begin?

What languages do you feel comfortable doing business in?

How many tourists do you see on a daily basis within the marketplace?

...At your shop?

Do you like to see tourists in the marketplace?

Why?

Merchant Interview Results

Interview Location

- | | |
|--------------------|-----------------------|
| 1) Single Quarters | 12) Tukondjeni |
| 2) Single Quarters | 13) Tukondjeni |
| 3) Single Quarters | 14) Tukondjeni |
| 4) Single Quarters | 15) Incubation Center |
| 5) Single Quarters | 16) Incubation Center |
| 6) Single Quarters | 17) Incubation Center |
| 7) Soweto | 18) Incubation Center |
| 8) Soweto | 19) Incubation Center |
| 9) Soweto | 20) Incubation Center |
| 10) Soweto | |
| 11) Soweto | |

What languages do you feel comfortable doing business in?

- 1) English, Afrikaans, Oshiwambo
- 2) Oshiwambo
- 3) English is OK in Business
- 4) English and Afrikaans
- 5) Oshiwambo and attempts English
- 6) English
- 7) English and Afrikaans
- 8) English, Afrikaans, Herero and Oshiwambo
- 9) English and native languages
- 10) English, Afrikaans and Oshiwambo
- 11) Mostly English
- 12) Native languages
- 13) Whatever language is comfortable for the costumers we can adapt to do business
- 14) Mostly native languages
- 15) Oshiwambo
- 16) English and Native Languages
- 17) English
- 18) Afrikaans
- 19) English, Oshiwambo, Afrikaans
- 20) English, Afrikaans, German

How many tourists do you see on a daily basis within the marketplace?

- 1) Yes, they come a lot especially during weekends. They are usually escorted by tour guides
- 2) a lot of buses full of tourists come, about 40 tourists per day
- 3) Many, many. About 100 per day
- 4) about 10-20 per day
- 5) more than 100 per week
- 6) Only sees tourists when they come with guides in big groups
- 7) Once in a while

- 8) Not sure
- 9) About 2 groups every 2 weeks
- 10) About 3 groups per month. Tour guide brings them and only takes a look around don't stop really
- 11) 2-3 times per month
- 12) Tours of people passing by
- 13) Usually groups, about 3 or 4 per month
- 14) About 4 groups per month. They mostly ask questions about our products like how we got them and how to use them.
- 15) Last year there were a few, but not a lot
- 16) No, not really
- 17) Seeing tourists is rare
- 18) Haven't seen many but would like to see more
- 19) Lots of different people come and you can show them what you are doing
- 20) Don't really see them

...At your shop?

- 1) Not sure
- 2) Not sure
- 3) They buy and eat a lot of meat
- 4) Not many
- 5) They sometimes buy, but usually just look around
- 6) Not sure
- 7) About 5 per month buy
- 8) About 1 tourist per month, very little
- 9) Yes look and sometimes also buy
- 10) Very seldom get support from tourists maybe one per year
- 11) Usually they buy at my shop. Sometimes four buy in bulk per month
- 12) None
- 13) Same
- 14) Not sure
- 15) None
- 16) None
- 17) None
- 18) None
- 19) not everyday, but usually they come in big groups and are rushed away by the guide
- 20) None

Do you like to see tourists in the marketplace? Why?

- 1) Yes, it's good to see them coming and asking questions. I hope that they will one day assist us.
- 2) Wants to see more because tourists purchase her products
- 3) We need them here so they can support them
- 4) Its ok, in the long run won't specifically benefit, but will help somewhat indirectly

- 5) Good! They encourage more business and it makes them feel like they are doing something when they sell their products
- 6) Yes, mostly to support business, would like to see more use her business though
- 7) Yes, really want to see more and have them spend more money
- 8) Great for them to come and check stuff out but most are just looking not buying
- 9) Yes, like them because good for market to be exposed to others and for the support of business
- 10) Yes, need tourists for three reasons, expose market, open up possibilities, direct support from tourists
- 11) Yes, very good to support us
- 12) Yes want to see more, more money
- 13) Fine with it
- 14) Yes, happy to see visitors and explain products how they came about and how to prepare them.
- 15) Yes, they would love to see more tourists to give support to their businesses
- 16) Very much so, 100%.
- 17) Would be an honor to have more tourists at the marketplace. It would also be a good experience to help business owners explore and could help to expand our businesses
- 18)
- 19) Yes, I want them to stay and visit and buy things, but they are usually in a hurry. They need to spend more time here [at the center].
- 20) We would love to have them here. We will welcome them with open hand and hearts. If they come they will at least know we are here and if they don't buy something right away, they will be able to see what we are doing and remember us when they need something we have.

Are you happy with the marketing currently being done? How should it be changed? (Additional question asked at Soweto, Tukondjeni and SME Incubation Center)

- 7) Yes but we need more exposure of the markets
- 8) Marketing is good, helps you. Yes more
- 9) Yes but needs more, marketing would help the business
- 10) Yes. Want an increase in the amount of advertising
- 11) Want and increase
- 12) Yes need more
- 13) No its not very good would like an increase
- 14) The marketing is ok but more would be ok too
- 15) The current marketing is good, but more is always better. Magazines may be a good way
- 16) More advertising would be good and is needed
- 17) The current advertising is more individual, each shop does most of their own advertising. More advertising for the marketplace as a whole would be good and is needed.
- 18) The office gives good assistance, but if possible would like to see more

- 19) We need more so that we can get more visitors and business. The center is out of city center and is not well known, even the taxi drivers don't know where it is by name, and they need to know the address.
- 20) Would like to see more effective advertising. What is being done currently doesn't seem to be working very well.

Appendix I

Pictures of Recommended Locations

Post Street Mall Main Walkway

A. Near the meteor sculpture



B. Beneath the FNB clock tower



C. Within the Town Square shopping complex near the Standard Bank ATM



Independence Avenue Information Center



Kalahari Sands Mall

A. Ground level near the Independence Ave entrance



B. Upper level near ATMs and bureau de change



Safari Court & Hotel

A. Safari Court Lobby



B. Safari Hotel Lobby



Hosea Kutako Airport

A. Next to the bureau de change



B. Next to car rentals



Maerua Mall

A. Near any of the ATMs



B. Entrance on the uncovered parking side of the mall (either the new or the old section)



C. Entrance near the covered parking side of the mall



Appendix J

Site Kiosk Order Form

Order Form / Fax +49-251-846924-10



Name of the Article	Items	Net Price

Method of Payment

- By Invoice
- By Credit Card:
- Amex
 - Visa
 - Eurocard / Mastercard
- Card Number: _____ Valid through: ____ / _____
- Cardholder's Name: _____

Invoice & Delivery Address

Company: _____ European VAT-ID: _____

First Name / Last Name: _____ E-Mail: _____

Street + No.: _____ Web-Address: _____

ZIP Code: _____ Fax: _____

City: _____ Phone: _____

State: _____

Country: _____

Internal Purchase Order Number (if applicable) _____

All hardware orders can only be processed if paid in advance.
Please do not forget to sign this order!

Date: _____ Signature: _____

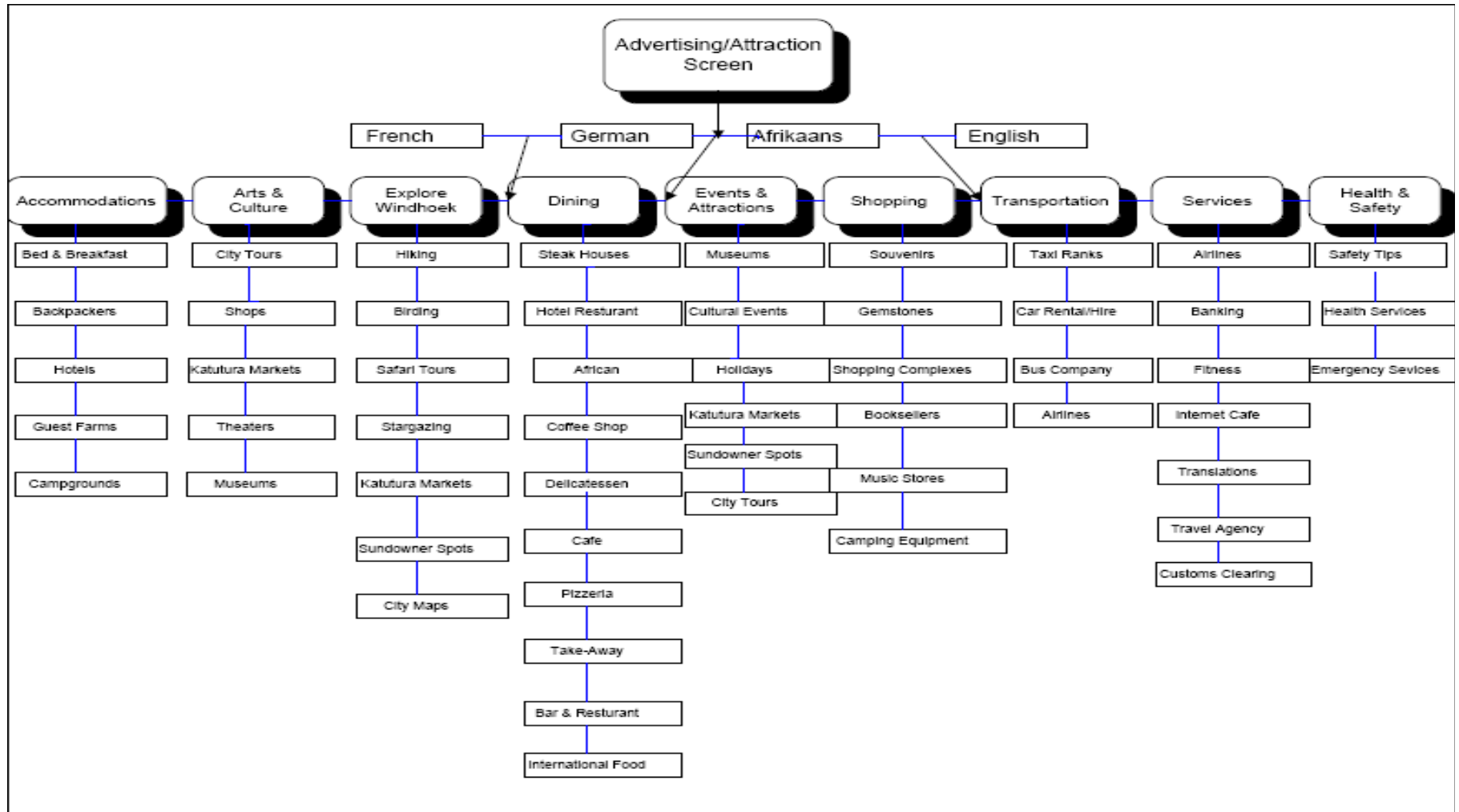
Appendix K

Database Analysis Table

Categories of information tourists are looking for	Related categories in the database	Analysis of possible combination of categories
Accommodations	Accommodations	Accommodations
Arts and Culture	Arts and Crafts, Music Stores, Media, Tour Operators, Tours and Trails	Arts and Culture
Attractions	Attractions, Horse Riding Trails, Lion and Cheetah feedings	Events/Attractions
Events	Events Calendar	Events/Attractions
Food	Restaurants	Dining
Gardens	Tours and Trails, Attractions	Events/Attractions
Hiking	Tours and Trails	Explore Windhoek
Internet cafes	Internet	Services
Maps	None	Explore Windhoek
Museums	Attractions	Events/Attractions
Night Life	Sundowner spots, Restaurants, stargazing	Dining or Events/Attractions
Safaris	Lion and Cheetah feedings, Tour Operators	Events/Attractions
Shops	Booksellers, Gemstone Dealers, Gifts and Souvenirs, Music Stores, Shopping Complexes	Shopping
Tours	Tours and Trails, Tour Operators	Explore Windhoek
Transportation	Car Rentals, Transportation, Bus Services	Transportation

Appendix L

Software Design Flow Chart



Appendix M

Recommended Signage



Appendix N

Kiosk Pilot Program Implementation Timeline

