



# **WEB-BASED INFORMATION SYSTEMS: THE DEVELOPMENT OF LEISUREDIGEST.COM – A SOUTH AFRICAN TOURISM WEBSITE**

**FELICITÉ FAIRER-WESSELS** 

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Department of Tourism Management, University of  
Pretoria, South Africa  
e-mail: ffairer-wessels@up.ac.za

## **ABSTRACT**

This article addresses the development of a Web-based tourism information system within the South African context. The development of Web-based information systems in tourism is briefly mentioned. The discussion focuses on the Leisuredigest.com website as a case study, its design, features, products, usability, adaptability, individuality, navigation, pricing, maintenance, marketing possibilities and problem areas. The article offers a view of the status quo within its particular context emphasising the need for further developments in the field to address global trends in the need for tourism information.

## **1 INTRODUCTION**

This article presents an overview of the development of Web-based information systems, relating specifically to the field of tourism. The general principles underlying generic information systems are implicit in the discussion. The focus is on the development of a dedicated information system that can function, as a one-stop information shop to satisfy the information needs of South African tourists relating specifically to accommodation and conference requirements, for example Leisuredigest.com. The focus of the discussion is on the intrinsic design and functionality of this website, its features, adaptability, individuality, maintenance, marketing and future prospects.

## 2 WHAT IS A VIRTUAL INFORMATION SYSTEM WITHIN A TOURISM CONTEXT?

In general an information system consists of all the ways in which people communicate with one another. Systems are composed of information channels that may be formal or informal, personal or impersonal, public or private. Different people, businesses and communities, use information channels in a variety of ways and combinations. To manage the mass of information globally available, many different information systems have been developed in various fields. Especially the presentation of tourism in the World Wide Web (WWW) has been very successful with the development of closed and open networks such as wide area networks, global distribution systems and the Internet, and, for example, the development of tourism information systems, destination systems and global reservation systems (Küng, Dünzendorfer & Wagner 1999:151).

A virtual information system is a specific type of information system that is based on the WWW. It is virtual in the sense that it is not book or paper-based although information on the Web can be downloaded onto paper or hard format. The advantage of virtual information is that it can be updated on a daily basis without the cost involved in updating traditional paper-based publications, as well as the advantage of timeliness, especially in the case of tourist information that is often obsolete before it is printed. The Web offers information providers and marketers the chance to make available full-colour virtual catalogues, provide on-screen reservation forms, offer online customer support, announce and distribute certain products easily, add supplementary information and capture customer feedback either quantitatively or qualitatively (*Introduction to travel ...* 2001:174).

A tourist information system is a specific type of information system in that it consists of all the information channels used in a business, community, region or country to promote itself as an information provider of tourist-related products. These information channels include, amongst others, commercials, advertisements, brochures, repeat visitors, employees, friends and relatives. In principle a tourist information system can be regarded as a generic information system that focuses on a particular discipline or application, for example that of tourism. Therefore, an information system is an information system irrespective of the particular subject field for which it is designed — the information or knowledge intrinsic to each subject field occurs on a meta-level and is not part of the workings of the system.

Information is one of the key factors of the travel industry and the Internet has emerged as a kind of travel agent as it represents a perfect platform for bringing products and services to the user/customer in a direct way without

using the traditional intermediary. The tourism product (e.g. a journey) has some unique features that differentiates it from other products, such as amongst others, intangibility (e.g. the psychological experience when visiting the Taj Mahal [(Goeldner & Ritchie 2003:238a)] and perishability (e.g. an airline seat for a particular date cannot be stored) and for these reasons the extensive use of information technology (IT) in tourism is a direct reflection of the large amount of information being produced, created and accessed within the tourist industry (Küng, Dunzendorfer & Wagner 1999:151; *Tourism management ...* in 2003:114). Accordingly users have accepted this new technology and Internet usage and the amount of commerce transacted on the Internet is increasing exponentially. The Internet is impacting more on promotional channels and is instrumental in starting to cut out some tour wholesalers and retailers from the travel product supply chain, thereby enabling direct communication among supplier, the tourism product and the consumer. For example, the viewing of virtual reality simulations of resort facilities and hotel rooms in real time through strategically placed cameras, prior to making a booking, is becoming standard procedure as is online booking via the Internet and e-ticketing that have already become established business practice (Diggin 2004:115–142; George 2004:97–107; Goeldner & Ritchie 2003:188–189).

With the tremendous growth of the Web, a broad spectrum of tourism-related information is already distributed over various Websites (Goeldner & Ritchie 2003:88–89; Lubbe 2004:174–176). To fulfil the tourist's request for information it is imperative to make available accumulated data from different sources available. In a first step towards a comprehensive integration of tourism data the 'Leisuredigest.com' information and booking system is being developed to allow for the interchange of structured data of tourism accommodation and conference providers within South Africa.

One of the first Web-based tourist information systems was developed in Austria in 1996. This system called *TIScover* (*Tourist-Information-System-discover*), based in Innsbruck, is a dedicated tourist information and booking system. *TIScover* was based on the pioneering system *TIS@Web* (Burger *et al.* 1996:18; Pröll *et al.* 1998:15) and serves as a medium to bring tourist information to the tourist in a direct way. Its aim is twofold: first, tourists should be supplied with up-to-date and comprehensive tourist information on countries (initially only Austria but now includes the British Isles, Germany, Italy, Liechtenstein and Switzerland) as well as all tourist products offered, such as information on villages, hotels, museums, or other places worth seeing. Second, it aims to attract the tourist to buy certain tourist products and equally important to offer the tourist the opportunity to buy them online. Although other Web-based tourist information systems exist, such as, amongst others, Microsoft's Expedia (1997 <http://www.expedia.com>), Sabre's

Travelocity (1997) now functioning as <http://www.nester.com> and the Swiss website Travelland (1997) now functioning as <http://www.imholz.ch>, the South African case study of Leisuredigest.com to be discussed is best comparable to TIScover.

### 3 FEATURES OF WEB-BASED TOURISM INFORMATION SYSTEMS

To ensure optimum functionality of a tourism website, the following features should be considered:

- *Access*: to ensure that the site is easy to find through an obvious uniform resource locator (URL) (Website address, i.e., Leisuredigest.com or search engines, i.e., Ananzi.com, Google.com)
- *Speed*: to ensure that the site operates quickly, with options not to load graphics for users of slow machines
- *Design*: to make the site attractive and easy to use (e.g., the Leisuredigest.com site is relatively simple to use if compared to some tourism sites that are very cluttered)
- *Content*: to provide content that is accurate, current, relevant and sufficiently detailed, using video, animation and images in a controlled manner to enhance effectiveness, without detracting seriously from performance
- *Search ability*: to help users find what they require easily, through search facilities with appropriate criteria and navigable maps (refer to paragraph 'Navigation and direct search')
- *Links*: to provide links to other relevant sites and to exploit third party relationships to deliver useful content, such as travel information
- *Help*: to provide help to navigate the site and/or get help with queries about content or booking
- *Enquiry response*: to provide an efficient mechanism for handling booking (refer to paragraph 'Booking of tourism products') (Goeldner & Ritchie 2003:521; WTO Report 1999a:119).

The following channels/categories of information are normally found on tourist information systems:

- Promotional messages, for example the Welcome campaign of the Department of Environmental Affairs and Tourism on the Website of South African Tourism ([www.southafrica.net](http://www.southafrica.net));
- Provincial tourism authorities (i.e. websites of each province, refer to bibliography);
- Tourist information centres (i.e. in various cities and towns) with the community's visual image and its awareness, pride and hospitality;

- Individual business promotion (e.g. Drifters);
- Employee knowledge;
- Brochures, signs (links with e.g. Getaway magazine);
- Billboards, storefronts (e.g. Cape Union Mart);
- Travellers and repeat visitors' news, etc.

#### **4 THE MANAGEMENT OF TOURIST INFORMATION SYSTEMS**

Irrespective of whether a tourist information system is public, private or voluntarily owned, it requires effective management. This implies not only the initial planning of the system, but also constant planning to meet changing user needs. The planning of a web-based tourist information system requires the necessary expertise of specialists in tourism, information science and computer programming successfully to design a system of this sort. The planning and organising of a tourist information system is essential to allow visitors or browsers access to properly organised information in order for them to obtain information and make informed decisions.

The management of publicly or voluntarily owned tourist information systems differ from privately owned systems in that they are usually responsible to a controlling authority or auditing body. As *Leisuredigest.com* is currently a privately owned tourist information system, issues concerning the public management thereof will not be discussed in this article. A well-organised tourism information system will benefit local business, the community and local residents as well as visitors and tourists. Such a system helps regional residents and tourists locate distribution channels to cultural and recreational sites, events and activities, accommodation and service outlets. Such a system helps build community pride and establishes ties with satisfied visitors encouraging them to become repeat visitors (Goeldner & Ritchie 2003:80,315; *Tourism management* (2003:184).

#### **5 THE IMPACT OF INFORMATION TECHNOLOGY ON TOURISM – THE FUTURE**

In 1999 the World Tourism Organisation (WTO) postulated a number of global technology trends for the forthcoming decade, some of which are already impacting on the South African tourism industry, such as:

- online booking via the Internet that has taken off globally, and is used by *Leisuredigest.com* amongst others in South Africa;

- e-ticketing (or ticketless travel) is being operated, currently on a limited basis, by a number of airlines (e.g., British Airways, SAS, United);
- CD-ROMs are used as electronic brochures and are increasingly replacing paper brochures (i.e., South African Tourism's Veza CDs);
- Central databases of traveller information will provide insight into individual traveller's preferences and behaviour patterns, and will be available on a commercial basis. Arthur Andersen and Pegasus Systems are developing such a programme in respect of hotel customers;
- Internet video telephony whereby consumers can 'test drive' a prospective holiday by viewing current pictures through cameras placed in hotels, clubs, etc;
- Plastification of travellers' cheques using smart card technology (i.e. Standard Bank's traveller's card);
- Artificially intelligent computer programmes where a combination of pre-entered information (e.g., likes and dislikes in respect of holidays) and observed behaviours in use of online booking patterns to make suggestions on possible options for the user, thus saving time in 'surfing' the Internet (Goeldner & Ritchie 2003:576; Heath 2002:284–285; WTO 1999b:36).

Based on a survey conducted by the WTO (1999b:32) of a forecast of tourism in the year 2020, international tourist arrivals are forecast to top 1 billion in 2010 and reach close to 1,6 billion in 2020 representing an overall global average annual growth rate of 4,1 per cent between 1995 and 2020. Similarly tourism's contribution to the gross domestic product (GDP) in southern Africa is expected to increase from 7,1 per cent in 1999 to 8,1 per cent in 2010. It is also projected that by 2010, 42 per cent of southern Africa's business will be derived from international tourism, 33 per cent from intra-regional personal tourism and 10 per cent from intra-regional business – making tourism the fastest growing industry locally and globally. For this reason, the development of virtual internet-based information services for tourism is both topical and imperative, hence the case study of Leisuredigest.com (Heath 2002:297–298).

## **6 A CASE STUDY: LEISUREDIGEST.COM AS VIRTUAL TOURIST INFORMATION SYSTEM**

### **6.1 BACKGROUND TO THE DEVELOPMENT OF LEISUREDIGEST.COM**

A Gauteng-based entrepreneur in collaboration with a team of computer programmers started developing the concept of Leisuredigest.com in 1999, as a new Web-based venture to address information needs in the field of tourism

in South Africa. No formal market research was undertaken prior to the venture other than informal discussions with two groups of respondents:

- Practitioners in the tourism industry, i.e. accommodation facility owners (e.g. the founder of BABASA Bed & Breakfast Association of South Africa), tour operators, tourism marketers and tourism product owners;
- end-users, i.e. potential tourists that expressed the need for a 'book & pay' online facility to eliminate the hassle of paying a deposit into the account of an accommodation facility and faxing the deposit slip as proof. Potential users also expressed the need for an integrated tourism website contrary to the stand-alone websites that were in existence.

The site went live in December 2000 although no banking institutions were able or willing to assist Leisuredigest.com with Internet payments. However, BOE eventually collaborated with Leisuredigest.com for initial developments in this regard.

## **6.2 POLICIES**

### **6.2.1 The vision**

For Leisuredigest.com to become the number one household name in addressing tourist information needs (i.e. accommodation and conference facilities) of all tourists in and planning to visit South Africa.

### **6.2.2 The aim**

Leisuredigest.com recognises the need for a one-stop accommodation web-based 'shop'/facility to offer all tourists direct access to as many accommodation and conference facilities, and related tourist products in South Africa as possible.

### **6.2.3 The objectives**

- Leisuredigest.com should be user-friendly for visitors;
- It should satisfy the accommodation and conference needs of visitors;
- It should be updated on a daily basis;
- It should attract accommodation facilities to register;
- It should provide marketing opportunities for tourism operations;

## **6.3 DESIGN OF THE WEBSITE**

Many existing tourist information systems support only static HTML pages, in other words, the tourist information is embedded within pure HTML code only. In the case of changes to the tourist information, HTML code must be

edited manually. Leisuredigest.com, in contrast, holds tourist information within a relational database that can be updated conveniently by means of a maintenance module realised as a simple Web-based application. The HTML pages presenting this information to the tourist are pre-generated automatically by the system due to performance reasons. Re-generation is also done automatically every time the underlying information changes.

#### **6.4 FEATURES OF LEISUREDIGEST.COM**

The site for Leisuredigest.com is very easy to navigate and has several features, including:

- A search facility for accommodation providers and their services
- A search facility for the Meetings, Incentives, Conferences and Events (MICE) industry and their services
- A search facility for tour operators
- A page for 'leisure products' in the tourism industry for hiring or buying
- A 'bid-it-buy-it' section promoting tourism products
- Banner advertising opportunities on each page
- Hyperlinks between pages for ease of use
- Links to related sites.

Leisuredigest.com serves the following areas of tourism as an industry:

- Providers of all forms of accommodation; including the holiday apartment industry
- Providers of conference facilities (with an extended search facility)
- Tour operators
- Providers of 'leisure products' (to hire or buy)
- Tourism news
- A 'bid-it-buy-it' section.

##### **6.4.1 Home page (Front page)**

The front page of Leisuredigest.com informs and allows users to navigate various sections of the site. The front page randomly selects several types of categories from the database and displays a summary for that selection.

The front page consists of two frames: *top navigation* and *main contents*.

ASP algorithms and database connections have been written to achieve random selection from database for accommodation, last minute specials, products and rentals. The news articles are selected and displayed by the latest article and by date.

JavaScript coding was needed to produce a mouseover (Alt scenario) that displays a pop-up description for left-index items.

## 6.4.2 Products found on the site

### Accommodation

This section allows a user to browse and find a listing for specific accommodation types in country, region and city/town according to the information contained in the database.

#### *Layout and design*

The accommodation browse facility appears in four sections that allow a user to filter out accommodation types:

- Country selector
- Region selector
- City/town selector
- Destination selector

#### *Functionality*

*Country selector ASP Template* selects and displays a listing of countries and regions for Africa that are populated in the database, allowing a user to choose either the country or region of interest.

*Region selector ASP Template* displays a map of regions of that country, so that the user can have a view of the destination. A listing of all country regions will appear on the left-hand side that will only allow a user to select populated database regions.

*City/town selector ASP Template* lists populated cities and towns within the region of selection.

*Destination selector ASP Template* lists accommodation types, names and telephone numbers within that area. The user can filter out accommodation types (hotels, guest farms, etc.) and he/she is informed on the relative cost of each accommodation destination by a formulated algorithm.

#### *Accommodation information*

An ASP template displaying accommodation location, image, description, directions, tourist attractions, contact information, special conditions, facilities, activities, room/unit basic information and rates.

*Functionality:* information is extracted and displayed dynamically on the page

form the database. If there are rates, they are displayed for a specific room from seasons by selecting today's date, allowing a user to select other seasons if available, or a default toll-free number will appear. If there is no image one will be defaulted until an image is supplied. Links are available for web address, e-mail, bookings and to add a destination to the user's shortlist.

*Room information:* displays more information on a room such as a picture and description.

*Facilities information:* displays more information on a specific facility such as a picture and description.

*Activity information:* displays more information on a specific activity such as pictures, prices and description. All of the above add value to the information supplied.

The accommodation section gives each tourism provider of accommodation (including the holiday apartment market) the opportunity to operate his/her own website cost-free. The site gives the provider the opportunity to manipulate his/her own site by:

- allowing extended introduction of all facilities, including photographs;
- indicating immediate availability (e.g. the guesthouse owner operates the site and is responsible for updating it);
- taking bookings online with the facility to pay immediately by credit card;
- advertising conference facilities.

The site gives the browser the opportunity to:

- search for available accommodation;
- compile a shortlist of accommodation possibilities;
- book and pay the deposit online.

In addition, a freestanding programme has been developed that enables guesthouses to operate their businesses and to do only online updating. The booking model has been developed with short message service (SMS) and fax confirmation to the client and the accommodation facility.

The opportunity exists for 'letting agencies' for the apartment market to:

- Allow browsers to view photographs of the apartments;
- Handle bookings;
- Operate apartments with inventories, etc.

In addition, a star-grading system has been incorporated that the Webmaster will operate.

### **Conference facilities (incorporating the MICE\* industry)**

This section also allows a user to browse and find a listing for specific conference facilities in South Africa, regions and town/city according to the information contained in the database.

An ASP template displays the company name, location, image, description, contact information and a list of services, products and rentals.

Functionality: same as with the accommodation section.

This section gives each MICE provider the opportunity to operate his/her own website cost-free. The site gives the provider the opportunity to manipulate his/her own site by:

- extended introduction of all facilities, including photographs;
- indicates immediate availability (e.g. conference venue owner operates the site and is responsible for updating it);
- takes bookings online with the facility to pay immediately by credit card;
- advertises accommodation facilities near conference venue.

The site gives the browser the opportunity to:

- search for available conference venues;
- compile a shortlist of conference venue possibilities
- book and pay the deposit online.

In addition, a freestanding programme has been developed that enables conference venues to operate their businesses and to do only online updating. The booking model has been developed with SMS and fax confirmation to the client and the conference venue.

### **Last Minute Availability/Specials**

Users can view and select more information on a special offer, according to which category the special is located.

#### *Layout and design*

The Last Minute section consists of two pages: *view specials* and *specials information* pages.

#### *Functionality*

An ASP Template that selects several categories forming the database and

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\* Meetings, Incentives, Conferences and Events

displays, if required, the paid specials and their categories in two dynamic columns.

The brief information displayed is:

- Category
- Accommodation name
- Area
- Type of accommodation
- Dates from and to
- The amount of units on special
- Cost of the special

The more detailed information for a special offer is displayed on the ASP specials information page, which is selected when a user has clicked on the 'go' button.

The 'More Information', ASP template dynamically displays various types of information for that special offer and links it to booking and accommodation details:

- Accommodation name
- Area
- Country
- Image
- Accommodation description
- Description for special
- Dates from and to
- The amount of units on special
- Cost of the special.

### **Tour operators**

Each tour operator, irrespective of the service delivered, can advertise cost-free on Leisuredigest.com. This will give the full range of tour operators, catering for all tourists' special interests, the opportunity to advertise their particular services (i.e. packages) on the web with visual images to enhance the various offerings.

### **Providers of 'Leisure Products' and Rentals**

These sections allow a user to browse and find a listing for specific products and rentals in South Africa (and Africa), regions and town/city according to the database population.

### *Layout and design*

The product and rental browse facility is presented in three sections that allow a user to find a specific product/rental.

They are

- Category selector
- City/town selector
- Company selector.

### *Functionality*

*Category selector ASP Template* lists populated categories within a specific country and allows a user to select and find a category for that place.

*City/town (product/rental) selector ASP Template* displays a list of populated city/towns within a region and allows the user to select one.

*Company selector ASP Template* lists all company names and descriptions, within the city/town, that specialise in a specific product/rental category and allows a user to make a selection. The navigation informs the user of previously selected options.

The opportunity exists for tourism product-providers to advertise free of charge any tourism-related leisure product. The full range of tourism products, from caravans and tents to skis to citronella soap, will have continuous market exposure.

### **Tourism news**

Displays a summary of news articles and relevant event information.

### *Functionality*

An ASP Template that selects all news and event items from the database, prioritises them according to date (most recent at the top) and displays a 'new' image next to articles that have been added within the last two weeks. It shows a heading and brief information about the article.

In addition, dedicated travel writers will write documentaries/commentaries on a regular basis.

### **'Bid-it-buy-it'**

Any interested parties have the opportunity to place and advertise tourism- or leisure-related products on this page. Interested parties can bid to buy a product and pay directly online.

## **6.5 USABILITY**

### **6.5.1 Adaptability and flexibility of the system**

Leisuredigest as a tourist information system assumes the commercialisation of heterogeneous tourist products presented by different tourist information providers. For example, a hotel owner presents his/her hotel along with the rooms offered and is thus able to announce any number of any types of tourist objects/products. The tourist information provider is free in deciding whether he/she offers only information on his/her tourist products, for example, price information on his/her rooms, or if he/she wants the tourist to book the product online. Leisuredigest allows the tourist information provider to assemble several products of different types into a so-called package with an individual price including, for example, accommodation and some additional service like a museum ticket or excursion to a nearby attraction.

### **6.5.2 Individuality and uniqueness**

As mentioned above, Leisuredigest provides a Web-based tourist information system that is general enough to be used for different kinds of tourist information providers. Similarly, since uniqueness is one of the main attractions in the tourist industry, the system can take the individuality of each tourist information provider into account. Leisuredigest offers the tourist information provider the opportunity to choose between a number of different layout templates using the Web-based Layout Assistant, in order to present his/her product. Leisuredigest also employs the Web by allowing various types of multimedia to present a product. In this sense the tourist information provider is allowed the flexibility to choose between a picture, an animated GIF or a VRML-object representing his/her rooms and apartments.

### **6.5.3 Navigation and direct search**

The placement of a tourism product on a tourist information system requires detailed consideration, as the bookable product must not disappear under the masses of tourist information. Moreover, the acceptance of tourist information and booking system depends largely on the possibility easily to find suitable bookable products. Systems often either lack proper navigational facilities or provide no means to specify selection criteria on different levels of granularity. Leisuredigest realises different approaches to access tourist information and especially bookable products through custom developed, in-house modules similar to 'Atlas' and 'Scout'. The philosophy behind the module 'Atlas' is, that the customer is able to go through tourist information by following a geographical hierarchy ranging from country, province, city, down to the accommodation and room levels (<http://www.atlas.web.cern.ch>).

In contrast to 'Atlas', the module 'Scout' (<http://www.webservices.org>) fully resigns navigation in that it realises direct access to an available, bookable product by allowing the specification of different search criteria, comprising locations, accommodation types and equipment, price limits and date of stay. On this basis of the specified criteria, Leisuredigest generates a list of available rooms, including total prices.

## **6.6 PRICING**

Concerning the computation of prices, it is necessary that the tourist receives both transparent information and how the total price was computed, with the possibility to select the best priced products out to the whole set of offers. As described above, the in-house 'Scout' – module produces a list of products typically offered by different tourist information providers and automatically calculates the total price of each product, thus making them comparable. Since Leisuredigest.com allows many additional features such as the possibility to specify the required weekday or arrival or price reduction dependent on the duration of stay, the check for availability as well as the computation of the price in response to a certain request is a very complex process. Depending on, for example, the season, the booking category and the length of stay, the total price has to be computed by the system. Concerning price transparency, a child's reduction is explicitly displayed on the product list. The full transparency of price calculation is complied in Leisuredigest.com by looking at the detailed information on the product.

## **6.7 BOOKING OF TOURIST PRODUCTS**

Online booking has begun growing phenomenally over the past few years. In Leisuredigest.com the internal booking procedure comprises several steps. First, the personal data of the tourist and all the data concerning with booking that have been entered by the customer are stored in the database for the purpose of the tourist information provider's booking confirmation report. Second, the number of available products is reduced. Third, the tourist information provider is pointed to the booking by an automatically sent fax and e-mail. Finally, the tourist is sent a voucher confirming his/her booking.

## **6.8 MAINTENANCE OF THE TOURIST INFORMATION BASE**

The effectiveness of any tourist information system depends on the proper maintenance of the underlying tourist information base. Especially in the context of online bookings, the prices and number of available products should be correct and up to date. To cope with this requirement, Leisuredigest.com supports decentralised maintenance of the tourist informa-

tion base on the basis of the maintenance module mentioned above as 'Generation of tourist information out of a database'. Each tourist information provider is able to directly actualise and extend his/her tourist information base, resulting in much less effort for the system provider. In addition, the large tourist information base of Leisuredigest.com can be kept up to date only this way. This approach also allows the tourist information provider to have access to information on the booking of his/her products by means of a booking report.

## **6.9 MARKETING OPPORTUNITIES OF LEISUREDIGEST.COM**

In 1994 the World Wide Web attracted zero advertising spend, by 1997 it attracted more than \$200 million in advertising and by 2000 surpassed \$5 billion (Kotler, Bowen & Makens 1999:536). The Leisuredigest.com website thus provides lucrative marketing opportunities for tourism industry stakeholders, with banner advertising available on each page. Banner advertising has been very effective, with monthly Web Statistics reports showing that banners generate an impressive number of visits for advertisers' websites.

Except for web-based marketing, Leisuredigest.com intends to use face-to-face personal selling of the site and its services to potential tourism providers in the first instance, and secondly to end-users, by implementing traditional media and word-of-mouth advertising.

### **6.10 RESULTS**

The site has the potential to be a great success and it hopes to be listed on Ananzi's (South Africa's most popular search engine) start-up page, placing it among some of South Africa's leading sites. In addition, Leisuredigest aims to be listed amongst the top ten results of all search engines undertaking searches on accommodation in South Africa.

Web Statistics, a programme implemented by Data Pro, will monitor the site's activity. This will allow Leisuredigest.com to have access to up-to-the-minute information about activities on the site with charts showing the site's 'unique visitor' statistics for specified periods. ('Unique visitors' refers to the number of individuals who visit the site and provides a useful indicator for evaluating a site's activity levels).

### **6.11 PROBLEM AREAS TO BE ADDRESSED**

The Leisuredigest.com Website needs continuous updating

- 1 by tourism providers themselves that are listed.

- 2 A marketing strategy needs to be developed aggressively to market the site.
- 3 A name change for Leisuredigest.com is suggested as the current name unfortunately has distinct negative connotations on the Web, that is, the term 'leisure', although a traditionally tourism-related term, it is increasingly used in the lingerie and soft-porn entertainment areas and so attracts many 'unwanted' visitors to the site.
- 4 The homepage of the site needs a makeover in order to create a vibrant feeling of energy and excitement that any tourism website should have.

## 7 CONCLUSION

The development of Leisuredigest.com as a web-based tourism information system can be seen as a forerunner in this field within the South African context. Global trends indicate that with its phenomenal growth, tourism is likely to affect societal behaviour and wellbeing in the third millennium.

Although there remain issues relevant in the context of tourist information systems that have not been dealt with in this article, the aim has not been to give an exhaustive account on the topic but rather an overview of the current development of the Leisuredigest.com web-based information system for tourism within the context of South Africa. A further aim is to stimulate the development of a variety of appropriate tourism websites to address realities in the tourism sector in South Africa and abroad.

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