Matching Tourism Supply and Demand: an analysis of how tourism products meet the needs of emerging domestic market segments in selected regions in South Africa

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ABSTRACT

In this study a newly developed model, referred to as the “Match Model”, is used to express the relationship between the needs of specifically identified emerging tourist market segments and the existing tourism product offerings in selected regions. Each market segment is positioned to show the extent to which the current product offerings in a region, represented by sectors such as transport, accommodation, tours and attractions, meet the respective market segment’s needs. The model was applied to South Africa’s five emerging domestic travel market segments and four - prioritized (?) regions. The value of the research lies in the development of a model which enables any permutation of tourism product-market matching

Keywords: Tourism supply, tourism demand, market segments, Match model, South Africa

INTRODUCTION

Tourist satisfaction, simply stated, depends on the ability of the supplier to satisfy customer needs at the right time with the right products; in other words, to match the supply of tourism products with the demand for those products. Matching supply and demand requires a good understanding of consumer needs, and involves a careful analysis of product - features/dimensions to identify potential products that will suit continuously changing consumer preferences. In this study the tourism product offerings within four selected regions in South Africa were analysed in terms of their appropriateness to meet the needs of South Africa’s emerging domestic travel market segments using an approach where the relationship between demand and supply is described.

THEORETICAL FRAMEWORK

The composite nature of tourism products (Smith, 1994) makes product supply in the tourism industry a complex process that requires joint efforts from different players. Kandampully (2000) describes the composite nature of the tourism product as unique because it is an amalgam of tangible and intangible factors that encompass the tourist experience (from core
to peripheral products and services). The tourism industry is thus composed of networks of independent but interrelated service providers such as airlines, hotels, tour operators, attractions and resorts. Kandampully (2000) also talks about the “service encounter” as an integral part of the tourism product and this includes tourists’ interaction with personnel, physical facilities and the various components of the service package. Formica and Uysal (2006) describe the supply side of tourism through the systems approach, stating that the attractiveness of a destination is linked to the tourist through the transportation, information and marketing components which enable tourists to make decisions concerning where to go, how long to stay and what to do. Through these links industry prices, promotes and develops the tourism products which affect the tourists’ decisions (or experiences?). Two decades ago Inskeep (1991) suggested that in order to understand the supply of tourism within a region it is necessary to look at regional access and the internal transportation network of facilities and services; tourist attractions and their locations; location of tourism development areas including resort areas; as well as the quality and quantity of tourist facilities and services. While discussion of tourism product formulations began with Medlik and Middleton in the seventies (1973) and a number of studies have been conducted, notably those of Agarwal, Ball, Shaw, and Williams (2000), Bramwell (1998), and Smith (1994), there has been much less analysis of tourism product development in contrast to the significant research efforts directed toward tourism demand and marketing. Lim (1997) reviewed one hundred articles that focused on tourism demand models. Numerous articles on tourism demand have since been published, with the majority focusing on forecasting models and econometric approaches. The purpose of this study is to match supply and demand in terms of market segment needs, thereby placing the focus on tourist classification and segmentation. Various methods are used to segment tourist markets for example activities-based segmentation (McKercher, Ho, Du Cros & So-Ming, 2002), benefit-segmentation (Frochot & Morrison, 2001), motive-based segmentation (Nyaupane, White & Budruk, 2006), lifestyle segmentation (Gonzalez & Bello, 2002) and travel behavior of which a good illustration is the study by Sung (2004) who did a classification of adventure tourists into (1) general enthusiasts, (2) budget youngsters, (3) soft moderates, (4) upper high naturalists, (5) family vacationers, and (6) active soloists. In a similar way South African Tourism (SA Tourism, 2010) identified five emerging domestic travel market segments based on demographic profile, lifestyle characteristics and travel-related needs, namely: “Spontaneous Budget Explorers” (SBE), “New Horizon Families” (NHF), “Seasoned Leisure Seekers” (SLS), “High Life Enthusiasts” (HLE) and “Well-to-do Mzansi” Families’ (WMF) and these market segments are used to assess how the supply of tourism products and services meet their needs in selected areas. The market segments are shown in Table 1.

<table>
<thead>
<tr>
<th>SPONTANEOUS BUDGET EXPLORERS (SBE)</th>
<th>18-24</th>
<th>All races</th>
<th>Income range: R5,001+</th>
<th>Avg. Length of Stay: 5.4 nights</th>
<th>Trips/year: 3</th>
<th>Avg. Spend: R1,252.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Travel is a way to discover new people, places and adventures. Consumers in this segment travel to get away from the monotony of daily life; to add to their life experiences and fond memories.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW HORIZON FAMILIES (NHF)</td>
<td>35+</td>
<td>Black, Coloured and Indian</td>
<td>Income range: R5,001- R10,000</td>
<td>Avg. Length of Stay: 5.2 nights</td>
<td>Trips/year: 3.1</td>
<td>Avg. Spend: R1,160.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Travel is a way to educate their children, and to provide them with the opportunity to broaden their perspectives. It is also seen as quality time for the family to spend together, and a reward for hard work.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH LIFE ENTHUSIASTS (HLE)</td>
<td>25-45</td>
<td>Black, Coloured and Indian</td>
<td>Income range: R10,001+</td>
<td>Avg. Length of Stay: 4.5 nights</td>
<td>Trips/year: 3.1</td>
<td>Avg. Spend: R1,265.54</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Travel is a way to boost one’s social status, and to experience the finer things in life in new and different settings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEASONED LEISURE</td>
<td>25-45</td>
<td></td>
<td></td>
<td>Avg. Length of Stay: 7.7 nights</td>
<td>Travel is a way of life and something of a necessity.</td>
<td></td>
</tr>
</tbody>
</table>

1 Mzansi is a Zulu word meaning ‘south’ and is popularly used to refer to South Africa.
Matching supply and demand in tourism has been viewed from various perspectives such as tourists’ motivations and destination choice (Andreu, Kozak, Avci & Cifter, 2005; Awaritefe, 2004; Janga & Caib, 2002), tourist perceptions of destinations and tourist satisfaction with destinations (Ibrahim, Essam & Gill 2005, Kandampully 2000) and the importance of attractions to destination attractiveness (Formica & Uysal, 2006). Studies on measuring the extent to which the main components of the tourism product, namely accommodation, transport, tours, attractions and events, information and marketing meet the needs of specific market segments are not as common. The overall purpose of this study was to evaluate the current composite tourism product offerings within selected regions against the needs of the five emerging domestic market segments and to identify any gaps in order to make recommendations for more effective product development within those regions. Four regions were selected in different provinces in South Africa based on being either potential growth points identified by tourism authorities or where product and market knowledge was lacking. These regions, the Central Karoo, West Coast, Bushbuckridge and OR Tambo district, are referred to as ‘tourism nodes’ by South African tourism authorities and will be referred to as such in this paper (see Figure 1).

**Figure 1**

Selected Tourism Nodes

![Map of selected tourism nodes in South Africa](image)

**RESEARCH METHODOLOGY**
The approach taken to evaluate the product offerings within each tourism node against the needs criteria of each market segment was to apply a mixed methods design using both quantitative and qualitative techniques. Based on the literature the needs of each market segment were translated into criteria against which product offerings within six sectors (see Table 1) could be measured. These criteria reflected the tangible product features (for example affordability, accessibility, safety, capacity), the intangible product features (sense of excitement, adventure, social interaction, nostalgia, status), as well as information availability and promotional aspects.

The data required to evaluate the product offerings in each node against market needs had to be obtained from individuals working in various capacities within the tourism industries of the nodes (primary data), as well as from existing product information sources (secondary data). Their perceptions of how the current product offerings meet the needs of the five emerging domestic markets and the gaps they experience, was the primary source of information. The sample selected for each node consisted of tourism professionals from provincial, regional and local tourism associations; industry-based associations, sector-based associations within the regions as well as referrals from those approached to respond to questions. Judgmental and snowball sampling was used to select potential respondents with a total of 139 (potential) respondents being identified. The respondents had to fulfill certain criteria such as a minimum level of involvement in the local tourism industry, number of years involved in tourism and a level of expertise on the region.

A web-based self-administered questionnaire was developed consisting of both structured and open-ended questions. The questionnaire was divided into a number of sections: profile of tourists visiting the tourism node (seasonality, origin of tourists, demographics and trip motivations); package tours (group and local); transportation to and within tourism node; attractions and events (tangible, intangible criteria as well as experience needs criteria); hospitality; and finally perceived gaps in tourism product offerings. The information and promotional needs of the market was also covered for each section. The “Qualtrics” online survey instrument was used to structure the questionnaire to provide for electronic responses. Provision was also made for paper-based questionnaires. The questionnaire included a cover letter with a description of the five market segments and their specific needs. The development of the questionnaire went through a number of rounds and a pre-test of seven questionnaires amongst tourism professionals lead to a number of constructive adjustments to the initial questionnaire.

The focus of the questionnaire was to determine the gaps in the available product offerings in the identified tourism nodes with specific reference to the six sectors. The questions were designed to elicit both quantitative and qualitative data. The quantitative questions related mainly to the rating of the adequacy of available products to meet the needs of tourists visiting the region. The qualitative open-ended questions were designed to elicit more comprehensive information on shortcomings, problems, constraints and suggestions for improvement in specific areas. A second phase of data collection was undertaken through follow-up telephone interviews to ascertain more in-depth information where required or to clarify responses. A total of 50 responses were received, varying across the four nodes. More in-depth follow up interviews were conducted with the respondents in regions where responses were particularly low in order to obtain as much information as possible (for example OR Tambo district had only 4 responses).
DATA ANALYSIS: BUILDING THE MATCH MODEL

Descriptive statistical analysis (frequencies and means) was used for the quantitative data from the structured questions. The qualitative data (comments) from the open-ended questions, which were also captured on the system, provided a first indication of consensus or disagreement between respondents, both within and between nodes. Content analysis was used to analyse the qualitative data both from the primary and secondary sources as it is an objective and systematic research technique that can successfully measure semantic content. Content analysis extends far beyond simple word counts and data was coded and categorized providing for rich and meaningful data. The content of the comments made on the questionnaire and derived from the follow-up interviews were analysed according to each sector. The following steps were followed to gain as much information as possible to provide a full picture:

i. The comments made on the questionnaires were viewed against the objective of the question to assess the meaning.
ii. Comments were linked to relevant needs criteria developed for each sector.
iii. The comments made on one sector were viewed against the quantitative results and any comments made on the same topic in another sector.
iv. Where applicable comments were viewed in the context of the respondent’s profile i.e. the specific town in which he/she is located or the position he/she holds.
v. An overall assessment was made in terms of respondents’ opinions on the product offerings in a particular sector.
vi. Interviews were evaluated for related comments on the sector which validated or contradicted the responses on the questionnaire. Some of the interviews went far wider than the context of the questionnaire and all information was not directly pertinent to the objectives of the study.
vii. Where the information on product offerings in a node or sector was regarded to be inadequate specific secondary sources on the affected areas were sourced and studied in order to provide more comprehensive and detailed information on the gaps which could influence potential recommendations.

The next step was to rate the six sector-specific product offerings (Table 2) in terms of the needs of the five market segments (Table 3).

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Six Sector-specific Product Offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>🚌</td>
<td>Transport</td>
</tr>
<tr>
<td>🏞️</td>
<td>Package tours</td>
</tr>
<tr>
<td>🕉️</td>
<td>Local tours</td>
</tr>
<tr>
<td>🛋️</td>
<td>Accommodation</td>
</tr>
<tr>
<td>🏞️</td>
<td>Attractions (natural and man-made)</td>
</tr>
<tr>
<td>🎈</td>
<td>Events and activities/special interest offerings</td>
</tr>
</tbody>
</table>
Table 3
Five Emerging Domestic Market segments in South Africa

<table>
<thead>
<tr>
<th>Segment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBE</td>
<td>Spontaneous Budget Explorers</td>
</tr>
<tr>
<td>NHF</td>
<td>New Horizon Families</td>
</tr>
<tr>
<td>HLE</td>
<td>High Life Enthusiasts</td>
</tr>
<tr>
<td>SLS</td>
<td>Seasoned Leisure Seekers</td>
</tr>
<tr>
<td>WMF</td>
<td>Well-to-do Mzansi Families</td>
</tr>
</tbody>
</table>

Source: SA Tourism (2010)

The demand of each market segment (based on the needs of the market segment) was rated against the current supply of product offerings in each sector and node using the codes depicted in Table 4:

Table 4
Rating Codes

<table>
<thead>
<tr>
<th>Outcome of Rating</th>
<th>S</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current supply meets demand</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Current supply inadequate for demand</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Limited supply and limited demand</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Current supply and untapped demand</td>
<td>✓</td>
<td>✗</td>
</tr>
</tbody>
</table>

The first code in the S column refers to the supply of the current product offerings and the second code in the D column refers to the demand of the market segment in terms of their needs for that specific product offering. A tick (✓) on the supply side means that the supply is adequate to meet the needs of the market segment. A cross (✗) means that the supply does not meet the needs of the market either because there may not be such an offering or that the offering has gaps which need to be overcome. A tick (✓) on the demand side means that there is a recognised demand for the product. A cross (✗) means that there is either little demand for the product based on the needs of the market segment, or that there may be an untapped market potential.

RESULTS: BUILDING THE MATCH MODEL

Figure 2 provides the ratings given to the appropriateness of the supply per sector for each market segment in each node. The columns show the various sectors under each node in relation to a specific market segment and the rows show a specific sector in terms of all the nodes in relation to a specific market segment. The codes indicated in Figure 2 are derived from the analysis of the findings.
As an example the description of the results of the market needs and product offerings in terms of the attractions sector for the West Coast node for a specific market segment, the New Horizon Families are shown in Figure 3.
The next step was to plot the rating as a relationship between the needs of the market segments and product offerings per node. This was done by positioning each market segment in terms of how the current product offerings in a specific node meet the needs of the market segment. These relationships are shown in Figure 4 where the plotting area was divided into four quadrants with each quadrant showing the vertical axis = adequacy of current offerings (supply) and the horizontal axis = market needs (demand) for each sector’s offerings. A six-point scale was used on the vertical and horizontal axis where each point on the scale is represented by a tourism sector (e.g. transport) which had a positive outcome (✓) in terms of supply and/or demand. In other words each sector (e.g. transport) could potentially “earn” a point for a positive rating (✓) on the supply side. So, if four out of the six sectors got a positive rating for their offerings the total would be four. On the horizontal axis if the market segment (e.g. SBE) had a positive demand for a particularly sector (✓) a point could be earned. The purpose of expressing these relationships is to provide a foundation for decision-makers to formulate appropriate responses to the gaps highlighted in the product offerings. Decision-makers need to decide whether the appropriate response to gaps in a particular market segment should be addressed through the improvement of the tourist offerings or through a greater focus on developing the demand, or both.

The example of the West Coast node is once again used to illustrate how the data was interpreted. In looking at the position of the NHFs segment in the West Coast node in Figure 4 it can be seen that NHFs fall within the high supply/high demand quadrant with supply at the lower end of the quadrant. Thus there is a clear demand from this market segment to visit the region and supply of product offerings seem to be adequate except for package tours to the region that are limited. Attractions offer limited educational and interactive aspects for the needs of...
accompanying children, while events (such as the wine route and crayfish festival) largely focus on the adult market. SBEs fall within the high demand/high supply quadrant with supply at the lower end of the quadrant. Thus there is a clear demand from this market segment to visit the region. There are some gaps in the current product offerings where data analysis showed that there are not enough package tours to the region and accommodation does not cater for large groups, which affects socialisation). There is a variety of events, but they do not address this market’s desire for shopping and nightlife. HLEs fall within the low supply/low demand quadrant with demand at the higher end of the quadrant. As far as supply is concerned, only events appear to be adequate for enhancing this market’s need for social status and glamour. While a variety of local tours do exist, many of the local activities may not be perceived as glamorous. There are limited higher-end accommodation establishments with good quality products. SLSs fall within the high supply/high demand quadrant with supply at the lower end of the quadrant. There is a distinct demand by this market to visit the region. This segment is not group tour enthusiasts. Attractions appear to be lacking in terms of authenticity and nostalgic experiences which this market desires. WMFs fall within the low supply/high demand quadrant with supply at the higher end of the quadrant. This is not a market for group tours to the region as they generally prefer to travel in private vehicles. There are limited higher-end accommodation establishments with good quality products (e.g. 4 and 5 star hotels). Many events and activities exist in this region although none that specifically address the edutainment aspect desired by adults for their children in this market.

The overall results for all four quadrants in Figure 4 show that in each of the four nodes the ability of the current product offerings to meet the needs of the identified market segments differs. In the Central Karoo the ability of the product offerings to meet the needs of all five segments fall within the lower quadrants, ranging from very limited demand for the destination and limited appropriate supply for the High Life Enthusiasts (HLE) segment to a high demand but inadequate supply for the New Horizon Families (NHF) segment. In Bushbuckridge the results again range from limited demand from the High Life Enthusiasts for the destination with a slightly greater ability of the destination to meet their needs if the development of products or stimulation of demand could occur. Bushbuckridge appears to have the most appropriate product offerings for the New Horizon Families while the demand for this destination seems to be highest from the Spontaneous Budget Explorers. The West Coast shows a distinct potential demand for the destination by four of the segments, namely Spontaneous Budget Explorers (SBE), New Horizon Families, Seasoned Leisure Seekers (SLS) and Well-to-do Mzansi Families (WMF) with the potential of the destination to meet their needs ranging from fairly low to fairly high. The OR Tambo district needed to be looked at more circumspectly given the lack of information on the district. Three of the segments, namely the New Horizon Families, Spontaneous Budget Explorers and the Seasoned Leisure Seekers show a distinct demand for the destination with the Well-to-do Mzansi Families appearing to have some demand and the High Life Enthusiasts very little. The product offerings in this region are currently underdeveloped or unknown by the markets so its’ perceived ability to meet the needs of the market segments appears low. The position of each market in the tourism node had to be interpreted by looking at the findings in depth because the position of the market segment could be as a result of inadequate supply where the region has many gaps in its offering and has much to do to improve its product offering, or alternatively, the product offering may be adequate but the market is unaware of it. From the demand side the results had to be interpreted against the possibility that there is limited demand for the region or that there is an untapped demand because of the unawareness of what the destination has to offer.
Figure 4
The Relationship between Supply and Demand per Node
RECOMMENDATIONS

The purpose of positioning the market segments as a relationship between current offerings and demand was to provide a foundation for decision-makers to formulate appropriate responses to the gaps highlighted in the product offerings. Decision-makers need to decide whether the appropriate response to gaps in a particular market segment should be addressed through the improvement of the tourist offerings or through a greater focus on developing the demand, or both. Each tourism node needs to be viewed separately by decision-makers in that region. Each market segments’ needs must be considered in the context of what the region has to offer and the ability of the products offerings to meet these needs. Specific strategies need to be put in place to overcome gaps identified with due consideration of the reason for these gaps i.e. that the product offering needs to be improved or that the awareness of the product offering needs to be created.

CONCLUSION

The research had certain limitations. The questionnaire was very long and, given the nature of the information required, quite complex which probably inhibited responses although through the efforts of the research team a relatively satisfactory response rate was obtained. The research could be done in more depth if one region is selected. Each region is complex and has unique characteristics that could not be adequately captured in this research. A focus group method could also be effectively applied to this research, perhaps with more information being gleaned on recommendations and strategies forthcoming. However, this requires significantly more time and resources to implement.

This research study provides a methodology which can be replicated in three ways:

i. Matching the product offerings of all sectors with potential demand of the five market segments in other identified tourism nodes.

ii. Matching the product offerings of one specific sector with the potential demand of the five market segments.

iii. Any permutation of matching all or one of the five market segments to potential demand in identified tourism nodes for all sectors or per sector.

The value of the research lies in the development of a model which enables the matching of supply and demand based on specific market segments and regions. The current study provided an effective tool for further studies of this nature.

REFERENCES


