Tourism Sector Demand and Supply - Towards Post-Covid-19 Resilience

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INTRODUCTION

• A viable vector for sustainable socio-economic development

• Devastating effect of COVID-19 on the tourism industry

• How are we going forward?

• How does SA become resilient as a tourism destination?
THE PROBLEM?

• Attract optimal international tourist arrivals and optimise domestic tourism: Resilience

• Time-line related to tourism recovery

• Recovery might take longer than expected:
  • New variants
  • Vaccine rollout
  • Concerned travellers
  • Social distancing and capacity of venues and facilities

• Move to higher levels of sustainability, resilience and innovation.

• The tourism industry is an economic, social and cultural asset in South Africa.
SA TOURISM TREND ANALYSIS: International tourism

- Income from tourism reached a peak of R82.5 billion in 2018.
- Total spending from African markets is following a downward trend, while overseas markets show a growing trend.
- Overseas tourists spend more nights in South Africa than African tourists and they also visit more provinces.
- Tourists spend on average more nights in the Western Cape province and the least number of nights in Limpopo.
- A slow-down in the overall growth rate of tourist arrivals to South Africa.
- Neighbouring countries remain the main source of international tourists and arrivals from these markets are growing at a reasonable rate.
- China and the USA are growing source markets, while the UK is a dwindling source market.
- Gauteng is the most visited province but is losing market share, mainly to the Western Cape.
- Provinces that border neighbouring countries remain popular destinations.
- South Africa is a predominant holiday destination with business arrivals only 3.33% of total arrivals.
SA TOURISM TREND ANALYSIS: Domestic tourism

- The total number of trips per year was on a declining trend, but the trend turned around during 2017.
- There are more day trips than overnight trips in a typical year.
- The main provinces for day trips are Gauteng, Limpopo and the Western Cape.
- The main destinations for overnight trips are Limpopo, KwaZulu-Natal, Gauteng and the Eastern Cape.
- Considering both day and overnight trips, the value of the domestic tourism market exceeded R200 billion during 2019.
- Overnight trips accounted for approximately R79 billion during 2019, slightly less than the value of the international tourism market during that year (R81 billion).
- Since 2017, there is an increasing trend in domestic tourist spending.
- Shopping is increasing in importance as a reason for day trips.
- Visiting friends and relatives remain the main reason for overnight trips, followed by leisure.
- Most overnight trips range from 2-4 nights – decrease in those spending 5 nights or more on a trip.
TOURIST ARRIVALS IN SOUTH AFRICA

Source: StatsSA & Statista.com
OBJECTIVE OF THIS RESEARCH

To conduct a multi-stakeholder study on the tourism demand-supply nexus within the South African tourism context, with the overall aim of optimising the demand and supply of tourism in South Africa and developing a data-driven TRM for the country.
RESEARCH METHODOLOGY

- DESKTOP REVIEW
- QUALITATIVE RESEARCH
- QUANTITATIVE RESEARCH

- Econometric Modelling
- Mediation Analyses
THE TOURISM RESILIENCE MODEL FOR SOUTH AFRICA

RESULTS:

From Response to Recovery (Phase 1)
<table>
<thead>
<tr>
<th>Building back better</th>
<th>Response</th>
<th>Recovery</th>
<th>Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post shock approach</td>
<td>Immediately when faced with shocks</td>
<td>Interventions bring pre-shock status or better</td>
<td>Anticipates, resists, adapts and transforms when faced with a shock</td>
</tr>
</tbody>
</table>

**Tourism Demand**

Variables:
1. Income
2. Price (transport cost and cost of living at destination cost)
3. Exchange rate
4. Trade openness
5. Population size
6. Marketing
7. Country attractiveness
8. Repeated visits
9. Seasonality
10. Legal frameworks

Regime 1: Immediate response to COVID-19 significantly dropped the demand of tourism, e.g.:
- Legislating the Disaster Management Act, 2002 (Act No. 57 of 2002) and operating on level 5.
- Restraining policy environment

Regime 2: Health measures to make it safe to travel again, e.g.:
- Vaccination
- Social distancing
- Quarantining and isolating

Institutional measures to boost demand included:
- E-visa programme for priority tourism markets
- Informative marketing

Regime 3: Prioritising regional cooperation to tap into travelling who embark on once-off regional trips.
Product diversification to improve demand.

**Tourism Supply**

Variables:
1. Natural resource & environment
2. Build environment
3. Spirit of hospitality
4. Operating sectors (e.g., accommodation, tourism services, attractions, transportation, food and beverage, adventure creation, travel guide, events and conferences)
5. Tourism financial rescue packages
6. Legal frameworks

Regime 1: Protecting supply, e.g.:
- R200 billion COVID-19 facility for businesses in different sector and R200 million Tourism Relief Fund.
- Creation of a solidarity fund providing seed capital of R150 million.
- Providing a tax subsidy of up to R500 per month for the next four months for private sector employees earning below R6,500 a month

Regime 2: Reviewing and transforming the tourism policy and institutional support measures to tourism suppliers.

Supply beginning to respond to demand and vice-versa.

Regime 3: Developing and harnessing competitive and comparative advantages associated with the innovation and technology-based solutions impacting tourism supply.
Stimulation of capital investment.
THREE REGIME SWITCHING MODEL

\[ \Delta y_t = \alpha_t + \theta_{R1}(y_{R1} - y_{\text{shock}}) + \theta_{R2}(y_{R2} - y_{R1}) + \theta_{R2}(y_{R3} - y_{R2}) + \epsilon_t \]

where \( \epsilon_t \sim i.i.d \mathcal{N}(0, \sigma^2_t) \) and the variance of the disturbance term is assumed to be state dependent on each of the three RRR-regime. Thus, R1, R2 and R3 are modelled as switching regimes of the stochastic process generating demand or supply.

We estimate the probability that one regime transitions to another as follows:

<table>
<thead>
<tr>
<th></th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>( p_{R1,R1} )</td>
<td>( p_{R1,R2} )</td>
<td>( p_{R1,R3} )</td>
</tr>
<tr>
<td>R2</td>
<td>( p_{R2,R1} )</td>
<td>( p_{R2,R2} )</td>
<td>( p_{R2,R3} )</td>
</tr>
<tr>
<td>R3</td>
<td>( p_{R3,R1} )</td>
<td>( p_{R3,R2} )</td>
<td>( p_{R3,R3} )</td>
</tr>
</tbody>
</table>

The transitioning probabilities are depended on the immediate previous prevailing regime and independent of the one before the immediate previous prevailing regime such that:

- \( p_{R1,R1} = \Pr(R1|\text{shock}) \)
- \( p_{R1,R2} = \Pr(R2|R1) = p_{R2,R1} = p_{R2,R2} \)
- \( p_{R1,R3} = \Pr(R3|R2) = p_{R2,R3} = p_{R3,R1} = p_{R3,R2} = p_{R3,R3} \)
THE TOURISM RESILIENCE MODEL FOR SOUTH AFRICA

RESULTS:

Recovery to Resilience (Phase 2)
### ON A PRACTICAL NOTE: USA AND BRAZIL

<table>
<thead>
<tr>
<th>Socio-demographic variable</th>
<th>USA</th>
<th>BRAZIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency (n=223)</td>
<td>Frequency (n=140)</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Male (61%); Female (39%)</td>
<td>Male (67%); Female (30%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>25-34 (53%); 35-44 (27%)</td>
<td>25-34 (52%); 35-44 (20%)</td>
</tr>
<tr>
<td><strong>Qualifications</strong></td>
<td>Bachelor’s Degree (71%); Postgraduate Degree (14%)</td>
<td>Bachelor’s Degree (41%); Postgraduate Degree (19%)</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td>Married (85%); Single (13%)</td>
<td>Single (54%); Married (36%);</td>
</tr>
<tr>
<td><strong>Economic activity</strong></td>
<td>Employed in the public sector (72%); Self-employed (15%)</td>
<td>Employed in the public sector (41%); Self-employed (36%)</td>
</tr>
<tr>
<td><strong>Travel companion(s)</strong></td>
<td>With my partner (36%); Family (Adults &amp; children) – (28%)</td>
<td>With my partner (34%); Family (Adults &amp; children) – (33%)</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td>Above-average income (36%); Same as average income (31%)</td>
<td>Above-average income (44%); Same as average income (32%)</td>
</tr>
<tr>
<td><strong>Travel to SA</strong></td>
<td>I would consider visiting South Africa as a tourist someday in the future (45%); I have travelled to South Africa before (44%)</td>
<td>I would consider visiting South Africa as a tourist someday in the future (72%); I have travelled to South Africa before (16%)</td>
</tr>
<tr>
<td><strong>Prior international travel</strong></td>
<td>Once (46%); More than once (40%)</td>
<td>More than once (56%); Once (26%)</td>
</tr>
<tr>
<td><strong>Most influential media channels</strong></td>
<td>Social media (46%); The internet (34%)</td>
<td>The internet (55%); Social media (27%)</td>
</tr>
<tr>
<td><strong>International travel in the near future</strong></td>
<td>Yes (94%); No (6%)</td>
<td>Yes (95%); No (5%)</td>
</tr>
<tr>
<td>USA</td>
<td></td>
<td>BRAZIL</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
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<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Effect of travel motives on travel intentions via country image</td>
<td>49%</td>
<td>Effect of travel motives on travel intentions via [functional] country image</td>
</tr>
<tr>
<td>Effect of brand equity I on travel intentions via country image</td>
<td>52%</td>
<td>Effect of brand equity I on travel intentions via [functional] country image</td>
</tr>
<tr>
<td>Effect of brand equity II on travel intentions via country image</td>
<td>45%</td>
<td>Effect of brand interest on travel intentions via [functional] country image</td>
</tr>
<tr>
<td>Effect of push travel motives on travel intention via Government Resources/International Relations as place brand dimensions</td>
<td>55%</td>
<td>Effect of push travel motives on travel intention via Government Resources/International Relations as place brand dimensions</td>
</tr>
</tbody>
</table>

A VAF of less than 20% is not significant
A VAF of between 20 and 80% is partial mediation
A VAF of above 80% is full mediation
PRACTICAL IMPLICATIONS OF COUNTRY IMAGE

The USA market perceptions of South Africa as a welcoming country that also provides for the safety of citizens and visitors account for 49% of the relationship between the travel motives of tourists and their intention to travel to South Africa.

Versus

The Brazilian market perceptions of South Africa as having a globally influential culture and having a well-functioning infrastructure accounts for 38% of the relationship between the travel motives of tourists and their intention to travel to South Africa.
THE VALUE AND UTILITY OF THIS MODEL

• Provides a continuous picture of how market perceptions drive behaviour
• The data can inform market and marketing decisions on a continuous basis
• It allows for a pro-active approach in addressing challenges and problems
• Allows for the gathering of big data related to perceptions and mediating factors
• Allows tourism practitioners to predict the influence of both tourism and non-tourism factors on tourist decision-making in one model
• The reflexive model allows NDT the flexibility to plug-in specific dimensions and model their influence[(eg replace pharma and non-pharma interventions dimension with any other contemporary factor at the MESO level like increased visible policing (safety issues) or visa regime interventions (immigration issues)]
• Promotes tourism resilience in SA as a process and not an ad-hoc event-related only to crisis via a dynamic and adaptive approach to modelling tourist behaviour
CONCLUSIONS

• Post shock (COVID-19) statutory responses and the speed of recovery of the tourism economy are key precursors of resilience.

• The developed model, in two phases, can help to show a country’s resilience after experiencing a shock.

• Market data is key to resilience!

• Predicting tourism demand through frequent assessments of “intention to travel” can direct the implementation of corrective measures proactively.
RECOMMENDATIONS

That the TRM which is a data-driven decision support model be implemented by the tourism industry to improve decisions.

That big-data is gathered on a six-monthly basis to build a databank of information related to current and potential source markets.
RECOMMENDATIONS

• That a crises management strategy is developed

• Build a stakeholder platform that provides information during crisis times (actually all the time)
Thank you!