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Maximizing ROMI of DMOs: Enabled through Tourism Investment Framework and Agile Marketing

1. Introduction

Travel and Tourism accounted for 10.4% of the global GDP in 2017, clearly emphasizing the significance that the sector has for the global economy. Given the importance of the sector and its favorable impact on the balance of payments, destinations have further geared up their efforts to improve arrivals through targeted marketing initiatives. According to the World Travel and Tourism Council, globally, government spending on tourism is expected to increase by 32% over the period 2018–28, to reach USD 603.4 Bn. The sector is witnessing unprecedented transformation driven by factors, as shared below:

a) Increasing Competition Amongst Destinations for Traveler Market Share

Most economies are working towards increasing their returns from the sector; thus, understandably, the established travel destinations are now faced with increased competition from up-and-coming destinations that are looking to gain the attention of the seasoned travelers. The smaller destinations such as Singapore, Seychelles, Jamaica and the Dominican Republic spend significant portions of their annual national budgets towards destination marketing as their economies are heavily reliant on tourism for growth. For instance, Seychelles has been observed to spend in excess of 20% of their government budgets towards tourism activities.

While emerging destinations are increasing their marketing spend, established destinations have been observed to further rationalize their tourism marketing spend. The rationalization is driven by the need for effectiveness within the core elements and the desire for adopting modern approaches; all with the intent to amplify the return on marketing investments. In recent years, there have also been increased pressures on the allocation of government resources as it is perceived that the funds could be put to better use. For instance, Tourism New Zealand's 2018 budget was reduced by ~USD 6 MM when compared to the previous year. As reported in 2018, according to Irish Tourism Industry Confederation, Tourism Ireland's current budget amounts to about a third of its 2008 budget. Thus, Destination Marketing Organizations (DMOs) across the world are faced with stiffening competition and depleting resources.

b) Evolving Marketing Techniques to Stay Top-of-Mind and Increase Conversion

In terms of marketing techniques, most DMOs are evolving their strategies, to make them time-relevant and efficient. Some destinations still focus on conventional methods; for instance, Scotland leveraged conventional advertising techniques using a combination of TV, print and online (news websites) platforms for its "Spirit of Scotland" marketing campaign. The other destinations are focused on adopting new-age advertising techniques, which involve partnerships with third parties including media, opinion leaders and broadcast production. These include celebrity endorsements, media productions and private sector involvement. Destinations such as Australia, Jamaica and Aruba have made use of celebrity endorsements to boost tourism. The "Lord of the Rings" movies have been leveraged to advertise New Zealand's offerings as a touristic destination. The "Game of Thrones" series has, similarly, boosted tourism for Croatia. Although marketing for Ireland is being managed by Tourism Ireland, the country is exploring funding marketing campaigns by private Irish Tourism businesses.

As corroborated by Dwyer L. et al through ‘Destination Marketing of Australia: Return on Investment’ (2013), any DMO needs to understand the growth rates of key source markets, the underlying market elasticities and the cost of acquisition of each tourist from those markets, to effectively allocate the available marketing budgets. Further, the research paper also highlights that return on marketing investment (ROMI) measures can inform organizations about effective allocation of available marketing resources, helping the destination marketer meet its objectives. Thus, to align with the marketing principles, overcome the challenges related to stiffening competition and to manage depleting resources, DMOs can benefit from an agile and reinstated approach towards the allocation and usage of marketing resources. The need for a proactive approach is accentuated with the demand for transparency and attractive return as DMOs often work with public resources and are accountable for their effective usage. Thus, such organizations strive for high returns on their marketing investments by innovating and differentiating their marketing strategy. To ensure that the destination marketers are able to generate the required returns, they need to identify the right set of opportunities, carefully invest the available resources, continually monitor the progress and course correct, if need be. This paper explores an agile, always-on approach to DMO marketing strategy formulation and execution. The framework focuses on two specific aspects, with an aim to maximize returns across both the elements:

- **Dynamic investment allocation:** The conceptual framework (Tourism Investment Framework) considers both the potential of source markets and the destination’s ability to ‘win’; thus, prioritizing target markets. The priority list is reviewed against the available resources and targets, to dynamically allocate resources. The approach helps to maximize ROMI. The framework leverages inputs from past choices along with market-specific macro and micro parameters.
- **Agile marketing approach:** In terms of implementation, i.e., defining appropriate marketing strategies, the framework leverages data being generated through Smart tourism products (i.e., digitalization, internet-of-things, and other concepts that create ample user data), to define appropriate channels to maximize the ROMI.

The framework is delivered through a data-driven, dynamic model for resource allocation across different markets and channels. The model relies on meta-analyses of existing data streams and new data created through various Smart touch-points and transactions of the travelers’ while interacting with the tourism ecosystem, thereby minimizing the costs related to acquiring new information.

2. The Framework

The Tourism investment framework was envisioned across two distinct areas of resource allocation and marketing choices. Though these areas are considered by several commercial businesses, the complexity of the tourism environment and the constraints within DMOs limit the application of quantifiable models in the context of destination marketing. Thus, a conceptual framework has been envisioned to bring together the key factors that are relevant to the successful operation of a DMO.

2.1. Dynamic Resource Allocation Framework

DMOs, typically, have distinct processes to set their targets (i.e., outcomes that need to be achieved), identify their target markets (i.e., potential opportunities), and budget (i.e., allocate and distribute investments/resources). Given the dissimilar nature of these processes, it often creates a siloed approach towards execution; thereby, creating inefficiencies. Taking into consideration the

challenges related to limitations within their functioning and taking cognizance of limited structured information, a customized approach to resource allocation was developed. The approach was based on interlinking the above-defined components, as shown in Figure 1.



Figure 1. Resource allocation framework

The three pillars of the resource allocation framework are as follows:

- **Source markets**, i.e., the select markets across which the destination will carry out its marketing activities, to tap into their outbound tourism potential.
- **Growth targets**, i.e., the targets that are set by the DMO across its source markets.
- **Investments**, i.e., the marketing resources available to the DMO to allocate across different source markets.

Each pillar has an intertwined linkage with the other pillar of the framework, through a numerical or quantifiable concept.

- **Balanced Portfolio:** To ensure that the ability of the DMO to achieve its targets is not overly reliant on specific markets, it needs to ensure that the overall targets of the destination/DMO, are distributed across an appropriate basket of markets. This also reduces the risk of investing in specific regions/markets.
- **Optimal Investment Distribution:** To ensure that the DMO invests optimal resources into the selected market, it needs to ascertain the commensurate investment to tap into the potential of the market.
- **Return on Marketing Investment:** To ensure that the DMO extracts an optimal return from its marketing investments, it needs to ascertain the appropriate cost of acquisition of travelers from the source markets and distribute resources appropriately. ROMI, in the case of a DMO, needs to be based on sought outcomes, including inbound-related attributes such as market share, visitor arrivals and/or visitor spend, and/or organizational objectives such as seasonality. The ROMI is, thus, the chosen outcome, as a ratio of marketing investments of the DMO.

The conceptual framework was applied in the environment of South African Tourism (the DMO for South Africa, and subsequently referred to as SA Tourism), as part of its initiative to develop a marketing investment strategy. To develop the dynamic resource allocation model, the

DMO was advised to follow the underlined steps, to have balanced consideration towards all the relevant pillars:

Step 1: Dynamic Selection of Source Markets

To define the basket of markets across which the DMO needs to invest resources to meet the set targets, the framework objectively prioritizes all the source markets in order of the outbound potential of the markets and the destination's ability to 'win' in the market. The prioritization can be achieved by scoring each destination on a set of attributes that hold a high causal relationship with factors such as inbound for the destination.

It has been observed that the following set of factors are important to be considered to ascertain the potential of the market:

- Macroeconomic factors, including economic, social political, and technological attributes. These include GDP, inflation population (overall, growth, urban penetration, etc.), currency movements, political stability indices, cost of living, education indices, Internet penetration, amongst other attributes;
- Outbound travel volumes and behaviors (including volumes, haul, passport strength, expenditure, leisure vs. business, amongst other factors); and,
- Market favorability, including doing business indices.

To ascertain the ability to 'win', the destination can consider relevant factors from the following:

- Inbound trends and behaviors for the focus destination (volumes, spends, nature of trips, existing connectivity, amongst other factors).
- Relationship and infrastructure, including political relationship, partner network, visa regulations
- Operational connectivity, including direct flights and proximity; and,
- Language coherence.

In most cases, it has been observed that the ability to 'win' attributes can be qualitative in nature; thus, these attributes need to be objectively quantified on a scale for appropriate assessment.

Given the high number of macro-economic and tourism-related micro attributes, mathematical correlation can be leveraged to reduce the number of factors. For instance, the human development index and the education index are observed to have a high correlation; thus, only one of these attributes can be considered for the assessment. Each factor can be subsequently leveraged to provide a score to the source market; the score can be based on the relative weights of the factors, which can be an equivalent of the regression coefficients of the identified factors to drive the end outcome (or the numerator of the ROMI measure), for instance, arrivals to the destination. For this, a regression equation can be developed at a global level, to derive the outcome of arrivals to the destination. Factors with high coefficient can be leveraged for the assessment of each market and the coefficients can be leveraged as the relative weights. The final scores can be mapped leveraging the Z-score methodology to rank the markets in priority order.

Thus, leveraging the above approach, the source markets can be dynamically scored and ranked in priority order. This approach will ensure that instead of selecting a short-list of source markets, the destination keeps all relevant markets in focus. The priority order of the markets is subsequently leveraged while allocating resources.

In the case of South Africa, the above step was carried out to identify the key attributes for market attractiveness and ability to ‘win’. As an example, amongst the macro-economic factors, several attributes were deprioritized based on a correlation assessment, as depicted in Figure 2.

		Political Stability Index																		
Economic	Political: Political Stability Index	1.00	GDP PPP per Capita																	
	GDP PPP (Per Capita)*	0.58	1.00	Inflation Rate																
	Inflation Rate	-0.28	-0.15	1.00	Unemployment															
	Unemployment Percentage	-0.04	-0.13	-0.01	1.00	Inequality in Income														
	Inequality in Income	-0.19	-0.34	0.03	0.08	1.00	Currency Exchange Rate													
	Currency Exchange Rate	-0.08	-0.11	0.09	-0.14	-0.01	1.00	Annual Disposable Income												
	Annual Disposable Income	0.05	0.12	-0.05	-0.13	0.15	-0.05	1.00	GDP PPP Total											
	GDP PPP (Total)	-0.01	0.15	-0.02	-0.11	0.03	-0.01	0.92	1.00	GINI Index										
	GINI Index	-0.20	-0.23	0.04	0.06	0.87	0.01	0.12	0.06	1.00	Cost of Living Index									
	Cost of Living Index	0.20	0.57	0.03	-0.11	-0.26	0.05	0.12	0.20	-0.22	1.00	Education Index								
Social	Education Index	0.63	0.62	-0.10	-0.02	-0.29	-0.08	0.14	0.17	-0.25	0.63	1.00	Urban Population							
	Urban Population	-0.15	0.01	0.02	-0.12	0.03	0.03	0.67	0.90	0.09	0.14	0.04	1.00	Urban Population Growth						
	Urban Population (% Growth)	-0.56	-0.43	0.12	-0.17	0.25	0.14	0.01	-0.08	0.25	-0.36	-0.81	0.02	1.00	Total Population					
	Total Population	-0.18	-0.05	0.02	-0.12	0.00	0.03	0.52	0.79	0.07	0.08	-0.05	0.96	0.08	1.00	Population 15-64 Years				
	Population (15-64 Years)	-0.17	-0.04	0.02	-0.12	0.00	0.03	0.52	0.80	0.07	0.08	-0.03	0.96	0.07	1.00	1.00	Human Development Index			
	Human Development Index	0.66	0.73	-0.15	-0.02	-0.32	-0.10	0.16	0.19	-0.28	0.67	0.95	0.07	-0.82	-0.01	0.00	1.00	Literacy rate		
	Literacy Rate	0.50	0.43	-0.09	0.12	-0.02	-0.03	-0.03	0.10	-0.02	0.45	0.83	0.04	-0.72	-0.02	0.00	0.82	1.00	Internet Penetration	
	Technology: Internet Penetration	0.64	0.76	-0.13	-0.03	-0.35	-0.10	0.14	0.18	-0.29	0.60	0.84	0.05	-0.68	-0.03	-0.02	0.91	0.65	1.00	
	Others: Proximity to South Africa																			

Indicators are excluded on the basis of correlation between them. The indicators with correlation value of more than ±0.5 are excluded (subject to their relevance)

* Indicator is a composite score of the current value, historic growth rate and future growth rate

Figure 2. Correlations between macroeconomic attributes tested for South Africa

The shortlisted macroeconomic attributes for South Africa were built into a regression equation, leveraging *percentage of long haul* as a dependent variable (or the outcome sought by the DMO), to ascertain the weights of respective attributes (i.e., based on coefficients in the equation). As shown in Table 1 (below), these weights were leveraged to carry out the initial prioritization of markets.

Table 1. Weights for Macroeconomic Attractiveness based on Regression Coefficients

Item	Shortlisted Attribute	Overseas Markets (Dependent Variable: Percentage of Long-haul Trips)
1.	Political Stability Index	12%
2.	GDP Per Capita	17%
3.	Inflation Rate	18%
4.	Unemployment	6%
5.	Income Inequality	6%
6.	Currency Exchange Rate	11%
7.	Education Index	5%
8.	Urban Population	5%
9.	Urban Population (growth)	10%
10.	Internet Penetration	5%

11.	Proximity to Destination	5%
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Similar sub-steps were carried out for outbound travel (with *market share* as the sought outcome) and market favorability (with *arrivals* as the sought outcome) related attributes. The weights that were achieved through the correlation-based shortlisting and associated regression coefficients is illustrated in tables 2 and 3.

Table 2. Weights for Outbound Attractiveness based on Regression Coefficients

Item	Shortlisted Attribute	Overseas Markets (Dependent Variable: Market Share)
1.	Outbound Trips	9%
2.	Domestic Trips	20%
3.	Passport Index	16%
4.	Tourist Outbound Expenditure	8%
5.	Short vs. Long Haul Trips	12%
6.	Business Outbound (%)	5%
7.	Inbound Holiday Trips (% of Total)	5%
8.	Inbound MICE Trips (% of Total)	12%
9.	Average Spend at Destination	5%
10.	Length of Stay at Destination	8%

Table 3. Weights for Ability to ‘Win’ based on Regression Coefficients

Item	Shortlisted Attribute	Overseas Markets (Dependent Variable: Trips to Destination)
1.	Political Scenario	9%
2.	Visa Regulations	6%
3.	Current Partner Network (Embassies, etc.)	7%
4.	DMO’s Presence	18%
5.	Starting a Business Index	6%
6.	Trading Across Borders Index	6%
7.	Enforcing Contracts Index	6%
8.	Resolving Insolvency Index	10%
9.	Connectivity	21%
10.	Proximity to Destination	6%
11.	Language Coherence	5%

As can be observed from the above, weights defined through the above approach help to put emphasis on variables that have the most significant impact on the end outcomes or objectives of the DMO. This approach helps to choose relevant variables that have an established impact on the ROMI of the destination.

In the case of South Africa, the above processes helped the destination to prioritize all the source markets for investment allocation in subsequent steps.

Step 2: Allocation of Investments across the Prioritized Markets Based on Cost of Acquisition

To optimally allocate resources across the target markets, the DMO can ascertain the cost of acquisition of each traveler from the market. This can be achieved through historical performance or transactional data from the market.

Further, the DMO can consider either their own arrival targets or the market share that they want to achieve in these markets. Based on the desired outcome (i.e., number of travelers sought

from the destination) and the cost of acquisition of each traveler, the DMO can allocate the resources to the prioritized markets. Allocating resources from the highest ROI based priority market and moving to the subsequent markets will allow the DMO to focus on the markets with the most optimal potential that can be achieved from the available resources. The allocation process can be carried out till the DMO exhausts its available budgets.

In the case of South Africa, target market share was leveraged for each source market, to allocate appropriate investments, starting from the highest priority market. Based on the priority of the markets, the return from each market and the available resources (i.e., budget), resources were allocated to the respective markets.

Step 3: Develop Investment Scenarios Guided by Organizational Objectives

Given the numerical nature of the model and the selection exercise, the framework can be leveraged to create investment scenarios for different combination of target markets and/or desired growth within each market. As concluded by Gupta S., Steenburgh T., in the white paper 'Allocating Marketing Resources' (2008), "*Marketing has been, and continues to be, a combination of art and science. With the increasing availability of data and sophistication in methods, it is now possible to more judiciously allocate marketing resources.*" Thus, the DMO can use the model to a) evaluate different scenarios of market choices or investments and its impact and b) assess synergies expected from working across cluster of target markets, while applying other considerations (political, diplomatic, social, amongst other).

Based on ROMI and considerations covered through each scenario, the DMO can opt for the most suited investment plan. These scenarios can also be brainstormed with a view to meet the business or organizational objectives of the DMO.

In the case of South Africa, the DMO was able to select a suited scenario, with effective ROMI, that was aligned with the organizational objectives.

2.2. Agile Marketing Implementation Framework

According to Aydin, S., Yasarol, L., 2018, agile marketing can be differentiated from traditional marketing methods on certain characteristics that include responsiveness to change, rapid repetition instead of long-term campaigns and iterative, small-scale testing, amongst other attributes. The authors (Aydin, S., Yasarol, L., 2018), further elaborate that agile marketing helps in improving the marketing function, through better speed of execution, predictability and transparency of results, and adaptiveness to change. Given the dynamic nature of tourism, DMOs need to make nimble investment choices, as elaborated in the first part of the framework. To ensure that the execution of the strategy is appropriate, the DMO needs to gain appropriate inputs to implement the resources across suited marketing tasks, with similar agility; thereby, helping keep the marketing choices relevant and improving the returns on their marketing investments. The conceptual approach to achieve this has been defined as in Figure 3.

While the consumer and market information through traditional research can yield the baseline view of marketing choices, to keep the approach relevant, DMO needs to ascertain ways to seek this input in real-time. This can be achieved by appropriately monitoring the usage and behavior patterns of the travelers, across the multiple touch-points of travel purchase. The approach needs to be based on real-time inputs of such information from the tourism ecosystem. Some examples of information streams that can be leveraged include:

- Transactional information from key tourism purchase channels, such as booking websites, travel trade, and peer-to-peer platforms;
- Transactional information on foreign bank cards in the country achieved through partnerships with financial services providers;
- Custom or border post information of entrance/exits; and,
- Transactional information of key sites frequented by travelers, for instance, ticketing information of key tourism centers such as museums, national parks or other points-of-interest.

Most of the above inputs are dynamic input streams by nature and do not require cumbersome research processes to be set up for garnering the information sets, as is the case with other tourism statistics derived from survey-based approaches. The DMOs can get the above inputs through appropriate partnerships with the travel and tourism ecosystem and the extended economy. Thereby, reducing the cost burden on research. The above data-streams can be leveraged to ascertain traveler profiles, preferred or prevalent channels of purchase, media consumption, behaviors, amongst other attributes.

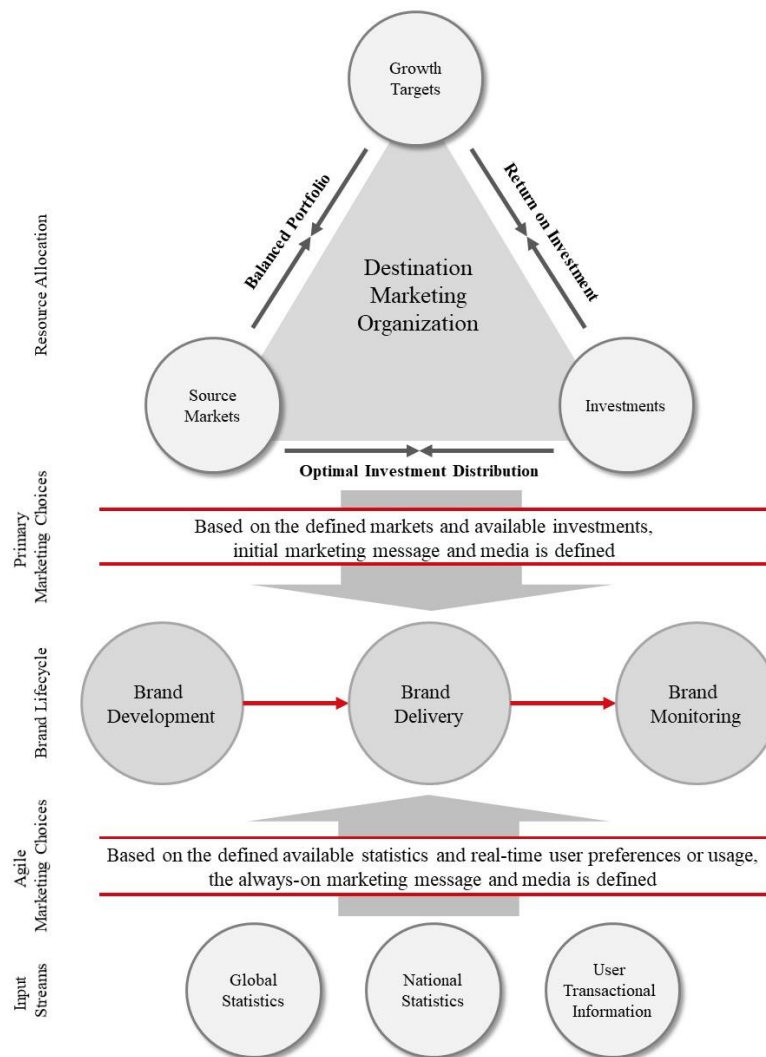


Figure 3. Conceptual framework on agile marketing choices

Beyond these indicators, social media-based indicators can also be garnered by the DMO to augment the insights related to travelers, specifically on their preferences, opinions, and usage patterns.

3. Methodology: Meta-Analyses

To develop the above frameworks into quantifiable models, the DMO needs to consider meta-analysis as the primary analysis method, in addition to quantitative analytics.

Meta-analysis across Data-streams

Pivoting the approach on meta-analysis will offer the following benefits:

- Meta-analysis will ensure that the derivations from the conceptual framework are robust, given the multi-faceted nature of information. It has been observed that leveraging standalone data-streams do not provide enough confidence amongst decision-makers at the DMO, as the decision to invest or not invest in a market has a significant bearing on the business or the destination's economy. Leveraging multiple data-streams increases the confidence level of the information and make the findings robust.
- From the return on investment perspective, meta-analyses will allow DMO to execute the desired tasks with minimal data acquisition investments, which are specifically high for conducting new primary or secondary research.

In terms of input information for meta-analysis, in the case of South Africa, the first framework was developed leveraging the widely available macro-economic and sector-level indicators. For the second part of the framework, DMOs can leverage transactional or usage inputs, sourced through the existing digitalization within the tourism ecosystem.

Dynamic Structuring of Data-streams

To ensure that resource allocation and marketing choices models remain agile to meet the evolving needs of the tourism sector, it is important that the DMO has a flexible approach towards inputs, i.e., the data streams and input variables can be adjusted, as and when required. With this approach, the DMO can ensure that it does not lock its investments or decisions in rigid models; hence, can dynamically use its resource based on outcomes from the framework.

User-interface to Monitor Choices and Track Performance, i.e., Always-on Approach

To sum up the outcomes, it is advisable that the DMO considers developing a user-interface, i.e., dashboard, to allow its key stakeholders to access the information and choices and assimilate those in day-to-day decision-making. This approach will allow that the decision system is always-on, allowing the DMO to minimize investment into cumbersome and time-consuming processes related to annual planning across all markets and reduce any wasteful expenditure on non-performing investments.

4. Results

Application of the framework in the environment of a DMO, viz., South African Tourism, helped the organization select focus markets based on their respective potential, the destination's ability to 'win' in the markets, considering the cost of acquisition per tourist from the source markets. As highlighted by the meetings notes from the Parliamentary Monitoring Group in South Africa, the framework helped the DMO to develop optimal budget allocation scenarios, based on the organizational goals and national priorities. The framework also helped the DMO secure additional

funding, based on the demonstrated return, from the government. Thus, the investment framework allowed the DMO to assess the pivotal choice-factors of its business, i.e., targets, focus markets, investments and marketing choices, through an objective quantifiable model. As the framework was applied in 2017, at the time of developing this paper (2019), only observational evidence of the efficacy of the framework was available. The actual returns of this differentiated approach would need to be studied over the next 3 to 5 years. The framework can, however, be applied to other DMOs to achieve the outlined benefits.

The linkages between targets, focus markets, investments and marketing choices help to ensure that the functions within the DMO, including research and strategy, marketing and execution, and finance, can coherently work towards interlinked objectives. As the choices are based on empirical evidence of return on marketing investment, it can allow the DMO to objectively rationalize its investments; thereby, improving the return on its marketing investments.

Further to the ROMI-based benefits, as an internal organizational benefit, the framework can help the DMOs to set organization-wide KPIs with appropriate success measurements in place.

5. Conclusion and Discussion

Based on the evidence presented from the case of South Africa, the tourism investment framework can help destination marketers improve the return on their marketing investments, by leveraging a meta-analysis driven approach towards optimal resource allocation and marketing choices.

For more information on either the tested or the conceptual framework and/or to discuss the environment in which this can be deployed, email notes to the authors.

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