

100% Pure Evidence: applying mixed methods to evaluate government's destination marketing performance

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Abstract: Offshore investment in destination marketing makes an important contribution to New Zealand's export earnings. International tourism expenditure was almost \$10 billion in 2011, second only to the dairy industry. However, market failure and other barriers limit the private sector from committing sufficient marketing resource to ensure optimal outcomes. Accordingly, Government invests in promoting New Zealand as an international visitor destination.

Tourism New Zealand's "100% Pure" brand is globally renowned, and for more than ten years marketing and advertising efforts have delivered strong performance in brand awareness, and building potential visitors' consideration, preference and intention to visit New Zealand. However, the Ministry of Business, Innovation and Employment, Tourism New Zealand and Treasury now seek greater understanding of tangible economic (and other) performance outcomes due to destination marketing. With a particular emphasis on the role of destination marketing, the Ministry wishes to learn more about the causal links between intention to visit New Zealand and what motivates an actual visit. Ultimately, this will enable a better understanding of the complex array of travel motivations and influences, and how this manifests in foreign exchange earnings.

This paper first outlines why and how Government invests in destination marketing, then summarises lessons learnt from marketing effectiveness measurement approaches trialled to date. It concludes with in-progress and proposed enhancements and extensions, including preliminary findings from a recently commissioned longitudinal study in Australia and Singapore. By its second and subsequent waves in 2013 onwards, this survey will for the first time enable accurate isolation and measurement of the extent to which visits are definitely attributable to destination marketing and advertising. That is, causation rather than association. This is due to the survey's unique ability to control for unobserved characteristics that correlate with the desired behaviour – a visit to New Zealand.

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Introduction

To support a deeper understanding of the effectiveness of government investment in destination marketing, the Ministry of Business, Innovation and Employment is developing a comprehensive evaluation programme. International consensus confirms that no single approach is adequate, so a suite of complementary evaluation and research approaches have and will continue to be developed. A deliberate emphasis will be placed on measuring and describing the causal relationship between pre-conversion “signals of intent” to travel in response to destination marketing and advertising, and actual travel behavior, or “conversion”, that ultimately results (or not).

Current evaluation of New Zealand destination marketing effectiveness meets international best practice in monitoring pre-conversion measures such as advertising reach and influence on awareness, brand perceptions and intention. However, robust conversion measurement approaches remain in development, so the return-on-investment (ROI) of destination marketing and advertising is still to be thoroughly investigated, interpreted and incorporated into optimal policy and practice.

This is a challenging area, but recent work has made promising progress in consolidating the key approaches and measures to evaluate the effectiveness of government’s destination marketing effort. In particular, the promise of recently commissioned longitudinal research with Tourism New Zealand’s “Active Considerer” target market, so actual causative links between destination marketing and other influences of travel behavior can be measured and described.

Why government invests in destination marketing

There are many reasons for government intervention in tourism, including wider societal objectives, transport policy, complexity, market failure, public sector provision of leisure services; and conflict resolution (Jeffries, 2001). Market failure is often cited as one of the more compelling reasons for government intervention, and a primary rationale for an annual \$85 million appropriation to Tourism New Zealand, of which \$55 million directly contributes to consumer and trade marketing. Market failure in tourism marketing is of particular relevance to a small, geographically isolated country like New Zealand, for which tourism is both a vital contributor to economic performance, but at the same time characterised by a diverse and fragmented tourism industry comprised of many small firms and very few large ones. Market failure can arise from:

- public goods – (typically smaller) tourism firms can and will free-ride on other (typically larger) tourism firms’ marketing efforts, resulting in a lack of co-ordination and sub-optimal levels of destination marketing
- externalities – positive and negative, including wider benefits to firms who don’t participate in destination marketing, or economic and social costs arising from peak season congestion or environmental degradation
- market power – aside from private sector market power which competition authorities are primarily responsible for controlling and mitigating, government has a natural opportunity to extract an economic rent to improve domestic economic and social welfare.

There are of course other reasons governments may or may not invest in destination marketing. However, for the purpose of this paper, the coordination and free-rider problems that result in sub-optimal private sector investment is assumed the primary reason behind government investment, and the subsequent impetus for robust measures of performance, value and return-on-investment.

International practice and perspectives

Internationally, National Tourism Organisations (NTOs) engage to varying degrees in destination marketing research and evaluation, with the United Nations World Tourism Organisation (2003) reporting that 20 percent conduct no formal evaluation at all. Among those that do, only half contract professional research and/or evaluation consultancy services.

Methods used also vary widely, including monitoring of existing administrative data, regular and irregular quantitative and qualitative research with tourists and the tourism trade, conversion and advertising tracking studies, media measurement, online analytics, etc. However, to our knowledge none have ever attempted to extend conversion studies beyond highly targeted campaigns with explicit “call to action” mechanisms, to measure the aggregate effect of both targeted and untargeted brand advertising.

Furthermore, conversion study conclusions vary widely, from the credible to the simply untenable. In large part due to significant differences in method, campaign objectives, scope and scale, markets, timing, and other factors, such that there is often no legitimate basis for comparison. Nevertheless, claims of ROIs up to and beyond 100:1 are not uncommon, with the most spectacular tourism marketing ROI the author is aware of being 154:1¹. Among other possible weaknesses, closer scrutiny suggests it is almost certain this estimate failed to properly isolate campaign attribution, with “coincidental” travel, or travel that would have occurred anyway, counted as directly attributable to campaign activity.

Should the programme of work the Ministry is committed to prove viable, it will position New Zealand as a leader in global best practice destination marketing effectiveness evaluation.

Achievements to date

Results from methods trialed to date are summarised in the following sub-sections.

International Visitor Survey and Visitor Experience Monitor ROI experiment

Survey questions to investigate marketing impact were piloted for six months in both the Ministry’s International Visitor Survey (IVS) and Tourism New Zealand’s Visitor Experience Monitor (VEM). The IVS and VEM are sample surveys of departing or recently departed international visitors to New Zealand, with visitor expenditure for national accounting purposes a primary IVS output, and visitor experiences and satisfaction a primary VEM output.

This pilot provided useful information on visitor decision processes, including evidence that advertising has a greater influence on holiday visitors than other purposes of visit. However, it also revealed a number of challenges. For example, difficulties disentangling advertising recall from the “clutter” of other influences, variable interpretations of the term “advertising”, and uncertainty associated with the alignment of Tourism New Zealand marketing expenditure and precisely when, and to what extent, advertising influenced a visit to New Zealand.

Nevertheless, experimental measures of marketing and advertising influence point to the promise of further work in this area, and already provide evidence of an acceptable return on government’s destination marketing investment.

¹ To put an ROI of 154:1 into perspective, if Tourism New Zealand’s approximately \$55 million annual direct expenditure on marketing activity resulted in a similar ROI, New Zealand’s international tourism expenditure would be approximately \$8.5 billion, which is \$3 billion greater than the current total – total expenditure that reflects all motivations and influences for visiting New Zealand, that extend well beyond only destination marketing.

Based on self-reported responses to a series of advertising influence questions, provided below are key findings for the 2011 IVS March and June quarters, and 2010 VEM September and December quarters (collectively, year to 30 June 2011).

Based on population-weighted IVS 2011 March and June quarter results, experimental findings for holiday and visiting friends and relatives (VFR) visitors include:

- among just over one million visitors in this six month period, approximately 10,000 (one percent) reported Tourism New Zealand advertising as a *main* influence for visiting
 - these visitors spent approximately \$26 million, or a proportionate one percent of \$2.4 billion total expenditure in the same period
- an additional 94,000 (nine percent) reported Tourism New advertising as a *secondary* influence
 - these visitors spent approximately \$260 million, or a slightly disproportionately greater 11 percent of total expenditure

A sensitivity analysis was applied to the above estimates to construct a distribution (or range) for the share of *all* expenditure by those who reported Tourism New Zealand advertising influence of any intensity, which might plausibly be *directly* attributable to advertising. For the IVS March and June quarters combined, this delivered range estimates as follows:

- advertising-influenced expenditure best estimate = \$72.6 million
 - lower-bound estimate = \$41.5 million
 - upper-bound estimate = \$127.1 million

Against approximate advertising expenditure of \$30.9 million for the six months to 30 June 2011, this results in an approximate return-on-investment range of 1.3 to 1 and 4.1 to 1.

Although subject to different methodologies and for different six month time periods, considered collectively, the VEM 2010 September and December quarters and IVS 2011 March and June quarters result in the following consolidated estimates for the year-ended 30 June 2011:

- advertising-influenced expenditure best estimate = \$136.7
 - lower-bound estimate = \$77.4 million
 - upper-bound estimate = \$240 million

Therefore, against approximate direct advertising expenditure of \$56.2 million for the year ending 30 June 2011, this results in an approximate annual return-on-investment range of 1.4 to 1 and 4.3 to 1.

Multivariate modelling

Multivariate time-series regression modelling examined Australian travel patterns to New Zealand. The main drivers of arrivals were found to be Australian economic growth, the cost of travel to New Zealand relative to other destinations (e.g. real airfares, relative prices between origin and destination), and total departures from Australia by purpose of visit. A small but not significant positive relationship between Tourism New Zealand marketing expenditure and holiday visitor arrivals was observed.

Unfortunately, the limited duration of available time series data and lack of sufficient variation in Tourism New Zealand expenditure in Australia (at least for the time period under analysis and that only annual, rather than quarterly data was available), meant the modelling only partially captured the relationships between travel influences and arrivals. A further weakness was the difficulty accounting for all possible influencers of travel behaviour in the modelling process. Further work in this area has therefore been discontinued, but may be revisited when multiple-country and longer time series marketing expenditure data is available.

Joint venture partnership cases studies

In 2009/10, an extra \$20 million of government funds was invested in marketing New Zealand as a visitor destination, of which \$15 million was originally allocated to a joint venture with Air New Zealand². This project was discontinued when Air New Zealand withdrew its support, so the balance of remaining funds was diverted into a number of initiatives across ten target markets.

Case studies of four projects supported by the diverted funds demonstrate the value of new digital and partnership approaches that Tourism New Zealand are now using. Also, the potential of these approaches to reach large audiences, to link destination marketing with travel offers, and to enable timely measurement of marketing effectiveness. In particular, these case study analyses provided evidence of increased visits to www.newzealand.com during campaign periods, increased bookings to New Zealand from www.newzealand.com partner websites, and increased visitor arrivals.

Conversely, known weaknesses of these analyses include:

- commercial-in-confidence restrictions that limit opportunity to causatively link travel purchase and booking behaviour with definite Tourism New Zealand (online) marketing activity
- the “one off” nature of these targeted campaigns and resulting challenges isolating campaign impact from changes in other external influences.

Digital effectiveness measures

Measurement of digital (online) effectiveness is now routinely undertaken, by tracking potential visitors' online behaviour including, for example, counts of visits to www.newzealand.com, referrals to partners' sites where travel arrangements are booked, and the cost per acquisition of each visit to www.newzealand.com^{3,4}. Although no substantive basis of comparison exists because digital effectiveness measures are relatively new, promising performance is already evident, including:

- visits to www.newzealand.com already tracking beyond 2011/12 targets at the beginning of the period
- referrals to www.newzealand.com catching up to 2011/12 targets
- cost per acquisition and cost per referral tracking reasonably well in key markets.

With further enhancement, it is expected that this and related approaches will ultimately provide conversion and ROI measures against specific campaigns, but only if appropriate means for attributing causality can be incorporated. Similar commercial-in-confidence issues to those discussed above will need to be resolved, and an online intercept survey approach will be required to establish causality. Another weakness in measuring the causality of Tourism New Zealand's online advertising is that a share of visitors influenced by *online* advertising will organise their travel arrangements *offline*.

² The remaining \$5 million was allocated to the International Tourism Marketing Joint Venture Partnership Fund, a collaboration between the Ministry of Business, Innovation and Employment, Tourism New Zealand and eight Regional Tourism Organisations to target the Australian visitor market. These funds have been evaluated separately; the report is available on the Ministry of Economic Development website: www.med.govt.nz.

³ Referral measures the percentage of people who once drawn to www.newzealand.com are then delivered to an operator or partner site where actual travel product can be purchased.

⁴ Acquisition refers to someone drawn to www.newzealand.com as a result of seeing and acting on advertising/search initiatives delivered by TNZ.

In progress – longitudinal consumer research

As an extension to completed work and guided by international theory and practice, the Ministry recently commissioned the first wave of a longitudinal pilot study in Australia and Singapore – the Longitudinal International Travel Motivations and Influence Survey (LITMIS). The survey targets “Active Considerers”⁵ and is conducted online in these respective markets. Over 2,500 first wave responses were collected in Australia, and 1,200 in Singapore.

Analysis of first wave Australia findings has only just started, however preliminary findings are summarised below⁶.

Travel motivations and influences

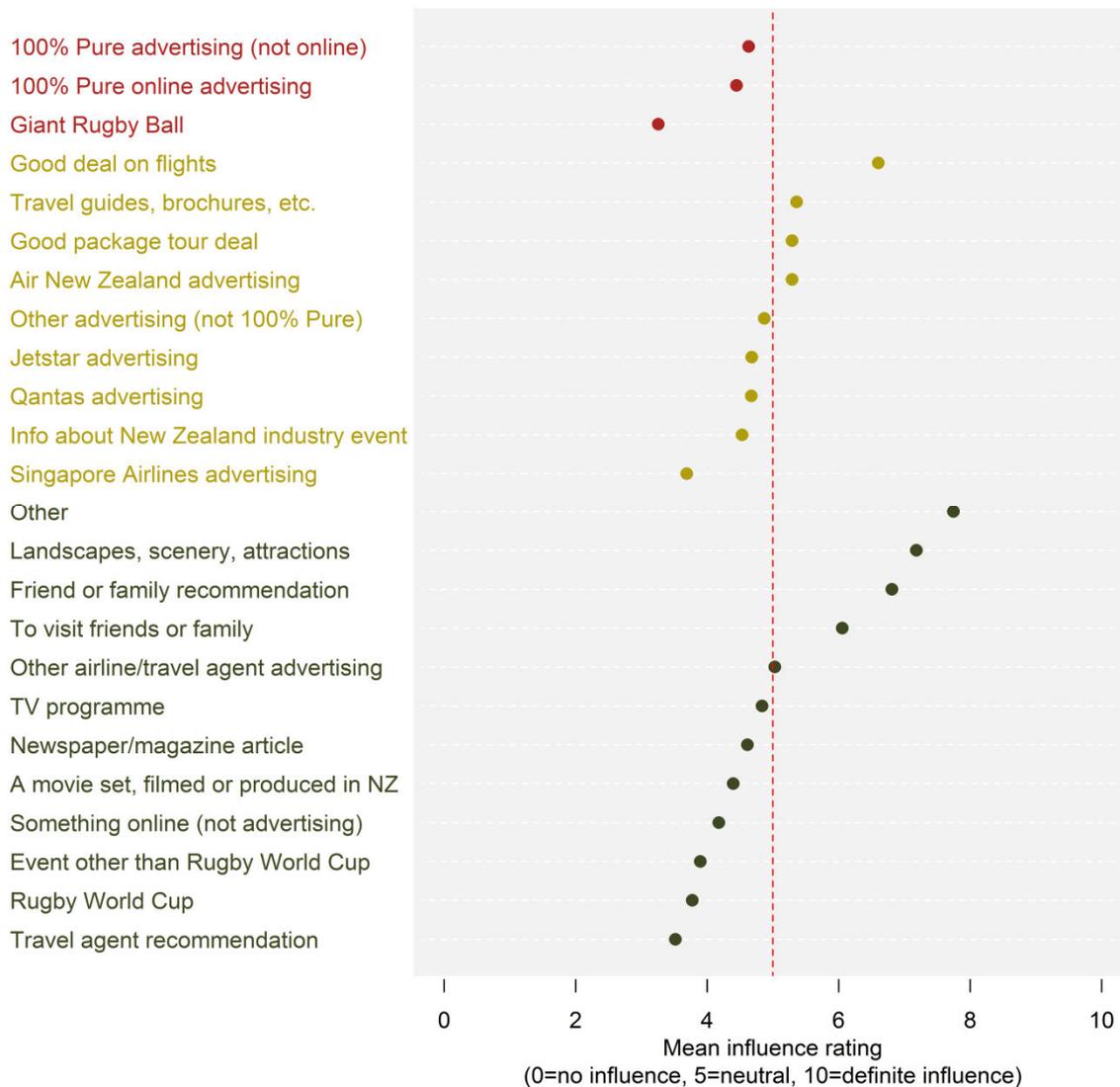
For the ten percent (n=266) of first wave respondents who reported having visited New Zealand for a holiday in the last year, mean influence ratings are displayed in the following graph. This illustrates the relatively lower influence of definite Tourism New Zealand advertising (top three items, coloured red), compared to other influences. Also evident is the moderate influence of “possible” Tourism New Zealand advertising – the gold coloured items which may be partly or wholly attributable to Tourism New Zealand advertising⁷.

⁵ “Active Considerers” are Tourism New Zealand’s target market, and are broadly defined as travellers who are attracted to, are seriously considering and have a high preference for New Zealand, and satisfy minimum spend requirements.

⁶ At the time of writing, Singapore data was not available for analysis.

⁷ “Partly attributable” may result from reported influence by a joint venture campaign with (say) an airline; “wholly attributable” may be a result of confusing definite Tourism New Zealand advertising as advertising or information provided by some other entity.

Most recent New Zealand visit influences



Key measures compared to International Visitor Survey

The following table illustrates preliminary estimates of key measures from the first LITMIS wave, for the sub-sample of respondents who reported having visited New Zealand for a holiday in the last year. Findings are positioned alongside equivalent International Visitor Survey for the year ending June 2012⁸, and indicate reasonable concordance. Reasons for possibly overstated LITMIS findings need to be more thoroughly explored, but may include:

- “telescoping”, where travel that actually occurred more than one year ago was counted as being in the last year
- respondents inadvertently counting VFR travel as “holiday”.

⁸ Year ending June 2012 has been selected as the reference period to best align with the 12 month travel and influence recall period for LITMIS survey respondents.

Measure	LITMIS Australia Wave One	International Visitor Survey
(holiday) Visitors	515,000	390,000
Visitor nights	7,600,000	4,100,000
Mean length of stay	14 nights	11 nights
Total expenditure	\$1,300 million	\$850 million
Mean expenditure per visitor	\$2,500	\$2,200
Mean expenditure per visitor per day	\$180	\$200
Return-on-investment	coming soon...	-

It is important to note that estimates reported above are experimental, and have not been subject to a sensitivity analysis, outlier and non-response adjustment, sample error estimation, nor more general quality and integrity checks. Furthermore, because this is only the first survey wave, causative advertising-influenced expenditure and ROI estimates that control for unobserved factors cannot be estimated. However, we plan to derive “static” estimates based on retrospective recall of advertising influence on travel already completed in the last year. This will at least provide a “rear view” insight to the association – if not causation, between advertising and other influences, and holiday travel to New Zealand.

Future work and improvement

Right now, the primary activity is to finalise analysis and reporting of the first wave of the longitudinal LITMIS study, which will continue through the second half of 2012. Analysis opportunities remain open for discussion, but are likely to include some or all of the following:

- Refinement of the advertising-influenced expenditure and return-on-investment calculation approach, including sensitivity analysis based on alternative assumptions and scenarios.
- Confirmatory factor analysis of travel motivation and influence ratings, to test hypotheses guided by what is already understood generally about holiday travel motivations and influences. A particular goal will be to understand if advertising can to any material extent be isolated from other motivations and influences.
- Alternatively or as a complement to the above, exploratory factor analysis and/or discriminant analysis.
- Cluster, multi-dimensional scaling or other interdependence analysis of the same data. This will test for the existence of underlying dimensions, or homogeneous sub-groups of visitors and their characteristics, in terms of travel motivations and influences.

Beyond this, survey findings will become especially valuable in 2013 when second wave results will allow the causal influence of destination marketing on actual New Zealand travel behavior to be accurately quantified and described.

In the meantime, routine measurement of Tourism New Zealand’s performance against their stated outputs and outcomes continues. Also, future research and evaluation work in collaboration with Tourism New Zealand may include the following:

- Ongoing development and refinement of online analytics, with an emphasis on primary research approaches that allow for definite attribution of booked travel behaviour to Tourism New Zealand's online marketing, for example:
 - online intercept surveys of visitors to www.newzealand.com and/or at the point of purchase on partner websites, although progress will in part depend on resolving commercial-in-confidence issues relating to the release of data by www.newzealand.com's referral partners
 - social media tracking and analysis of Tourism New Zealand's Facebook fan base; benchmarking of www.newzealand.com and partner website customer relationship management, and data mining.
- As a complement to online analytics, more in-depth media measurement.
- Further evaluation of Tourism New Zealand joint venture partnerships, to understand both the overall return-on-investment of such initiatives. However, given the increasing scale and importance of joint venture partnerships, also to critically evaluate the important question of the distribution of benefits from joint venture campaign activity. For example, to what extent does national (economic) welfare benefit from Government investment in partnership programmes, compared to private provider, or indeed "free rider" benefit?
- Qualitative research to triangulate quantitative insights. For example, individual or group Delphi approaches targeting tourism officials and operators, tourism marketers and analysts, and the academic sector.
- Available data permitting, revisit multivariate modeling and related analytic methods.

Ultimately, it is proposed that more formal mixed methods analysis be incorporated into the overall evaluation strategy, to draw together and consolidate the multiple streams of evidence. It is conceivable that the entire mix of research and evaluation evidence will be subject to a formal cost benefit analysis (CBA) appraisal. This will extend our current work beyond what is visible and immediately measurable, to enable an overall assessment of "national welfare" that derives from government investment in tourism marketing.

A number of challenges will need to be overcome to facilitate a robust CBA of this type of investment, but are not insurmountable provided a thorough approach to project scoping, planning, design and execution. Of particular importance will be identification of an appropriate counterfactual, which in principle is zero destination marketing for an extended period of time in key markets, but a risk government is unwilling to take. Also, a deeper understanding of opportunity costs, consumers' willingness to pay for travel to New Zealand, and by association measurement of consumer surplus.

So, despite considerable progress the last few years, this ambitious evaluation programme still has some way to go.

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