THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

Ian Macfarlane and Leo Jago
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National Library of Australia Cataloguing-in-Publication Entry
Author: Macfarlane, Ian Elgin 1955-
Title: The role of brand equity in helping to evaluate the contribution of major events
ISBN: 9781921521898 (pbk.) 9781921521904 (pdf.)
Notes: Bibliography.

Other Authors/Contributors: Jago, Leo Cooperative Research Centre for Sustainable Tourism.

Dewey Number: 338.47910994

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General Manager, Communications and Industry Extension or Publishing Manager, info@crctourism.com.au

First published in Australia in 2009 by CRC for Sustainable Tourism Pty Ltd

Printed in Australia (Gold Coast, Queensland)

Acknowledgements
The Sustainable Tourism Cooperative Research Centre, established and supported under the Australian Government’s Cooperative Research Centres Program, funded this research.
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EXECUTIVE SUMMARY

Project Objective
The original objective was to develop a methodology for quantifying the induced tourism effect of hosting major events; but due to lack of suitable data, this had to be modified to the development of an event evaluation methodology based on brand equity.

Limitations
As budgetary restrictions prohibited recourse to primary data collection, the project utilised existing data and standard aggregations commonly available to the tourism and events industries. The methodology developed confined itself to the utilisation of existing sources and materials.

Findings
- Technically, it is possible to develop a framework and methodology for determining and quantifying event induced tourism effects, however, the generation of valid results is substantively limited, given the degree of specificity required for such measurement. This, coupled with the degree of sampling error at a micro level, as required for event monitoring, creates an environment where models cannot be confidently developed and/or replicated.
- Since all tracking and survey data are collected, minimally at monthly intervals, it is not possible to ascribe the established induced effect directly to the event itself.
- It is possible to develop an evaluation methodology using established marketing techniques such as brand equity.

Outcomes
This project has progressed the understanding of the event contribution to the marketing of destinations, by:
- developing a framework for assessing the brand equity effect (for a destination) for and during the period in which events are held
- clarifying the relationships between visitor decision making processes and their actual arrival at a destination
- conceptually isolating the key, and differing influences affecting decision making and behavioural action
- providing a method that allows for event (period) comparisons and calibration.

Conclusions and Recommendations
- The established methodology may provide an equity perspective for the adjudication of annualised programmes and initiatives (including events) and could, arguably, be used within the induced effect calculation.
- Importantly, however, it is clear that the direct induced effect can only be established with a significant investment in primary time series research.
- The methodology could well evolve and be enhanced with such discrete research.

It is recommended that a discrete study be undertaken to supplement the outcomes of this project. This subsequent project should make use of primary research and supplemental instruments with the objective of determining the event induced effects as opposed to the ‘period’ induced effects.

In undertaking such a project, it will be necessary to reduce sampling error and monitor motivation/thought process conditions and actual behaviour.
Chapter 1

INTRODUCTION

Summary

- Major events are a prominent feature of the Australian tourism landscape.
- The focus for event evaluation has been on rational/consequential approaches based primarily on economics considering the direct and indirect effects.
- Currently, there is no standardised process quantifying induced tourism effects generated by events.
- Measurements of induced effects are hampered by inherent (unquantified) time lags (from decision to actual travel), and the existence of (unquantifiable) residual influences. This is compounded given the insignificant arrival share increases generated by even the largest destinations.

Background

The staging and hosting of major events has become a significant feature of the Australian tourism landscape. As events are seen as an important means of building a tourism profile and attracting tourists, most states have invested considerable sums developing event portfolios and they continuously seek to attract, fund and host major events.

These events take many forms and typically attract both private and public investments. Whilst the application of private funds are adjudicated by respective investors on commercial return on investment models, the picture is not that clear for the public (state and federal) contribution as the rationale for investment is often based upon a ‘public good’ platform. In this regard, aside from the inevitable policy debates often based upon the application of the ‘market failure’ principle, it is clear that major events are unlikely to occur without public funding, support and investment.

In such circumstances, whether it is deemed appropriate or otherwise; particularly after an event has been hosted, there is inevitably a debate about the effectiveness of the event or the event portfolio. Applying for public funds require institutions to, not only present a clear justification for event investment, but to evaluate the return on that (public) investment both transparently and with an empirical foundation.

Most publicly funded organisations have established processes for adjudicating the returns accruing to investments. In the context of events, however, there is sufficient ambiguity in evaluation processes to raise a number of objections, which are often played out in the public arena.

In the Northern Hemisphere where there are significant and easily accessible populations, event evaluation and contribution can often be established solely on a direct contribution basis (Sport UK 2004). This is not the case in Australia where arguably, relative attendance numbers and direct benefits do not in themselves, translate into sound economic returns. As a consequence, event corporations are required to aggregate both direct and indirect effects in determining the gross return on publicly funded investments.

It is self evident that a major consideration in quantifying indirect benefits is whether or not the event induces incremental tourism. This so-called ‘tourism effect’ is not only ambiguous but is often neither quantified nor factored in terms necessary for Return On Investment (ROI) evaluations. The frustration in comprehending this concept is expressed within the events sector and is often noted by politicians in budget negotiations and portfolio reviews. An example of such a frustration was expressed, in response to the Victorian Auditor General’s report on economic impact of the event programme (VAG 2007), by the Victorian Minister for Tourism who stated on ABC Radio:

*For example, the cost-benefit analysis used in the report is able to quantify a cost from car noise at the Grand Prix, yet failed to recognise any branding and publicity benefits from international exposure, so the results of that analysis are inevitably skewed towards the costs ... It is important that measurement is not only of the economic benefits of major events but also of international exposure, destination branding, induced tourism, industry development opportunities, employment opportunities and social benefits and legacies.*
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Clearly, for the impact of events to be truly evaluated, it is necessary to have a means of assessing their induced tourism effects.

Induced Tourism

Induced tourism is a relatively new concept and in the event field is taken to mean the additional tourism that occurs after an event as a result of the media exposure that was created by the event. It is a concept that has received more discussion in the film sector than in other areas and Beeton (2006) sums it up in her cross-reference to film-induced tourism with social constructionism. There has been much documented about the media and social construction, and it is this link that Beeton (2006) makes to describe social construction as it relates to tourism. Her claim is that visual forms have a strong influence on our ideas and beliefs—our perceptions can be induced by this. Thus, induced tourism, just as it sounds, is a product of our socio-cultural construction. In our contemporary culture which relies heavily on visual forms (Beeton 2006), induced tourism will necessarily and inevitably involve the media in being constructed as a method of attracting tourists to a region.

It was recently noted by Gamprubi (2008), that there is a gap in our knowledge about the effects of image perception as it specifically relates to induced tourism. He has developed a conceptual model for understanding how ‘induced tourism image of a destination is created’. Gamprubi’s model looks into the role of tourism agents and their ‘agency’ as external actors in inducing the destination image. He adds, that Crompton (1979) and later Kotler (1994) put forward the theory that the impressions constructed for tourists by the structure and agency of this network creates the ideas and beliefs a person may have about their tourist destination (Gamprubi 2008).

Impression management is another relatively recent concept to the field of tourism, however, it is now being acknowledged as vital to our understanding of tourism management in a crisis situation (Ritchie 2004; Nelson 2005). Quite early in this ongoing, albeit disjointed discussion, Gunn (1989), argued that destination image occurs on two levels, namely, organic and induced. It was his claim that the former is non-touristically-directed, while the latter is the end product of ‘image building’ (Chon 1990).

Beeton (2006) has explored the use of film and its interplay with induced tourism. She highlights, that although there is now greater public awareness about mass media exposure, the understanding about the complexity of film-induced tourism remains basically unrecognised. To unmask its invisibility, Beeton developed several models demonstrating the various streams of influence that film-induced tourism has on community (Andereck 2006). While Croy and Walker (2001) state that film-induced tourism can serve as a productive tool in community and its development of tourism, Beeton (2004 & 2006) also points out that the film industry’s priority is not concerned with the flow-on benefits which may result from film-induced tourism.

Due to its reliance on choice of the ‘correct’ image, film-induced tourism stands as a highly debatable issue. Branding has moved to become the central element, with image playing the single most important element to its success. For brand identity and marketing strategies to be successful, they should be both framed and presented with a clear and concise image strategy (Gartner 1993; Gamprubi 2008). Image in tourism and how it interrelates with mass media and popular culture is vital to our understanding about induced tourism and with tourism in general (Beeton 2004).

Given the importance of branding in helping to determine induced tourism, an understanding of brand equity will be needed in order to pursue this topic.

Brand Equity

The origin of branding goes back to the 19th century (Room 1992). It was created so that one producer of goods could be distinguished from another. This became the system for identifying ownership of a particular brand by its image, or logo (Konecnik & Gartner 2007).
In the late 1970s to early 1980s, brand equity rose to the fore in its own right as a research topic (Mackay 2001). Since the mid 1990s, much attention has been given to brand equity, also acknowledged as brand value. Thus, there is debate about the definition of brand equity as well as in measuring and quantifying its value (Chen 2007; Eagle et al. 2001). Within this debate, it was noted by Feldwick (1996), that prior to the 1990s, the concept of brand image itself was regarded as a vague theory (Eagle et al. 2001). Having a better product or a larger sales force is not brand equity. Brand equity is that incremental value that accrues to a product when it is branded. If you can get your name to pop up in people’s minds when they think of the product category, you’ve won a big part of the battle (Srinivasan et al. 2006).

As a means of addressing this debate, there has been significant time and energy spent in analysing the complexities of the nature of brand (Konecnik & Gartner 2007). De Chernatony and McDonald (1999) argue that both concepts of brand identity (Aaker & Joachimsthaler 2000; Kapferer 1998) and brand equity (Aaker 1991; Keller 1993) are fundamentally interrelated and it is this that is in need of examination (Konecnik & Gartner 2007).

Whilst it appears that branding is a relatively new area of research (Cai 2002; Morgan & Pritchard 2002), Ritchie and Ritchie (1998) have pointed out that there is research dating back 30 years on destination image studies (Baloglu & McCleary 1999; Crompton 1979; Echtner & Ritchie 1993; Gallarza, Gil & Calderon 2002; Gartner 1986, 1989, 1992; Hunt 1975; Phelps 1986) Konecnik & Gartner (2007). However, it is the contention of Cai (2002), that previous studies did not distinguish the difference between the function of branding and image (Konecnik & Gartner 2007). Image formation is not branding, albeit the former constitutes the core of the latter. Image building is one step closer, but there still remains a critical missing link: the brand identity (Cai 2002).

Interest in brand equity initially emerged in marketing research in the 1990s (Barwise 1993). As previously mentioned, there has been considerable debate about its conceptualisation and understanding (Chaudhuri 1995), and even quite recently, several authors have maintained that there is a lack of theoretical framework for proper analysis of this topic (Vazquez, Del Rio & Iglesias 2002; Konecnik & Gartner 2007).

The important question which is more relevant to brand equity in terms of tourism is asked by Konecnik and Gartner (2007), ‘whether a customer-based brand equity methodology traditionally developed for product brands (and partly for services and organisations) can be transferred to destinations’. It is also worth noting, that brand personality in its complexity, provides brand equity to tourists (Konecnik & Gartner 2007).

According to T. Richards, L. Friedman and J. Hofmeyer in their unpublished 2005 article ‘In search of the Holy grail ... a holistic measure of brand equity’ the central issue to grasp is that brand equity and its components are relative concepts as they are relevant in the context of the market.

They contend that Brand equity is a function of:

- current and past arrivals (as measured by market share); this is in turn is the result of all past activity whether initiated or otherwise by the marketer
- future intention as measured by, in the tourism case, by preference (as measured by preference share).

It is also important to recognise that brand equity, constructed with these inputs, cannot be used to specifically quantify future visitor behaviour as in the model, construct visitation is an independent variable and hence cannot simultaneously be the dependent variable. The value of this approach is in its capacity to signal market share movements and it is precisely this that is important in this exercise. As an added benefit; establishing brand equity provides a common evaluation technique which allows for initiative contributions to be comparatively analysed. This provides indications as to whether single events positively or negatively contribute to a portfolio of activity.

**Measurement of Marketing Initiatives**

**General observations**

Whether it is within the tourism sector or otherwise, marketing investments not only require rational justification but also the extent of their impact needs calibration. This is common for all organisations and whilst being a plausible and an acceptable requirement, it does pose some significant problems which vary according to industry, product category and consumer decision making peculiarities.
Within the tourism environment, there are generally two factors which significantly influence the measurement method and the quantification of induced effects. These are:

- the decision-making time period, i.e. the period between inducement to travel and actual travel
- the relative magnitude of either or both the inducement and/or the arrival, i.e. the quantum of the behavior change in the context of the market.

Decision making time period

Whilst peculiarities exist in all product categories, arguably tourism with its highly perishable nature and relatively high cost places it in a unique position. This status is further complicated when one considers that destination decision-making processes are often ambiguous and subject to significant influence by contextual and individual externalities. Key motivators are difficult to define, isolate and measure.

There is little doubt that a displacement between motivation to travel (to a destination) and actual arrival at that destination is evident, the magnitude of which is however, unknown. Often the latent desire to visit a destination takes a significant time to convert into action. Many commentators, who have experience in monitoring tourist behavior, indicate that there is a potential ‘long haul’ destination time lag of between 3 to 10 years. It is also evidenced that domestic interstate trips could be considered for periods from 1 to 3 years before activation.

As a consequence, even after discounting potential intervening influences, the time lag ambiguity makes it difficult to isolate the discrete effects of specific marketing activities and initiatives.

Magnitude of incremental behavior

From observations already raised, it is argued in this paper that incremental effects are adjudicated not in absolute but in relative terms. The relative measure of performance, in brand equity terms, is market share where effective initiatives result in increases or positive contribution to market share.

Market share movements in the tourism industry are almost imperceptible. As an example, Melbourne is Australia’s best performing city in the interstate market. As can be seen from Table 1 below, Melbourne interstate leisure (VFR + Holiday) arrivals for those people over 18 years of age grew by some 24% over the period 2000 to 2007, whilst the interstate market grew by some 16%.

<table>
<thead>
<tr>
<th>Table 1 Interstate leisure arrivals, 2000 – 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
</tr>
<tr>
<td>Melbourne</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

(Source National Visitor Survey, TRA 2008)

In measuring incremental growth, however, one needs to factor out the market movement and hence it is important to establish the quantum of share increase. This is shown in Table 2 below, where Melbourne’s market share increment is displayed. It should be noted that over the eight year period (2000 – 2007), the share was elevated by some 0.89%.

<table>
<thead>
<tr>
<th>Table 2 Melbourne interstate market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

(Source: National Visitor Survey, TRA 2008)

Ignoring for the moment any sampling error, the task theoretically at least, is to distill the contribution of individually, and amongst others of: The Australian Tennis Open, The Melbourne Grand Prix, The AFL Final, The Spring Carnival etcetera, and if one was to be precise, the contribution of advertising, paid for PR and promotions.

With an annualised market share increment of less than 0.11%, the above two factors seriously inhibit the capacity not only to locate the direct effect but to allocate the induced effect of any single event and or initiative.
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Comments on Current Methodologies

Observation
Whilst methodologies do differ from state to state, discussion with event corporations’ executives point to a common generic theme; events and for that matter, marketing programmes are most often assessed on two central outputs:

- Actual/direct benefits, which include incremental visitor arrivals, spend, economic activity generated etc.
- Quantified intermediate effects, which typically comprise the ascribed value of the public relations media generated by the event or initiative.

Whilst the first mentioned benefit is obvious, the second (intermediate) effect requires explanation.

Quantification of the intermediate effect
As articulated by the Victorian Tourism Minister, the intermediate effect is often described as enhancing the brand and or increasing brand value. It is implied, that it is intuitively obvious that the destination’s brand equity is enhanced through event hosting.

The above view is supported in event evaluations where it is espoused that PR and media exposure can be measured and quantified. This is done by calculating an equivalent advertising rate/cost for the media generated (column inches, programming time, news mentions etc.). This value is then incorporated as a direct financial benefit. Simply, the return on investment may be represented by the following basic equation:

\[ \text{ROI} = \frac{\text{direct revenue} + \text{intermediate value}}{\text{investment cost}} \]

Where:

- Investment cost = direct public investment
- Direct revenue = total visitor attendance * spend per visitor
- Intermediate value = total equivalent advertising spend

As mentioned previously, in addition to this basic formula, attempts have been made to include the value attributed to related event attributes such as, for example, skills acquired by people working on the project, skills exporting from experience gained and contracts signed as a result of corporate hosting. These have not been factored into this project.

Influence of the intermediate effect
It is clear that, intuitively at least; most people believe that PR activity, generated by an event, will result in inducing incremental tourism sometime in the future. This line of thinking and justification fails on two counts as it assumes:

- a distinct and measurable causal relationship between awareness generation and arrival. As will become clear later, this is not as obvious as it seems
- that the media coverage is audience relevant, that it can be isolated from all other elements of the communication mix and the quantum of its effect in the minds’ of prospective visitors can be determined.

This, similarly, is not obvious. The ambiguity resulting from these two inappropriately applied concepts has, no doubt, influenced the decision not only to cancel certain events such as Rally of Australia, Johnnie Walker classic etcetera, but to question the viability of event evaluation of established events such as the Australian Grand Prix.

Conclusions
There are three salient issues:

- The intermediate effect, such as media generated, is a ‘cause’ factor which has no value in its own right. For inclusion in a ROI analysis, the ‘cause’ needs to be calibrated into the induced action, which in the first instance is a rise in preference level.
- For a positive brand effect, elevated preference levels require to be adjudicated within a market context. This requires that the preference share be established. In effect this constitutes the real effect of the PR.
- The link between preference (thought share) elevation and future arrivals needs to be determined.
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OF MAJOR EVENTS

It is also important to point out that when people refer to brand effects they are obviously not confining their observations to potential visitors to the event only. It seems that for an event to be effective it should enhance brand equity generally. In other words, it is not confined only to the event interested target audience. As an example, it is implausible to suggest that the public investment in the Melbourne Grand Prix is made to achieve an increase in preference for Melbourne by interstate motor sport enthusiasts only. Clearly, the objective is to enhance the preference levels for Melbourne within the entire interstate market.

As a consequence of the above it is necessary to point out that:
• to have value any proposed evaluation method requires an economic approach
• the elements of brand equity need to be translated into behaviour
• the brand effect needs to be established within the context of the wider definition of the audience/potential visitor segments.

This analysis, therefore, does not focus on media quantification. It rather measures the increases in individual’s preferences and/or intentions to travel to the event host destination as a consequence of the media coverage.
Chapter 2

PROJECT SCOPE

Project Parameters

Aim
The original objective of this project was to determine an appropriate method for quantifying an event’s induced tourism effect. In this regard the two components are:

- determining the equity effect—the interaction between the mind condition, which is the propensity and desire to travel to a destination and travel behavior (actual visit)
- determining the timing of the visit after exposure to the event generated media.

Considerations
From a marketing perspective, it could be argued that induced effects are nothing more than the consequences of rising or falling brand equity. Brand equity, in turn, is a relative concept and is predicated on the brand performance against the market; in other words, rising or decreasing share as opposed to actual returns. As a consequence, this project uses a (contextual and modified) brand equity framework in establishing the induced effect.

As discussed earlier, the ‘market’ is not confined to the ‘event interested’ segment alone. For simplicity, however, it does not include the intra-state and international components of the tourism arrivals:

- It could be argued that local and intra-state spend is not incremental. In reality, such spends are merely transfer payments which do not increase the net returns to a state.
- Aside from the fact that there are significant international data gaps, induced effects are likely to be evidenced far more readily in the domestic (interstate) market where media clutter/noise is comparatively limited.

Comments on supplemental inclusions in the project scope
Before concluding this section, it is necessary to discuss a few peripheral arguments and positions:

- Miscellaneous effects such as the value attributable to the exporting of event management intellectual property, value arising from contracts negotiated as a result of corporate hosting and the like are potential considerations but are unlikely to be quantifiably evidenced. As such, this research does not evaluate nor does it attempt to validate these claimed benefits, suffice to say, that such incremental benefit relies upon a number of assumptions which require further investigation.
- Similarly, there is an argument for brand investment substitution; should the event not have occurred then marketing investments would have had to have been commensurately increased to achieve the same brand equity benefits. This argument will not be debated here, other than to say there are major objections to this thinking which include the facts that:
  o there is little comparative material available suggesting that media mixes are substitutable (i.e. one can compare say event coverage with multiple screenings of a travel programme)
  o marketing expense saving is a notional concept—in a dollar rationing situation, investments need to be considered on individual merits and not on an opportunity cost basis.

Premises
The following premises were developed and assumed in undertaking this project:

- Events require evaluation consistent with established marketing practice. In this regard, effectiveness resides in the element’s capacity to enhance brand equity by either:
  o inducing immediate results (in this case arrivals)
  o elevating the destination’s position within potential visitors’ choice sets, or
  o achieving both.
Immediate results (visits or attendances) are well researched and available; as a result the key variable for examination is the capacity of an event to elevate the destination’s position in the potential visitors’ choice set.

Positioning in a choice set is most appropriately measured and recorded as the inclusion of the host destination in potential visitors ‘preference set’.

Destination preferences are relative concepts and individual destinations may be benchmarked against the prevailing market condition. In other words, rising preference levels are adjudicated within the context of the market movement; the measure of preference enhancement is the destination’s preference share which is a similar concept to market share.

Preference share data for the domestic market is available and in a form useful for equity analysis.

Assumptions
Induced effects do not necessarily imply that for the event to be effective, any future visits are required to:

- occur at the same time of the year as the event
- specifically induce incremental attendance at the event
- necessarily attract and/or only elevate preference within the minds of the event target audience.

Source Data: Task Requirements
Central to establishing an appropriate evaluation method is accessing or having data available in the form required by the basic brand equity model. Given the variability and length of time between a destination entering an individual’s preference set and the actual visit, it is necessary that data variables are available over an extended timeframe.

In Australia, there are two sources of data which meet these criteria:
- The National Visitor Survey (NVS) which provides interstate and intrastate data as well as discrete destination visitor information dating back to January 2000.
- Roy Morgan Research (RMR), Holiday Tracking Survey (HTS) which provides holiday behavior information including consumer awareness, preference, and intention data as well as visitation behaviour since January 2000.

The two data sets provide the foundation for investigating the induced effect and both sets have been made available to Victoria University for research and academic purposes.

Project process
The project and analysis process is shown schematically in Appendix A with relevant notes attached. As previously stated, for a brand equity effect to be established the two distinct sets of inputs required are:

- destination arrival share
- destination preference share.

Given that arrival data and hence share is well documented and evidenced, this project focuses exclusively on the impact on brand equity of preference elevations potentially enhanced by media/PR generated by the event itself.

Event selection
The events/destinations selected for study were chosen for their:

- **Scale**: it was an event of significant magnitude (generating significant spectators) which in turn had the capacity to generate a critical mass of media coverage.
- **Context**: an international event with a significant local audience, which would allow for eventual comparative analysis and may be replicated in the international arena.
- **Confinement**: the event is discrete and its media impact immediate with little event media legacy. That is, either the next event is held in another country within a short period following the staging of the event or the calendar/programme terminates with few, if any, supplemental post event activities.
- **Comparable**: the event analysis is comparable over time and between years (i.e. it is held regularly at approximately the same time every year).
Analysis method
The initial intention was to quantify the induced impact using the ‘attrition curve’ (curve linking awareness, preference, intention and visit). It had been hoped that this initial study would have provided enough evidence to establish a causality and correlation between awareness, preference, intention to travel, and arrival. Intuitively, it was anticipated that this approach would provide the necessary quantified results. Unfortunately, this proved not to be the case.

- There is substantial variation in quantified ‘thought process’ data. As a consequence, at the discrete level of an event, the established attrition rate (awareness through arrival), varied substantially both within and between years.
- It appears that arrivals are not a function of the preferences or intention conditions within the same year. Whilst it is accepted there is a time displacement, the extent of that displacement cannot be established from the data.
- The attrition rate curve does not lend itself to establishing brand equity effects as the latter requires a disaggregation of preference (thought) and arrival (behavior) data.

This initial investigation material is provided in Appendix B. This is presented as not only does it provide a context for the actual project, but it describes the data used in developing and evaluating the methodology.

The project was segmented into three distinct phases:

**Phase 1: Analysis of the Australian Grand Prix in Melbourne**
- **Aim:** To establish the appropriateness of the data and a potential methodology for wider use.
- **Outcomes:**
  - The preference share profile, by month was established for Melbourne.
  - By comparing the monthly preference share with the average annual preference share, the positive or negative brand effect of discrete months was established.
  - By multiplying the arrival share with the preference share, a monthly brand equity position was determined.
  - When compared with the average equity, an aggregate contribution was derived.
- **Limitations**
  - Preference share data (as with arrival data) is collected on a monthly basis which for brand equity is adequate but for establishing induced effects lacks specificity.
  - Even on a seven year aggregate basis the data variability and range is significant.

**Phase 2: Application of the method to both Adelaide and the Gold Coast**
- **Aim:** To determine the applicability of the method to alternate destinations.
- **Outcome:** Results were as per those established for Melbourne, obviously though different profiles were established with fluctuations in different months.
- **Limitations:** As per the initial case.

**Phase 3:**
- **Aim:** To conceptually develop an explanation of the interaction between preference and arrival.
- **Outcome:** A framework was developed which noted that confusion exists in the application of these two variables:
  - Preference is a surrogate for choice set. In other words, if after a marketing initiative, preference share is elevated then effectively the destination has entered the choice sets of more people.
  - Preference is, however, separated from arrival by situational and exogenous variables, which are unique to each individual and to each destination.
  - The link between the two concepts is somewhat ambiguous unless of course one has a substantive set of data which tracks individual’s uniquely and isolates the influencing variables pertinent to their mental (thought condition) and physical (arrival) condition.
Chapter 3

PROJECT ANALYSIS

Summary

- Events in Melbourne, Gold Coast and Adelaide were evaluated.
- A method evolved which allowed for establishing event contribution to brand equity.
- Limitations include the fact that neither TRA nor RMR collect data in anything less than calendar months. It is therefore not possible to determine arrivals and/or preferences for periods directly pertaining to the events analysed.

Phase 1: Project Analysis - Melbourne (Australian) Grand Prix

Melbourne: arrivals performance

As previously stated, Melbourne has seen a growth in market share in the interstate leisure market in both nights and trips. This is evident from Chart 1 below. It should be noted that variations are significant and actual movements within and between years difficult to reliably measure.

![Chart 1 Melbourne’s market share of the interstate leisure market](Source: NVS 2008)

Arrival share data is readily available and presented both monthly and annually by TRA. For the sake of completeness, the interstate leisure trip arrival share data for Melbourne is presented in Chart 2.

![Chart 2 Melbourne annual monthly share](Source: NVS)
THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

Australian Formula 1 Grand Prix

Attendances
The event, which was previously staged in Adelaide, has been held in Melbourne since 1996. Since that year the event has been staged on the first weekend of March (excepting 2000, 2003 and 2007 when it was staged in the second weekend) and in 2006 when it was staged in the first weekend of April. The following provides an insight as to direct event spectator attendance trends:

- 1995 (Adelaide): 520 000
- 1996 (Melbourne): 410 000
- 2005 “ 359 000
- 2006 “ 310 500
- 2007 “ 301 000

Analysis

Observation
Whilst the arrival data is interesting, the central issue in this analysis was to determine whether a preference share profile could be established and whether or not it correlated with the staging of events. In this regard, Chart 3(a) shows the annual preference share profiles for Melbourne. As can be seen and as previously mentioned, the variability and range of the share points was immediately a cause for concern.

The data was stabilised when aggregated and averaged, see Chart 3(b). Superimposed on this profile are a number of Melbourne staged events including: the Australian Tennis Open (late January/early February), the Grand Prix (March) and the Spring Carnival (Late October/early November). In this regard, the fact that Melbourne hosts the same events regularly in the same months provided analytical advantages.

Chart 3(a) Melbourne’s preference share of the interstate leisure market

(Source: Roy Morgan Research, HTS 2008)
THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

Chart 3(b) Melbourne’s average preference share of the interstate leisure market

The most noticeable feature of Chart 3(b) is that the preference share of Melbourne in the month of the Grand Prix is lower not only when compared with the other listed major events but when compared to the average preference share. Intuitively, combining the declining attendance numbers to the event (contextualised within a growing arrival condition) and a declining preference share; the inference must be that the Grand Prix not only has declining equity but that it negatively contributes to Melbourne’s overall brand equity position.

Findings

- It was established in the initial analysis that the attrition curve (gravitation from preference to intention to visit) had little merit in isolating and quantifying both brand equity effects and induced visitation, resulting from elevated preference shares.
- The variations to monthly data do not provide for stability and as a consequence it is not possible to isolate the effects of an event within a single year. This analysis has shown that it is possible to quantify preference share movements by aggregating annual data. However, it is necessary to point out that preference share elevations are reflective of the period during which an event is held and potentially not of the event itself. This cannot be overcome within the constraints of all existing data.
- By isolating preference share and combining it with arrival share it is possible to determine brand equity. The usefulness in this approach, theoretically:
  - allows for competitive destinations to be benchmarked against each other
  - provides for a projected view of brand/destination performance.

Phase 2: Analysis - Adelaide and Gold Coast

Observations

Preference share data was collected for Adelaide and the Gold Coast and analyses conducted as per the Melbourne case. The results are provided at Appendices D and E.

In the case of Adelaide, since preference share data has been available, the city has hosted a series of events in January and February (months circled in red) including the Clipsal 500, the (cycling) Tour Down-under and the Adelaide Arts Festival. The average preference share profile is provided below in Chart 4a. It is clear that in these months, the city generates a rise in its interstate preference share (relative to the average) potentially showing that event package is having a positive brand equity effect.
THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

The Gold Coast hosts two primary events, namely, the Indy 500 (October) and the Gold Coast Marathon (July). As can be seen from Chart 4b below, there appears to be a positive equity effect during the period of the Indy 500 and a neutral (potentially negative) contribution by the Gold Coast Marathon.

Phase 3: Preference Share and Arrival Conceptual Framework

General
This project has highlighted the absolute necessity to link intended with actual behaviour. At its outset it was anticipated that not only would there be a correlation, but that elevated intention or preference, would result in elevated arrival. Establishing this with a degree of certainty appears not to be possible as:

- even though the HTS provides for large sample sizes, the market share and/or preference share for a significant major event is extremely small; taking attendance at the Melbourne Grand Prix as an example, it attracts less than 7.75% of all inter and intra state leisure visitors in the month of February and less than 0.75% of the total annual number of inter and intrastate leisure travellers
- annually, the data is highly variable and has significant range, inhibiting a model which could hold true in a number of situations/event evaluations
- as an alternative form of explanation, attrition rate curves were not only different for each destination but varied when the same event (held at the same time) was compared with the previous or post year periods.

This suggested the existence of exogenous factors infiltrating the decision making processes of respondents. These issues, so crucial for developing an induced effect model, proved to be significant impediments, not only in constructing a repeatable model but in understanding the dynamic between thought processes and action.
Re-evaluation and reassessment

Conceptually, it was established that in assessing future induced behaviour, three problems were apparent:

- Sample sizes and data specificity: Even though the HTS has a significant number of statistically representative respondents (in excess of 20,000), the quantum of people responding to questions in respect of specific destinations within specific months is extremely small with a consequent high statistical error.
- The NVS sample has the same problems, as like the HTS, it only reflects monthly data. As a result, one cannot isolate the 3 or 4 days of an event within a particular month.
- The inter-relationships between the ‘attrition curve’ variables and in particular the ‘thought’ share variables (awareness, preference and intention) and the behaviour variable (visitation) were not obvious.

It is clear that sample sizes and data specificity may only be solved by instituting a rigorous primary research study on the engagement between events and audiences/potential visitors. This is not possible within the scope of this project.

Leaving the above aside for the moment, it was deemed important to at least explore the key factors affecting the relationship between the ‘thought’ and ‘behaviour’ variables. Insights, if established, could be incorporated in the analysis.

Relationship between ‘thought’ conditions and behavioural outcomes

It is logical to assume that there are obvious and hidden exogenous variables affecting the connections such as:

- the more obvious interventions, for example, the effect of advertising which could be placed irregularly and could either supplement/strengthen the event message or add little direct effect if placed outside the event period
- the less obvious, such as personal and destination effects which are irregular in influence.

As a start, the advertising environment, over the last three years was reviewed. In this regard, a series of tables are presented at Appendix C. Cursory glances at the tables reveal that:

- the entire tourism industry (including overseas promotion, non-destination related booking advertising, transportation etc.), has a share of voice of less than 5%
- isolating the domestic industry, the position is more acute where the share of voice of less than 3%.

Based on the above, it would be difficult to pronounce that advertising is having any major effect on (annual) thought condition. This is borne out in the Roy Morgan Single Source Survey where unprompted destination awareness is extremely low and on re-contact surveys which show a confused perception of when advertising was actually observed.

As far as the less obvious factors are concerned, there are important observations isolated when interviewing (RMR) researchers who have had substantial experience with the HTS:

- There is a high correlation between intention to travel and arrival; this is a function of the questioning which is time based and potentially has little to do with linking of the thought condition and behaviour. The question is framed as ‘which destinations do you intend to visit in the next twelve months’ and it is assessed, given lead times etc., that in answering this question, in the majority of cases, the decision, to travel to the stated destination, has already been made.
- Preferences largely reflect the respondent’s choice set. Tracking would suggest that intentions are derived from this set and hence this condition is both salient and arguably the most relevant in assessing inducement to travel.

After assessing a number of destinations, it is apparent that the relationship between preference for a destination and arrival at that destination is highly variable. It is postulated that different sets of exogenous variables affect these conditions discretely, providing for individual influences and fluctuating relationship structures:

- Preference is a true ‘thought’ variable influenced largely by messaging (paid for and non-paid for; both initiated and not initiated by marketing organisations) whereas;
- Preference whilst being a pre-condition to arrival is only one of many factors inducing a visit within a particular time frame. Of significance, the other influences (including pricing, flight/transport availability, hotel room availability, timing, coordination with travelling companions etc.) solely influence arrival but do not influence choice/preference set.
Rather than there being a correlation or causal effect, it may be true as postulated by Hofmeyer (Interview Dec 2007) that the variables (thought and arrival) operate in a manner similar to the blades of a pair of scissors; they are linked but operate independently to define brand equity.
Chapter 4

CONCLUSIONS

Summary

- It is recommended that a discrete study be undertaken which monitors individuals’ motivations and behaviour over an extended time frame. This will provide the necessary event/initiative based data as required to definitively model induced effects.
- It is also recommended that there should be a focus on determining brand equity effects.
- In this regard, an equity approach has been explored which provides for the comparison of events and assesses their potential individual contribution to destination equity.

A Brand Equity Solution

General

There appears to be an insoluble problem:
- Within available data, the induced effect cannot be economically quantified.
- The brand equity model, where brand equity is a function of current arrival share and preference share, cannot predict future visitation.

It may have to be accepted that unless a long term study can be conducted where individuals are continually monitored, an effective economic quantification of indirect (induced) effects is unlikely, and even if undertaken, there would be few results in the short term. Without wishing to detract from the importance of quantification of induced effects, one could argue that a re-statement of the problem would provide genuine insights into event contributions to visitor arrivals.

Problem revisited

It appears as if events will continue to be part of Australia’s major destinations’ marketing mix and considering all the limitations, it is unlikely that the induced effect will be quantified in the short term. Under such circumstances, surely the central problem is whether or not there is a direct economic benefit of a discrete event and then whether or not the event contributes to a greater or lesser extent than others to the equity of the destination. Under such circumstances, it could well be asked of event organisations to:
- quantify (only) the direct costs and benefits
- determine whether the event contributes to the destination’s equity
- assess the destination’s brand equity effect against the alternatives (i.e. other events in the portfolio or against competitor destination events).

The methodologies potentially in place for these are:
- a rigorous direct cost benefit approach as practiced by UK Sport
- a brand equity approach as explored in this study.

Benefits

- By focussing on real and provable economic return, the areas of ambiguity are removed providing for a concise report and assessment. The requirement would be to set acceptable direct cost recovery benchmarks.
- By focussing on a standardised approach to equity measures, there is a methodology for event calibration and comparison.
THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

Findings
- The most comprehensive data available in Australia lack the specificity to generate stable data trends applicable to single events.
- As can be seen from the preference share charts in all three of the cases studied, monthly data is unstable. In such a form, they cannot support any argument for induced effects one way or another.
- By aggregating the shares over the seven years, for which data is available, a monthly stable preference share may be established. This, however, cannot definitively prove causality nor can one correlate preference share elevations with arrival share increments.
- By isolating and quantifying both arrival and preference share data, as a result of this analysis one is able to calculate rudimentary brand equity positions. This, as explained earlier, may assist in providing a common index for destination comparison and programme construction as well as allowing identification of underperforming events.

Recommendations
This analysis has shed some light on the interaction between thought share variables and actual arrival. Primarily that, as a result of exogenous variables, correlations and causality cannot be established with any certainty. This will be important in any further work conducted.

It is recommended that given the importance of event evaluation, consideration be given to conducting a discretely designed study to monitor individuals over an extended period to assess both ‘mind share’ and actual behaviour. This will provide for:
- an accurate assessment of preference share elevations arising uniquely from events
- establishing a causal or contribution effect of preference on visitation
- the identification and quantification of relevant exogenous variables and their impact on decision making.

Given the time scale of such an event, it is further recommended that this study be extended to further develop a standardised brand equity model which can be applied to event/marketing initiatives in assessing contribution.
THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

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Sport UK, July 2004 Measuring Success 2: “The economic impact of major sports events”


National Visitor Survey, TRA, 2008


Roy Morgan Research HTS (2008)


T. Richards, L. Friedman and J. Hofmeyer in their unpublished 2005 article ‘In search of the Holy grail ... a holistic measure of brand equity’


THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

AUTHORS

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Ian Macfarlane has B. Comm., MBA and M. Phil degrees. He is an Adjunct Professor in the Centre for Tourism and Services Research at Victoria University on the Advisory Board of the University of South Australia’s Ehrenberg-Bass Institute for Marketing Sciences. His work history includes appointments as:
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- CEO Gold Coast Tourism
- GM Marketing, Tourism New Zealand
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Ian now operates as a marketing consultant focusing on the analysis, development and execution of branding strategy. Aside from a portfolio of Australian clients his international clients include the USA based Travel Channel, Discovery Networks (Asia Pacific) and MTV (Australasia). For these broadcasters, he provides strategic services in the area of brand integration and leverage.

Leo Jago
Leo is a Professor of Tourism at Victoria University and Director of the Centre for Tourism and Services Research. Over the last 15 years, Leo has researched extensively in the event field covering both major events and business events. His work initially focussed on the economic evaluation of events where he has developed tools used in all states and territories of Australia as well as overseas. Over the last couple of years, his research has adopted a more holistic approach and now includes the social, environmental and leveraging dimensions of events. He is on the Editorial Boards of a range of event journals and has recently been appointed as Editor of a new event research journal to be released by Emerald in 2010.
APPENDICES

Appendix A: Project Process

Australia: event portfolio → Review of data sources → Literature review

Single event selection → Data set selection → Method 1

Data extraction → Analysis → Valid findings?

No → Terminate

Yes → Additional events → Analysis → Findings and conclusions → Recommendations

Method 2
Appendix A: Notes

1. The initial literature and data set review suggested that the impact of events could be monitored and measured through the application of the so-called ‘attrition rate curve’. This is the curve that depicts the relationship between motivation variables (awareness, preference and intention) and the behaviour variable (visitation).

2. The assumption was if it could be proven that during a month of an event the curve was elevated and the magnitude measured against the same curves for all other months and indeed the average curve, there would be a quantifiable arrival effect.

3. As can be seen from the chart below, it was not possible to isolate any event’s annual increments to the curve. It was also apparent that by isolating months, the applicable curves were highly variable between years.

4. Indexing the individual conditions shed less light on the curve movements and no conclusions could be drawn for such an investigation.

5. The reasons for this are now obvious:
   a. As one progresses down the curve, the sample sizes become extremely small (less than 9% of all people surveyed) with commensurate statistical error.
   b. There is a displacement between preference, intention (thought) data and (actual) visitation. They do not occur simultaneously and visitation data only refers to a visit in the past twelve months with no specific month detailed.
   c. Mapping the process from intention to arrival, there are only three options:
      i. People intended to visit (the destination) and did visit.
      ii. People intended to travel (the destination) and did not visit.
      iii. People who did not intend to travel to the destination but did visit.
   d. People’s actual behaviour and its categorisation within the above broad framework are not able to be discerned.

As a consequence of the above observations, it was decided to develop a second methodology which would largely ignore actual arrivals and the inherent time lag and focus on developing a methodology which quantified the brand equity effect (method 2).
Appendix B: Initial Analysis

Notes

• A sub-set of the data is provided at Appendix B(i). The entire data set used both for the initial and subsequent analysis comprised data for all years from 2000–2007. This was in the same form as that presented at Appendix B(i), and is hence this is not provided.

• It is important to note that the arrival information provided at Appendix B(i) is extracted from the Roy Morgan single source and is defined as those respondents who have taken a leisure trip to Melbourne in the last twelve months. Whilst it is intuitively simple to merge the Roy Morgan data (preference and intention) and the Domestic Visitor Survey (as provided by TRA), this proved extremely difficult as the samples are at variance and definitions do not align.

• The analysis confined itself to assessing movements in preference share.

Analysis observations

Attrition rate data were assembled for each year and, in the initial case, for April (the grand prix month). As can be seen from the tables presented in the body of the report, the data variances were significant and there was poor correlation between intention to travel and arrival (even when arrival was displaced).

To determine if any patterns were evident, the data were indexed to the average month. With little result (see graph below)

![Melbourne: attrition rate indices indexed to average](image)

This approach showed that it was unlikely that a discernable increment, even at the preference level could be confidently determined. The variations in intention level and arrival were concerning.

At an aggregate level (for all years) the data was stabilised yet the variations between the grand prix month and all others proved insignificant. This showed that attempts to explain effects within and between years was unlikely to be successful. In addition, it was concluded that the two sets of variables (preference and intention on the one hand and arrival on the other) were not continuous but that they operated independently.
THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

<table>
<thead>
<tr>
<th></th>
<th>Av (11 months)</th>
<th>April</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>20.9%</td>
<td>21.7%</td>
<td>0.8%</td>
</tr>
<tr>
<td>2002</td>
<td>21.4%</td>
<td>21.5%</td>
<td>0.1%</td>
</tr>
<tr>
<td>2003</td>
<td>22.4%</td>
<td>21.8%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>2004</td>
<td>22.9%</td>
<td>23.1%</td>
<td>0.2%</td>
</tr>
<tr>
<td>2005</td>
<td>22.6%</td>
<td>21.0%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>2006</td>
<td>21.0%</td>
<td>21.2%</td>
<td>0.2%</td>
</tr>
<tr>
<td>2007</td>
<td>21.7%</td>
<td>20.3%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Average</td>
<td>21.8%</td>
<td>21.5%</td>
<td>-0.3%</td>
</tr>
</tbody>
</table>

Conclusions

On the basis of the above, the method and initial premises were reassessed. It was established that the ‘attrition curve’ was clearly not a continuous phenomenon:

- Preference and potentially intention are ‘thought’ variables influenced largely by messaging whereas arrival is influenced by external variables such as availability, cost, access, etc.
- Correlations, say between preference and arrival, is therefore a function not only of messaging and appeal of the event but of externalities which vary both in time and personal context.

Given the independent operation of the influencing variables, which conform to brand equity definitions, it was decided to adopt a brand equity approach in the analysis.
### Appendix B(i): Data sub-set

**Survey: Year 2001**

<table>
<thead>
<tr>
<th>Category</th>
<th>Note</th>
<th>Total (01–07)</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
</tr>
</thead>
<tbody>
<tr>
<td>(unweighted)</td>
<td>a uc</td>
<td>136 480</td>
<td>1534</td>
<td>1559</td>
<td>1488</td>
<td>1648</td>
</tr>
<tr>
<td>(population, '000)</td>
<td>b wc</td>
<td>11 357</td>
<td>10 835</td>
<td>10 834</td>
<td>10 845</td>
<td>10 869</td>
</tr>
<tr>
<td>Preference</td>
<td>c wc</td>
<td>2102</td>
<td>19.40%</td>
<td>23.60%</td>
<td>21.70%</td>
<td>20.90%</td>
</tr>
<tr>
<td></td>
<td>d v%</td>
<td></td>
<td>1013</td>
<td>1196</td>
<td>1086</td>
<td>936</td>
</tr>
<tr>
<td>Intention</td>
<td>e wc</td>
<td>903</td>
<td>8.30%</td>
<td>9.10%</td>
<td>6.80%</td>
<td>8.50%</td>
</tr>
<tr>
<td>Arrived (pre-12 months)</td>
<td>g wc</td>
<td>934</td>
<td>8.30%</td>
<td>9.10%</td>
<td>6.80%</td>
<td>8.50%</td>
</tr>
<tr>
<td></td>
<td>h v%</td>
<td></td>
<td>1077</td>
<td>1168</td>
<td>1068</td>
<td>895</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Note</th>
<th>Explanation/definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Total number of respondents who conformed to the criteria (18 yrs +, travelled previously interstate, and who were not Victorian residents)</td>
</tr>
<tr>
<td>b</td>
<td>Extrapolated number of Australian residents represented by the conforming respondents (in '000s)</td>
</tr>
<tr>
<td>c</td>
<td>Extrapolated number of Australian residents having a preference for Melbourne</td>
</tr>
<tr>
<td>d</td>
<td>Percentage of Australian residents having a preference for Melbourne (preference share)</td>
</tr>
<tr>
<td>e</td>
<td>Extrapolated number of Australian residents having an intention to travel to Melbourne</td>
</tr>
<tr>
<td>f</td>
<td>Percentage of Australian residents having an intention to travel Melbourne (intention share)</td>
</tr>
<tr>
<td>g</td>
<td>Extrapolated number of Australian residents having visited Melbourne in the previous 12 months</td>
</tr>
<tr>
<td>h</td>
<td>Percentage of Australian residents having visited Melbourne in the previous 12 months</td>
</tr>
</tbody>
</table>
THE ROLE OF BRAND EQUITY IN HELPING TO EVALUATE THE CONTRIBUTION OF MAJOR EVENTS

Appendix C: Australia Media Environment

The Australian media environment is analysed below—source date provide by Carat (Australia)

<table>
<thead>
<tr>
<th>Top 40 categories (no cable)</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>Actual</th>
<th>Contrib. %</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accommodation</td>
<td>55 803</td>
<td>53 026</td>
<td>51 007</td>
<td>-4796</td>
<td>-8%</td>
<td>-9%</td>
</tr>
<tr>
<td>Air Charter</td>
<td>685</td>
<td>547</td>
<td>654</td>
<td>-31</td>
<td>0%</td>
<td>-5%</td>
</tr>
<tr>
<td>Airlines</td>
<td>99 109</td>
<td>81 304</td>
<td>104 365</td>
<td>5256</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Passenger Shipping Line/Cruise</td>
<td>28 938</td>
<td>27 047</td>
<td>37 242</td>
<td>8304</td>
<td>13%</td>
<td>29%</td>
</tr>
<tr>
<td>Tourist Authorities</td>
<td>58 983</td>
<td>54 191</td>
<td>62 258</td>
<td>3275</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Train Services</td>
<td>7931</td>
<td>12 151</td>
<td>9133</td>
<td>1202</td>
<td>2%</td>
<td>15%</td>
</tr>
<tr>
<td>Travel Agents-Service/Tour</td>
<td>108 706</td>
<td>127 704</td>
<td>157 917</td>
<td>49 211</td>
<td>77%</td>
<td>45%</td>
</tr>
<tr>
<td>Vehicle Rentals</td>
<td>11 292</td>
<td>11 513</td>
<td>12 423</td>
<td>1131</td>
<td>2%</td>
<td>10%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>371 448</td>
<td>367 482</td>
<td>434 999</td>
<td>63 551</td>
<td>100%</td>
<td>17%</td>
</tr>
<tr>
<td>All media</td>
<td>8 264 463</td>
<td>9 090 909</td>
<td>10 000 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism</td>
<td>371 448</td>
<td>367 482</td>
<td>434 999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of voice</td>
<td>4.49%</td>
<td>4.04%</td>
<td>4.35%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

'Destination' marketing

- Getting there
- Staying there
- Promoting there
- Booking

Legend:
- 2005
- 2006
- 2007
### Appendix C: Australia media environment (continued)

<table>
<thead>
<tr>
<th>Total media spend (all, except digital)</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>All categories</td>
<td>11,212</td>
<td>11,997</td>
<td>12,836</td>
</tr>
<tr>
<td>Travel and tourism</td>
<td>371.45</td>
<td>367.48</td>
<td>435.00</td>
</tr>
<tr>
<td>Share of voice</td>
<td>3.31%</td>
<td>3.06%</td>
<td>3.39%</td>
</tr>
</tbody>
</table>

| Domestic promotion (est.)               | 5260m  |
| Domestic share of voice                | 2.6% ($^*$) |

($^*$) = cosmetics, insurance
Data stability
As with both Adelaide and Melbourne monthly data is unstable. See the monthly preference share since 200 in the chart opposite (top).

Isolating events
In the case of the Gold Coast the city hosts two primary events; the Indy (October) and the Gold Coast marathon (July).

Since these events are staged at the same time every year and have done so since inception it is possible to aggregate. The aggregated preference share, by month is provided opposite (below).

The data shows and it is reflected in the chart opposite that the marathon, in preference share, does not elevate the Gold Coast above the annual average (the month under performs by some 0.5%, whereas the Indy does (some +5%). In the case of the Indy event this translates to an annual contribution of 0.6%.

Toward a quantification
The correlation between preference and trips for this destination is .95. By simply multiplying the preference contribution with the correlation the actual incremental visitor effect is determined (see next page).
Gold Coast (continued)

Method and results
As can be seen below the Gold coast presents a few challenges in quantifying the effect of events. The Gold coast has experienced a declining interstate visitor share since 2001, (-1%) and as such even though an event and or a series of events may positively contribute to the net effect, the net effect is in decline.
It will be noted from the data that of the two events isolated only the Indy month elevates the average preference share.

- On an annualised basis, this equates to an 1.6%
- The correlation coefficient of preference to visitation (a displacement of approximately 2 years) is .87 and as a consequence the effect of the 1.6% rise in annual preference share translates to an increment to visitor trips of 1.33%
- The average number of interstate visitor trips per annum to the Gold Coast, for the period under review, is 1,160m (source NVS)
- The attributable arrivals as a consequence of the elevated preference level of October is potentially 15,400 visitors per annum
- The average spend per trip to Gold Coast, over the 7 year period, is $878.50
- The annual induced effect of the preference rise hence is approximately $13.5m

<table>
<thead>
<tr>
<th>Element</th>
<th>Quantification</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual preference rise contribution of isolated event month(s)</td>
<td>1.6%</td>
<td>(8%+7%+6%) / 12</td>
</tr>
<tr>
<td>Correlation coefficient (preference to trips/arrivals)</td>
<td>.87</td>
<td>Annual correlation coefficient</td>
</tr>
<tr>
<td>Preference to arrival conversion</td>
<td>1.33%</td>
<td>Correlation coefficient * contribution</td>
</tr>
<tr>
<td>Average visitors per annum</td>
<td>1,160m</td>
<td>Source NVS</td>
</tr>
<tr>
<td>Average annual visitors accruing from preference elevation</td>
<td>15,400</td>
<td>Conversion * average visitors</td>
</tr>
<tr>
<td>Average annual spend</td>
<td>$878.50</td>
<td>Source Roy Morgan Research HTS</td>
</tr>
<tr>
<td>Average annual induced effect</td>
<td>$13.5m</td>
<td>Average annual spend * accruing visitors</td>
</tr>
</tbody>
</table>
Gold Coast (continued): related outputs

Relationship to actual arrivals
The context of the share analysis requires to be set:
- The Gold Coast has seen a decline in interstate leisure trips since 2003
- Preferences share has similarly been declining since 2002 (the data suggests a rise in share in 2007 but its dramatic nature points to a data inaccuracy which needs to be investigated)

Brand equity
The brand equity position (excluding 2007) shows a similar declining trend.

Conclusions
It is clear that the events are, in context, providing a lift in Preferences and hence having an (positive) induced effect. The issue with the destination however is that the positive effects are being negated and in fact superseded, resulting in a net decline in the destination’s equity.
Appendix E: Case Study Adelaide

Adelaide

Data stability
As can be seen from the preference share chart opposite, and as with the initial analysis of Melbourne, monthly data is unstable, making an annual analysis futile. (In such a form it cannot support any argument for induced effects one way or another.)

By aggregating the shares over the 7 years, for which data is available, a monthly stable preference share is established (see chart, opposite below).

Isolating events
In the Adelaide case, since preference share data has been available, the city has hosted a series of events in January and February (months circled in red) including the Clipsal 500, and the (cycling) tour down-under.

It is clear that in these months, the city generates a rise in its preference share (relative to all other interstate options). Potentially showing that event generated media and word of mouth is having an incremental effect on perceptions.

Isolating the actual effect
The data and the analysis thereof is provided on the next page (page 7). It shows that by aggregating the months over a seven year period we are able to establish the aggregate and average effects of the January / February/March period.
Adelaide (continued)

Method and results
As can be seen below there is a case to be made for a financially quantifiable effect resulting from the increased preference elevation in the January – March period.

* The months of January, February and March achieve an elevated preference rating by interstate travelers. The actual elevation over the annual average is 8%, 7% and 6% respectively. On an annualized basis, therefore, the three months mentioned contribute an elevated aggregate preference of 1.8%
* The correlation coefficient of preference to visitation (a displacement of approximately 2 years) is .97 and as a consequence the effect of the 1.8% rise in annual preference share translates to a 1.7% increment to visitor trips
* The average number of interstate visitor trips / arrival to Adelaide over the period is 823,000 (source NYS)
* The attributable arrivals as a consequence of the elevated preference level of Jan-March is hence likely to have been 13,900 per annum
* The average spend per trip to Adelaide, over the 7 year period is $650.70
* The annual induced effect of the preference rise hence is approximately $9m

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Adelaide (continued): related outputs

Relationship to actual arrivals
There are two things noted from the share chart (opposite, top):
• Annual arrivals correlate with preferences (correlation coefficient .97)
• Preference to arrival is displaced by approximately 2 years

Brand equity
Accepting the various models and observations that point to a brand equity calculation of physical share (trips) and mind share (preferences) then Adelaide's equity has been rising since the year 2000.
As with brand equity observations, at times, actual (sales, visits etc.) may exceed preference shares this is however, is less important that the overall trend which is seeing an increase overtime.
From an interstate perspective, this has resulted in a small but discernable increase in arrivals and trips to Adelaide over the last 7 years. (NYS 2007)

Conclusions
Whilst being reticent to link correlation with causality, it does appear that the hike in preference share in each of January and February lifts brand equity and does raise the level of arrivals.
• Travel and tourism industry
• Academic researchers
• Government policy makers

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EDUCATION AND TRAINING
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• Industry-ready post-graduate students
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KEY EC3 PRODUCTS

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Sustainable Tourism Cooperative Research Centre (STCRC) is established under the Australian Government’s Cooperative Research Centres Program. STCRC is the world’s leading scientific institution delivering research to support the sustainability of travel and tourism—one of the world’s largest and fastest growing industries.

Introduction
STCRC has grown to be the largest dedicated tourism research organisation in the world, with $187 million invested in tourism research programs, commercialisation and education since 1997.

STCRC was established in July 2003 under the Commonwealth Government’s CRC program and is an extension of the previous Tourism CRC, which operated from 1997 to 2003.

Role and responsibilities
The Commonwealth CRC program aims to turn research outcomes into successful new products, services and technologies. This enables Australian industries to be more efficient, productive and competitive.

The program emphasises collaboration between businesses and researchers to maximise the benefits of research through utilisation, commercialisation and technology transfer.

An education component focuses on producing graduates with skills relevant to industry needs.

STCRC’s objectives are to enhance:

- the contribution of long-term scientific and technological research and innovation to Australia’s sustainable economic and social development;
- the transfer of research outputs into outcomes of economic, environmental or social benefit to Australia;
- the value of graduate researchers to Australia;
- collaboration among researchers, between searchers and industry or other users; and
- efficiency in the use of intellectual and other research outcomes.