BRII Challenge – Intelligent data to transform tourism service delivery

Fact sheet

This Fact sheet provides information on the BRII Challenge – Intelligent data to transform tourism service delivery. For information on the Business Research and Innovation Initiative (BRII) please see the BRII Fact sheet.

Short description

Unlock and integrate new data sources to better measure tourism and better inform decision-makers.

Potential Themes

Data capture, management and integration, performance and investment metrics, artificial intelligence, data visualisation.

Overview of Challenge

Australia’s tourism industry is one of five growth pillars for the economy, contributing $55 billion to gross domestic product and employing almost 600,000 people. Tourism, unlike most other industries, cuts across many economic segments and its benefits are geographically widespread. The industry’s fragmented and diversified nature creates an environment that is difficult to measure in statistically valid ways, particularly where sharing economy impacts are emerging.

With more than two-thirds of Australians using these services, and with a value of over $15 billion, the sharing economy has led to a surge of non-traditional providers entering the industry, further complicating the process of measuring and understanding the supply of tourism products and services.

This is the challenge proposed by the Australian Trade and Investment Commission (Austrade) whose functions are to contribute to Australia’s economic prosperity by helping Australian businesses, education institutions, tourism operators, government and citizens.

Existing approaches to capturing tourism data (i.e. surveys or public record data on tourism activities) focus on traditional markets, with established and regular reporting. Lack of data from non-traditional sources such as digital platforms impedes the government, investors and tourism operators alike from making informed decisions on policies and future investments.
For example, in 2017, Airbnb, one of many share housing accommodation providers, had more than five million guests staying at their Australian properties. However, measurement of traditional accommodation, such as hotels, motels and serviced apartments will overlook this aspect of the industry, misrepresenting performance and potentially affecting service operators’ business and investment decisions.

The key challenges are:

- How do we unlock new data sources to measure the impacts of the sharing economy on tourism products and services to capture the diversity of visitor behaviours?
- How do we integrate new data sources with existing sources such as hotel performance metrics, tourism investment projects, aviation and visitation statistics?
- How do we leverage this new data – applying a layer of intelligence to this enhanced evidence base to provide new, more detailed insights on the industry’s performance? The goal is to provide innovative, informative and up to date metrics at differing geographic levels to complement existing measures and support better informed decisions.

The goal, apart from providing a consistent measure of supply and demand of the tourism industry, is a solution that can adapt to new forms of disruption and provide predictive insights.

**Solution requirements**

The diverse range of users of tourism data, from small business owners through to federal government means it’s vital to deliver a product that is easy to understand and capable of summarising complex information.

The challenge requires a solution that captures, aggregates and effectively measures all aspects of the tourism industry. It will need to unlock new data sources and integrate with existing resources. The solution will also need to be adaptive as new sources of data become apparent. The solution should be attractive to international investors that provide a majority of investment into the tourism market, other government agencies, peak bodies and tourism operators.

The solution would involve:

- Identifying the range of additional data sources that could be utilised, how they would be harvested and the supply and demand-side metrics they would deliver.
- Assess each data source, whether acquiring this data was technically feasible, the costs involved in acquisition and concerns around privacy.
- Describing how this new data could be integrated with existing data to provide a holistic view of the industry for a given region.
- Describing the range of outputs that could be produced, which by looking at the relationships between demand, supply and supporting infrastructure deliver a product that is easy to use and understand, and makes appropriate use of simple indicators to
summarise complex information around performance, competitive pressures, complementary activities and visitor access.

- Assessing the type of reporting that is possible and its ability to integrate data with other non-tourism sources.

A solution should also have scope for private commercialisation on a national or global scale.

**Benefits of the solution**

Austrade operates in an environment increasingly impacted by rapid geopolitical and technological change. At the same time, client needs are rapidly changing with technology creating higher expectations of accountability, interconnectivity, responsiveness, and effective service delivery.

As the impact of digital disruption becomes more evident, expanding the range of tourism metrics to cover the activities of traditional and non-traditional providers is becoming increasingly important.

A well-rounded measurement of the tourism economy will provide Austrade with information to:

- Enable government and businesses to support Australia’s tourism industry
- Promote tourism outwardly, increasing tourism trade and facilitating continued foreign investment in critical tourism infrastructure.
- Complement work underway to identify alternative data sources to measure the demand side of tourism.