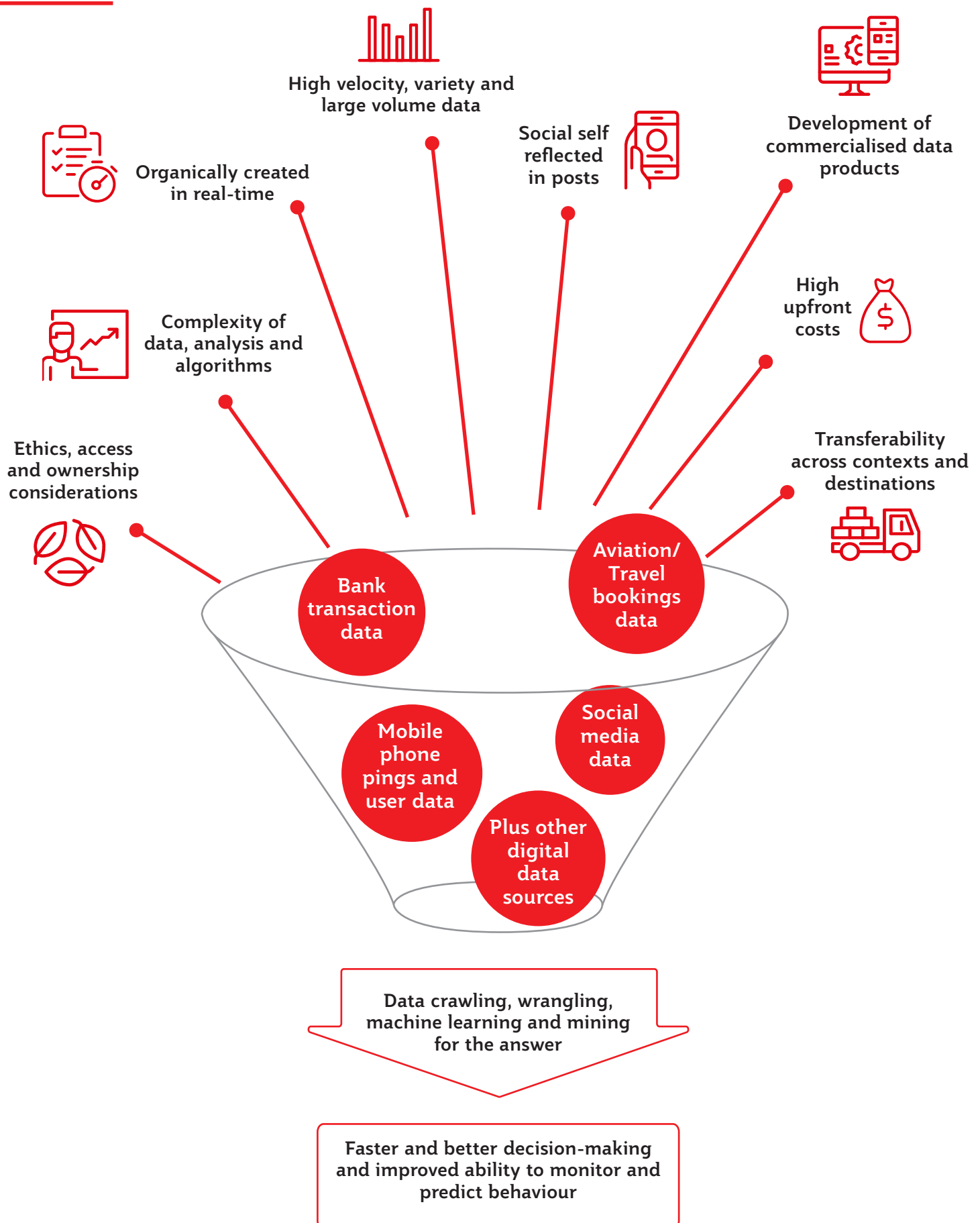


# Big Data in Tourism



# Big Data projects

## Measuring the beauty of the Great Barrier Reef

**Project aim:** To understand the aesthetic and experience values to inform reef conservation.

**Griffith researchers:**

Professor Susanne Becken and Professor Bela Stantic

**Data sources:**

- Human sensors: Twitter posts
- Survey data
- Stakeholder data
- Eye tracking

**Outcomes:**

- Consumer sentiment analysis
- Spatial analysis of hotspots (areas of concern)
- Integration of data sources through algorithms, artificial intelligence and machine learning can monitor the condition of reef's coral and animal species.



## Economic Impact of the 2018 Commonwealth Games Gold Coast, Australia

**Project aim:** To determine the pattern and magnitude of a potential time switching effect of visitors to the region.

**Griffith researchers:**

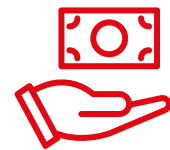
Assoc Prof Tien Pham, Professor Susanne Becken and Professor Michael Powell

**Data collection:**

Collaboration between Tourism Research Australia (TRA) and Dspark.

**Data:** Translated raw location mobile data into useful information on the mobility of visitors to a region and combined this data with economic data for modelling.

**Outcome:** Estimated leakage of outbound tourism expenditure from the Gold Coast is around \$7.3 million.



## Visitor movement tracking in Portugal

**Project aim:**

To identify the location and movement patterns of international visitors to Portugal and within its cities.

**Griffith researcher:**

Dr Margarita Abreu Novais

**Intended outcomes:**

Mapping of the concentration of visitors and their travel routes and patterns to inform programs to reduce visitor crowding and encourage visitor dispersal and improve the visitor experience, particularly during special events and when cruise ships visit the destination.

**Data:** Mobile pings that capture the location of international visitors at particular points in time.



## Chinese travel behaviour and sentiment

**Project aim:**

Using Weibo to analyse Chinese tourists' travel patterns in Australia.

**Griffith researchers:**

Emily Chen (Jinyan), Professor Susanne Becken and Professor Bela Stantic

**Data:** Chinese

Social Media Platform – Weibo.

**Outcomes:** Find out where do Chinese tourists go in Australia and apply sentiment analysis to analyse why they choose it.



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