Utilising travel data and technology to inform your travel programme

How to make the most of your travel data utilising guided analytics and current technologies - by ATPI’s John Brunkow
Introduction

Data: in a travel management context that word may fill you either with dread or enthusiasm!

Similar to the way in which data and technology has transformed our daily lives over the past few years, the same can be said for data within the business travel industry.

What this expert insight will tell you:

1. How data technologies are empowering the travel manager
2. Why you need to move away from static reporting
3. How to use data to inform your travel programme
4. Working with your TMC to maximise your data

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John has worked in the travel industry since 1986, in both the leisure and business travel sectors. His expertise lies in extracting and managing data, and using it to provide tools for people to understand their businesses and make informed decisions on improving processes.

Before joining ATPI John worked for the Monarch Travel Group, heading up the application development and management information teams.
The GBTA Foundation undertook a survey in 2012 ‘The State of Expense Data Management and Consolidation in the Business Travel Industry’, which found that travel managers were not convinced they have a complete or accurate picture of the total cost of individual trips. Respondents stated they struggle to reconcile data, spending 442,000 hours in staff time per year or $22.7 million manually reconciling and cleaning travel data.

Transparent, accurate and timely data is something that travel managers have felt historically they aren’t receiving from their travel suppliers. However, here in 2016, travel data and analysis is in a more positive place – this document outlines the progress which has been made, why and what technologies are now available.

Traditional reporting and analysis of travel data typically focused on post-trip data (what has happened), which limits the ability of the person managing a travel programme to analyse future trends (what could happen) and therefore contribute to cost / value management.

The strength of the travel management company (TMC), and the value a good travel partner brings to their client is aggregating various streams of data (from for example your air, hotel, rail and car partners) and consolidating them in one single, transparent source to empower and inform.
Some common data definitions

An application (app)
Piece of software to assist in accomplishing one or several tasks (often referred to as user interfaces). This software will usually run within an operating system (OS) or framework i.e. web applications run within the web browser, mobile apps within mobiles’ OS (Android / iOS)

Business intelligence
Made up of several related activities, including data mining, online analytical processing, querying and reporting that makes it possible to analyse larger amounts of data

Drill anywhere
Like drill down, drill anywhere allows the user to move through levels of detail within a single report. The difference here is that the hierarchy, or path, is built by the user during the drill process, rather than the administrator during the view building stage

Data association
Helps uncover relationships between seemingly unrelated data in a relational database or other information repository

Drill down
In information technology to drill down means to move from one place to another, focusing in on something

Data mining
The computational process of discovering patterns in large data sets ("big data"). The overall goal of the data mining process is to extract information from a data set and transform it into an understandable structure for further use
Data warehouses
Central repositories of integrated data from one or more disparate sources. They store current and historical data and are used for creating analytical reports.

Extract, transform & load
Three database functions that are combined into one tool to pull data out of one database and place it (generally) into a data warehouse.

Management information system
A computer-based system that provides managers with the tools to organise, evaluate and efficiently manage departments within an organisation.

On-line analytical processing (OLAP)
OLAP performs multidimensional analysis of business data and provides the capability for complex calculations, trend analysis, and sophisticated data modelling.

Unstructured data
Information that either does not have a pre-defined data model or is not organised in a pre-defined manner. Unstructured information is typically text-heavy, but may contain data such as dates, numbers and facts as well.
Developing technologies to manage travel data

Static travel reports providing fixed answers to specific ‘anticipated’ questions become a major barrier to properly analysing data. Why? When a new question appears, the initial report is no longer relevant and you need to go back to the drawing board (which could involve several iterations).

A dynamic tool that manages high volumes of data and reduces complexity eliminates this problem. And here at ATPI we are able to deliver this for our clients through building a solution that gives each company a window into their travel programme.

An optimised view on reporting ‘data consumption’ involves exposing critical relationships among the data elements essential for properly understanding travel behaviour. Instead of concealing relationships in pre-defined drill down paths, data analysis needs to bring the relationships to the surface to aid the consumer in understanding and interpreting travel data (and therefore travel behaviour). This in the business intelligence world is referred to as ‘data association’.

A dynamic tool which can present this information 24/7 to travel managers and allows them to drill down into the data real-time is of much more value than a static report run a number of hours ago.
Moving away from traditional, static reports

Data association is a key element required to properly analyse high volumes of data, however not the only one. More important than “new technology” (which is often easy to adapt to) is making sure that we break away from these traditional ‘static reports’.

The ultimate goal of adapting new ways of data consumption is to empower category managers, procurement leaders and other stakeholders to ask and answer questions relevant to your requirements - leveraging on your TMC’s technology and expertise to produce insights to optimise your travel programme.

This new way of looking at data requires that instead of knowing ‘what to measure’ you need to know ‘what you want to change’ in your travel programme – and this ensures that your TMC can assist you to reach this goal.
An example of data association could for example, be applied to leakage from travel policy – i.e. identifying travellers that have booked a rail ticket through your preferred TMC but not booked accommodation through the correct channel. From a duty of care perspective (as well as cost management) this out of policy behaviour is important to action before the traveller takes their journey.

Describing what happened, why it happened and monitoring what is happening now is slowly losing relevance due to low complexity and low value (i.e. it has already happened – there is nothing you can do to change it). Every traditional TMC will be able to capture this data and report on it. However there is significant difference between just reporting on data and actually producing actionable insights.

The only way to move forward is to understand the ‘what and why’ so that you are able to plan what might happen (forecasting), to determine if this forecast is likely to happen (predicting) and what actions should be taken to change the outcome as necessary (prescriptive analytics).

Exploring your travel data and producing insights is what is going to drive change in an innovative way. Being able to provide information real-time, while the conversation is happening, is the key change – i.e. from passively receiving information to using travellers’ behaviour data to dynamically enhance your travel programme.
This graph illustrates the value for data analysis moving from hindsight to foresight.

Static: Detect & Respond

Dynamic: Predict & Act

Streamline these processes through guided analytics using ATPI Analytics

Value

Raw Data
Standard & Ad hoc Reports
KPIs & Dashboards
Diagnostic Analysis
Predictive Analysis

Predictive Modelling
Prescriptive Analysis

Hindsight Complexity
Insight Complexity
Foresight Complexity

What happened?
What is happening?
Why it happened?
What could happen?
How likely is it to happen?
How can we make it happen?

Based on Gartner's Analytics Maturity model
Working with your TMC

To accomplish this is no easy task; it requires a high degree of interaction/integration with your TMC, as they are the natural aggregators of your supplier data and can provide one consolidated view bringing together your travel intelligence.

Understanding basic elements (such as data transparency) is a must; traditional TMCs are often frightened by the concept of giving clients access to the ‘raw data’, without realising that the change from traditional static reports requires this, and actually delivers the detail that the travel manager is looking for (as long as it is presented in a user-friendly way).
The next step in the new cycle of data consumption is that the data aggregators/consolidators have the ability to channel all this data captured, use data association and other techniques (i.e. data mining) to produce insights tailored to a single project or task - which in the data world is called ‘guided analytics’.

Guided analytics, as the pillar for data consumption in the dynamic data world, is only possible through applications (or apps). Imagine one single app that has all of your travel information/behaviour to analyse one specific subject such as duty of care. This app would be designed to use every single field captured to bring to the surface the underlying data relations specific to a subject. This concept leaves far behind any static report.

The collection, processing and analysing of data then becomes worthless if the outcome is not somehow translated into action. Using data to inform and manage a travel programme needs to evolve as well. The same way static reporting is soon to be the past, so will enforcing your travel policy through a policing approach.

The information era requires a less conflicted and more dynamic approach (such as targeted advertising/promotion) and even though you might think these are unrelated subjects, the best way of changing behaviour is not through the general analysis of data but a direct engagement with subjects (i.e. travellers) to trigger change.
A few top tips to better manage your data:

Consolidation (pre-trip and post-trip)
Check with your data suppliers what sort of challenges they face so that you can work together to overcome these, understanding that multiple data from multiple sources / suppliers can be challenging.

Transparency of data
The more eyes on the data the better data you’ll get. Ensure data is something that is covered in your contract with your suppliers – so you get access to all the raw data available.

Traveller profiles
Keeping traveller profiles up-to-date will ensure that the traveller data being analysed is accurate, i.e. ensure data going in is as accurate as possible.

Reviewing data with your account manager
Make sure you make data and travel intelligence a regular topic on the agenda with your account manager. Reporting may be crucial to your travel programme or business in which case you may wish to make it part of their KPIs / objectives.

Change the conversation timing
Having access to a dynamic tool means you can start using forecasted data to plan and inform your travel programme. Real-time data means analysis is immediate and current – delayed and out of date analysis will become a thing of the past.
Conclusion

Hopefully this document has given you insight into the world of data and left you in a positive mind-set thinking about your own travel programme.

Dynamic tools enable you as a travel manager to use significant amounts of data to improve programme performance and get better value from your supplier relationships. Your TMC is the central point, bringing together various sources of data and providing this data to you (real-time) in a format that you and your stakeholders find useful.

Once presented in a user-friendly manner, you can use this huge amount of data to drill down into areas that are of particular interest, feeding into specific objectives, indicators or providing stakeholders with snapshots of your business travel.

Want to know more?

For examples of case studies and more how-to guides, visit the ATPI Knowledge Hub.
ATPI is among the world’s leading travel management companies. Our dynamic and innovative approach to savings and service has earned us one of the highest client retention rates in the industry.

With over 100 offices worldwide, the company has successful operations in corporate travel, corporate event management, online travel technology and specialist travel management for a number of key industries.