



Analysing Customer Feedback in Tourism and Hospitality: Capitalizing the Big Data

Pavitra Shetty^{1*} and Sudha S²

Abstract

The tourism and hospitality industry basically have 2 types of data i.e. structured and unstructured. The data collected from website, blogs, and property management software's is a structured data which is easy to collect and analyze, whereas data that is already available in the internet which include, data posts from the Instagram, twitter, Facebook or it could be from the reviews taken from the trip advisor websites and other forums. Integrating the unstructured data and analyzing the Guest satisfaction is the most challenging task. Guest satisfaction surveys are used to understand your Guest's satisfaction levels with your organisation's products, services, or experiences. This is one type of customer experience survey and can be used to measure customer's needs, understand problems with your products and/or services, or segment customers by their score.

This paper focusses on how exactly this huge volume of big data i.e. structured and unstructured data is analyzed and to provide deeper knowledge on how the customer satisfaction survey is being made in the field of tourism and hospitality industry.

This review of my work will reflect on both opportunities and risks that such technological advances, highlighting on importance of data with ethical data tool management in both tourism and hospitality. the findings of this study reveal, among others, the most studied areas, trends and tendencies for big data analysis in tourism and hospitality.

Keywords

Big Data, Business Intelligence, Hospitality, Tourism

Introduction

The Tourism and Hospitality sector caters to millions of travelers every day, and each one of them checks in with their own set of expectations. Meeting those expectations is the key to getting people to return and increasingly tourism and hotels turning to advanced analytics solution for clues about how to keep their customers happy and is used by the travel and transportation companies all around the world. For instance, in tourism industry airline operators use analytics to not only understand the passengers but also aggregated behavior insights about particular demographics, it also reflects on customer's choice of travel destinations and times, some of the techniques like web scraping and using of social media listening can help us to analyze the electronic Word-of-Mouth (e WOM) of various services and products in the industry. These strategies will help company to get thorough

picture of the market and brand performance from one source of big data. The use of big data is rapidly entering the domain of tourism and also aid to hospitality department. Most of the hotels are already using big data insights to create customized and relevant discount packages, add on services and incentives coupons based on customer's travel pattern. Moreover, customer experience is crucial for growth and reputation, has mainly adapted to the evolving technology and the availability of new data sources. The tourism boards in a few countries are also turning towards Big Data applications to understand tourism flows and discover more investment opportunities in their country. International hotel chains like Starwood Hotels and Resorts have started integrating analytics for dynamic pricing to increase revenue and profit. For instance, the hotel chain has systems in the hotels that combine information like macroeconomic factors and local events to offer accommodation at competitive prices. Technology adoption and constant innovation have made it possible to provide real-time insights into a customers' perception of the services, the overall health of the business and competitive performance in the market. Big data is more important for the travel and tourism companies as the huge amount of data collected needs to be properly analyzed to make well-informed decisions. There is huge potential in developing big data analytics, particularly, as an experience-based product the design and development of tourism requires a profound understanding of what's today's travelers need and want, how they move through and interact with physical and social spaces, and what leads to their enjoyment, happiness, and realization of personal values, increasingly the focus on creating this knowledge is shifting toward the capabilities of capturing, storing, measuring and interpreting data generated through different stages of the travel process in a timely fashion.

What is big data?

Big Data is perceived as massive data volume, used for social media sentiment analysis but in reality big data is about variety, velocity, validity and volume. Big data is about viewing all types of data sources as a business hurdle. It's not about having better insights and more data but it is more important to the right data than having the most data. The analytics on this is about making better decisions by having better queries; it is not just predictive analytics but to establish the benefit to be gained from the basics [1].

Big Data is tremendously growing, not only in competence but also in complexity. As a result, it is used to enable forecasts to be made based on fresh data rather than relying on the old information. We need to explore new forms of data appropriation method to manage and integrate in order to make apt decisions. However, making a reasonable picture from infinite bits of information is not easy [2]. To maximize big data's value and to make it effective the focus needs to be on relevant data, with control on its quality to deliver the right decisions.

The reality the big data of today may not be the big data of tomorrow; what is entitled as 'big data' today will change priority as the tools and techniques to handle it evolve, the storage capacity increases and processing power improves [3]. Big data helps the management to stop looking at the past reactions and make predictive decisions about the future of your organization depending on relevant data.

*Corresponding author: Pavitra Shetty, Assistant Professor, Department of Hospitality science, Yenepoya University, Mangalore, Karnataka, Tel: 9108620123; E-mail: shettypavitra08@gmail.com

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Big data in tourism and hospitality

Big data analysis (Figure 1) is changing all sorts of industries, not only in retail and logistics but it's also connected and transformed the worlds of hospitality and tourism which gives the information on flight

confirmation or customer's room preference. The big data in tourism and hospitality is huge and plays a potential role with its importance in understanding about consumer's preference using this information and insight to build connections with individual travelers which providing and offering right choice or service at right time is crucial. Especially in tourism industry, any demand needs to be addressed instantly in order to remain relevant to travelers and for this is what makes big data so important and presently represents as game changer and competitiveness in tourism. It can drive innovation and enhanced performance in all business operations across the business value and supply chain [4].

Tourism is big data using innovative methods which has advantages over traditional methodologies, as discussed below.

Reliability: Big data in tourism will be based on users' real actions, not on surveys. otherwise actions have been analyzed rather than stated intentions or answers to questions, taking all the data and information together, big data increases e sample based on which conventional research tends to be based by several orders of magnitude as mentioned by (Meeker Hong,2014) the reliability of big data analysis allows us to consider all aspects of the information in order to provide comprehensive results instead of biased conclusions due to information loss in the sample data.

New information flows: Tourism big data is a type of information produced by tourist themselves; it enriches the knowledge of tourism businesses, target market is very useful for analyzing the consumers' demand for different tourism products and services since tourism big data are structure and repositioned data, it is possible to cross-reference them with other sources such as social media and open public information that may be created or released in the future. The analyzing of big data can be contrasted with internal data from each tourism business with a view to determining whether the supply of tourism products/ services in each area of the city is in tune with the tourist who demands for these products and services [5].

Real-time data and now casting: one of the innovative uses of big data is now casting which is real time data to describe contemporaneous activities before official data sources are made available (Bollier & Firestone,2010) for example, Varian (2014) argued the real time google search queries are good way to nowcast consumer activities as its correlation analysis obtained from Google correlate forms and data it helps to identify possible flu outbreaks 1-2 weeks earlier than the official health reports tracking the incidents of flu related search terms in the Google search engine.

Data analysis makes it possible to know future customers much better, which translates into sales and web positioning. Specifically, Big Data helps to.

Align strategies to customer expectations, adapting service proposals to new customer groups, and even creating new business opportunities.

Anticipate. Establishments can predict a high influx of tourists, and thus plan their resources more efficiently;

Create patterns of future clients, something crucial at a time where spontaneity prevails. Consumers want their needs to be met as soon as they arrive at an establishment, so it is necessary to be ready for them;

Obtain a comprehensive knowledge of the tourist, their social and demographic data, purchasing power, place of origin, place of residence, hobbies, etc.

Adjust employee profiles to match those of future customers (language, menus, etc.), which directly translates into satisfied customers "50% off on Your Next Flight Booking!"

As soon as this notification popped on my smartphone in between my work schedule, I found myself tempted towards planning another vacay after ages (okay!! after a month). This notification was enough to attract my wanderlust soul. And guess what, I ended up going on another vacation.

All thanks to Big Data.

Benefits of Analysing Big Data in Tourism and Hospitality Industry

Revenue management

Through a combination of the data they gather themselves, and information available online, hotels can use big data to assist them with a revenue management strategy. In particular, it allows them to carry out predictive analysis, allowing hotel owners to more accurately anticipate levels of demand for hotel rooms.

Examples of the kind of data that may be useful here include past occupancy rates, current bookings on the system and various key performance metrics, as well as external data, such as information about when school holidays are, or when local events are happening. On data has been successfully used to predict demand, those within the hospitality industry can take steps to optimise room rates, in order to maximise revenue and profit.

Targeted marketing

Hotel guests are extremely varied, ranging from business travellers to families, and from those operating on a budget, to those looking for something special for a honeymoon. In addition to helping with financial management of a hotel, big data can also help those in the hotel industry to more effectively target their marketing content [6].

Indeed, big data provides marketers with the ability to identify the best opportunities for their particular business, and target key demographics much more specifically, especially through online advertising. This can also include both location and time-specific marketing which can allow hotels to reach customers at the time of advertising will be most relevant to them, or in the place where they are most likely to want to see it.

Customer experience

Another way that big data can be of great use within the hospitality industry is in relation to the customer experience that hotel companies provide. Big data can help hotel owners and customer service teams to spot significant trends in terms of customer opinions, learning about their strengths and weaknesses in the process.

This may require the gathering of service usage data, feedback from customers on social media, reviews posted on websites, and other related information. Fortunately, the hotel industry is an area where

customers are happy to let their opinion be heard, although gathering data from various sources and analysing it can be challenging. Once done, however, it can allow hotels to understand what customers like and where improvement is needed.

Additional services

Hotels have a variety of interactions with both current and potential customers, providing an opportunity to gather large amounts of data. When collected and analysed carefully, the data can be extremely revealing, providing information about not only the services that customers use, but also the services that they request or ask about.

This can help hotel owners to make decisions about new services to introduce, as well as services that are no longer required. For example, a hotel might opt to refurbish their gym if customers are regularly asking about machines they do not have. Furthermore, big data can be used to inform decisions related to partnerships with other businesses, with possible examples including OTAs, local taxi firms, and nearby bars or restaurants.

Competition survey

Finally, big data can also be used to get a clearer idea of competitors and to see what other companies operating in the hospitality sector are offering their customers. In the internet age, there are a vast array of places to go to learn customer opinions, including review sites, social media, internet forums and travel publications. All of this data can potentially be gathered and processed to find the trends that matter.

Analysing the customer feedback in tourism and hospitality

There are various methods how this huge volume of structured and unstructured data is analysed in the field of tourism and hospitality in order to generate a guest satisfaction survey report

Following are some of the software's used to analyse the guest feedback and generate guest satisfaction survey reports:

Trust You: Trust You is a fully featured Reputation Management Software designed to serve SMEs, Agencies. TrustYou provides end-to-end solutions designed for Web App. This online Reputation Management system offers Response Management, Review Monitoring, Sentiment Analysis, Social Media Metrics, Social Media Monitoring at one place.

Vendasta: Vendasta is a helpful solution for business to improve and visible in local search to provides progress reports and manage the reputation. Vendasta integrated with news sites, google, social media, blogs, etc. to get the picture of what people say about you.

HOTH stars: HOTH Stars is review management software designed specifically for small enterprises and marketing agencies. With the help of these online review management tools, you can prevent negative reviews, monitor reputation, and auto-post to social media

Bright Local: Bright Local is review management software for digital marketing and integrated business promotion. This program automatically responds to reviews, generate online reviews, manage negative feedback, gets review alerts, and monitor industry sites.

Review Trackers: Review Trackers is the best and most reliable solution for multi-location any size of the business of reputation management. It will analyse and guide where & what you need to

improve by actual data.

Trust you: Trust you is the software which is basically used in most of the property to analyse the feedbacks given by the guests, currently it is been used in OYO, Linder Hotels and resorts, Accor, Ayres hotels etc.

Features of Trust You: TRUST YOU make Data-Driven Decisions: The Guest surveys and online reputation management (ORM) work together in one platform to make it easy to understand your guests' opinions and build a better product.

trustyou provides quantitative data, like NPS score, as well as qualitative results from open-ended questions and it also provides Competitive Insights and Impact Scores to track and identify what most impacts your online review scores. It also provides Time-efficient response and task management, ensuring that we never miss a review.

TrustYou Turns Reviews into Marketing Content as customer ratings rise, it will make sure to promote success. The positive feedback you collect influence traveller opinions and increase bookings.

It Provides Survey reviews on website that improve SEO and help travellers make booking decisions.

It also provides the ability to push survey reviews to Google or TripAdvisor and increase your ratings and rankings.

TrustYou's review summaries and hotel highlights distributed to Google Search and Maps, Kayak, Hotels.com, and dozens more sites.

The best way to get feedback about your guests' experience is through a conversation. TrustYou Guest Messaging creates unlimited opportunities to listen to your guest feedback.

The ability to answer questions and get feedback from guests with pre-stay, on-site, and post-stay surveys,

Real-time communication to fix problems as they occur and improve the overall guest experience,

Multi-channel conversations, organized in one inbox via SMS, web chat, email, Facebook Messenger, and more.

Steps in analysing the data: Following are the steps which show how exactly the data is collected from different source and how the analysis is being made by the software.

Automate survey mailing with guest data: Trust you enable the integration with the PMS or CRM system and access the guest data fully automate the mailing process of the guest surveys.

Get qualitative results from open ended questions: Trusty's powerful semantic technology, you can analyse survey responses and make the staff and procedural adjustments that matter most to your guests. Set up alerts on positive, neutral, or negative comments and assign tasks to take immediate action within more than 20 hotel categories.

Detect key performance trends: Understand what most impacts your overall hotel score. Advanced reporting allows you to view and filter important KPIs by brands, hotel groups or individual properties to detect trends and identify areas of improvements.

Solicit guest feedback to increase traveller reviews: Automatically engage with guests to rate their pre-arrival, on-site and post-stay experiences based on specific hotel categories. Collect

valuable survey reviews to positively influence hotel rankings and ultimately increase revenue.

Customize guest surveys with your hotel brand:Customize the look and feel of your surveys to better align with your hotel's brand and personality. Modify colors, fonts, and headers, as well as the alignment of questions to maintain familiarity with the interaction.

Utilize questions logic to enhance traveller insights:Create personalized questions based on guest profiles, making the survey more relevant to each type of guest. Trigger or hide questions based on certain answers, assess customer loyalty, and receive the detailed feedback you need to improve your hotel product.

Conclusion

Big data is playing a crucial role in digital transformation efforts of organisations in general and in the tourism and hospitality industry, thus driving greater effectiveness and efficiency and the strategy to define new business models and bring about successful change. This special issue offers original contributions that advance knowledge about opportunities for smart tourism at the light of the Big Data. Each reflects the state-of-the-art research and/or related practice, and each identifies emerging issues and areas for future investigations. Big

data and data analytics suggest that the future may belong to those firms best able to shape and deliver the consumer travel experience. In doing so, the experience of companies in offering such services will be an extra advantage. From this study it became clear that for hearing the voice of the customer, Shaping the customer experience, and moving from rewards to real and sustained loyalty in the tourism sector, Big Data is a necessity.

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Author Affiliation

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¹Department of Hospitality science, Yenepoya(Deemed to be University), Mangalore, Karnataka, India

²Department of Computer science, Yenepoya(Deemed to be University), Mangalore, Karnataka, India.