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**Website Quality Report**

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# Abstract

In a world of rapidly growing technology, many businesses have switched their practice into online or web-based models. This allows companies to have a better exposure to their customers and allows them to access their web from anywhere around the world. One of these businesses is the traveling business. Travel website is one of the most revolutionary inventions in the travel business, not only does it save customers' time to get information and book their travels, but it also connects various other businesses such as hotels and airline service. A way to ensure these websites keep thriving is to collect feedback on the web's quality. One of the methods is to use Google Lighthouse, an audit tool that can measure the quality of a webpage. Google Lighthouse assesses a website based on four metrics namely Performance, Accessibility, Best Practices, and SEO.

# Introduction

Travel website is a digital platform where a company can act as an intermediary between the public customers and the corresponding travel industry. Travel website allows the customers to compare prices and book their travel in real time without going to the ticket outlets to buy the ticket manually. These websites also allow customers to check the reviews of the services they are about to book, allowing customers to make decisions based on the reviews posted by other customers.

# Objective

The primary objective of this report is to conduct a thorough comparative evaluation of multiple ticket booking service websites utilizing web performance audit tools, notably Google Lighthouse. By scrutinizing various facets of performance, accessibility, and SEO, this evaluation aims to unveil each website's strengths and weaknesses, offering actionable insights for optimization and improvement.

# Website Review

## 1. Traveloka

Traveloka is an Indonesian startup company focusing on travel and ticketing. The company was founded by Ferry Unardi, Derianto Kusuma, and Albert Zhang and was first launched in February 2012. The website was first functioned only to compare prices between different websites. In 2013, Traveloka started to function as a booking service for flights and hotel reservations. As of 2019, Traveloka became one of the four “unicorns” in Indonesia and Southeast Asia’s largest online travel startup [1] and has incorporated 100,000 hotels, apartments, and other forms of accommodation as well as partnership with 100 airlines [2].

## 2. Booking.com

Booking.com is a travel company based in Amsterdam. It was founded in 1996 by Geer-Jan Bruinsma under the name booking.nl which caught the attention of Priceline.com during a show in London after the success of the business in its home market, the Netherlands. In 2023

with the rise of AI technology, Booking.com started testing to create a travel planner using Artificial intelligence to help customers provide travel inspiration based on their needs and requirements as well as creating itineraries[3]. As of 2024, Booking.com is the most visited travel website in the world.

### 3. Agoda

Agoda, headquartered in Singapore and part of Booking Holdings (Nasdaq: BKNG), is a digital travel platform offering great value deals on a global network of 4.2M hotels and holiday properties worldwide, plus flights, activities, and more. It helps anyone see the world for less. Agoda.com, available in 39 languages, and the Agoda mobile app facilitate easy reservations for hotels, flights, ground transportation, and activities, supported by 24/7 customer support. With operations in Bangkok, Thailand, and employing more than 7,000 staff in 26 markets, Agoda is dedicated to leveraging best-in-class technology to make travel even easier as a subsidiary of Booking Holdings.[5][6]

### 4. AirAsia Move

AirAsia MOVE, previously airasia Superapp, is the latest OTA+ offering seamless travel experiences at great value in ASEAN and beyond. With features like airasia chat, games, gifting, and a robust loyalty program, it fosters community-led travel. Its ecosystem covers flight bookings from 700+ airlines, 900,000+ hotels worldwide, ride-hailing, dining, insurance, duty-free shopping, and more, supported by integrated financial services from BigPay. Awarded 'Asia's Leading Online Travel Agency 2023' by World Travel Awards, download the app from Apple App Store, Google Play Store, or Huawei App Gallery.

### 5. AirBNB

The United States-based company Airbnb, Inc. runs an online marketplace for experiences and short- and long-term house stays. The business takes a commission from each booking in its capacity as a broker. Airbnb was born in 2007 when two Hosts welcomed three guests to their San Francisco home, and has since grown to over 5 million Hosts who have welcomed over 1.5 billion guest arrivals in almost every country across the globe. Every day, Hosts offer unique stays and experiences that make it possible for guests to connect with communities in a more authentic way.[4]

## Result and Discussion

In this comparative evaluation, we scrutinized multiple ticket booking service websites using web performance audit tools, notably Google Lighthouse. Our analysis focused on various facets including performance, accessibility, best practices, and SEO, with the aim of uncovering each website's strengths and weaknesses to provide actionable insights for optimization and improvement.

The data collected from Google Lighthouse audits for the selected ticket booking service websites are summarized as follows:

NO	Platform	Google Lighthouse Result				
		Performance	Accessibility	Best Practices	SEO	PWA
1	Traveloka	55	75	100	93	+
2	Booking.com	9	95	74	100	-
3	Agoda	47	74	96	92	-
4	AirAsia MOVE	33	91	70	93	+
5	Airbnb	28	96	96	99	+

### 1. Performance

The performance aspect measures how quickly a website loads and becomes interactive. Traveloka and Agoda perform relatively better in this aspect, with scores of 55 and 47, respectively, though there is room for improvement across all platforms. Booking.com exhibits the lowest performance score at 9, indicating significant optimization opportunities. This downside can be fixed by reducing the number of third party codes and creating simpler codes to improve load time.

### 2. Accessibility

Accessibility is crucial for ensuring that websites are usable by individuals with disabilities. Airbnb achieves the highest accessibility score of 96, followed closely by Booking.com at 95. However, all platforms have areas where accessibility can be improved to enhance user experience for all visitors, as indicated by scores ranging from 74 to 96.

### 3. Best Practices

Best practices encompass adherence to modern web development standards and guidelines. Traveloka achieved a perfect score of 100, indicating robust implementation of best practices. However, Booking.com lags behind with a score of 74, suggesting the need for enhancements in this area.

### 4. SEO

Search Engine Optimization (SEO) plays a vital role in determining a website's visibility in search engine results. Booking.com leads in SEO with a score of 100, closely followed by Airbnb at 99. While all platforms perform reasonably well in this aspect, there are still areas for improvement, particularly for Agoda and Traveloka.

## 5. Progressive Web App (PWA)

The Progressive Web App (PWA) score indicates the degree to which a website utilizes modern web technologies to offer an app-like experience. Traveloka, AirBNB, and AirAsia MOVE exhibit PWA functionality, denoted by a plus sign, suggesting advanced web capabilities. However, there is potential for other platforms to adopt PWA features to enhance user engagement and retention.

## Conclusion

Based on the results, it is clear that travel websites have a low to average score in performance. This can be seen as these websites use a lot of third party codes such as ads which can cause a slow web performance. Contrasting the performance results, travel websites have a good accessibility and best practice scores. This indicates that as a service provider, travel websites focus more on providing access to customers, keeping the website secure and easy to understand following a good practice of web development.

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