

## **METHODS OF ANALYSIS AND FORECASTING OF THE TOURIST MARKET OF UZBEKISTAN**

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**Annotation:** This article presents combinational methods for analyzing and forecasting the tourism market, such as machine learning and regression analysis. Based on these combinational methods, it is possible to predict the future potential of the tourism market.

**Keywords:** Combination, machine learning method, regression analysis, forecasting, statistical methods, analysis.

Combining statistical methods and machine learning methods can improve the accuracy of tourism market analysis and forecasting. One way to combine these methods is to use machine learning algorithms to process large amounts of data and then use statistical methods to analyze the results.

For example, machine learning techniques can be used to analyze social media and other online sources to determine the moods and interests of potential tourists. Statistical methods such as regression analysis can then be used to determine how these moods and interests influence travel decisions.

You can also use a combination of machine learning and statistical methods to create predictive models. Machine learning algorithms can be used to train models based on historical data and then statistical methods can be applied to analyze and interpret model results.

Another way to combine methods is to use expert knowledge in combination with machine learning algorithms. For example, experts can use their professional experience and knowledge to identify factors influencing the tourism market, and then these factors can be incorporated into machine learning models to predict future trends.

The combination of statistical methods and machine learning methods can greatly improve the accuracy of tourism market forecasting and help companies in the tourism industry make more informed decisions.

The analysis of social media and other online sources related to the tourism market can be performed using special tools for monitoring and analyzing data. The following are the main steps required to analyze social media and other online sources related to tourism:

1. **Data collection:** First, you need to collect data from social media and other online sources related to tourism. These can be posts on social networks, reviews on travel sites, blogs, etc. To do this, you can use special tools for monitoring social media.
2. **Data cleaning:** After data is collected, it must be cleaned of noise and duplicates. You also need to filter the data for keywords related to tourism to make sure that the data is really related to this industry.
3. **Sentiment Analysis:** Sentiment analysis should then be performed to determine the tone and emotional content of the topics being discussed. For this, machine learning algorithms such as sentiment classifiers or sentiment analysis methods can be used.

4. **Topic Identification:** The next step is to identify the topics discussed in social media and other online sources. To do this, you can use thematic text analysis, clustering or classification methods.
5. **Extraction of insights :** After performing data analysis, valuable insights related to the tourism market can be obtained. For example, you can identify the most discussed topics, popular places and attractions, the moods and preferences of potential tourists, as well as problems and complaints related to tourism.

**Application of Insights :** Insights obtained from the analysis of social media data and other online sources can be used to improve marketing.

There are many methods for analyzing and forecasting the tourism market, including the following:

1. **Analysis of statistical data:** this may include collecting and analyzing data on the number of tourists, tourism spending, average length of stay and other factors.
2. **Surveys and research:** This may include conducting surveys and research among tourists, tour agents, travel companies and other market participants.
3. **Analysis of social media and other online sources:** this may include monitoring social media, tourist reviews and ratings, online bookings and other online sources that can give an idea of which places and activities are most popular.
4. **Machine learning methods:** This may include using machine learning algorithms such as regression analysis, decision trees, neural networks, and others to identify patterns in travel market data and predict future trends.
5. **Expert opinions:** this may include consultations with experts in the tourism industry who can give their predictions on how the market will develop in the future.

Each of these methods has its own advantages and limitations, so a combination of several methods is often used to analyze and forecast the tourism market.