The Prioritization of Hotels and Determination of their Efficiency Using Data Envelopment Analysis Method

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Extended Abstract

1. Introduction
Economically, tourism is of growing importance to many nations and is recognized as the largest source of export earnings in the world as well as an important provider of the employment and growth in foreign exchange. Tourism industry is one of the most important income-generating industries in the world. Tourism and its related activities have been developed considerably during the last decades. Indeed, it can be said that tourism is a gainful and advantageous industry which should be considered by tourism planners and marketers. Tourism is expected to become the most important economic activity of the 21st century. In this context, tourism is recognized as a key economic activity for Iran’s economy. Hotels are considered to be one the important pillars of the tourism industry and provide tourists with extensive services. The hospitality industry can play an important role in growing and developing a country’s tourism industry. Thus, increasing the efficiency and improving the performance of hotels are of high importance. Every organization needs to evaluate its performance in order to improve its organizational performance. In many studies, organizational performance has been measured through using Data Envelopment Analysis (DEA) method. Hence, this study makes use of this method to measure the performance of Yazd Hotels.

2. Theoretical Framework
Today, tourism has become one of the economic activities in the world. Indeed, tourism is one of the most important forces shaping our world. Tourism is usually used as a tool to stimulate the economy of countries and to develop it through the jobs and incomes that it fosters. The tourism industry is recognized as an important part of Iran’s economy, too, as there are a lot of tourism attractions and potentialities in this country. Therefore, Iran can experience a significant progress in this area. Hospitality is recognized as one of the important factors in the development of the tourism industry. In other words, it is one of the main pillars of the tourism industry and provides tourists with various services. The hospitality industry includes services like lodging, transportation, and event planning. In fact, the development of the hospitality industry directly affects the growth and development of the tourism industry. In addition, increasing the efficiency of Hotels in this industry can increase employment in Iran and contribute to government revenue. The improvement in any organization requires performance measurement, planning and goal setting for performance improvement. Thus, the aim of this study is to examine the performance of the hospitality industry in Iran. To this end, Data Envelopment Analysis method was used to evaluate the performance of Yazd Hotels.

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3. Methodology
The present study is a descriptive-practical research. The purpose of this study is to rank all of two, three, and four-star hotels in Yazd province, including 27 hotels, and measure their efficiency and performance through using Data Envelopment Analysis and Grey Analysis methods (GRA). In operations research and economy, DEA is a nonparametric method that estimates the production frontiers. In fact, it is used to empirically measure the productive efficiency of decision making units (two, three and four-star hotels located in Yazd province). Indeed, DEA is a linear programming methodology measuring the efficiency of multiple decision-making units (DMUs) during the production process. Having used DEA method and input/output orientations, this study showed that only nine hotels were efficient.

4. Discussion & Conclusion

In this model, the number of rooms, beds and staff were considered as inputs and the income gained from each room and the number of guests were considered as the outputs. Finally, the grey relation analysis was used to rank the efficient hotels. According to the findings of this study, Safaei Hotel was ranked first.

5. Suggestions
All hotel managers are suggested to consider it necessary to pay attention to the findings of this study so that they can increase the efficiency and performance of their hotels. Managerial implications of this research will help them solve their problems.

Key Words: Data Envelopment Analysis (DEA), Efficiency, Grey Relation Analysis (GRA), Hotel.

References

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