

# Strategic Group Analysis in the Tourism Industry: A Destination's perspective

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## ABSTRACT

Strategic group analysis is one of the most important methodological tools a decision-maker can use to explore the external environment of a business. In a constantly evolving sector like tourism, this analysis becomes even more significant, especially at the destination level, where there is a limited number of studies in the literature. To address this, the present research first provides an extensive literature review of the applications of strategic groups at the level of tourism businesses and destinations. Subsequently, the model is applied to cases of competitive destinations in Greece, distinguishing them based on their completeness, carrying capacity, and attractiveness in terms of overnight stays. This form of analysis can be useful for both Destination Management Organizations (DMOs) in the strategy formulation process and potential investors, as it offers a combined approach to attractiveness, tourism demand, and sustainability in terms of the destination's carrying capacity relative to its competitors.

**Keywords:** Strategic Group Analysis, Tourism Carrying Capacity, DMOs, Destination Management, Performance Measurement

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## 1. Introduction

This research aims to address the analysis of strategic groups in the tourism sector, focusing on the constantly changing external environment, particularly at the level of tourism destinations, where there is a limited number of studies in the literature. The study includes an extensive literature review of the applications of this analysis in both tourism businesses and destinations. Additionally, in the research framework, two models are proposed for implementation in the tourism sector. The first model involves the analysis of destinations in two dimensions, considering the destination's sustainability in terms of carrying capacity and its attractiveness in terms of tourist arrivals. The second model involves the analysis of destinations in three dimensions, combining the aforementioned two with the completeness of businesses operating in the specific destination. Subsequently, these models are applied to the case of specific competing Greek destinations.

## 2. Theoretical Framework

### 2.1. Strategic Group Analysis in the Tourism Sector

The analysis of strategic groups is a key methodological tool for examining a business's external environment. Strategic groups can be defined as a set of companies within a specific industry that employ similar competitive strategies to gain a competitive advantage



(Rothaermel, 2023). Companies with different strategic characteristics cannot belong to the same strategic group.

For instance, a five-star luxury hotel in Paris and a guesthouse in the French suburbs may both provide accommodation and meals, making them theoretical competitors, but their products, distribution channels, and customer bases differ, so they cannot be classified in the same group (Evans, 2024). This distinction is crucial, as competition within strategic groups intensifies because companies produce similar goods and target the same consumers, increasing the risk of reduced profitability (Georgopoulos, 2013; Dess et al., 2023). According to Georgopoulos (2013), the homogeneity within these groups reduces the number of companies to analyze, thus simplifying industry analysis. The method for distinguishing these groups typically involves two main categories: the scope of activities, such as geographic coverage and product range, and resource commitment, such as marketing expenses and branding, although the final choice of variables depends on the analyst and varies by industry (Johnson et al., 2016).

Moreover, the selection process should consider the variety of strategic combinations within the industry. If a factor like product differentiation is uniform across all companies, it should not be selected (Dess et al., 2023). For example, Hill, Schilling, & Jones (2020) and Rothaermel (2023) applied strategic group analysis in the airline industry, using geographic coverage and seat capacity in the former case, and geographic coverage and cost structure in the latter. Similarly, Wheelen et al. (2023) applied it to the restaurant industry, using product variety and pricing as differentiating variables, while Dressler (2017) did the same for wine production companies, categorizing them based on the value derived from tourism activities. The importance of strategic groups in conducting industry analysis is undeniable, as grouping similar companies would otherwise be challenging, given that companies in an industry are neither identical nor entirely different (Duhaime, Hitt, & Lyles, 2021). Summarizing the benefits of this analysis, Dess et al. (2023) note that it:

- Helps a company identify groups with marginal competitive positions in the industry, which are likely to exit or attempt to join another group.
- Contributes to visualizing future strategic business moves. If all strategic groups move in the same direction, it signals high uncertainty and competitive intensity.
- Provides additional insights into industry trends for the entire group, which can alter uncertainty and entry barriers, aiding in forecasting.
- Offers indications of structural changes and strategic opportunities that the company should exploit (Henry, 2021).

Additionally, research suggests that some strategic groups may be more profitable due to mobility barriers, which make it difficult for a company to switch groups (Wheelen et al., 2023). Mobility barriers, as defined by Porter (1980) and Henry (2021), are "factors that prevent a company from moving from one strategic position to another." These barriers restrict a company's ability to replicate another's strategy, requiring significant resources and time (Georgopoulos, 2013).

Focusing on the tourism sector, Varelas (2016) emphasized that strategic groups are highly significant and identified key single-factor variables such as hotel size, management type (e.g., chain), and star rating. Claver-Cortés, Molina-Azorín, & Pereira-Moliner (2006) applied this analysis to Spain's hotel industry, using resource allocation and the focus of tourism activity as variables, while also noting more complex variables in the literature, such as employee capacity, use of advanced technologies, revenue management systems, brand strength, booking

systems, corporate social responsibility, and employee training levels. Similarly, Gannon, Doherty, & Roper (2012) highlighted that strategic group analysis can enhance human resource management practices in the hotel industry, while Claver-Cortés, Pereira-Moliner, & Molina-Azorín (2009) found that large, high-star-rated hotels part of chains outperform others. In a study focused on Taiwan's hotel industry, Tsang & Chen (2013) collected data from 56 hotels, categorizing them into five strategic groups based on efficiency and effectiveness. Generally, as Okumus et al. (2019) note, strategic groups in the hotel industry can emerge from market positioning and choices to target luxury, mid-range, or budget segments, while also helping businesses identify uncontested market segments (Enz, 2009).

Regarding strategic group analysis at the destination level, there is a limited number of studies in the literature. Guizzardi & Stacchini (2017) applied it within the framework of Importance-Performance Analysis (IPA), enabling simultaneous comparison of destinations' strengths and weaknesses and geographic visualization of competition in Italy. Strategic groups can also be analyzed using modern techniques such as leveraging Points of Interest (POI) customer data (Jin et al., 2024), statistical performance differentiation analyses (Peixoto, Alcantara, & Silva, 2022), and Data Envelopment Analysis (DEA). DEA, using linear programming, addresses the need for multi-dimensional evaluation when multiple inputs and outputs must be assessed, making single-indicator use impractical (Varelas & Tsoupros, 2024). Despite numerous applications of this analysis in the tourism sector at both macro-economic (Hadad et al., 2012; Kurt, 2017) and micro-economic levels (Nurmatov, Lopez, & Millan, 2021; Sigala, 2004; Neves & Lourenco, 2009), few studies highlight its role in strategic group analysis in tourism, offering clear, quantified benchmarking guidelines for underperforming businesses (Evans, 2024).

## 2.2. Tourism Carrying Capacity

The carrying capacity of tourism development can be defined as the maximum number of individuals who can visit a destination without damaging its economic, social, and cultural environment and without compromising traveler satisfaction (Varelas & Belias, 2019). Research on carrying capacity as an approach includes efforts to measure it using economic, social, and environmental indicators (Stefanidaki & Lekakou, 2014; O'Reilly, 1986), mathematical functions (Josef & Jaroslav, 2014), and environmental pressure curves (Kostopoulou & Kyritsis, 2006). The earliest related studies, dating back to the 1960s, focused on incorporating ecological and environmental parameters into tourism. It has been recognized that carrying capacity can play a pivotal role in a destination's strategic planning if used as a systematic policy tool (Salerno et al., 2013; Coccossis & Mexa, 2017). However, there are still gaps in the conceptual clarification of this concept. Given the lack of a standardized methodology for measuring and further explaining tourism carrying capacity (McCool & Lime, 2009), research in this area must be conducted carefully with targeted approaches. When selecting an indicator-based approach, carrying capacity measurements should be categorized into the following four groups (Gazis, 2019):

- Feasibility: The indicator should be easy to use, with sufficient data available for its construction and leading to practical conclusions.
- Significance: The indicator should be relevant to the study area and its results easily understandable.
- Responsiveness: The indicator should align with implemented management and local policy measures, with its variations influenced by visitors' tourism activities rather than environmental factors.

- Reliability: The indicator should be measurable, designed to facilitate repeated measurements, and yield consistent results when applied under the same conditions by different individuals.

Additionally, the calculation process relies on empirical spatial and temporal criteria, previously applied in similar tourism destination cases, and includes a range of standard indicators such as (Spilanis, Kizos, & Karampela, 2015; Vandarakis et al., 2023; Leka et al., 2022; He et al., 2023; Zekan et al., 2022; Xiao et al., 2022):

- Tourism Function Index = (Beds/Population) × 100
- Tourism Density Index = (Beds × 100)/ (Area in km<sup>2</sup> × Population)
- Tourism Occupancy Index = Overnight Stays/Beds
- Hotel Density Index = Beds/ (Area in km<sup>2</sup>) or Beds/(Residents per Bed)
- Tourism Pressure Index = Arrivals/ (Area in km<sup>2</sup>)
- Tourism Intensity Indices = (Arrivals/Population) × 100 and Beds/Population
- Tolerable Tourism Population Index = (Peak Daily Tourists)/Population
- Tourists per Coastline Index = Arrivals/Coastline
- Beds per Kilometer of Beach Index = Beds/ (Coastline in km)
- Beachgoers per Meter of Beach Index = (Population + Beds)/(Coastline in meters)
- Tourism Concentration Index = Overnight Stays/Hectare or Beds/Hectare
- Attractiveness Index = (Foreign Tourists)/(Domestic Tourists)
- Tourism Penetration Index = (Overnight Stays of Foreign or Domestic Tourists)/ (Local Population) × 100/360
- Accommodation Dynamism Index = (Existing Tourism Capacity)/(Area in km<sup>2</sup>)
- Overnight Stays Index = Overnight Stays/Population
- Economically Active Population per Bed Index = (Economically Active Population)/Beds
- Long-term to Short-term Rental Ratio Index = (Number of Long-term Rental Apartments)/ (Number of Short-term Rental Accommodations) × 100

Based on the results of these indicators, three types of conclusions can be drawn: physical-ecological (indicators 1, 2, 5, 6, 7, 8, 9, 10, 11), social-demographic (indicators 12, 13, 15), and political-financial (indicators 3, 16).

### 3. Methodology

The methodology employed in this research is a case study approach, based on primary data sources such as the Hellenic Statistical Authority, the Bank of Greece, and the Institute of the

Association of Greek Tourism Enterprises from 2023. The analysis of strategic groups in two and three dimensions was based on existing studies (Multan & Wójcik Augustyniak, 2016; Wójcik-Augustyniak & Multan, 2020) focused on destinations (Guizzardi & Stacchini, 2017). Furthermore, the selection of variables was based on the dimensions that most significantly characterize a destination's competitiveness, while the choice of research scope was driven by the lack of studies at the destination level, particularly in the Greek context.

#### 4. Case study of Greek Destinations

The data based on which the two-dimensional strategic group analysis was conducted for ten Greek destinations are as follows:

Table 1: Destinations' data

Destinations	Carrying Capacity	Overnight stays	Occupancy rate
Athens	685	7,458,177	63%
Loutraki	1,982.27	610,215	47.8%
Kalamata	219.4	404,909	48.5%
Nafplio	1,973.4	659,905	47.1%
Patras	149.2	488,510	46.5%
Eastern Mani	830.2	236,774	31%
Ancient Olympia	1,184.9	196,669	39.9%
Ermionida	657.1	371,862	41.7%
Pylos	819.5	559,089	44.8%
Pyrgos	240.4	256,772	50.5%

Based on the above, the two-dimensional strategic group analysis was as follows:

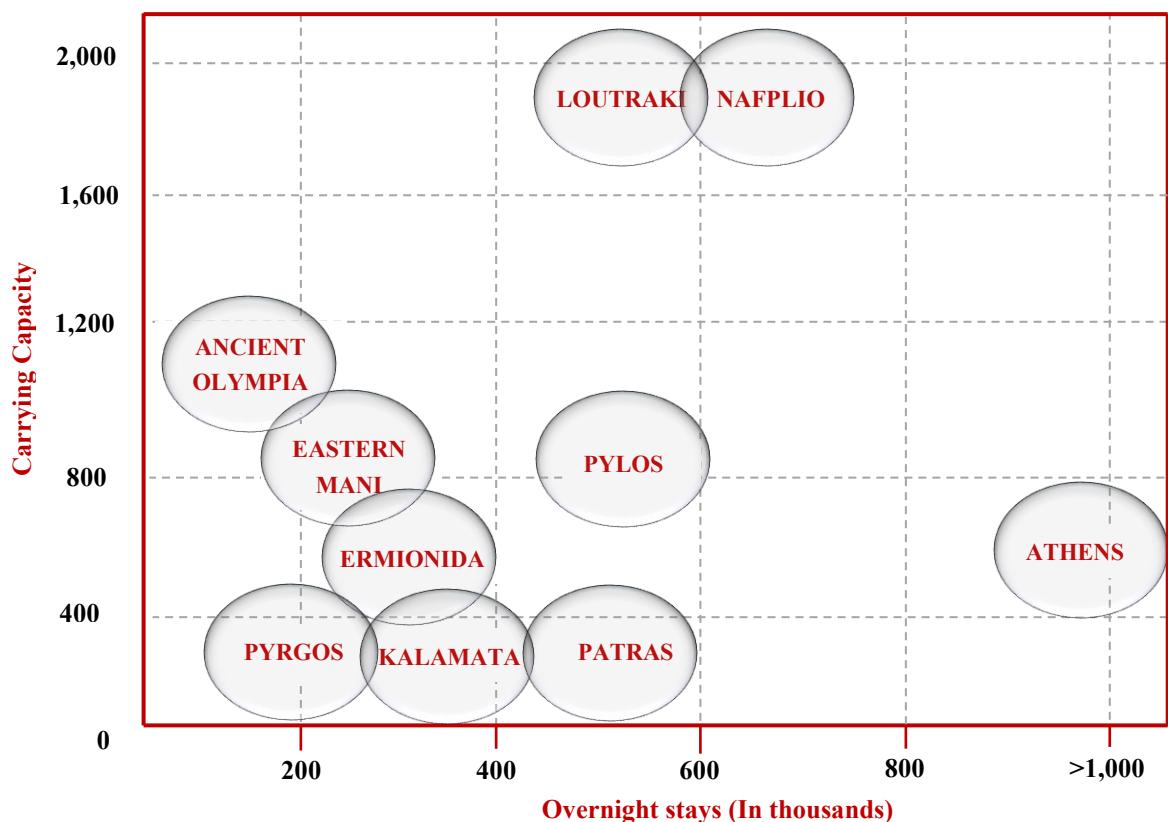


Figure 1: Strategic group analysis in two dimensions

As shown, the destinations were categorized based on one of the most characteristic carrying capacity indicators mentioned earlier, the tourism intensity index, calculated as:

$$\frac{\text{Arrivals}}{\text{Population}} \times 100$$

Additionally, the number of tourist overnight stays was considered to simultaneously assess the destinations based on their sustainability and attractiveness. In this way, three groups of destinations were created. The first group includes the destinations Pyrgos, Kalamata, Patra, Pylos, Ermionida, Eastern Mani, and Ancient Olympia, which have overnight stays below 600,000 and a tourism intensity index below 1,200. The second group includes the destinations Loutraki and Nafplio, which achieve a carrying capacity performance close to 2,000 and tourist overnight stays around 600,000. Finally, the third group includes the destination of Athens, with a carrying capacity performance below 800 and tourist overnight stays significantly above 1,000,000. As is evident, a low tourism intensity index indicates high destination sustainability, while a high number of overnight stays indicates high destination attractiveness.

Thus, depending on the category each destination falls into, appropriate administrative actions should be initiated. Subsequently, the evaluation of the destinations in three dimensions is presented, also taking into account the occupancy rate of local businesses:

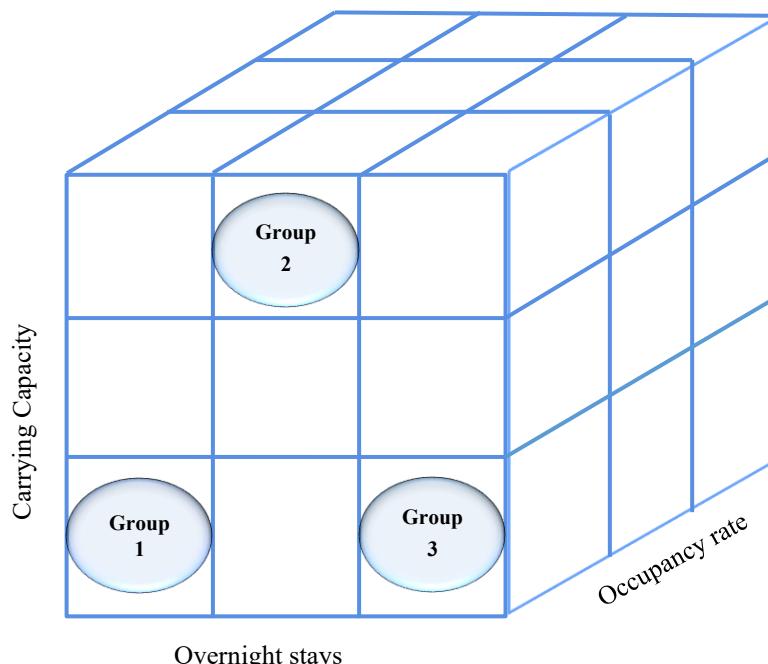


Figure 2: Strategic group analysis in three dimensions

As observed, the inclusion of the occupancy rate in the analysis reinforced the prior categorization of destinations into the three groups mentioned. The three-dimensional analysis helped incorporate both the occupancy rate and tourist overnight stays into the pillar of attractiveness, while sustainability is explained by carrying capacity.

## 5. Managerial and Theoretical Implications

The application of strategic group analysis to Greek tourism destinations can provide valuable insights for both Destination Management Organizations (DMOs) and potential investors. Specifically, for the first group, characterized by low carrying capacity performance, no actions are needed to enhance sustainability. However, the low number of overnight stays combined with moderate occupancy indicates that strategic actions should be initiated to increase the attractiveness of these destinations for both domestic and inbound tourists, as well as potential investors. For the second group, consisting of Loutraki and Nafplio, attractiveness can be considered satisfactory, with high levels of overnight stays and occupancy. Nevertheless, the high performance in the tourism intensity index suggests that these destinations are nearing their limits in terms of tourism carrying capacity, necessitating actions to increase capacity and maintain a sustainable development framework. Regarding the third group, high attractiveness is observed, based on occupancy and overnight stays, along with low carrying capacity performance. However, it should be emphasized that Athens, as the Greek capital, operates on a significantly larger scale in terms of capacity compared to the other destinations.

## 6. Conclusions

This research initially highlighted the importance of strategic group analysis in the strategic management process for tourism organizations, based on the lack of related studies in the literature. Subsequently, through a case study of selected Greek tourism destinations, a two-dimensional analysis model was proposed, categorizing destinations based on their attractiveness, as reflected by tourist overnight stays, and their sustainability, as indicated by carrying capacity performance. Building on the above and relevant analyses in the literature, the model was extended to three dimensions, incorporating both overnight stays and occupancy into the attractiveness of destinations. Based on this hybrid approach, the destinations were categorized into three groups, with the analysis providing significant guidelines for the strategies of DMOs and potential investors. In future research, the analysis could be conducted on a broader geographical scope, using different variables.

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## References

Claver-Cortés, E., Molina-Azorín, J. F., & Pereira-Moliner, J. (2006). Strategic groups in the hospitality industry: Intergroup and intragroup performance differences in Alicante, Spain. *Tourism Management*, 27(6), 1101–1116. <https://doi.org/10.1016/j.tourman.2005.11.006>

Claver-Cortés, E., Pereira-Moliner, J., & Molina-Azorín, J. F. (2009). Strategic groups and performance in the Spanish hotel sector. *The Service Industries Journal*, 29(7), 943–961. <https://doi.org/10.1080/02642060902749567>

Coccossis, H., & Mexa, A. (2017). *The challenge of tourism carrying capacity assessment: Theory and practice*. Routledge. <https://doi.org/10.4324/9781315240817>

Dess, G. G., McNamara, G., Eisner, A. B., & Sauerwald, S. (2023). *Strategic management: Text and cases* (11th ed.). McGraw Hill.

Dressler, M. (2017). Strategic profiling and the value of wine & tourism initiatives: Exploring strategic grouping of German wineries. *International Journal of Wine Business Research*, 29(4), 484–502. <https://doi.org/10.1108/IJWBR-04-2017-0026>

Duhaime, I. M., Hitt, M. A., & Lyles, M. A. (Eds.). (2021). *Strategic management: State of the field and its future*. Oxford University Press.

Enz, C. A. (2009). *Hospitality strategic management* (2nd ed.). John Wiley & Sons.

Evans, N. (2024). *Strategic management for tourism, hospitality and events* (4th ed.). Routledge.

Gannon, J. M., Doherty, L., & Roper, A. (2012). The role of strategic groups in understanding strategic human resource management. *Personnel Review*, 41(4), 513–546. <https://doi.org/10.1108/00483481211229401>

Gazis, Z. (2019). Η Φέρουσα ικανότητα τουριστικής ανάπτυξης: Εφαρμογή στις 13 ελληνικές περιφέρειες [Tourism carrying capacity: Its application on the 13 Greek regions] [Master's thesis, National Technical University of Athens]. National Technical University of Athens Institutional Repository. [https://dspace.lib.ntua.gr/xmlui/bitstream/handle/123456789/50485/TCC\\_diplomatiki.pdf](https://dspace.lib.ntua.gr/xmlui/bitstream/handle/123456789/50485/TCC_diplomatiki.pdf)

Georgopoulos, N. B. (2013). *Στρατηγικό μάνατζμεντ* [Strategic management] (3rd ed.). Kritiki.

Guizzardi, A., & Stacchini, A. (2017). Destinations strategic groups via multivariate competition-based IPA. *Tourism Management*, 58, 40–50. <https://doi.org/10.1016/j.tourman.2016.10.004>

Hadad, S., Hadad, Y., Malul, M., & Rosenboim, M. (2012). The economic efficiency of the tourism industry: A global comparison. *Tourism Economics*, 18(5), 931–940. <https://doi.org/10.5367/te.2012.0165>

He, H., Shen, L., Wong, S. W., Cheng, G., & Shu, T. (2023). A “load-carrier” perspective approach for assessing tourism resource carrying capacity. *Tourism Management*, 94, Article 104651. <https://doi.org/10.1016/j.tourman.2022.104651>

Henry, A. E. (2021). *Understanding strategic management* (4th ed.). Oxford University Press.

Hill, C. W. L., Schilling, M. A., & Jones, G. R. (2020). *Strategic management: An integrated approach: Theory and cases* (13th ed.). Cengage Learning.

Hunger, J. D., & Wheelen, T. L. (2011). *Essentials of strategic management* (5th ed.). Pearson.

Jin, J., Zhang, H., Bai, W., Lin, X., & Zhang, J. (2024). Inferring point-of-interest relationship for strategic group discovery guided by user demands. *IEEE Transactions on Consumer Electronics*, 70(1), 4132–4141. <https://doi.org/10.1109/TCE.2024.3365066>

Johnson, G., Whittington, R., Scholes, K., Angwin, D., & Regnér, P. (2016). Βασικές αρχές στρατηγικής των επιχειρήσεων [Fundamentals of business strategy] (2nd ed.). Kritiki.

Josef, Z., & Jaroslav, K. (2014). The concept of carrying capacity in tourism. *Amfiteatru Economic*, 16(36), 641–654.

Kostopoulou, S., & Kyritsis, I. (2006). A tourism carrying capacity indicator for protected areas. *Anatolia: An International Journal of Tourism and Hospitality Research*, 17(1), 5–24. <https://doi.org/10.1080/13032917.2006.9687024>

Kurt, H. (2017). Measuring tourism efficiency of European countries by using data envelopment analysis. *European Scientific Journal*, 13(10), 31–49. <https://doi.org/10.19044/esj.2017.v13n10p31>

Leka, A., Lagarias, A., Panagiotopoulou, M., & Stratigea, A. (2022). Development of a Tourism Carrying Capacity Index (TCCI) for sustainable management of coastal areas in

Mediterranean islands – Case study Naxos, Greece. *Ocean & Coastal Management*, 216, Article 105978. <https://doi.org/10.1016/j.ocecoaman.2021.105978>

McCool, S. F., & Lime, D. W. (2001). Tourism carrying capacity: Tempting fantasy or useful reality? *Journal of Sustainable Tourism*, 9(5), 372–388. <https://doi.org/10.1080/09669580108667409>

Multan, E., & Wójcik-Augustyniak, M. (2016). Research methodology of entrepreneurship and innovativeness of higher education institutions. *Edukacja Ekonomistów i Menedżerów*, 42(4), 83–98. <https://doi.org/10.5604/01.3001.0009.5493>

Neves, J., & Lourenço, S. (2009). Using data envelopment analysis to select strategies that improve the performance of hotel companies. *International Journal of Contemporary Hospitality Management*, 21(6), 698–712. <https://doi.org/10.1108/09596110910975973>

Nurmatov, R., Lopez, X., & Millan, P. (2021). Tourism, hospitality, and DEA: Where do we come from and where do we go? *International Journal of Hospitality Management*, 96, Article 102987. <https://doi.org/10.1016/j.ijhm.2021.102883>

Okumus, F., Altinay, L., Chathoth, P., & Koseoglu, M. A. (2019). *Strategic management for hospitality and tourism* (2nd ed.). Routledge. <https://doi.org/10.4324/9781351188517>

O'Reilly, A. M. (1986). Tourism carrying capacity: Concept and issues. *Tourism Management*, 7(4), 254–258. [https://doi.org/10.1016/0261-5177\(86\)90035-X](https://doi.org/10.1016/0261-5177(86)90035-X)

Peixoto, M., Alcantara, M. S., & Silva, J. F. (2022). Strategic groups and performance in higher education in Brazil. *Latin American Business Review*, 23(4), 309–341. <https://doi.org/10.1080/10978526.2021.1928516>

Rothaermel, F. T. (2023). *Strategic management* (6th ed.). McGraw Hill.

Salerno, F., Viviano, G., Manfredi, E. C., Caroli, P., Thakuri, S., & Tartari, G. (2013). Multiple carrying capacities from a management-oriented perspective to operationalize sustainable tourism in protected areas. *Journal of Environmental Management*, 128, 116–125. <https://doi.org/10.1016/j.jenvman.2013.04.043>

Sigala, M. (2004). Using data envelopment analysis for measuring and benchmarking productivity in the hotel sector. *Journal of Travel & Tourism Marketing*, 16(2–3), 39–60. [https://doi.org/10.1300/J073v16n02\\_04](https://doi.org/10.1300/J073v16n02_04)

Spilanis, I., Kizos, T., & Karampela, S. (2015). Νησιωτικότητα και βιωσιμότητα: Η περίπτωση των νησιών του Αιγαίου [Insularity and sustainability: The case of the Aegean Islands]. University of the Aegean.

Stefanidaki, E., & Lekakou, M. (2014). Cruise carrying capacity: A conceptual approach. *Research in Transportation Business & Management*, 13, 43–52. <https://doi.org/10.1016/j.rtbm.2014.11.005>

Tsang, S.-S., & Chen, Y.-F. (2013). Facilitating benchmarking with strategic grouping and data envelopment analysis: The case of international tourist hotels in Taiwan. *Asia Pacific Journal of Tourism Research*, 18(5), 518–533. <https://doi.org/10.1080/10941665.2012.695283>

Vandarakis, D., Malliouri, D., Petrakis, S., Kapsimalis, V., Moraitis, V., Hatiris, G.-A., & Panagiotopoulos, I. (2023). Carrying Capacity and Assessment of the Tourism Sector in the South Aegean Region, Greece. *Water*, 15(14), 2616. <https://doi.org/10.3390/w15142616>

Varelas, S. (2016). Στρατηγικές ανάπτυξης τουριστικών επιχειρήσεων: Η περίπτωση των ξενοδοχειακών επιχειρήσεων [Tourism enterprises development strategies: The case of

*hotel enterprises]* [Doctoral dissertation, National Documentation Centre of Greece]. <http://dx.doi.org/10.12681/eadd/39663>

Varelas, S., Belias, D. (2019). Carrying Capacity Assessment for Tourism Development: A Strategic Approach. In: Kavoura, A., Kefallonitis, E., Giovanis, A. (eds) Strategic Innovative Marketing and Tourism. Springer Proceedings in Business and Economics. Springer, Cham. [https://doi.org/10.1007/978-3-030-12453-3\\_100](https://doi.org/10.1007/978-3-030-12453-3_100)

Varelas, S., & Tsoupros, G. (2024). Key performance indicators and data envelopment analysis in Greek tourism: A strategic planning tool for destinations and DMMOs. *Sustainability*, 16(8), Article 3453. <https://doi.org/10.3390/su16083453>

Wójcik-Augustyniak, M.; Multan, E. 2020. Evaluation of escape room competitive position in Polish macro regions with 2d and 1d strategic group maps, *Entrepreneurship and Sustainability Issues* 7(3): 1632-1652. [https://doi.org/10.9770/jesi.2020.7.3\(14\)](https://doi.org/10.9770/jesi.2020.7.3(14))

Xiao, Y., Tang, X., Wang, J., Huang, H., & Liu, L. (2022). Assessment of coordinated development between tourism development and resource environment carrying capacity: A case study of Yangtze River economic belt in China. *Ecological Indicators*, 141, Article 109125. <https://doi.org/10.1016/j.ecolind.2022.109125>

Zekan, B., Weismayer, C., Gunter, U., Schuh, B., & Sedlacek, S. (2022). Regional sustainability and tourism carrying capacities. *Journal of Cleaner Production*, 339, Article 130624. <https://doi.org/10.1016/j.jclepro.2022.130624>