

Special issue on ‘Cruise and shipping’

While shipping has long been regarded as the conveyer for the global trade, cruise shipping which provides direct services to people is also an important sector in maritime studies. As they all involve the use of ships, they do share some common interests, such as safety and environmental concerns, demand analysis, economic and operation efficiency, pricing, revenue management, interaction with ports and terminals, the service clusters to ships and that to cargo/people.

However, cargo and cruise shipping are different. In cruise, people value the experience and satisfaction on board, but not for cargo. The quality of services on the ship, as well as the attractiveness and experience in the calling port, will all affect their level of satisfaction. Therefore, different strategies should be implemented for cruise shipping business to attract customers and make them happy, which in turn build up the business’ market position.

In consideration of the importance of cruise shipping in the economic development of many countries, and the lack of existing research in cruise shipping, this special issue gathers together the interests of the academia and the industry practitioners all over the world, and contributes to the emerging area of

cruise shipping, and its relationship in the current shipping study. A total of eight papers are collected, and most of them are from the International Forum on Shipping, Ports and Airports (IFSPA) 2019 organized by the Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University. The topics include customer satisfaction and cruise demand, sustainability, pricing and itinerary design, revenue management, and spatial-temporal distribution of cruise networks. The research methods include survey method, empirical and numerical modeling, and data assessment. The research results can contribute to the design of cruise itinerary, and operation and management of cruise businesses.

Service failures in cruise occur frequently because of uncertain factors such as bad weather. Chiou et al. examined the moderating role of service recovery in the relationships between service quality, customer satisfaction, and customer loyalty from a cruise passenger's perspective. They found that service quality and customer satisfaction positively influenced cruise passenger's loyalty. Specifically, service recovery reinforced the positive influence of service quality on customer loyalty. The measures of service recovery include the cruise staff actively comforts the customers suffered in a service failure, rapid responses to resolve the problem, and increase the satisfaction after that. This paper pointed

out the importance of service recovery in the cruise services. More importantly, cruise operators should strive to eliminate the gap between customer expectations and the service experiences.

While social media provides a useful tool in relationship marketing, Tsai and Bui's study investigated the influence of word of mouth through social media on the intention to purchase cruise travel products. Drawing from the prospect theory and mental accounting theory, a value-based adoption model was applied in the research. A conceptual model was developed to examine the relationships among customers' perceived information reliability, enjoyment, word of mouth praise and activities, as well as purchase intention. The results indicate that information reliability and enjoyment of social media positively influenced word of mouth praise and activities, which in turn positively influenced customers' purchase intention and played mediating roles in the relationships between information reliability of social media and customers' purchase intention. This research contributes to the theories that explain the impact of social media on a customer's decision on purchasing cruise travel products.

Di Vaio et al. investigated the sustainable development goals (SDGs) and

environmental sustainability disclosure of cruise and container shipping companies based on the 17 SDGs of the United Nations. This study used the samples of Costa Crociere S.p.A, Mediterranean Crociere S.p.A, Mediterranean Shipping company, and A. P. Moller-Maersk to explain the major sustainability pillars and priorities. It addressed the crucial sustainability indicators in cruise companies, including good health and well-being, quality education, gender equality, clean water and sanitation, clean energy, decent work and economic growth, industry innovation, sustainable cities and communities, responsible consumption, climate action, life below and on land, justice and partnerships for goals. It is essential for shipping companies to develop appropriate tools that assess the environmental, economic, and social performance. However, this study was based on a single case study only. Future research should consider more samples and be more generalized to the whole shipping industry. Meanwhile, opinions from different stakeholders including passengers, shippers, agencies, and forwarders should be considered in the sustainability policy of cruise and container shipping companies.

Wu et al. assessed the sustainability of cruise-industry development in Xiamen, China, using a stepwise-cyclic approach, and the sustainability indicators are

assessed by experts in five categories: economic, social, resource, environmental and ecological. The assessment covered a broad scope of activities in and for the cruise shipping industry, including cruise lines, terminals, hinterland, hinterland support, logistics and management, and government support and policies. The assessment result indicates that Xiamen had the appropriate condition for sustainable cruise-industry development, but the hinterland condition was not sufficient. Therefore, for sustainable development of cruise industry in Xiamen, it is important to improve itinerary design, hinterland economy, conserve resources, and minimize ecological impacts.

For a country with a long Coast, such as China, domestic short-term cruise business has a high demand and is a niche area for local Chinese cruise companies. However, the relationship among cruise demand, itinerary design, and price is not well studied, which creates difficulties for the operation decisions of the small local cruise lines. To address this problem, Guo et al. developed a two-stage optimization models on itinerary design and cabin price. The first stage is to find the optimal itinerary to maximize the demand and minimize the total cost, and the second one is to setup the cabin price to maximize profit of the coastal cruise business considering the competition from land tourist activities. This model is

applied to analyze the optimal itinerary and cabin price for a Chinese cruise line, Taishan, in Northern China. Based on the location of the ports and the social-economic conditions in the three provinces of Northeast China, they found that the cruise duration of 2–3 days has the highest market demand and is most profitable.

Espinet-Rius et al. conducted an empirical analysis on the determinants of cruise prices and pricing tactics, using both brochure and booking prices from American Online Travel Agencies, for the cruise departure year in 2019. The sample included 80,555 prices, 141 ships of 8 major cruise companies, with corresponding data on company, itinerary (ports of departure and disembarkation, number of nights), type of cabin, geographical area, and ship attributes such as capacity, tonnage, year of built or refurbishing, and ship rating. With such a large sample, all included variables (number of nights, type of cabin, month, company, zone of departure, and ship rating) were highly significant. On average, 76% of the price variations could be explained by these six variables. For a specific company, the explanatory power could be as high as 87.9% (Celebrity). The pricing tactics were analyzed by clustering the companies or ships by standardized price per night and standard rating.

Like the revenue management in container shipping, cruise lines also have the pressure to fill in their cabins before departure, as the unsold cabins are a waste of capacity. However, cruise lines have more time to adjust their price, as most of the cruise tickets are open to sell 1 year before the departure. Therefore, it makes sense for the cruise lines to adopt dynamic pricing strategies, to adjust the price according to the available cabins to sell and time to departure. Chen et al. designed a dynamic pricing mechanism to maximize cruise lines' voyage revenue facing stochastic demand and incorporating different discount or refund policies. Compared with the real data from a cruise voyage of a North American cruise company, the dynamic pricing scheme generated by this model can generate higher revenue and demand. It can increase revenue by 26.26% when there are discount and refund policies.

Li et al. summarized the spatial attributes of cruise line with respect to season, temperature, climate zone, using 1 year's track data of Queen Elizabeth (QE) from April 2019. QE cruised globally in that year, from Africa and Australia in the Southern Hemisphere to Asia, Europe and America in the Northern Hemisphere. It sails along the trunk route from west to east to different regions, and visits many

ports in a region in the branch networks. This global cruising network allowing the cruise line to operate in three seasons: spring, summer and autumn, as the harsh weather in the winter cannot provide a present cruising experience to its customers. The result shows the major difference between the general shipping industry for carrying cargoes and that cruise industry that provide entertainment for people. While cargo shipping only needs to satisfy the import and export demand, cruise shipping should care more on the satisfactions and experiences of the people onboard the vessel.