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Original Article

The Asia cruise tourism industry: Current trend and future outlook[☆]

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ABSTRACT

More frequent cruisers prefer attractive cruising destinations, excellent geographical locations, diversified oriental cultures, local wildlife, rich tourism resource and exotic experiences in Asia for western travellers. Cruising in the Asian regions has considered as a potential growth in the transport and tourism industry. In this paper, we aim to provide suggestions to industrial practitioners on the development of the cruise port in Asia and identify the key elements of a regional leading cruise hub as desired by different users. Nevertheless, the majority of cruising-related studies were focused on tourism management in the North American and European regions. Relevant cruising studies on maritime transport management in the Asian region are under-researched. In doing so, we newly propose the CRUISE PORT framework by illustrating four representative countries in Asia (South Korea, Japan, Vietnam and Singapore) to look for common characteristics and unique features of cruise ship market in the Asian region. In order to give the valuable information and provide insight into the framework, we carried out semi-structured, in-depth interviews with different practitioners involved in the cruise industry. Through the framework, it fosters the industrial practitioners to implement cruise port strategies, cruise lines strategies and local government planning for the cruise destinations.

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1. Introduction

Cruise is one of the passenger transport sectors in the world. A cruise is defined as ‘to make a trip by sea in a line for pleasure, usually calling at a number of ports’ (Collins English Dictionary, 2018). Cruise lines are passenger ship served for pleasure and leisure voyages. Cruise is described as ‘any fare paying voyage for leisure on-board a vessel whose primary purpose is the accommodation of guests and not freight normally to visit a variety of destinations rather than to operate on a set route’ (Wild & Dearing, 2000, p. 319–320). Rodrigue and Notteboom (2013, pp. 33) pointed out that a current trend in the cruise industry is a “ship represents in itself the destination, essentially acting as a floating resort (or a theme park) with all the related facilities (bars, restaurants, theatres, casinos, swimming pools, etc.)” Cruises are proposed as ‘the transportation of pleasure-seeking travellers on ocean voyages offering one or more glamorous ports of calls’ (Kendall,

1986, p. 360). In the industrialized nations, desire for recreational and leisure activities has grown, because vacations have changed customary and work weeks have been shortened (Marti, 1986). Wanhill (1982) indicated that ‘the growth of the international holiday market has witnessed the increasing popularity of cruising as well as a changing role for the cruise ship industry’. Accordingly, Soriani, Bertazzon, Cesare, and Rech (2009) addressed that the cruise industry is a dynamic field, in continuous expansion, and increasingly a key element of the global tourism industry. Hence, demand growth rates are regularly positive; supply is gradually growing and experiencing a dynamic qualitative adjustment; the range of destinations and routes is ever enlarging. Lau, Tam, Ng, and Pallis (2014) concluded that cruises nowadays are given in a more relaxed condition and are basically given in ‘floating hotels’ or large ships, that select specific ports to generate their customers with excellent in-port involvement.

In previous studies, majority of the cruising-related studies were concentrated on tourism management. Clearly, maritime transport management is rare. In terms of regional studies, majority of cruise shipping research is concentrated on the North American market and the Caribbean region, the Asian cruise market is seriously overlooked. Indeed, many research papers have been published starting from 2000. The topics mainly highlighted were cruising economies (e.g., competition and pricing) and daily cruising activities like

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cruisers perceptions of the cruise industry, cruise vessel operational efficiency, ship safety management, behavioural area of inter-firm interrelations, and cruising regulations (Sun, Xu, Lau, & Gauri, 2019b). Nevertheless, the strategic management or strategies of cruise tourism have been neglected. Thus, a significant research gap is yet to be filled. To conduct a comprehensive research study, we illustrate via a multiple-case design to draw conclusions from a group of cases. Di Vaio, Varriale, and Alvino (2018, pp. 230–231) identified that “*the case study approach is a useful method for examining phenomena still unexplored. Case studies allow the investigation of phenomena separately from their context examining specific variables*”. In our study, multiple-case designs are considerable when the identical circumstances are thought to have existed in several scenarios and complexity. Each single case study still requires to be rigorously carried out. However, the collection of various case studies on the identical topic is intended to be the basis for confirming or replicating the results. In terms of multiple-case design, the adoption of three to four cases has been recognized sufficiently. As a result, it can create a general synthesis or explanation across the cases (Yin, 1981, 2013). Based on that, we employ four representative cases (i.e., South Korea, Japan, Vietnam and Singapore) to look for common characteristics and unique features of cruise ship market in the Asia Pacific region.

After that, we further extended the CRUISE framework proposed by Sun et al. (2019b) to construct and modify a new framework named as the CRUISE PORT in our study. A framework is a representation of reality to explain the significant roles of cruise port in the cruise industry. The CRUISE PORT framework fosters to grasp an achievable prospect of the external environment and search for characteristics of cruise tourism in South Korea, Japan, Vietnam and Singapore. Through the framework, we aim to investigate how the countries could be effectively transformed into a regional leading cruise hub? To what extent and how cruise ports design and formulate strategies for dealing with their weaknesses under stiff competition within the Asian region? Managerial and academic implications of the key research findings for cruise terminals are explored. In order to supplement the valuable information and show insights into the CRUISE PORT framework, we have conducted semi-structured, in-depth interviews with different practitioners (i.e., logistics association, tourism association, travel agency, and cruise terminal) involved in the cruise industry. Because of confidentiality agreements, all details of the interviews will be kept highly confidential. From the perspective of practitioners, the CRUISE PORT framework fosters to implement cruise port strategies, cruise lines strategies and local government planning for the cruise destinations in the forthcoming years.

Traditionally, cruising is considered to be tailor-made for retirees and the rich. Since the 21st century, the cruise shipping industry diverts their development to all budgets, markets and geographical regions (Bowen, Fidgeon, & Page, 2014). This is not surprising that the worldwide cruise industry has given an obvious trend towards expansion over the past decade (Qu & Wong, 1999). Basically, cruise market is split it into three core geographical regions including the European, North-American and the Asian region. The cruise industry has obtained a 2600 percent growth starting from 1970 (Dowling, 2006). Rodrigue and Notteboom (2012) summarized that the global cruise industry served 7.2 million passengers in 2000 and up to about 19.1 million passengers in 2011. More than 68% of the total passengers have been generated in the past 10 years and nearly 40% in the past 5 years. Additionally, more than 154 million passengers have taken a 2+ days cruise. 2018 *Cruise Industry Outlook* reported that the cruise passengers mainly originate from 10 countries in the past five years. It accumulated a total of 22 million cruise passengers.

Admittedly, the Asian region has experienced a tremendous growth in the cruise industry since 2000. Because the cruise tourism

generates economic development and social mobility, a number of Asian countries are currently either setting up new cruise ports or upgrading existing cruise ports with world class facilities so as to increase the ports of call and strengthen the strategic position as a home port in the Asia Pacific region (Jeon, Duru, & Yeo, 2019; Millsbaugh, 2001). In doing so, the cruise ports not only encounter with the stiff competition with neighbouring countries, but also deal with the dynamic business environment.

This paper is divided into six sections. After the introduction in Section 1, literature review is given in Section 2. Then, CRUISE PORT framework is exhibited in Section 3. In Section 4, we explore four countries (i.e., South Korea, Japan, Vietnam and Singapore) cruise markets in the Asia region. Finally, we provide discussion and conclusion in Sections 5 and 6, respectively.

2. Literature review

2.1. Evolution of Cruise Industry

Cruise industry can be traced back to the 1920s, growing academic literature is now highlighting the rise of cruising as a widespread leisure activity (Cartwright & Baird, 1999; Douglas & Douglas, 2001; Gibson, 2006; Hannafin & Sarna, 2010; Mancini, 2011; Lau et al., 2014). From the past literature review, the role of cruise has fundamentally changed from a means of transportation to a ‘*holiday experience*’. From the 1960s, line voyage (i.e., sailings between two points) has been substituted by prearranged itineraries along various ports of calls. Time at sea was to be occupied with a different combination of gourmet dining and entertainment, while port visitation permitted passengers to explore trips, shore excursions and visits. Some researchers have emphasized that the cruise shipping has changed from luxury to affordable all-inclusive products that can be customized to local tastes (Bowen et al., 2014; Singh, 1999). The average price per day for a cruise product has decreased remarkably over the past three decades (Vogel & Oschmann, 2012).

In the last three decades, technological and scientific advancement have brought about immense improvements of cruise ships from the power supply, design, catering facilities and accommodation. Meanwhile, the modern cruise tourism faces a severe competition from the land-based holidays (Jeon et al., 2019; Lois, Wang, & Ruxton, 2004). Hence, converting in the cruise ship design has been demonstrated from the ‘*classic ships*’ of the 1960s and 1970s to the modern ships of the 1980s and 1990s and then a way forward to the ‘*third generation ships*’ of the new millennium (Bowen et al., 2014). A systematic comparison between cruise ship designs is summarized in Table 1.

2.2. Cruise tourism

Tourism is a kind of travel for business or pleasure. Also, it is the theory and practice of touring, the business of accommodating, entertaining and attracting tourists (Oxford English Dictionary, 2005). The World Tourism Organization (2018) clearly defines tourism as “*beyond the common perception of tourism as being limited to holiday activity only, as people traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes*”.

Cruise tourism was identified as the most desired way of travel for the world’s social elite in the 1920s. During the post Second World War, however, the shrinking cruise market generated decreasing trade due to passenger aircraft (Johnson, 2002). In other words, the passengers have been clearly shifted from cruise to aircraft. With the reference to the Organization for Economic Cooperation Development (OECD), a decline in sea travel (i.e.,

Table 1
Key comparisons in cruise ship design.

Third generation ships	Modern cruise ships	Classic cruise ships
Produced from light weight interior materials, combustible construction materials, environmental friendly materials and natural fibre	Made of metal	Built from natural materials and wood
Ship measuring more than 100,000 tonnes are common place	Large public areas	Small public areas
Increased facilities for children and generate a family experience	Ports are more accessible because of hulls have smaller drafts	Some ports inaccessible and need tendering due to hulls have deep drafts
Innovative design, for instance, splitting the ship and widening the hull	Bigger windows	Small porthole sized windows
Increased dining options	Fewer obstructed stateroom views	Numerous staterooms have obstructed views
Mega ships serving for over 2000 passengers	Increased number of staterooms with a balcony	Staterooms with balconies are scarce
Freshwater swimming pools	Bigger swimming pools	Smaller swimming pools
Pioneering characteristics, shopping malls, open air cinemas, spa, zip lines, waterslides, rock climbing walls, ice skating rinks, aqua-theatres, areas with grass and tree	Increasing passenger facilities contain theatres, casinos and discos	Promenade decks are commonplace
Average is 222,900 tonnes; passenger capacity 5400 plus crew	Average is 70,390 tonnes; passenger capacity 2183 plus crew	Average is 21,891 tonnes; passenger capacity 1237 plus crew
Vibration less propulsion systems	Standardized stateroom size	Staterooms sizes generally large in size
	Can travel between 20 and 25 knots	Travel up to 30 knots
	Easier pedestrian flow through ship	

Sources: Bowen et al. (2014); Evgren, Hertzberg, and Rahm (2011).

1957–1970) induced a further decrease in the demand for passenger ships (OECD, 1970). Cruise tourism became relatively a new kind of tourism which arose in the 1970s in Miami (UNWTO, 2010: XI; Jeon et al., 2019). This refers to the transoceanic ship travel has been diminished as a result of the commencement of the first non-stop air travels between Europe and the USA (Brida & Zapata, 2010). In the contemporary business environment, cruise tourism is a dynamic and remarkable concept of the tourism industry. In order to boost up the market share in the passenger transport sector, cruise lines have introduced changes in services and market positioning. A series of cruise services packages (i.e., fly cruises, cruise and stay, repositioning cruises, freighter cruising, round the world, river and special interest cruises) have been launched from time to time (Bowen et al., 2014). Consequently, the extent and complexity of the global cruise services has changed significantly over the past few years (Peisley, 2010).

To a better understanding, Papathanassis and Beckman (2011, p. 166) defined that “cruise tourism is a socio-economic system generated by the interaction between human, organizational and geographical entities, aimed at producing maritime-transportation-enabled leisure experiences”. Although its newness, cruise tourism affects four main areas of the tourism markets, namely accommodation, transportation, tour operations and tourism services (McKee, 1986). Zappino (2005, p. 11) addressed that “cruise tourism is attracting new markets to the region and encouraging land-based vacations”. To the best of our knowledge, cruise tourism is required supply-led on enlarging in vessel size, as well as needs targeted, proactive and multi-pronged way to generate demand. Also, an innovation in cruise pertaining to itineraries, ship design, destinations, facilities, services, and a scope of shore excursions available (Lee & Ramdeen, 2013). From 1990, cruise tourism grows 7.2% annually (Klein, 1990). Business Research and Economic Advisors (2017) explained that demand for cruising worldwide has dramatically increased from 15.1 million passengers to 24.73 million (+64%) in the past 10 years period. Therefore, cruise tourism generated \$125.96 billion total output and 1,021,681 full-time equivalent jobs during 2016. The structure of total revenues from cruise tourism is provided in Fig. 1. With the reference from Rodrigue and Notteboom (2013, p. 42), cruise tourism can grow as “the global demand for cruises is likely to see further

growth given the increasing level of further participation of customers from various age groups, background and regions”.

Fish and Gunther (1994) and McKee and Mamoozadeh (1994) identified that crew and cruise passengers not only create expenditures but also generate job opportunities in industries that give goods and services to the cruise lines. To a certain extent, cruise tourism encourages sustainable economic development. Academic researchers and policymakers started to focus on the economic aspect of cruise tourism. Mescon and Vozikis (1985) employed the input-output model to evaluate the economic influence of cruise industry. Dwyer and Forsyth (1998) further created a framework which contemplates both costs and benefits for examining the economic influence of cruise relevant expenditures from the key six areas including (1) profits and taxes, (2) foreign exchange, (3) employment, (4) terms of scale economies, (5) trade, and (6) externalities. However, the cruise industry has experienced under keen competition between cruise lines since 2000 as well as the previous research studies largely ignored cruise passengers’ behavioural aspects. To overcome a research pitfall, cruise passengers’ satisfaction with service delivery and product cannot be overlooked. Various attempts to cruise tourism have been considered in past literature (e.g., Jones, 2011; Petrick & Sirakaya, 2004).

In the past decade, the World Tourism Organization reinforced that the sustainable development of cruising activities urgently demanded for a balance among environmental, economic, and socio-cultural aspects (Sanz-Blas, Buzova, & Schlesinger, 2019). Gámez, Serrano, Gil, and Ruiz (2019) explained that the port of call sustainability analysis should contain the cruisers’ behaviour and intention. Cruisers currently decide to choose an environmentally responsible cruise product rather than a purely conventional cruise (Han, Yu, Koo, & Kim, 2019). Thus, most ports of calls depend on the implementation of actions that foster their reputation and familiarity under environmental management (Gámez et al., 2019). Indeed, some researchers contributed representative systematic cruise research papers so that we can explore the main research directions, product interesting subject for researchers and foster theoretical understanding of particular scientific discourses in the existing research of cruise tourism (Vega-Munoz, Arjona-Fuentes, Ariza-Montes, Han, & Law, 2020). Wondirad (2019) conducted a systematic review of 222 cruise ship tourism research papers

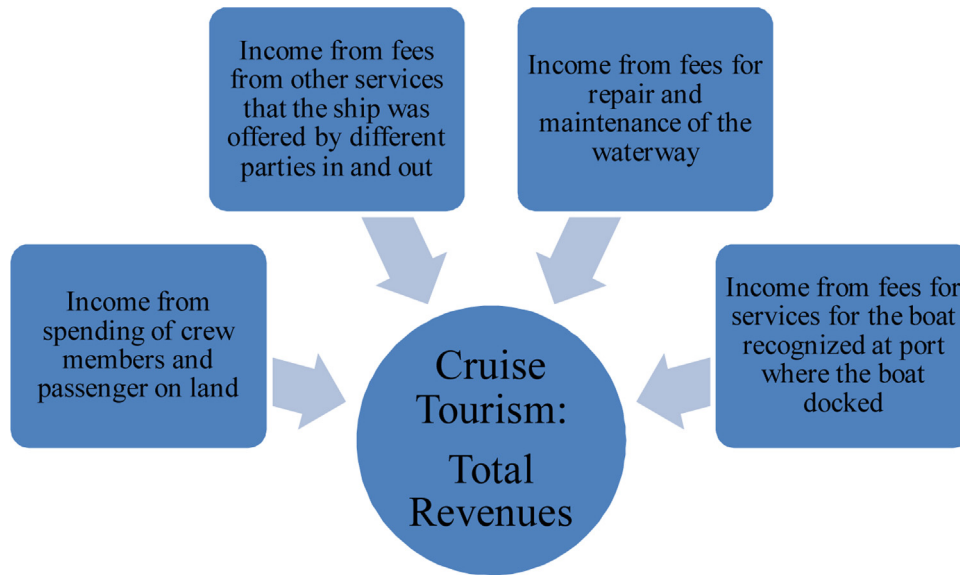


Fig. 1. Structure of total revenue from cruise tourism.

Source: Gračan (2016)

Table 2
Top 20 scheduled port calls.

Rank (2017)	Port	Destination	Calls (2017)	Calls (2018)
1	Baoshan/Shanghai	Mainland China	581	416
2	JejuIsland	South Korea	477	22
3	Singapore	Singapore	393	374
4	Fukuoka/Hakata	Japan	341	245
5	Hong Kong	Hong Kong	263	249
6	Nagasaki	Japan	247	214
7	Keelung/Taipei	Taiwan	237	322
8	Naha/Okinawa	Japan	213	231
9	Georgetown/Penang	Malaysia	207	139
10	Pusan/Busan	South Korea	205	85
11	Tianjin/Xingang/Beijing	China	175	110
12	Guangzhou/Nansha	China	157	104
13	Patong Bay/Phuket	Thailand	150	219
14	Yokohama	Japan	143	127
15	Ishigaki	Japan	142	144
16	Other Japan	Japan	140	N.A.
17	Miyakojima	Japan	121	205
18	Port Klang/Kuala Lumpur	Malaysia	121	183
19	Da Nang/Hue/Chan May	Vietnam	118	159
20	Bangkok (Laem Chabang & KlongToey)	Thailand	115	149

Sources: Cruise Lines International Association (2017b, 2018).

from 1984 to 2018. The researcher summarized the cruise industry requires creative entrepreneurs and innovative management to encounter with unfolded challenges in the contemporary environment including (1) energy and GHG emissions; (2) sustainable water consumption; (3) waste and pollution management; (4) host community benefit; (5) ecosystem pollution and loss of biological diversity and effective management of cultural heritage; and (6) the ageing population. Vega-Munoz et al. (forthcoming) carried out a comprehensive review of 320 research articles from 1980 to 2018. Up to now, the cruise industry is required to focus on improving port infrastructure, implementing the stringency of environmental regulations, and increasing the local customs effectiveness.

2.3. An overview of cruise ports in Asian regions

Cruise port, the cruise line and the cruise destination are the three main actors participated in creating a cruise itinerary (Esteve-Perez & Garcia-Sanchez, 2015). In terms of cruise ports/terminals features in Asia, Jeon et al. (2019) adopted social network analysis

to evaluate the centrality of Asian cruise ports and recognize hub ports in Asia region where Ho Chi Minh City, Port Klang, Hong Kong, Nagasaki, Shanghai, Singapore, Phuket, and Penang. Regarding a hub index, Singapore ranked the first and then followed by Shanghai, Penang, Phuket, Hong Kong, and Port Klang. In order to strengthen a competitive position in the cruise port market, Esteve-Perez and Garcia-Sanchez (2015) proposed that the cruise ports require to have advanced port facilities to fulfil the increasing sizes of cruise ships and the increased cruisers transit. Also, the cruise ports are essential to establish a close linkage between the cruise vessel and inland tourist attractions. Indeed, Lekakou, Pallis, and Vaggelas (2009) recognized the significant factors for cruise lines to select their homeports including accessibility of the port, tourist facilities, safety and security, flight density, unique tourism resources, local transportations and cruise ship reception capacity. Likewise, Chang, Liu, Park, and Roh (2016) pointed out that the cruise port connected with convenient shopping malls and transportation can meet cruisers expectations. To this end, cruise terminal site selection is now an emerging issue in a cruise

Table 3
Cruise liner deployments by region.

Region	2017 deployment (%)	2018 deployment (%)
Caribbean	35.4	34.4
Mediterranean	15.8	17.3
Europe (excluding Mediterranean)	11.3	11.1
China	6.0	4.9
Australia/New Zealand/Pacific	6.0	4.8
Asia (excluding China)	4.4	4.3
Alaska	4.3	4.7
South America	2.1	2.3
All others	14.6	16.2

Sources: Cruise Lines International Association (2017a, 2018a, 2018b).

industry. Lau et al. (2014) carried out an institutional analysis to explore how the location of Kai Tak Cruise Terminal was chosen by employing an in-depth, semi-structured interview approach. The results addressed that a number of stakeholders were supposed to be participated in the location selection process compared to other transport terminals. Sun et al. (2019b) concurred that a thorough analysis of cruise terminal location is critical to support effective cruise port planning. With the exception of economic effect, institutional factors like rules, norms, decisions, and policies are vital to the site selection process in the long-term impact.

In addition, the cruise industry is a key element of the global tourism industry and a vital international growth area, notably in the Asian region (Johnson, 2002; Soriani et al., 2009). Many frequent cruisers are searching for exotic oriental cultures, rich tourism resources, attractive destinations, proximity to neighbouring countries, year-round warm weather which they would discover in Asian regions (Ma, Fan, & Zhang, 2018). Furthermore, the rise of new destinations in China, South Korea, Japan, Vietnam, and Singapore has produced a chance to explore new cruise itineraries (Singh, 1999). Consequently, numerous Asian cruise ports can entice various cruise lines to arrive there. It has recorded 5574 and 7196 Asian cruise calls in 2016 and 2017, respectively. Also, the passenger capacity almost tripled from 1.51 million passengers in 2013 to 4.24 million passengers in 2017 (Cruise Lines International Association, 2017b). Top 20 scheduled port calls in the Asian regions are highlighted in Table 2. In order to catch up with a rising demand for the cruise passengers in the future, cruise lines are continuously enlarging their capacity in terms of the size and number of cruise ships. The number of ships deployed in Asia increased by 53% since 2013 (Cruise Lines International Association, 2017b). Table 3 describes cruise deployment by port.

Despite the Asia cruise market generated a 123% increase in the past 10 years (Hung & Petrick, 2010), research about cruise tourism in the Asian region still stay at an early development stage. Vaggelas and Pallis (2010) and Gui and Russo (2011) addressed that cruise port is still an under-researched topic in maritime policy, geography, management and economics. To some extent, Asian cruise markets show a huge potential to generate to the international cruise industry in the forthcoming years. Also, a majority of studies inclined towards descriptive and normally tend to concentrate on the scope and scale of the cruise industry, the economics of cruise tourism (Mancini, 2000; Douglas & Douglas, 2004). To address a research gap, we conduct systematic qualitative case study research to investigate common characteristics and unique features of the cruise ship market in the Asian region.

3. CRUISE PORT framework

Due to Davies and Ellis (2000, p. 1189) criticized that “sustained prosperity may be achieved without a nation becoming ‘innovation-driven’, strong ‘diamonds’ are not in place in the home

bases of many internationally successful industries and inward foreign direct investment does not indicate a lack of ‘competitiveness’ or low national productivity.” Thus, with reference to the traditional Porters’ diamond framework (1998), we propose new analysis framework, so called CRUISE PORT framework, in this section. The newly proposed CRUISE PORT framework is used to foster Japan, South Korea, Vietnam and Singapore cruise industry regional competitiveness in the Asia-Pacific region. The CRUISE PORT framework is basically divided into two main parts: CRUISE part is from the passengers’ perspective and PORT part is from the ships’ perspective. Based on Dragovic, Skuric, and Kofjac (2014), Parola, Satta, Penco, and Persico (2014) and Satta, Parola, Penco, and Persico (2015), the studies addressed the importance of cruisers experience in cruising is research worthy. But, the research on cruise passengers’ behaviour was overlooked (Sanz-Blas, Carvajal-Trujillo, & Buzova, 2017). To this end, we design the CRUISE PORT framework which not only consider from the cruise port operator (i.e., supply side), but also think about cruise passenger (i.e., demand side). After visiting a port destination, cruisers may have an intention to return as independent tourists (i.e., repeated cruisers) or recommend the destination to colleagues, friends and relatives. Accordingly, the CRUISE PORT framework intends to provide a constructive advice on how to design and implement strategies for retaining loyal cruisers and securing additional potential cruisers.

The CURISE PORT framework consists of the ten key elements to demonstrate a cruise terminal operation. The CRUISE PORT framework can be explained such that C refers to connectivity, R refers to regional competitiveness, U refers to utilization, I refers to infrastructure, S refers to security, E refers to environmental management, P refers to ports of call, O refers to ocean, R refers to recreational activities, and T refers to traffic. The 10 key elements of CRUISE PORT framework are illustrated in Fig. 2. The CRUISE PORT framework secures the core elements of a cruise port system that are critical to strengthening the role of a region as a leading regional cruise hub. The CRUISE PORT framework generates a more systematic framework for investigating cruise development than what has been obtainable in the current literature.

C – connectivity: Niavis and Vaggelas (2016) identified that cruise port connectivity is created by two main elements. The first key element is the physical position of the cruise port where it is near to other attractive cruise ports. This is the most important area in boosting up cruise ship traffic in a port (Dragovic et al., 2014). The second key element is the ability of cruise port authorities to build up strong cooperation channels with cruise lines. The interviewees indicated that the cruise port authorities can provide free shuttle bus for cruisers to travel between cruise terminals and shopping malls or onshore excursions. As Satta et al. (2015) suggested, the cruise ports are required to easy access between the cruise port area and shopping areas like boutiques and souvenir shops. Indeed, the interviewees addressed that the rise of fly-cruise concept induces the importance of close connection between cruise port and airport. Thus, the adequate airline connectivity and schedule reliability of the itineraries are crucial to support fly-cruise operations (Bagis & Doms, 2014).

R – regional competitiveness: Porter (2003) identified that the regional competitiveness is relevant with the industry struggles against neighbouring rivals through engaging investment from foreign, public and private capital, generating innovation environments by entrepreneurs, skilled employees and creative workers and encouraging the technological advancement. Accordingly, the excursions for sightseeing and shopping should be close to the cruise ports. Bagis and Doms (2014) addressed port cities should be at close proximity and abundant. The interviewees addressed that the cruisers expect that shopping centres should be conveniently located. Japan and South Korea incline towards redesigning cruise port design similar to the Ocean Terminal where the cruise

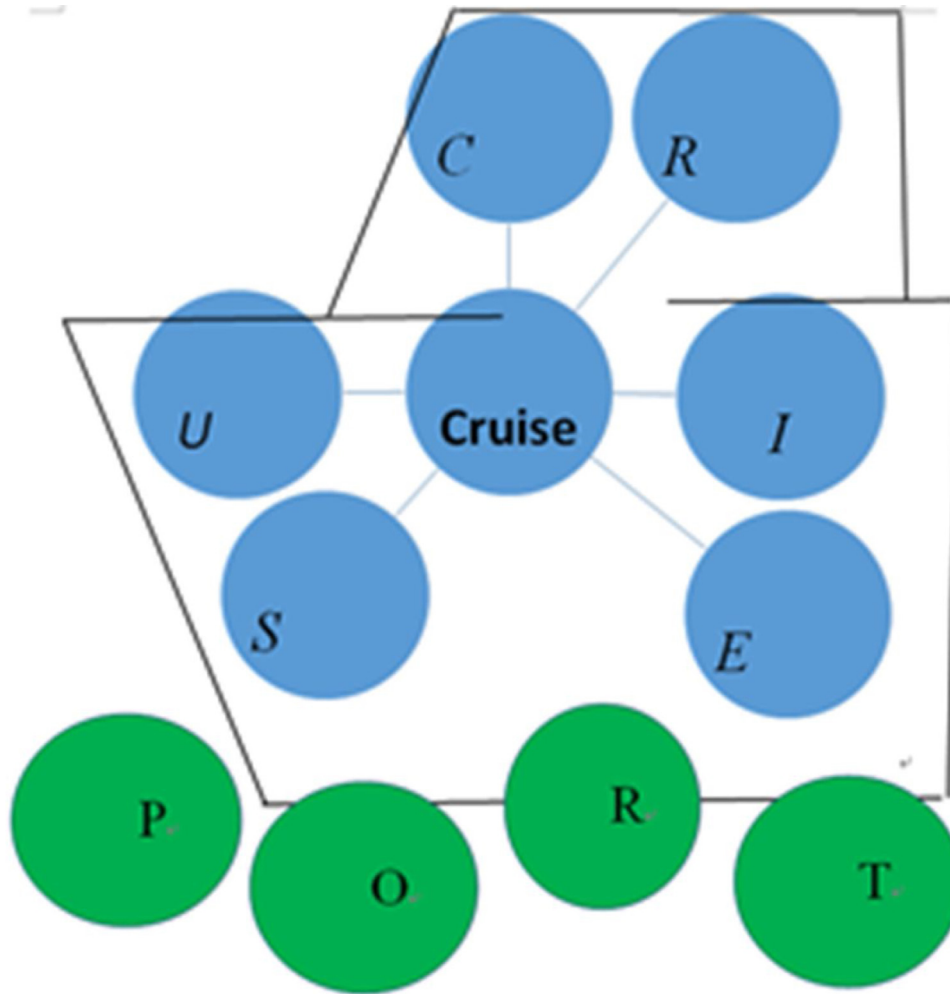


Fig. 2. CRUISE PORT framework.

port and the shopping centre are integrated into one location. In practice, the cruise lines design either the pre-cruise or post-cruise sightseeing city tour for the cruise passengers with additional charges. These tours are planned for the tourists who will stay in the city ranging from few hours to few days. As interviewees proposed, the excursion destinations are required wonderful with numerous elements of experiencing local culture, history, shopping and sightseeing. As a result, the excursion destinations are required wonderful with numerous elements of investigating local culture to shopping and sightseeing. High availability of the hotel accommodation is critical for these tourists who are eager to stay in the city for a period. Besides, the interviewees mentioned that cruise ports offer supporting service including waste handling, repairs and maintenance, basic supplies (e.g., fuel, LNG, food), medical treatment, to name but a few so as to strengthen the regional competitiveness.

U – utilization: In principle, cruise industry undergoes seasonality impact. Under-capacity leads cruise terminals to encounter the typical problem of diseconomies of scale. This is an undesirable factor in a cruise industry (Jeon et al., 2019; Yip, Lun, & Lau, 2012). To deal with the shortfall, cruise ports integrate with cruise lines in order to engage cruise lines in calling the cruise port constantly. The interviewees suggested that cruise port can reduce the parking fee in order to motivate the cruise lines to increase the calling frequency at port of calls and extend the duration of berthing. This is related to one of the incentive mechanisms to encourage the cruise lines to consider a cruise port as a home port

(Sun, Zeng, Xiang, & Chen, 2019a). In addition, cruise lines redesign their cruise itinerary to improve the port call significantly. In the long term, cruise ports could introduce various promotional campaigns with various stakeholders, for instance, cruise lines, tourism associations, government bodies and travel agents.

I – Infrastructure: The size of the cruise ship is getting wider and wider, longer and longer, bigger and bigger. Thus, cruise lines would examine the large capability for serving the cruise like terminal space, pier width, pier length and other port facilities. Satta et al. (2015) reinforced that advanced passenger terminal, appropriate capacity and ease of infrastructure for cruiser embarkation and disembarkation. The interviewees highlighted that more and more cruisers prefer planning their trips by themselves rather than joining the excursions offered by the cruise lines. In doing so, the cruise port facilities are required to be updated and comprehensive. During the interview process, the interviewee emphasized that cruise port facilities are required to be updated and comprehensive. Such as tourism information desk providing brochures and leaflets, welcome reception, smart phone, laptops, travel centres, Wi-Fi hotspots, foreign currency exchange stores, immigration, car rentals, bus-stops, ferryboat stops and the shopping malls with local products and restaurants. Satta et al. (2015) pointed out that ground transportation is critical to link up various inside cruise port facilities for cruisers easy to locate different facilities.

S – Security: Normally, the cruise would stop over a cruise port during a journey. The customs quarantine control facilities, waiting area of the terminal, and counters for entry and exit control

should be enough. The interviewees mentioned that the sound hardware facilities, the smooth flow of custom clearance process and professional manpower support are significant in controlling the cruisers flow in peak hours. Ideally, the home port for attracting the two large 360-m-long 100,000-tonnes-class vessels, disembarking a total of 1200 crew members and 5400 passengers at the same time (Lau et al., 2014). Additionally, the interviewees addressed that cruise port authorities require to oversee territorial water condition such as maritime piracy and meteorological phenomena. The cruise port authorities send the alert message to cruise ships bypass a danger zone.

E – environmental management: Cruise ports produce an innovative energy model to assess the effectiveness of the building's energy conservation measures. The core factors pertaining to (1) energy saving switches to control lighting; (2) high performance building envelope; (3) high performance glazing; (4) heat recovery and VAV systems; (5) high efficiency fans, pumps and motors; (6) install energy efficient lighting systems and (7) variable speed pumps on the chilled water and domestic water systems (Sun, Yip, & Lau, 2019c). Sustainable environmental management could foster cruise ports with a number of operational cost reductions and support sustainable development in a cruise industry. In order to maintain sustainable environmental management, the interviewees suggested that the cruise ports provide shore power supply. The use of shore power technology has a notable impact on decreasing the emission of harmful substances including SO_x, NO_x and PM₁₀. In practice, shore-based power supply describes as cruise ships adopt shore-based power supply rather than using marine generators during berthing period (Shanghai Observer, 2016).

P – ports of call: Port of call refers to the number of cruise ports established as a home port. A home port mainly refers to the port in which a cruise ship will change over or take on the majority of its passengers while taking on supplies, fuel and stores. In general, the cruise line staying at the port of call is around 8–10 h (Lau et al., 2014). The interviewees responded that the duration of berthing is not sufficient for cruisers to participate in different onshore excursions. The proposed approach is to extend main berth to make sure the port's capability to deal with the increased traffic intensity and provide a longer time for cruisers to stay at a port destination (Dragovic et al., 2014). Thus, the cruisers satisfaction will be further reduced. Importantly, the interviewees addressed that the maturity of surrounding cruise ports can boost up the calling frequency at ports of call. Most of the cruisers concerned about the next cruise port will be visited along the cruise itinerary. For a homeport, notably the aviation is critically important because of the passengers from all over the world would come over to the homeport. Thus, the operational efficiency of home port is highly determined by the adjacent airport support, fast immigration clearance procedures, flight regularity and airlines availability. In addition, the railway connection with smooth ticketing system between the cruise port and the international airport could be beneficial to tourists. Other one-stop public transports like taxi and coach could reduce the time of tourists for local transit. Furthermore, the transport connectivity between cruise port and town area could not be overlooked. Well-developed tunnels and highways could diminish in a risk of traffic jam in the city and excessive delay of the cruise departure under the bad traffic condition.

O – ocean: Ocean is defined as the oceanic conditions, including typhoon, water depth, tidal range, tidal current, and water clearance. The oceanic condition is critical for water sports, water recreational activities and pleasure diving. The interviewees highlighted that the oceanic condition will also affect the cruise itinerary design and cruise ship safety. Such as, Taiwan Strait often occurs in a rough sea condition. Other oceanic conditions (channel depth, channel length) are important for how cruise ports to serve for the size and the number of cruise ships, especially in a peak season.

R – recreational activities: The recreational activities are mainly provided for amusement, enjoyment, fun and pleasure for cruise passengers. The varieties of recreational activities attract the cruise lines arrive at a preferred cruise port. The cruise passengers not only enjoy the cruise ship facilities, but also explore fantastic recreational activities for land-based holiday, for instance, recreational boating, sailing, stand-up paddle boarding, theme park, to name but a few. Accordingly, Parola et al. (2014) proposed that the cruise ports collaborate with cruise managers to create extra chances in the effective showcase of top tourist attractions. Regarding to recreational activities, the interviewees proposed that the tourism association can consider arranging a bus tour for cruisers to involve in sightseeing. The tourism association also takes account of organizing some carnivals in terms of specific theme or festival. To a certain extent, recreational activities provide a supporting and related business in a cruise industry.

T – traffic: The capacity of cruise ports attract cruise ships to stop at cruise port during a journey. The possibility of having a high volume of cruise traffic is correlated with cruise ports situated at populous areas, attractive hinterland destinations, and nearby popular sightseeing sites for one-day trip, as well as cruise ports having good ship restore supply. The amount of cruise traffic is affected by the tourist appeal of the area (Bagis & Dooms, 2014; Castillo-Manzano, Fageda, & Gonzalez-Laxe, 2014).

After discussing the CRUISE PORT framework, we investigate four countries (i.e., South Korea, Japan, Vietnam and Singapore) cruise markets in Asia regions in the next section. These four countries have a long coastline, moderate climate, attractive cruising destinations, unexpected cultures, and interesting shore excursions (Lau et al., 2014).

4. Multiple case studies in Asian regions

We explore the four cruise ports (i.e., South Korea, Japan, Vietnam, Singapore) as representative cases for establishing foundation, giving suggestion, and looking into new insight to explore. The summary of cruise port case studies is given in Table 4.

4.1. South Korea cruise market

South Korea is one of the principal sources of cruise passengers in the Asian region (Kester, 2003). Thanks to urbanization, industrialization and western influence, South Korea is now largely developed tourism industry, notably cruise tourism in the 21st century (Connor, 2002). South Korea's top attractions including Gyeongbokgung Palace, North Seoul Tower, Namiseom Island, Lotte World, Myeong Dong, to name but a few have already well connected with cruise tourism development. From the geographical perspective, South Korea is the perfect place to develop cruise tourism because of surrounded by the sea on three sides and possessing 11 port cities. In April 2008, the first cruise ships operated in South Korea by Pan Star Honey Line and had a predominantly domestic itinerary. Although a cruise market only appeared in South Korea for a decade, South Korea has attracted a number of internationally known cruise lines like Costa Cruises and Royal Caribbean selected the cities of Incheon and Busan as homeports. South Korea is now established as a new cruise destination in the Northeast Asian region (Hur & Adler, 2010). Currently, there are 12 cruise ports in South Korea, including 5 key cruise ports in Incheon, Jeju, Busan, Yeosu and Sokcho. The number of foreign cruise tourists in South Korea increased by around 80% annually for the last 5 years (Korea Tourism Organization, 2018). In 2017, there were 737 cruise calls which were divided into 723 cruise calls for transit, 11 cruise calls for turnaround and 3 cruise calls for overnight (Cruise Lines International Association, 2017b). Hur and Adler (2010) addressed

Table 4
Summary of cruise port case studies.

Item	South Korea	Japan	Vietnam	Singapore
Geographical location	East Asia	East Asia	Southeast Asia	Southeast Asia
Climate	Winter: Cold and sunny Summer: Hot and sultry, with abundant rainfall Spring and autumn: Quite short but pleasant	Winter: Snow and ice dominate Summer: The absence of a real dry season and the high rainfall Autumn: Hot and humid	Winter: Cool to cold, misty, cloudy Summer: Stormy, hot, humid Spring and Autumn: Transitional seasons	Tropical rainforest climate
Coastline	2413 km	29,751 km	3444 km	193 km
Top attractions	Gyeongbokgung Palace, North Seoul Tower, Namiseom Island, Lotte World, Myeong Dong	Nagasaki, Mt Fuji, Niseko, American Village, Nirai Beach, Yaeyama Islands	Reunification Hall, Sea Goddess Temple, Dong Khoi Street, Ben Thanh Central Market	Chinatown, Singapore Zoo, Sentosa Island
Top cruise ports	Incheon, Jeju, Busan, Yeosu, Sokcho	Fukuoka/Hakata, Nagasaki, Naha/Okinawa, Yokohama, Ishigaki, Miyakojima	Da Nang, Ho Chi Minh City	Sentosa Island, Marina Bay Cruise Centre
Number of cruise calls	Total: 737 Transit: 723 Turnaround: 11 Overnight: 3	Total: 2378 Transit: 2040 Turnaround: 281 Overnight: 57	Total: 407 Transit: 345 Turnaround: 1 Overnight: 61	Total: 393 Transit: 24 Turnaround: 325 Overnight: 44
Growth Trend	South Korea recorded a 25% compound annual growth rate in calls representing a 141% growth.	Since 2013, there has been a 622% absolute growth in port calls, for a combined annual growth rate of 64%.	2017 has brought a 13% decrease in port calls.	An absolute increase of 36% in port calls (2013–2017). The port had a combined annual growth rate of 8%
Cruise port governance model	Model C: The Marketer	Model C: The Marketer	Model D: The Passive	Model B: The Investor

Sources: Cruise Lines International Association (2017b); Department of Statistics Singapore (2018); Hydrographic and Oceanographic Department (2020); Japan Tourism Agency (2014); Korea's Geography (2020); Korea Tourism Organization (2018); Pallis, Arapi, & Papachristou (2019); World Climate Guide (2020).

that cruise passengers had faced a problem with getting to the departure city for cruises outside of South Korea. More homeports for cruising in South Korea, more cruise passengers would be able to take cruises as it would be easier to get to departure cruise ports. In other words, connectivity, utilization and infrastructure are still a main concern for South Korea to establish as a cruise home port in the forthcoming years.

4.2. Japan cruise market

Because of the economic boom in South-East Asia region, the domestic cruising market has been emerged in Japan (Choy, 1998). The initial year of the cruise was labelled in Japan's travel industry in 1989. After that, the expansion of cruise ship industry is shown in different activities, for instance, the chartering of ships for promotion to the Japanese market, the construction of cruise ships in Japanese yards, investment in cruise lines and the promotion of different American cruise products through different tour operators (Cruise Industry News, 2017b). From the geographical point of view, we can divide Japan cruise market into two main groups. One group includes Kyushu, Honshu and Hokkaido. These three regions demonstrated the Japanese traditional culture and provided gourmet restaurants. The top attractions like Nagasaki, Mt Fuji, and Niseko etc. Another group only includes Okinawa. Okinawa is located in the southwestern coast of Japan. The natural landscape of the coasts the mixture of Japanese and American culture attracts different cruise passengers to travel there. The popular attractions like American Village, Nirai Beach, and Yaeyama Islands. In general, Japan has various attractions in each area in a whole year (Japan Tourism Agency, 2014). Thus, Japan is ranked the first in the number of ports of call (i.e., 2378 times) in 2017 among the Asian countries. The main allocation was 2040 cruise calls for transit, 281 cruise calls for turnaround and 57 cruise calls for overnight (Cruise Lines International Association, 2017b). However, there are only three local Japanese cruise lines (i.e., Asuka, Mitsui, and Venus) and a few additional capacities from Princess and Costa invest and operate the cruise market in Japan for these 30 years. Hence, we conclude that Japanese cruise market is stable but small (Cruise

Industry News, 2017b). Up to now, some cruise ports are located in a remote area as well as the rate of facility development is far beyond with the growth in cruise ship calls (e.g., Hirara, Fukue, Rumoi) where it creates a problem of decline reservations. Also, some cruise ports do not have any waiting areas for guests or customs, immigration and quarantine (CIQ) facilities. As a result, these procedures are required to conduct onboard the cruise ships before passengers disembark, creating unwelcome delays. By doing this, Japan considers to diversify the locations of cruise ports, establish a subsidiary system, and create partnerships between cruise lines and cruise ports to address solve utilization, connectivity and infrastructure problems in Japanese cruise ports in the future (Cruise & Ferry, 2018; Japan Cruise Port Association, 2018).

4.3. Vietnam cruise market

Vietnam is one of key cruise ports in the Southeast Asian region. Apart from a dynamic blend of modernity and tradition, Vietnam has owned stunning beach and long coastline (Travel Online, 2018). Hence, Vietnam is an excellent place to develop cruise tourism in the 21st century. In 2017, Vietnam attracted 407 cruise calls which were divided into 345 cruise calls for transits, one cruise call for turnaround and 61 cruise calls for overnight. There are five cruise ports in Vietnam. However, Da Nang and Ho Chi Minh City are currently as the leading cruise ports in Vietnam (Cruise Lines International Association, 2017b). The attractions in Vietnam pertaining to Reunification Hall, Sea Goddess Temple, Dong Khoi Street, and Ben Thanh Central Market, to name but a few. Up to now, Vietnam is facing an obstacle to become an excellent destination for cruise holidays due to a lack of infrastructure. None of special cruise port for large sizes of cruise ships to dock at, giving rise to various tour operators exclude Vietnam in the cruise itineraries. Furthermore, insufficient city tours with a far distance between cruise ports and shopping/entertainment locations hinder Vietnam as a cruise home port in the Southeast Asian region. The reality is that Vietnam would simplify immigration policy, upgrade port infrastructure, promote environmental management and generate new

Table 5
Comparison of 4 countries with cruise ship ports in the CRUISE PORT framework.

CRUISE PORT framework	South Korea	Japan	Vietnam	Singapore
Connectivity	+	+++	+	+++++
Regional competitiveness	+++	+++	+++++	+
Utilization	+	+	+++++	+++
Infrastructure	+	+++	–	+++++
Security	+++++	+++++	+	+++++
Environmental management	+++++	+++++	–	+++++
Ports of call	+++	+++++	–	+++++
Ocean	+++++	+++	–	+++++
Recreational activities	+++	+++	+++++	–
Traffic	+++	+++	–	++++

Remarks: “+++++” denotes Excellent; “+++” denotes Strong; “+” denotes Good; and “–” denotes Weak.

tourism service ([The Voice of Vietnam, 2017](#)). Vietnam becomes as a cruise home port is a questionable issue in the agenda.

4.4. Singapore cruise market

In the context of Asian region, Singapore is one of the attractive locations for cruise lines and exciting cruise destinations for cruise passengers ([Wang, Jung, Yeo, & Chou, 2014](#)). Basically, Singapore has two core cruise terminals. In Sentosa Island, it mainly serves for small and medium cruise ships. In order to accommodate for bigger cruise ships, Singapore has established a new cruise terminal at Marina Bay Cruise Centre in May 2012. Both of them are well connected with various shopping malls, restaurants, hotels, sightseeing points (e.g., Chinatown, Singapore Zoo, Sentosa Island) and neighbouring countries through extensive local transportation networks ([Cruise Port Wiki, 2018](#)). In 2017, Singapore recorded 393 cruise calls which were divided into 24 cruise calls for transit, 325 cruise calls for turnaround and 44 cruise calls for overnight ([Cruise Lines International Association, 2017b](#)). Despite Singapore invested USD 50 million to upgrade the cruise industry by establishing a cruise centre and further enlarging the current cruise terminal to offer more services and options for cruise passengers, it fails to provide diversified onshore tourism programmes for cruise passengers to gain fantastic cruising experience. Nevertheless, Singapore cruise port has recognized as an attractive cruise destination to cruise lines because of their cruise terminal infrastructure and connectivity and agility. In the future, Singapore cruise port develops various recreational activities for cruise passengers are urgently demanded ([Sun et al., 2019a; Wang et al., 2014](#)).

5. Discussion

According to the CRUISE PORT framework, we can now create a comparison table to evaluate the named four countries in 10 key areas. The comparison table is generated in [Table 5](#). The research findings arise from the existing information and interviewees' perspective.

South Korea generally demonstrated as a strong performance. Apart from connectivity, utilization, and infrastructure, other aspects are ranging between strong and excellent. In terms of connectivity, South Korea is difficult to further extend to nearby countries due to a rough weather condition like in North Korea and a lack of collaboration among cruise lines, cruise terminals (e.g., Seoul and Jeju Island), and tourist association. In addition, some cruise terminals are located far away from urban area, airport and shopping mall. Such as, the cruisers require travelling from cruise terminals in Seoul to urban area around 45 min. [Chang et al. \(2016\)](#) reflected that South Korea urgently required to develop K-pop sites and convenient shopping malls in order to improve cruisers' travel expectations and experiences. Indeed, the cruise terminal facilities and infrastructure relevant with cruise tourism are urgently

improved in order to increase ports of call ([Lee & Lee, 2017](#)). At a moment, the majorities of ports of call are transit rather than home port. To this end, the utilization is still left behind Vietnam and Singapore.

Concerning Japan, it normally showed as between strong and excellent performance. Besides utilization, other aspects are ranging between strong and excellent. In terms of utilization, some cruise ports are now facing an underutilization problem as some cruise ports locate in small towns/cities, face a water frozen problem in the winter season, encounter with a serious earthquake in east Japan, and confront the incident of nuclear radiation in Fukushima in 2011. As a result, the cruise ports launched the subsidiary or incentive programme to attract cruise lines select the cruise ports ([Chen, Lijesen, & Nijkamp, 2017](#)). To a large extent, Japan has favourable conditions to establish home ports due to comprehensive infrastructure, the close collaboration among cruise lines, cruise terminals, unique onshore excursions (e.g., Okinawa and Yokohama), tourist associations and other supporting industries.

In the Vietnam context, the overall performance slightly obtained good performance. Among 10 key aspects, only regional competitiveness, utilization and recreational activities demonstrated excellent performance. Two aspects (i.e., connectivity and security) are recognized as a good performance while five aspects (i.e., infrastructure, environmental management, ports of call, ocean and traffic) are identified as a weak performance. Although Vietnam has a long coastline across northern part, central part and southern part as well as connecting with a nearby city in Guangxi, some cruise terminal facilities are outdated and of small scale. In other words, it is hard for cruise terminals to increase ports of call and accommodate 'super-sized' cruise ships ([Lau et al., 2014](#)). In some cases, the distance between cruise ports (e.g., Da Nang) and the excursion destinations are relatively long. As a result, Vietnam still needs to improve the connectivity with town area. Furthermore, Vietnam has loose regulations about environmental management. It is obvious that Vietnam fails to attain the “green cruise port” concept in a sustainable development ([Singh, 1999](#)).

For Singapore, the overall performance typically appears between strong and excellent performance. Other aspects are ranging between strong and excellent excluding regional competitiveness and recreational activities. Basically, Singapore mainly focuses on shopping area and city sightseeing. To a large extent, there are insufficient attractive cruising destinations and interesting shore excursions. Even if the cruising itinerates contain South Pacific Islands, the cruisers need to sail from Singapore to South Pacific Island for 2 to 3 days. Hence, the cruisers feel unremarkable cruising experience in staying a cruise ship for a certain period. Based on that, Singapore can attempt to develop river cruise market with surrounding small islands in order to increase connectivity and enlarge cruise products through exploring a new cruise market ([Lau & Ng, 2018](#)). Those small islands are situated along the Straits of Malacca in which the Caribbean-like weather conditions are desirable for cruising activities for years. Alternatively, [Sanz-Blas et al. \(2017\)](#) suggested that Singapore is informed to enhance cultural attractions, providing exceptional events like dances, customs, concerts and performances of local arts focusing on cruisers.

Singapore can attract more cruise lines to base their ships in there. In the long-term, it can further strengthen Singapore's position as a regional hub for international cruise lines ([Singh, 1999](#)).

Conclusively speaking, Japan and Singapore demonstrated the best performance. South Korea exhibited a better performance while Vietnam showed a good performance. From the geographical perspective, Singapore and Vietnam are situated at the southern part, while Japan and South Korea are located at the northern part. Japan and South Korea aim to attract the cruisers to explore

traditional cultural events and heritage as well as Singapore and Vietnam incline towards arousing the cruisers to participate in sightseeing. Based on the cruise product similarities and the proximity of cruise port location, it is feasible to integrate Japan and South Korea in one group and combine Singapore and Vietnam in the other group. To this end, it can optimize the resource allocation and categorize the product based on the regional differentiation. [Chang et al. \(2016\)](#) further elaborated that the cruise ports can share the same cruiser hinterland if they are situated next each other. In doing so, [Sun et al. \(2019a\)](#) and [Jeon et al. \(2019\)](#) proposed that cruise ports transform from a pure competition to a mix of competitive and complementary relationship in order to maximize a market share. The changing scenario has a remarkable influence on the whole cruise transport system ([Sun et al., 2019a](#)).

6. Conclusions

6.1. Contribution to scholarly knowledge

Greater leisure time and rising income levels provide people a chance to strive for new kinds of tourism ventures. In terms of tourism industry, the cruise industry is increasing dramatically ([Wang et al., 2014](#)). Since 2000, the cruising industry in Asia region is rapidly developing in terms of the number of cruisers, the ports of call, the size of cruise ships, and the scale of cruise ports. However, the research studies related to Asian cruise industry are still under-researched. Although some researchers strived to investigate Asian cruise port, the research approach has focused on either technical or modelling (e.g., [Chang et al., 2016](#); [Dragovic et al., 2014](#); [Sun et al., 2019a](#)), a cruise shipping management perspective is seriously overlooked. To fill the gap, we conduct a comparative analysis of four main cruise ports (i.e., South Korea, Japan, Vietnam and Singapore) under the newly proposed CRUISE PORT framework in the paper. The framework explains the significant roles of cruise port in the cruise industry. A cruise port is critical in providing an interface between landside and seaside and connecting between the urban area and hinterland. The interviewees indicated that none of cruise port is perfect and stands out from the keen competition. [Stefanidaki and Lekakou \(2014\)](#) further elaborated that most cruisers are seeking for “something different” which can bring them memorable experiences. In doing so, different countries strive to upgrade the cruise port facilities and infrastructure and adopt differentiation strategy in Asia. However, the cruise ports will face unfolded challenges and risks, notably provided with the large investments needed for infrastructure enlargement for both mature and new destinations ([London & Lohmann, 2014](#)). Thus, the ten key elements provides guidelines for the key stakeholders in the cruise industry, such that cruise lines, cruise ports, cruise terminals, the travel agencies, the tourism associations, and the local destination operators can benefit from a better understanding on how to improve internal cruise port operations and adjust their marketing strategies to take advantage of external environment. Through our proposed framework, different cruise ports are able to design appropriate strategies for dealing with their weaknesses under stiff competition within the Asian region.

The CRUISE PORT framework mainly concentrates on the qualitative analysis to explain for managing cruise industry in the Asian region. However, it provides a theoretical framework for the researchers to conduct a large-scale survey. Eventually, a thorough study and comprehensive analysis of the Asian cruise industry will be accomplished in the future. This will be useful in assessing cruise port competitiveness, exploring the characteristics of Asian cruise industry and formulating differentiation strategies in different Asian cruise ports.

6.2. Implications for managerial practice

As a home port, the tourists would prefer to stay at the country either before or after the cruising for relatively longer, which could definitely create and sustain the relevant business areas pertaining to logistics, hospitality, finance, event management and tourism. Based on the favourable situation of cruise industry, the government can consider creating different clusters of cruise industry and revisiting the positions of cruise industry in a national development in the forthcoming years. To our best knowledge, Asian cruise ports become a home port is still questionable. The majority of ports of call in Asia are a transit port of call rather than a home port. The rationale is from an insufficient promotion from tourism association, some cruise products fail to meet various cruisers expectation, a lack of connectivity with intermodal transportation and international airports, a weak collaboration among cruise ports, cruise lines, local travel agencies and tourism association, loose regulations of safety and environment in cruise port development, and some cruise port facilities and infrastructure are still far away from a global development. Such unfavourable factors will discourage the cruise lines from choosing the Asia region as a port destination during the selection process ([Stefanidaki & Lekakou, 2014](#)). [Pallis, Parola, Satta, and Notteboom \(2018\)](#) and [Pallis, Arapi, and Papachristou \(2019\)](#) identified the key models of cruise ports governance. The cruise terminal is determined by the beginning stage of internationalization and privatization. In our paper, it clearly shows that the role of port authority still intervenes the cruise port liberalization process. Indeed, the port authority still provides the short period of concession and contractual agreements and contributes to the lower average investment size in a cruise industry. We expect that it will decrease the attractiveness of cruise business for institutional investors. This is not surprising that the Asian cruise terminal industry remains to be experiencing an earlier stage of development.

Worse still, the downturn of the Asian market led to 11.1% in the number of vessels performed –19% of the capacity deployed ([Cruise Industry News, 2017a](#)). In other words, the cruise vessel schedule failed to match with cruise port schedule due to port capacity problem, notably during the peak season. We expect that the gap between main ports and secondary ports in terms of capacity utilization will become wider and wider. In order to deal with the difficulties in further market development, the cruise ports are suggested to adopt port regionalization model which expects that cruise ports collaborate between each other so as to maximize the capacity utilization rate and offer various types of shore excursion products to the cruise lines. Another way is the cruise lines can refresh and redesign the itinerary policy to increase the sale economies and minimize competition on resources like berth allocation, facilities, to name but a few ([Bagis & Dooms, 2014](#)).

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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