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# Cruise Tourism and Society

## A Socio-economic Perspective

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# Editors' Foreword: The 'Icarian Wings' of Cruise Growth

## The Myth of Daedalos and Icaros: A Metaphor for Sustainable Growth in the Cruise Sector

According to ancient Greek mythology, Daidalos was a famous inventor who frequently suffered due to his successes (designer of the Labyrinth). As he was refused the option to leave Crete, he built wings out of feathers glued together with bee-wax for himself and his son Icarus. Before beginning their journey over the open seas, Daidalos warned his son on the dangers of flying with these wings. Flying too high, the heat of the sun would cause the wax to melt and flying too low near the sea level would risk the feathers becoming wet. In both cases the wings would be rendered ineffective, bringing the journey to a fatal end. As the story goes, Icarus decided to ignore his father's advice at his own peril. Apart from the obvious moral on the risks of inexperience and hubris, this legend serves as a metaphor for sustainable growth. Growth, like Icarian flying, is subject to sensitive balances. At the end of the day, the 'wings' of the cruise sector's growth is the cruise product itself, powered by the 'winds' of a positive image. Destinations can be seen as the 'feathers', populating an empty cruise 'wing-frame' and the stakeholders as the 'adhesive wax' keeping it all together. Moreover, safely utilising such a Daidalian invention requires education and knowledge, the lack of which Icarus dearly paid with his life. A sustainable flight with 'Icarian wings' is neither to be taken for granted nor to be underestimated in terms of the complexity it actually entails. Ironically, Daidalos was blessed by the success of his inventions whilst cursed by the corresponding complexity they entailed. His ingenious plan to build wings in order to escape was subject to a variety of systemic risks, ultimately resulting in the tragic loss of his son Icarus.

## Cruise Sector Sustainability: Destinations, Sector Image, Research and Education

Growth of any kind is subject to systemic complexity and does not come without costs and challenges. The cruise sector's growth over the last years has highlighted a number of challenges and externalities creating an imperative for a closer examination. This was the main aim of the 3rd International Cruise Conference, which took place in Dubrovnik (Croatia) between the 16 and 18 May 2011. From the 26 papers submitted, presented and reviewed, 14 were selected for publication in this volume. Our aim with this collection of papers is to provide a 'red thread' to support cruise stakeholders find their way in the complex 'Labyrinth' of cruise growth.

The topics covered can be summarised under the headings:

- Cruise destination management and sustainability ('Feathers'): The focus of this section is on the economic, social and environmental impacts of cruise tourism on the ports of call. As an increasing number of ports are seeking to increase their attractiveness for cruisers, questions of related externalities and economic feasibility arise.
- Cruise-sector image and marketing challenges ('Wax' and 'Wind'): In this section, a number of cruise operator practices (actual and prospective) are discussed in terms of their potential and implications for the stakeholders involved. Amongst others, the role of the media and the challenges of dealing with safety, on board crime and negative customer feedback are addressed.
- Cruise research and education ('Flight training'): Cruise management does not yet constitute a mature academic discipline and faces a paradigmatic dilemma in terms of research as well as education. The final section of this book takes a closer look at actual cruise research practices and discusses the challenge of educating cruise hotel managers.

## Introducing a Novel Review Process: Anonymised Peer-Crowd Reviewing

Finally, it may be worth mentioning that this proceedings book has been the testing bed for an alternative way of academic paper reviewing. Instead of the typical double-blind reviewing process, the Internet platform of the Cruise Research Society (abbr. CRS) has enabled us to introduce a 'crowd-blind review' process, which does not only take into account scientific rigour (i.e. ratings and comments) but also relevance (i.e. number of reviews).

The conference review committee members were instructed to conduct at least three reviews of papers they could freely choose from the internal download section of the CRS website. Once, they had selected the papers (anonymised) they found

interesting, the system prompted them to provide a review consisting of a star-rating (1–5*, with 5* being the highest rating), including a free text explanation of their evaluation. Under such a schema, the number of total reviews a paper received serves as an indicator of the selected topic's relevance, whilst the average rating provides a measure of each submitted paper's quality. Our first experiences with this reviewing approach have been positive and we aim to fine-tune it in the future. Research rigour may enable 'functional wings', but a stronger emphasis on research and educational relevance may well serve as a 'compass' for the sector's journey along the growth curve.

# Acknowledgements

This book is dedicated to the fellows and associates of the Cruise Research Society. It is their openness, enthusiasm and commitment that are enabling us to gradually develop an emerging knowledge base in the area of cruise tourism. Particular thanks to the co-authors for their contributions. Moreover, our gratitude goes to the Bremerhaven University of Applied Sciences and rectorate for providing the resources necessary to finance and produce this piece of work. Our appreciation also goes to Dr. Martina Bihn and Christian Rauscher from Springer (our publishers) for their patience, professional support and flexibility. Finally, we would like to explicitly mention and thank the sponsors of the 3rd international Cruise Conference in Dubrovnik: Croatian Ministry of Maritime Affairs, Transport and Infrastructure, Dubrovnik Port Authority, County Port Authority Dubrovnik and Marina Frapa (Rogoznica, Croatia).

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# Part I
# Cruise Destination Management and Sustainability

# Chapter 1
# Mediterranean Cruise Itineraries and the Position of Dubrovnik

**Zrinka Marušić, Ivan Sever, and Neven Ivandić**

**Abstract** Within an analysis of the competitiveness of ports/destinations on an international cruise market, this paper is attempting to answer one of the core and permanent questions: how to obtain relevant, unbiased and objective data/information for such an analysis? The focus of this paper is to analyze the capability and features of data gathered from cruise itineraries, offered through Internet websites, to provide objective and unbiased information on the current market position of a competitive cruise port/destination. This paper is specifically focused on evaluating the scope and relevance of such easily-accessible data sources, with regards to revealing key information for the analysis of competitiveness of Mediterranean cruise ports/destinations but also on assessing the size and structure of the Mediterranean cruise market, and the competitive position of Dubrovnik as one of the leading Mediterranean ports of call. Based on cruise itineraries' data, offered by 25 cruise companies in 2010, the Mediterranean cruise market was analyzed with regards to the total number of different itineraries and cruises. Moreover, other relevant factors include: the total number of ports/destinations participating in cruise tourism within the Mediterranean; the interdependence of the respective ports, itineraries and cruise companies; the number of cruise ships involved, according to ship size; and the seasonality of cruises. Dubrovnik's competitive position was assessed through the comparison of cruises that have Dubrovnik as a port of call versus those that do not. Such an approach enables ports/destinations to directly assess their market position whilst also gathering information on the characteristics of ports/destinations that they rely on and/or compete with on different itineraries.

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## 1.1 Introduction

Cruising is a unique leisure product that comprises transport and hospitality activities (Papatheodorou 2006). It is the fastest-growing sector within the tourism industry, having grown at approximately double the rate of international tourism as a whole during recent decades with an average annual growth rate of approximately 8.1 % since the 1980s (Hung and Petrick 2010; Wood 2004). In particular, its growth has been the most impressive on the North American and European markets (Bartolome et al. 2009).

The cruise product consists of the ship itself and its itinerary (UNWTO 2010). Ports or destinations play a major role in itinerary development; they are an attraction basis for the enrichment of the cruise passengers' travel experiences and they provide a unique opportunity for cruise passengers to learn about the local community's history, culture and lifestyle, as well as experience its natural attractions.

The global scope of the cruise industry is likely to continue to grow whilst concentration in the industry is likely to increase even further (Wood 2006). The cruise market is becoming increasingly competitive as companies try to differentiate themselves (Ellis and Kriwoken 2006). One such way to differentiate the cruise product is through the cruise's itinerary and selection of visited ports, resulting in an increased demand for ports involved with cruise tourism. At the same time, ports/destinations are interested in accommodating cruise ships because they want to grab a part of the passengers' spending money whilst on a cruise, as well as to induce repeat land-based visits and, in that way, a longer stay (Chesworth 2006). Due to the intensive development of the cruise tourism market, one result in the increased level of inter-destination competition is that competitive analysis – as a tool for relating and comparing particular destinations to others and to the market in general (Ritchie and Crouch 2010) – is getting more and more attention.

An analysis of the competitive position of port/destination on the international cruise market requires an extremely wide set of indicators, ranging from those describing the actual competitive position of particular ports/destinations to those explaining factors that determine and/or those that can improve that position (Vanhove 2011). Such a broad set of indicators implies the need for an even broader set of data; that which is needed for competiveness analysis usually also requires different secondary data sources, as well as primary research. Aside from funding and time-consuming primary research, available statistics mainly deal with the number of cruise calls and the number of passengers (home in, home out, transit and total) as well as the cruise companies' market share and characteristics of their ships (Ca' Foscari Formazione e Ricerca 2010; GPW and BREA 2009, 2010; IRN Research 2011). Furthermore, there is also the issue of international comparability of available data due to the different methods, approaches and geographical coverage in the measurement of cruise tourism size and characteristics, caused by different interests and scopes of associations/organizations providing the data, i.e. MedCruise, European Cruise Council, The Florida-Caribbean Cruise Association etc. Such fragmentation in the availability of data on cruise tourism, recognized

also in the overall field of cruise research (Papathanassis and Beckmann 2011), imposes difficulties of synthesizing them and drawing relevant and meaningful conclusions.

One of the core and permanent questions in the analysis of the competiveness of cruise port/destination is therefore how to obtain relevant, unbiased and objective data/information? The focus of the research presented in this paper is to evaluate the scope and relevance of one type of data source in order to reveal key information for the analysis of the competitiveness of cruise ports/destinations.

This paper analyses the capability and features of information gathered from cruise itineraries, which are offered through Internet sites, to provide objective information on the current market position of a competitive cruise destination. The research is focused on the Mediterranean cruise market as one of the world's top cruise regions in 2010 (CLIA 2011) and on the competitiveness of Mediterranean cruise ports/destinations from the perspective of the port of Dubrovnik, as one of the leading Mediterranean ports of call.

The first part of this paper sets the scene – it provides an overview of cruising in the Mediterranean. The second part describes the methods of data collection and applied analysis, while the results section is divided into two parts: the first of which presents the scope of the applied analysis with regard to size and structure of Mediterranean cruise offer; while the second deals with the competitive position of Dubrovnik within that market. The resulting conclusions are outlined in the final chapter of this paper, followed by a critical assessment of the applied methodological framework and possible improvements for future research.

## 1.2 Mediterranean Cruise Market and Dubrovnik: Setting a Scene

While the North American market leads the cruise industry, the most impressive growth in recent decades has occurred in the Mediterranean, with forecasts of further growth (Ca' Foscari Formazione e Ricerca 2010). The Mediterranean market, which reached 3.8 million passengers in 2008 (Lekakou et al. 2009), is divided into three main areas: Western, Eastern and Adriatic. The Western Mediterranean section attains most of the Mediterranean cruise demand (Bartolome et al. 2009) of which the majority is nowadays of European origin (UNWTO 2010).

Regarding the Mediterranean cruise supply in terms of ships and companies, COSTA leads the Mediterranean market with a 23 % share of all passengers (70 % of whom are European), followed by MSC with a 12 % share (UNWTO 2010). According to data published by the European Cruise Council for 2009 (GPW and BREA 2010), there were 152 cruise ships involved in cruising tourism within the Mediterranean; their total capacity was 176,000 lower berths with an average of 1,158 lower berths. In 2009, they could have potentially carried 3.33 million passengers with a total capacity of more than 26 million overnights.

The leading American and European-based cruise lines are increasingly expanding their business in the Mediterranean, with more and more ports included in their itineraries, indicating that this market has not yet achieved its full maturity (UNWTO 2007; Dowling 2006). According to the latest report on cruise tourism, published by the World Tourism Organization (2010), aside from the excellent Mediterranean port facilities and pleasant climate, the enormous potential of further cruise tourism growth in the Mediterranean is due to onshore tourism attractions in Mediterranean countries, majority of which are well-known world tourism destinations. Lekakou et al. (2009) argues that a destination in Mediterranean plays an even more important role than in the Caribbean. Unlike the Caribbean, where the cruise product is labeled as 'fun-sun-sea', the cruise product of the Mediterranean region is more focused towards the cultural and historical varieties of the destination itself. In fulfilling the increasing cruise demand, it is estimated that more than 150 ports in the Mediterranean *can* facilitate cruise ships. At the same time, the quality of the cruise ports is constantly improving; for example, there were 11 on-going cruise port projects in Europe during 2008.

The main Mediterranean cruise ports – those with the highest number of cruise passengers in 2009 – are also the main Mediterranean home ports: Barcelona, Civitavecchia (Rome), Athens, Venice, Palma de Majorca and Savona. The ports with the highest numbers of transit passengers, i.e. main ports of call, were: Naples, Dubrovnik, Livorno, Tunis, Nice, Kusadasi, Marseille, Bari, Malaga, Palermo and Valletta (GPW and BREA 2010).

Dubrovnik, an old medieval town and a UNESCO World Heritage Site situated on the Croatian part of the Adriatic Sea, is one of the most prominent tourist destinations on the Adriatic. It is the second Mediterranean port of call and the seventh Mediterranean cruise port overall for 2009 (GPW and BREA 2010). Dubrovnik with its two ports, Port of Gruž and the Old town port, recorded extremely high growth rates with regards to both the number of calls and the number of cruise passengers during last decade; its millionth cruise passenger was recorded during 2010. Furthermore, Dubrovnik recently significantly upgraded the infrastructure of its main cruise port, Port of Gruž, with further projects focused on cruise terminals under way.

## 1.3 Methods

The evaluation of the scope and relevance of cruise itineraries, offered through Internet websites, aims to provide objective information on the current market position of cruise destinations. This research has been based on a three-step procedure: (1) identification of data sources, (2) collection of data with necessary adjustments, and (3) data analysis.

Identified were cruise companies that generated 90 % of the total cruise overnights in the Mediterranean during 2009 (G.P. Wild 2009). The only types of data sources used to collect information on cruises provided by those cruise

companies, were those that were available via the Internet through the websites of individual cruise companies, including:

- Costa Cruises (http://www.costacruise.com),
- MSC Cruises (http://www.msccruises.com),
- Royal Caribbean International (http://www.royalcarib.com),
- Carnival Cruise Lines (http://www.carnival.com),
- Ibero Cruceros (http://www.iberocruceros.com),
- Happy Cruises (http://www.happycruises.eu),
- Louis Cruises (http://www.louiscruises.com),
- Pullmantur Cruises (http://www.pullmantur.es),
- Aida Cruises (http://www.aida.de);
  - Tour operator Thomson (http://thomson.co.uk),
  - And association Vacation Pros (http://www.cruise-pros.com), a member of Cruise Lines International Association.

Altogether, data on 2010 Mediterranean cruises, provided by 25 cruise companies, were collected.

For each cruise, i.e. voyage, information regarding the company name, name of ship, home port, ports of call, and duration of the cruise as well as departure date has been gathered. Visual Basic code was developed to partially capture cruise data from websites. The collected data required some additional data manipulation, primarily in order to avoid the possibility of counting the same cruises multiple times. Due to the use of the cruise companies' websites, as well as the websites of tour operators and cruise associations, identical, i.e. duplicate or multiple, cruises were detected and excluded in order to avoid multiple counting of the same cruise and to ensure an accurate result. Furthermore, multiple counting of the same cruise also appeared due to the possibility of embarkation/disembarkation in more than one port on the same cruise. Those cruises were captured by analyzing the duration of the cruise and the departure dates, and consequently excluded from further analysis as well. Additionally, as the research was focused on Mediterranean cruises only, cruises with just one port in the Mediterranean were defined as 'non-Mediterranean' cruises and thus omitted from further analysis.

The analysis of cruises included: the frequency and distribution of ports/destinations participating in cruise tourism within the Mediterranean; the interdependence of cruise ports, itineraries and cruise companies; the number of cruise ships involved, according to ship size; and the seasonality of cruises.

Additionally, a set of itineraries was defined based on the set of all cruises by grouping cruises with the same ports of call. That enabled the assessment of Mediterranean itineraries structure and itinerary level analysis, presenting analytical challenges due to the great diversity of available routes (Lew and McKercher 2002). Besides the identification of the most frequent itineraries, based on the number of cruises, itineraries were also analyzed from the perspectives of the cruise companies and ports.

The main part of the analysis referred to the assessment of the ports' and cruise companies' share in the overall Mediterranean cruises and itineraries, separately for cruises/itineraries that had Dubrovnik as a port of call (the so-called Dubrovnik cruises/itineraries) as well as those that did not (non-Dubrovnik cruises/itineraries). Using the same framework, the seasonality and duration of the cruises as well as home ports' shares in the Mediterranean cruise market have also been addressed. Additionally, ports/destinations identified as Dubrovnik's main substitutes and complements in the Mediterranean cruise market have also been assessed.

In addition to the descriptive statistical methods utilized in the study, the differences in characteristics between the two groups of cruises (Dubrovnik and non-Dubrovnik cruises) have been tested using the chi-square test and the Wilcoxon Rank Sum test to address potential significant differences in distribution of the cruise duration, average duration of a cruise, average number of ports called and average size of the ship. This paper also includes graphical presentations of the Mediterranean cruise market allocation (of the ships according to their size and of the most represented itineraries) as well as one that addresses the interdependency between Dubrovnik and other Mediterranean cruise ports.

## 1.4 Mediterranean Cruise Market in 2010: Itineraries, Cruises and Cruise Ports

The analysis of the Mediterranean cruise market in 2010 revealed a total of 1,705 different cruises with 342 different cruise itineraries. The itineraries included 135 cruise ports, either home ports or ports of call. A total of 11,296 cruise ship calls were realized in those ports. The analyzed cruise itineraries included 6.6 ports on average while the average length of a cruise was 8.7 nights.

The total number of 104 cruise ships was involved in Mediterranean cruising industry in 2010 (Table 1.1). Out of all cruise ships, 17 (16 %) were the biggest ones with the capacity of more than 3,000 passengers, while almost three fourths had capacity of more than 1,000 passengers.

The number of ports visited on a cruise is affected by ship size – bigger ships are visiting fewer numbers of ports. Thus, among all Mediterranean cruise ports in 2010, 41 were called by the largest cruise ships (those with a capacity of more than 3,000 passengers). The cruise ships with a capacity from 2,000 to 3,000 passengers visited altogether 53 ports; out of those 16 were new, i.e. not visited by the biggest ships. The majority of ports visited by ships with a capacity of more than 2,000 passengers are along Italian and French Mediterranean coast (Fig. 1.1).

Cruise ships with a capacity from 1,000 to 2,000 passengers called altogether 77 ports (27 new), while cruise ships with a capacity below 1,000 passengers visited the biggest number of ports – altogether 120 ports, out of those 51 new. Taking into account all ships, regardless their capacity, high level of cruise activity, i.e. high

**Table 1.1** Number of cruise ships in the Mediterranean in 2010 by ship size

| Size of ship (number of passengers) | Cruise ships in the Mediterranean | |
|---|---|---|
| | N | % |
| More than 3,000 | 17 | 16.3 |
| 2,001–3,000 | 28 | 26.9 |
| 1,001–2,000 | 30 | 28.8 |
| 1,000 or less | 29 | 27.9 |
| Total | 104 | 100.0 |

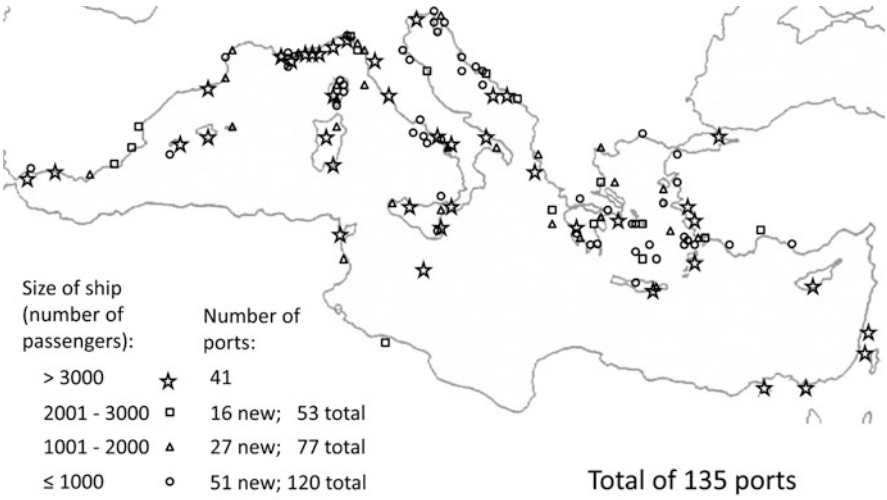


**Fig. 1.1** Mediterranean ports/destinations involved with cruise tourism in 2010 according to cruise ship size

concentration of cruise ports, has been detected also along Greek, Turkish and Croatian coast.

Italy and Greece have the largest number of cruise ports (35 ports each), followed by France, Spain, Croatia and Turkey with 18, 13, 11 and 10 cruise ports, respectively (Table 1.2). More than 90 % of all analyzed Mediterranean ports are in those six countries.

In accordance to the UNWTO (2010) data on share of cruise ship companies, Costa Cruises and MSC Cruises lead the Mediterranean cruise market accounting for more than a third of all cruises in 2010 (21 % and 15 %, respectively). The third one is Royal Caribbean with 9 % of all cruises, followed by Louis Cruises (8 %), Thomson (7 %) etc.

Costa Cruises, as the Mediterranean market leader, had placed on the market the largest number of different cruise itineraries (53) in 2010. Variety of itineraries was provided also by Royal Caribbean and Silver Cruises that developed 34 different itineraries each as well as Louis Cruises with 31 itineraries. The most frequent itinerary was the one in the Western Mediterranean that included Savona, Rome,

**Table 1.2** Number of Mediterranean cruise ports in 2010 by country

| | Mediterranean cruise ports | |
|---|---|---|
| Country | N | % |
| Italy | 35 | 25.9 |
| Greece | 35 | 25.9 |
| France | 18 | 13.3 |
| Spain | 13 | 9.6 |
| Croatia | 11 | 8.1 |
| Turkey | 10 | 7.4 |
| Egypt | 2 | 1.5 |
| Tunisia | 2 | 1.5 |
| Others | 9 | 6.7 |
| Total | 135 | 100.0 |

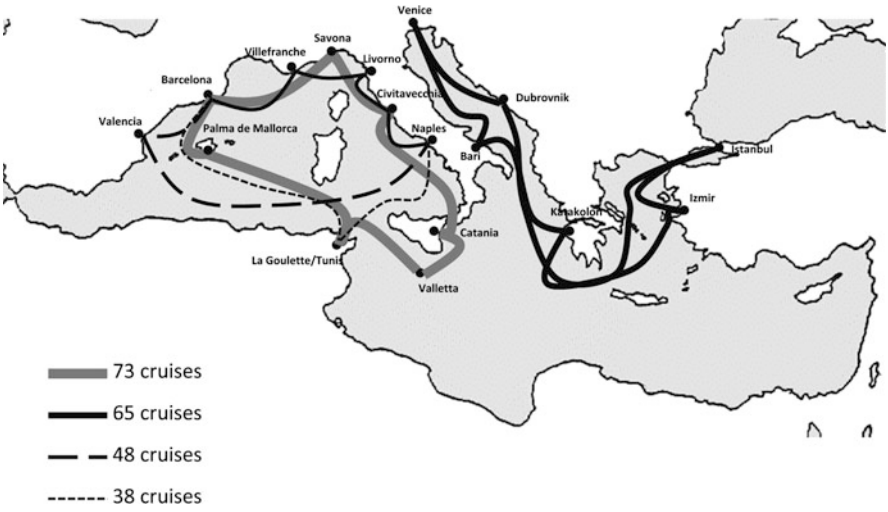


**Fig. 1.2** The most frequent Mediterranean cruise itineraries in 2010

Sicily, Tunis, Balearic Islands and Barcelona, accounting for 73 cruises in 2010 (Fig. 1.2). Most of these ports were also included in the third and the fourth most popular itinerary in the Mediterranean, accounting for 48 and 38 cruises, respectively. With the 65 cruises based on, the Eastern Mediterranean itinerary that included Venice, Bari, Izmir, Istanbul, Katakolon and Dubrovnik was the second most popular.

## 1.5 Competitive Position of Dubrovnik as a Port of Call on the 2010 Mediterranean Cruise Market

Dubrovnik as a port of call appeared on 78 different itineraries and 420 cruises, i.e. on the almost every fourth Mediterranean itinerary/cruise in 2010. As among Mediterranean cruises in general, Costa Cruises and MSC Cruises have been the

**Table 1.3** Share of cruise companies in Mediterranean and Dubrovnik cruises in 2010

| Cruise company | Mediterranean cruises in 2010 (in %) | Dubrovnik cruises in 2010 (in %) | Share of Dubrovnik cruises in all cruises provided by cruise company (in %) |
|---|---|---|---|
| COSTA Cruises | 21.1 | 22.5 | 26.1 |
| MSC Cruises | 14.8 | 22.0 | 36.5 |
| Royal Caribbean Intern. | 8.9 | 5.5 | 15.2 |
| Louis Cruise Lines | 7.8 | 2.9 | 9.0 |
| Thomson | 7.3 | 3.1 | 10.4 |
| Windstar Cruises | 4.9 | 3.8 | 19.0 |
| Happy Cruises | 4.8 | 7.7 | 39.0 |
| Aida Cruises | 4.5 | – | – |
| Pullmantur Cruises | 3.6 | 3.3 | 23.0 |
| Norwegian Cruise Line | 3.2 | 3.8 | 29.1 |
| Others | 19.1 | 25.4 | – |
| Total | 100.0 | 100.0 | – |

most represented cruise companies in Dubrovnik cruises as well. Almost every second cruise that called Dubrovnik in 2010 (45 %) has been realized by Costa Cruises or MSC Cruises (Table 1.3), pointing out high dependence of Dubrovnik on those two companies. While the share of Costa Cruises in Dubrovnik cruises (23 %) has been similar to its overall share in the Mediterranean cruises (21 %), MSC Cruises had higher share in Dubrovnik cruises (22 %) than in the overall Mediterranean cruises (15 %), showing its higher 'preference' to Dubrovnik (hosting 37 % of all MSC cruises). Regarding number of calls, Dubrovnik was the seventh port of call in all Costa cruises, and the fourth port of call in all MSC cruises. On the other hand, cruises by Royal Caribbean, Louis Cruise Lines and Thomson were less present in Dubrovnik cruises than in the Mediterranean cruises overall.

The itineraries that included Dubrovnik included also 86 other ports (Fig. 1.3) with total of 3,090 calls realized in 2010. Among them, Venice was a cruise port with the highest number of calls, being a home port or port of call of almost every Dubrovnik cruise (98 %). At the same time, Dubrovnik was a port of call for 85 % of cruises calling Venice. The high correlation with Dubrovnik as a port of call was also evident for ports of Bari and Corfu – cruises calling Bari and Corfu in 92 % and 89 %, respectively, were also calling Dubrovnik. Meanwhile, almost every second Dubrovnik cruise included Corfu while almost every third Bari. Thus, these ports could be addressed as Dubrovnik complements.

Split, Bari, Hvar, Koper and Šibenik were detected as the main substitutes of Dubrovnik as a port of call in the Adriatic. These ports were on 38 %, 18 %, 6 %, 4 % and 2 % of all non-Dubrovnik cruises having Venice as a home port. Those cruises were often calling Athens (62 %), Katakolon (50 %), Corfu (44 %) and Mykonos (40 %), somewhat less represented cruise ports on Dubrovnik cruises. As Split and Koper have been amongst the Mediterranean ports with the highest growth rates in a number of cruise passengers during the last decade (Ca' Foscari

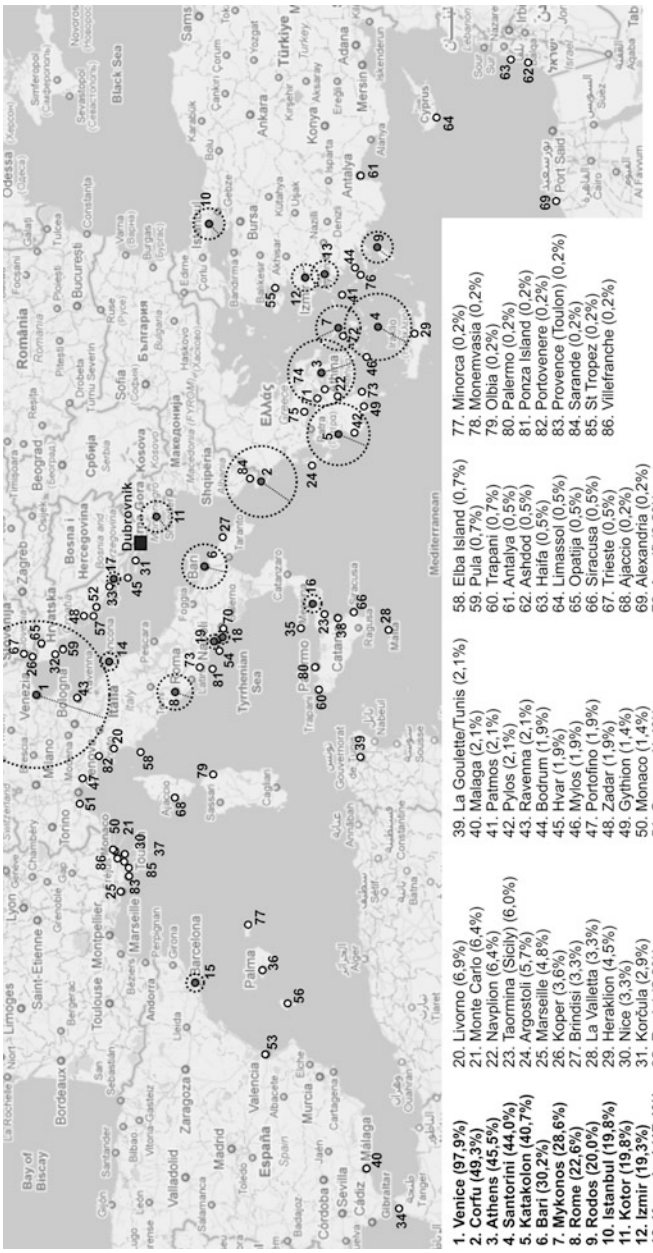


**Fig. 1.3** Share of the cruise ports in Dubrovnik cruises in 2010

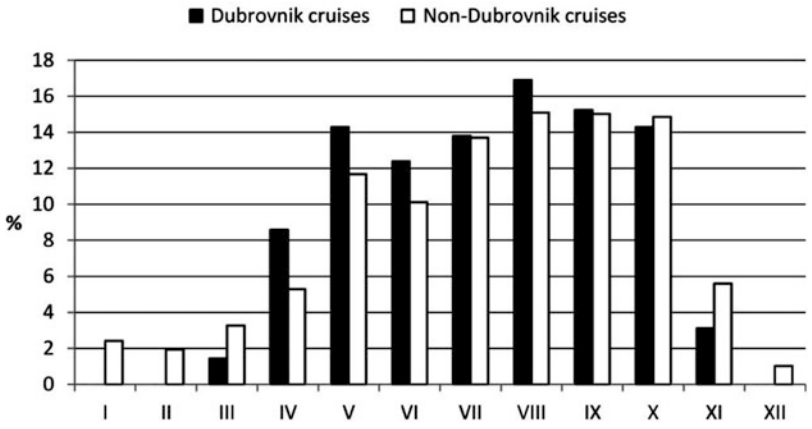


**Fig. 1.4** Seasonality of Dubrovnik and non-Dubrovnik cruises in 2010

**Table 1.4** Comparison of Dubrovnik and non-Dubrovnik cruises

| Cruise characteristics | Dubrovnik cruises (N = 420) | Non-Dubrovnik cruises (N = 1,285) | p-value[a] |
|---|---|---|---|
| Length of cruise (number of cruise nights) | | | |
| 1–7 | 72 % | 65 % | <0.001 |
| 8–14 | 20 % | 31 % | |
| 15 and more | 8 % | 4 % | |
| Average number of nights | 9.1 | 8.5 | NS |
| Average number of ports/calls | 7.4 | 6.4 | <0.001 |
| Average size of ship (number of passengers) | 2,040 | 2,046 | NS |

NS – not significant
[a]P-value from chi-square test or Wilcoxon rank-sum test.

Formazione e Ricerca 2010), they could represent most serious substitutes for Dubrovnik as a port of call.

Cruise industry is governed by seasonality (Charlier and McCalla 2006). Although both groups of analyzed cruises were expressing seasonality, non-Dubrovnik cruises were less seasonal, showing higher share of winter cruises (Fig. 1.4).

The analyses of the average length of cruise between Dubrovnik and non-Dubrovnik cruises did not reveal any significant difference between them. Nevertheless, the shortest cruises, up to seven nights long, as well as the longest ones, with 15 and more nights, were more frequent among Dubrovnik cruises (Table 1.4). Furthermore, Dubrovnik cruises included seven ports on average, one more compared to non-Dubrovnik cruises. No significant difference was detected in the size of the cruise ships between Dubrovnik and non-Dubrovnik cruises.

## 1.6 Concluding Remarks

As a part of the overall competitiveness analysis, this paper deals with the explicit assessment of the cruise port/destinations' relative market position. It also examines different aspects of the Mediterranean cruise tourism industry through geographical and statistical perspectives, whilst providing comparative framework to examine the structure of Mediterranean cruise itineraries. With limited availability and comparability of international data needed for such analysis, this paper shows how one easily-accessible type of data source can provide reliable and unbiased data for the determination of competitive cruise port/destination market position.

Data on Mediterranean cruise itineraries gathered through Internet sites enables the analysis of the Mediterranean cruise market with regard to: the total number of different itineraries and cruises; the total number of ports/destinations participating in cruise tourism within the Mediterranean; the interdependence of ports, itineraries and cruise companies; the number of cruise ships involved, according to size; the seasonality of cruises; and the average calling time by cruise ports and cruise companies. Such an approach enables ports/destinations to directly assess their market position but, moreover, to also gather information on the characteristics of ports/destinations that they rely on and/or compete with on different itineraries. The scope of data described and analyzed provides a comprehensive tool for the determination of ports/destinations relative competitiveness, as a key issue for proper approach to destination positioning (Chacko 1998).

Determination of the population, i.e. all itineraries and cruises available within a region, creates the major methodological limitation of the proposed approach. That limitation is, aside from coverage of all cruise companies, primarily caused by using the Internet as the only source for data collection. Although the effectiveness and importance of online distribution channels is rather small but gaining importance in cruise business (Papathanassis and Breitner 2009; Vogel 2004), cruise operators' web accessibility is clearly demonstrated and emphasized on numerous websites of cruise companies and associations as well as travel agents providing detailed information on the available cruises. Nevertheless, it can be expected that some specific niche markets do not use Internet as a communication tool.

Besides testing the relevance of coverage issues, future research should be extended in the field of variety of data gathered – including the price of specific cruises together with discounts offered and calling time in ports of call – but also by extending its time horizon. Trend analysis can provide significant data about cruise market structure changes over time and it can also indicate new cruise destinations entering or exiting the Mediterranean cruise market. Scholars and practitioners have shown that the service quality evaluation and the resulting satisfaction are associated with loyalty and willingness to maintain long-term relationship between the cruise companies and ports (Pantouvakis et al. 2008). Thus, combining the described database with the internal database owned by cruise companies on sociodemographic characteristics of cruise passengers could substantially improve customer satisfaction as well as improve the destinations' understanding of their competitive position and advantages regarding rival destinations.

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# Chapter 2
# Megaships and Developing Cultural Tourism in Dubrovnik

**Jasenko Ljubica and Zelimir Dulcic**

**Abstract** The process of determining the influence of different variables to the design of development strategies primarily includes a multidimensional analysis of such correlations in order to, and based on data obtained by such a process; determine an optimal development model for applicable areas. Accordingly, when discussing the phenomenon of tourist megaships as an influential variable, we discuss both the multidimensional influence of their presence on the receptive area in periods of the physical presence of vessels, and the influence of the presence of guests on such ships to the receptive area. Furthermore, the fact that the tourist valorisation has transformed the cultural heritage, as a relevant part of the receptive area, into a fundamental factor of attraction of Dubrovnik as both receptive area in general, as well as cruising tourism destination, clearly indicates cultural tourism management development model, as an instrument of strategic interaction between these two dimensions, being the recipient variable. Therefore, the main objective of this paper is to define the impact of cruise megaship presence on the creation of the optimal culture tourism development model as well as to project the implementation effects of such model in previous tourism practice.

## 2.1 Introduction

The transformation of tourism into the inductor of economic revitalization and prosperity is caused by natural, technological and social-cultural predispositions of the receptive area in terms of compatibility of the resource basis with the requirements of modern tourism industry. Accordingly, the development of cruise tourism presupposes the realization of a number of preconditions in terms of destinations. These conditions relate to the creation and (or) modification of the

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key elements of cruise tourism development in terms of creating and marketing an integrated package of services that will enhance a cruise destinations recognition on a cruise market. Competitiveness on such market involves achieving a high level of standards that modern cruise industry sets as a condition. Accordingly, a crucial criteria for the entry of potential contact ports in itineraries of cruise ships, except attraction components which are the main motive and the presumption of their arrival, the technological conditions are adequate in terms of nautical, transportation and utility infrastructure network. Thereafter, we must take into consideration the spatial and social-cultural characteristics of areas in order not to neglect the imperative of sustainability, which presupposes the quality before quantity (Djurkovic 2007). Thus, the cruise destination offer is characterized by the compatibility of the resource structure to the requirements of sustainability and modern cruise industry.

In the Dubrovnik area, which is characterized by inversely proportional ratio of tourist attractiveness and intensity of demand and load-bearing capacity of the city as a tourist destination, the spatial-natural compatibility is a focal point of the problem. Due to topographic predispositions, defined by non-homogeneous narrow coastal strip (UOPD 2005) and monocultural structure of tourism, based on the historical core as the central tourist district (Djukic 2008), such area cannot be significantly adapted to increasing demand. Consequently, given the intense cruising traffic with a constant tendency to increase, the current geo-urban configuration is extremely unfavorable especially in terms of overloading the natural and urban environment and the ecological and socio-cultural equilibrium.

From the aspect of technological compatibility, taking into consideration the relatively small area of tourist interest (Old Town) and the linearly increasing demand trend, the problem of transport overcrowding is actualized. The expected two million cruise tourists by 2017 and their current spatial and temporal distribution,[1] are ineligible for Dubrovnik (Ban 2007) and are aggressively exceeding the limits of carrying capacity of the City, designed for 1.1 million cruise tourists a year. On the other hand, the nautical infrastructure upgrade, as a crucial element for the cruising development, is recognized as an imperative. Taking into consideration the upgraded carrying capacity of the port, and despite the lack of disposal technology, rearrangement of cargo port to the area of Batahovina and construction of port infrastructure, will establish the leading position of Dubrovnik as a destination for cruise tourism in the region.

Destabilization of environmental sustainability is induced, in terms of passengers, with negative temporal and spatial dispersion of tourism intensity. The concentration of highly numbered tourist visits in the central quarter of the year, and lack of their education and available information, along with the unpreparedness of the tourist offer creators, often results in devastation of cultural goods as the basic tourist resource. The problem of production and disposal of small waste also runs out as a side effect of the presence of a large number of tourists in the Old

[1] Analysis of the cruising traffic data in highseason, when the same is most intense, indicate that the historic core is visited every 2 days by 3,000 cruising guests, every 4 days by 3–6,000, every 8 days by 6–10,000, and every 20 days by over 10,000 cruising guests (Djukic and Jerković 2008).

Town, which together with the cleanliness and sanitation minimums undermines its visual identity as well as the tourist attractiveness. Other invasive elements in terms of environmental sustainability are the vessels themselves. They affect the ecological balance of the area, such as sound, air and water (sea) pollution even up to 2,000 times (Klein 2003) more harmful than other pollutants such as automobiles. Nevertheless, the ecological balance of the Dubrovnik area is still relatively well preserved which entails the need for a proactive approach to this issue.

Analyzing the economic dimension of the impact of megaships to the sustainability of tourism development in Dubrovnik, in fact, defines the economic aspects of tourism exploitation of destination resources. The income that the destination generates by reception of cruise ships (supply and servicing of the vessels and passengers), includes revenue from port charges and fees, tariffs to maintain the waterways and tourist and crew expenditure at the destination. Correlating prices for services that megaships use and the average tourist expenditure with the dynamics of their visits, clearly indicates the economic benefits that destination accomplishes. Data derived by analyzing the dynamics and the number of passengers and vessel size, and their correlation with tourist expenditure show a increase of tourist spending in parallel with the length of tourists stay in the destination, and the reduction compared with the size of the vessel. The analysis also shows that tourist expenditure in Dubrovnik is relatively low, given the intensity and dynamics of cruise demand. The reasons for this should be identified in a relatively short period of stay, or inadequate offer which, besides the unfavorable urban characteristics and infrastructure deficiencies, is characterized by unacceptably expensive catering offer. Adding to that, the unoriginal trendy products and the absence of genuine traditional souvenirs and other products and services (Djurkovic 2007), is a clear gap between the superior cultural and inferior tourist offer. The structure of the economy, particularly in most burdened historical center, points to further, tourist induced, economic changes. They are primarily visible in the extrusion of productive and penetration of catering activities, which indicates a strong development towards tertiary sector and tourism industry in the inner city area. The historical core of today has become a business zone, characterized by a surplus of jobs in relation to population.

Social-cultural sustainability of Dubrovnik tourism refers to the impact of cruisers and their passengers to the local community and stationary guests. Here we primarily heed social-demographic variations in receptive area, especially the Old City as a major tourist attraction in the form of movement of population and households as well as the structure and intensity of such migrations. The first to point out is the negative population trend that is evident in the decline of the average number of households and their members of 3.2 in 1953 to 2.1 in 2006 (Djukic 2008). This is due to a strong penetration of tourist and restaurant services, but also the fact that the Old Town is increasingly appreciated as secondary residence (vacation homes). Tourist migration in the Old City participates with 87.7 %, in which the cruise guests hold 11.8 % and in the period of highest cruising intensity (about 13.00 h on weekends) up to 54.2 % (Djukic and Jerkovic 2008). According to empirical research, conducted by the Institute for Tourism, for the

needs of national strategy for sustainable development of cruise tourism, the local community, however, shows a great tolerance towards the cruise reviews and considers them to be generally welcomed. Nevertheless, most respondents (55 %) believe that the crowds in Dubrovnik are as they appear in the media, while 21 % consider the problem even more serious, which has a potential to construct negative image of the city. Also indicative is the fact that over 93 % of respondents wanted to see more cruisers out of season and 35 % believe that further growth in cruise demand will threaten the quality of life of citizens. This means that cruising is percepted as positive and desirable but also confirms the hypothesis of an adverse concentration of the intensity of demand on annual basis. 13 % of the stationary guests, on the other hand, assessed the presence of cruise guests as a factor of destination attractiveness impairing, while the other 23 % (one out of four hotel guests) the presence of passengers from the cruisers rate as negative. Despite the aggressively growing demand and overcapacity and halfness of the urban and technological parameters, the inhabitants recognize tourism as the most important economic activity, and the fact that Dubrovnik represents a tourist mecca creates a sense of pride. Tourism, therefore, forms part of the cultural identity of local community and is a factor of their social cohesion.

All the above clearly confirms the fact that the current aggressive growth of the cruise demand directly contributes to the excess of Dubrovnik carrying capacity, and thus becoming a serious threat to its sustainable tourism development.

## 2.2 Hypothesis

Based on the preliminary analysis of the compatibility of resource structure and impact of megaships on the sustainability of tourism development, researches and hypotheses are performed. Given the capital importance of the destination resource basis for the cruise industry development, the starting point of this research is to determine the degree of compatibility of each resource category with the standards of modern cruising. The analysis shows that Dubrovnik, as a cruise destination, is characterized by unequal capacity to comply the demand from spatial, technological and social-cultural point of view. Linearly increasing demand is complementary to high, culturally profiled, tourist attraction of the city, but is also exceeding the boundaries of acceptable capacity and the intensity which the destination, given its physical, technological and socio-cultural capacity, can tolerate. Therefore, the first part of research is aiming towards defining and measuring adaptability and effects which intense demand has on the receptive area.

The next phase of research relates to the creation of a strategic model of sustainable tourism development, based on findings from a previous analysis of the resource basis and the effects of exaggerated tourism demand in the receptive area. Designing such a model implies demand modelling by re-evaluating the attraction resources of generally cultural profile, taking into consideration the strain on the limited spatial and social-cultural capacities of Dubrovnik. Accordingly, given the uniformity of attraction features, which are characterized by a rich

cultural heritage, their specificity in the form of natural linkage with specific time (intangible heritage) and location (tangible heritage) become a crucial element of a new strategic model. Consequently, differentiation of culturologicaly based tourism product of the city by more intense tourist valorization of intangible cultural heritage, naturally and traditionally related to, mostly out of season periods, and the tangible cultural heritage, which is always available to visitors, imposes by itself. Such evaluation must include cultural resources, on a wider geographical area in order to encourage and intensify the geographical expansion of the tourist attractivity which will consequently result in temporal and spatial dispersion of tourism intensity. In this way a new tourist destination will be formed, which will, on the basis of its multidimensional carrying capacity increase, disperse and therefore reduce the demand pressure on the current narrow range of tourist interest, which is, in the concentrated intervals, linearly increasing, causing many negative effects. On this grounds, the main objective of this paper is to investigate and determine the optimal model for sustainable tourism development of Dubrovnik on the basis of strategic modelling of tourist offer, based on cultural tourism products, and demand in the form of cruises, as well as to design the effects of implementing such a model in the current tourism practice. Hypotheses highlight the importance of dispersion of megaships presence throughout the year, thus reducing their pressure on all dimensions of sustainability of receptive area in terms of ecological, technological and social-cultural capacity. This will result in initiating, inversely proportional ratio of positive at the expense of the negative effects derived from the implementation of such a model in tourism practice.

In accordance with the above issues, the fundamental objective of this paper is to substantiate the following baseline hypothesis:

- H0 Dubrovnik, on the basis of its rich cultural heritage, *is* primarily a destination of cultural tourism, while the same has a function of primary attractivity factor of the city as a cruise destination.

On this basis, the following auxiliary hypotheses can be set:

- H1 Impact of cruise ships and passengers is negative *from the* aspects of technological and environmental, *moderate* from social-*cultural* and positive from economic point of view, which represents the destabilization of sustainable tourism development.
- H2 Enhanced tourist valorization of remote and cultural resources traditionally associated with off-season periods, will result in differentiation of the tourism product and *in* increase in tourist attractiveness of the wider Dubrovnik area.
- H3 *Increase* in tourism attractiveness of the wider receptive area, particularly in the off-season periods, will result in spatial and temporal transfer *of* the focus of demand,[2] that will, consequently, reduce its pressure on the destination and will reduce the seasonal effect.

[2] Refers to the cruising community demand and overall tourist demand.

## 2.3 Methodology

In the study and determination of the defined hypotheses and objectives the basic research method will be the questionnaire method. The questionnaire is designed based on Likert psychometric and analytical method used to measure the degree of agreement or disagreement with a statement on the continuum from absolute negative to absolute positive attitude toward the research interests. In the present survey, scale consists of five stages with the corresponding intensity of (dis)agreement. The structure of the questionnaire was designed to accurately test each hypothesis by three groups of questions: general information and structure of the respondents (1), determination of the degree of compatibility of the receptive area resource basis with modern cruising standards, and requirements of sustainable tourism development, as to define the current megaships impact on the sustainability of tourism (2) and testing of the proposed model (3). Questionnaires will be distributed, mainly, via personal contact with a prior explanation of the problem in order to get as much concrete results as possible. The sample will consist of all relevant stakeholders for sustainable development of tourism in the Dubrovnik area. Consequently, the structure of subjects will consist of the holders and the creators of tourism development such as City Mayoralty, tourism boards, travel agencies and similar entities. Furthermore, attitudes of key service providers in the cruise tourism industry such as port authorities, shipping companies and contractors will be examined. Apart from these, members of the community will represent a significant group of respondents, particularly members of the academic community, whose area of interest is this issue in order to get as much as possible professional and credible conclusions. According to the characteristics such a sample can be viewed as a sample of connoisseurs. Polygon area of research will be the city of Dubrovnik and the surrounding region as a tourism destination covering the problem. Information gathered in this manner will be processed by adequate statistical methods, and based on their processing, research results will be formed and, grouped into different spreadsheets and graphics. Data obtained by empirical research formulated in this manner, should be accurate, reliable and precise.

## 2.4 Findings

In accordance with the defined research design, a total of 125 questionnaires were distributed. Twenty-six correctly completed questionnaires were returned, which sets the questionnaire return rate at 20.8 % which is considered as acceptable. One questionnaire was incorrectly filled, and one respondent declared incompetent. There was no significant limitations to the research, aside from the fact that it was conducted during two summer months (July–August) when the potential respondents were preoccupied with the increased volume of business activity for the summer season, or even vacations, which is directly correlated with the relatively low interest of respondents to participate in the study.

| DEMOGRAPHIC CHARACTERISTICS | | *f* | % |
|---|---|---|---|
| Gender | male | 15 | 57,7 |
| | female | 11 | 42,3 |
| Age | Less then 25 | 0 | 0 |
| | Between 26 and 35 | 8 | 30,8 |
| | Between 36 and 45 | 8 | 30,8 |
| | Between 46 and 55 | 3 | 11,5 |
| | More then 55 | 7 | 26,9 |
| Education | High school | 5 | 19,2 |
| | College | 0 | 0 |
| | University | 12 | 46,2 |
| | MA | 4 | 15,4 |
| | PHD | 5 | 19,2 |
| Occupation | Turism | 2 | 7,7 |
| | Culture | 7 | 26,9 |
| | Education / science | 9 | 34,6 |
| | Mayorality | 2 | 7,7 |
| | Port Authority | 3 | 11,5 |
| | Other | 3 | 11,5 |
| Experience | -5 | 2 | 7,7 |
| | 6-15 | 11 | 42,3 |
| | 16-25 | 6 | 23 |
| | 26-35 | 4 | 15,4 |
| | 35+ | 3 | 11,5 |

**Fig. 2.1** Sample structure (Source: authors according to the research results)

Analysis of the research results begins with the structure of the examinees (Fig. 2.1). Of the total number of respondents who participated in the study, 57.7 % are male and 42.3 % female. Age structure of respondents is concentrated mainly in the age group between 25 and 45 years (61.6 % of respondents), while 11.5 % of respondents are in the age group of 45–55 years. 26.9 % of respondents have more than 56 years. The educational structure is formed mostly of people with a college education (46.2 % of respondents) followed by those with secondary education (19.2 %) and doctoral degrees (19.2 %). 15.4 % of respondents holds a MA, while none of the participants was with a bachelor degree. From the aspect of professional work, the largest number of respondents, 34.6 %, are working in educational institutions, followed by persons employed in institutions in the cultural domain (26.9 %), port authorities (11.5 %), tourism (7.7 % ) and the city administration (7.7 %). 11.5 % of respondents are employed in the other business category. Accordingly, most respondents had between 6 and 15 years of experience (42.3 %), 23 % between 16 and 25 years and 15.4 % between 26 and 35 years of experience. Less than 5 years of service 7.7 % of respondents and 11.5 % more than 36.

| Claim | Disagree | | Undecided | | Agree | |
|---|---|---|---|---|---|---|
| | *f* | % | *f* | % | *f* | % |
| Dubrovnik as a destination for cultural tourism | 1 | 3,9 | 0 | 0 | 25 | 96,1 |
| Cultural heritage as a factor in the attractiveness of Dubrovnik as a destination for cruise tourism | 1 | 3,8 | 2 | 7,7 | 23 | 88,4 |
| Transport infrastructure in the city's outdated and inadequate numbers of tourists | 2 | 7,7 | 2 | 7,7 | 22 | 84,6 |
| Passengers from the cruise directly contribute to the exceedance of carrying capacity of the city | 7 | 26,9 | 3 | 11,5 | 16 | 61,5 |
| Seasonality of tourism in Dubrovnik is strongly expressed | 0 | 0 | 6 | 23 | 20 | 77 |
| The presence of cruisers adversely affects the ecological preservation of the Dubrovnik area | 6 | 23,1 | 9 | 34,6 | 11 | 42,3 |
| The presence of cruisers adversely the city's apperance | 12 | 46,2 | 7 | 26,9 | 7 | 26,9 |
| Passengers from the cruise adversely affect the ecological preservation of the City , primarily in the form of small waste production and physical damage to cultural heritage | 7 | 26,9 | 9 | 34,6 | 10 | 38,4 |
| Cruise Passengers affect me negatively | 12 | 46,2 | 8 | 30,8 | 6 | 23 |
| Cruisers and passengers bring significant financial benefit to the local community | 1 | 3,8 | 2 | 7,7 | 23 | 88,4 |

**Fig. 2.2** Compatibility of the resource basis of Dubrovnik and the intensity of demand (Source: authors according to the research results)

Compatibility of the resource structure of Dubrovnik with the requirements of contemporary cruising and the impact of megaships and their passengers on the sustainable development of tourism, become clearer from the analysis of data from Fig. 2.2. Consequently, 96 % of respondents, the near absolute majority, consider Dubrovnik, primary, as a destination of cultural tourism. Also, 88 % of respondents hold the cultural heritage as a fundamental factor of attractiveness of Dubrovnik as a cruise destination. In accordance with the high coherence of the answers, the starting hypothesis H0 is considered to be confirmed.

In the technology domain, the stand of the examinees is very clear of whom 84 % considered the transport infrastructure in the City as outdated and inadequate to the number of tourists. The fact that 61.5 % of the respondents believe that tourists megaships directly contribute to the exceedance of carrying capacity, while 27 % of them claim the opposite and 11.5 % were undecided, which means that their stands part, clearly indicates the pressure strength that the cruise guests produce on the destination, in technological, ecological and socio-cultural terms. Accordingly, 77 % of respondents believe that the seasonality of tourism in the city is strongly expressed and 23 % were undecided which repeatedly confirms the theory of the negative intensity of the tourism concentration on annual basis, together with associated repercussions.

The impact of vessels on the ecological preservation of the aquatorium, as the basic resource that the megaships use, is rated as negative by 42.3 % of the

| Claim | Disagree | | Undecided | | Agree | |
|---|---|---|---|---|---|---|
| | *f* | % | *f* | % | *f* | % |
| Cultural heritage of the wider Dubrovnik area is not sufficiently involved in the tourist offer | 1 | 3,9 | 4 | 15,3 | 21 | 80,8 |
| Tourism promotion of cultural heritage will increase the attractiveness of the wider Dubrovnik area and reduce the size and thus the pressure of tourists on theTown | 4 | 15,4 | 3 | 11,5 | 19 | 73,2 |
| Tourism promotion of intangible cultural heritageof Dubrovnik is unsatisfactory. | 4 | 15,4 | 6 | 23 | 16 | 61,5 |
| Enhanced tourism promotion of intangible cultural hertage of the City will increase its attractiveness as a destination of cultural and cruising tourism. | 4 | 15,4 | 3 | 11,5 | 19 | 73,2 |
| Enhanced tourist valorization of intangible cultural heritage, related to Out of season parts of the year will reduce the effect of seasonality of tourism in the City | 8 | 30,8 | 4 | 15,4 | 14 | 53,8 |
| Achieving sustainable development of tourism in Dubrovnik will positively affect the sustainability of tourism developmentat national level | 2 | 7,6 | 5 | 19,2 | 19 | 73,2 |

**Fig. 2.3** Testing of the proposed model (Source: authors according to the research results)

respondents while as many as 34.6 % are undecided. The reason for this, can be found in the lack of information and (or) interest of respondents, considering that cases of leakage of very toxic ship waste in the Dubrovnik area have already been documented. Furthermore, respondents show, according to the introductory statements, a high tolerance towards megaships. Consequently 46.2 % do not consider that it distorts the beauty of the City while the same percentage, find their impact not negative from a personal point of view. Also the attitude of the respondents in terms of ecological preservation of the city and its heritage as a basic tourism resource given the number of passengers from the vessels is indicative. Accordingly, 38.4 % confirms the thesis that they negatively affect the ecological balance primarily in terms of small waste production and devastation of cultural heritage. 26.9 % of subjects deny such as a thesis while 34.6 % are undecided, which can be attributed to the previously mentioned lack of information or a high adaptability degree to the presence of passengers which, as well as their impact, leaves them indifferent. The high degree of coherence in responses has been achieved in terms of economic benefits that the city obtains from megaships and their passengers, where even 88.4 % of respondents agreed with the statement that these benefits are substantial. Based on these results we conclude that the hypothesis H1 is confirmed Fig. 2.3.

The proposed strategic model of tourism development, based on the re-evaluation of cultural heritage, as the most valuable tourist resource, was tested as follows. In accordance with the thesis that the wider Dubrovnik area is characterized by an unequal degree of transparency in relation to the tourism in the city and its historic center, 80.8 % of respondents agreed with this statement while 15 % were undecided. Undecided biased attitude of the respondents can be explained by

misinformation or uniformity, but without any doubt the fact about the unbalanced tourism promotion and development of the wider Dubrovnik region is confirmed. Consequently, 73.2 % of respondents believe that the tourism promotion of cultural heritage of the wider Dubrovnik area, increases its attractiveness and differentiation of the tourism product and reduces the size and thus the pressure of tourists to the city, which supports hypothesis H2. Such a position clearly indicates the need for dispersion of tourism intensity from overloaded tourist area of the Old Town.

When talking about the city as a central tourist attraction, 61.5 % of respondents believe that the intangible cultural heritage is promoted unsatisfactory. On these grounds, 73.2 % of respondents believe that its implementation in the tourism offer will significantly increase the attractiveness of Dubrovnik as a cultural and cruise tourism destination. It is important to emphasize the fact that 53.8 % of respondents believe that tourist valorization of intangible cultural heritage, which is naturally linked to, in large part, out of season period, will reduce the effect of tourism seasonality and increase the city attractiveness in the highseason period. Also, 73.2 % of respondents believe that the achievement of sustainable development of tourism in Dubrovnik will have the same result at the national level. Having in mind the importance of Dubrovnik to the Croatian tourism, positive impact that the implementation of such a model would have on the development of national tourism Corps is apparent.

## 2.5 Conclusion

Culture and cultural heritage, as its manifest form, have always been firmly incorporated into one, including the tourist traveler. From this strong connection, and from the growing sophistication of tourists who crave for more than sun, sea and sand, emerges the strength of heritage as a tourist resource. Cultural destinations, as Dubrovnik is, have an enormous potential in terms of neutralization of those tourism segments arising from the era of mass tourism. Seasonality, overcapacity, ecological and social-cultural imbalance, are relics of the time but still very current. Cruise tourism, as the new selective form of tourism, often characterizes forcing in satisfying the conditions for receiving and servicing megaships and their passengers at the expense of the needs and possibilities of destinations. This is the starting point for the destabilization of the destination sustainable development, which must determine the priorities and modalities of development taking at the same time, as a regulatory element, its natural, technological and socio-cultural opportunities and potentials.

When talking about the tourist attractions of Dubrovnik it is easy to come to conclusion that the accumulation of a large number of different forms of tangible and intangible cultural heritage, of priceless value and indisputable importance, recognized in global terms, actually represents a critical mass of tourist attractions and basic tourism resource of the City. Consequently, almost every tourist whose stay in Dubrovnik was initiated by the appeal of its heritage, is a cultural tourist.

Cruising tourists, due to the fact that the cultural heritage is a motivator of their arrival, have also metamorphosed into cultural tourists. In their case, the focal point of the problem is almost invasive nature, the intensity and the concentration of their presence. Having in focus the needs, wishes and preferences of cruise passengers, cruise tourism often assumes the realization of different requirements in terms of destination while ignoring the natural and anthropological capacity. Destinations, on the other hand, often motivated by economic ratios, tend to maximize the serviceability of such demand. Such actions undoubtedly lead to the critical escalation moment when it is necessary to analyze the genesis of the problem, and modalities to its solving based on long-term sustainability.

Sustainable development management process is actually a quest for the best solution, taking into account the essential elements of the strategic environment whose ecological, economic and social-cultural configuration represents the source of sustainable development strategy. In the case of Dubrovnik, the high attractiveness of the historic center is a clear cause of the linearly increasing cruising demand trend but also, slowly but surely growing into its curse. Aggressively growing trend in demand is approaching the upper limits of ecological, technological and socio-cultural sustainability and hence a need to proactively approach resurfacing tourism development with the aim of long-term stability. Problems initiated by surging cruising tourism, taking into account the correlation between attractiveness, demand and capacity, assume a more serious character. Specificity as well as strength, and the role of cultural heritage in tourism, and in human life, are in this paper recognized, as key components of the new strategic development model, which indicates an unequal tourism valorization and exploitation of destination resources and the potential of cultural heritage in its tangible and intangible form, has in the management of sustainable tourism development in the Dubrovnik area. As an instrument of managing aggressively growing demand, it is able to achieve a multi-dimensional effect in the direction of relieving the natural, urban-technological and the social-cultural system of receptive area and as such, represents a valuable tool to neutralize or minimize the burning problems of tourism in this area that is reaching alarming levels.

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# Chapter 3
# Port Development Partnerships: Dubrovnik Port Case Study

**Tihomir Lukovic and Kristijan Pavic**

## 3.1 Introduction

When defining the guidelines for the development of the entire port area, it appears, in addition to the spatial organization of individual facilities, a number of issues of functional and organizational nature. Organization and quality of terminal service in the port enters the area of basic security functionality of port operations, and this is one of the primary factors that respond to market demand for cruises. The question of required criteria of Dubrovnik as a destination is to a large extent conditioned by the possibility of forming a satisfactory tourist product, which is an important issue, according to the researches that have been made in the Mediterranean ports. For a professional approach into the increasingly sophisticated and demanding market cruises, it is necessary to meet the basic requirements, especially in situations when the Dubrovnik as a destination should be determined in terms of setting their requirements and criteria.

Partnership in the investment in the port passenger capacity is realized through the issuance of concessions for a long period of time, which would include the construction and use of the facility under conditions that would determine by the port authority. The partnership is formed between public and private sector, and between the port and local authorities in order to protect the interests of the functionality of the port and the development of cruise destination.

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## 3.2 Cruise Ports and Their Distinguishing Features

Special features of the ports oriented to cruise ships acceptance come primarily from the interaction of the port system and tourism as an economic segment. At the local level, this refers to the port operation as part of a tourist destination. Destinations are places with real or imaginary borders, such as physical boundaries (eg islands), political boundaries or artificially created market demarcation. Sustainable development of tourism destinations must establish a balance between efforts to achieve the best possible performance and preserve the attractiveness of destinations that should not be undermined by the massive exploitation. It is the concept of sustainable development of cruising which is necessary to take into account the objective of looking at the need for carrying capacities and the kind of passenger facilities and services in the port. According to a new marketing concept of social marketing, organization needs to define the desires, needs and goals of consumers and the entire community in which it operates, and to realize their benefit in a way that is more efficient than the competition.

The economic effects of the cruises are important in local and regional context. This type of tourism is driving the development force of many service industries, and a source of revenue for private and public sectors. A large part of the revenue in gathered in the port and the management of the port places it directly to the ships and passengers handling processes, as well as the development of port facilities. Ports have also direct affect to the development of destinations, as they manage the transport infrastructure as an essential condition for the development of the cruising. They become centers of economic development of cities and regions.

Port infrastructure designs are consistent with trends in cruising, adjusting their properties to accepting all major vessels with a capacity over 100,000 gross tons and few thousands of passengers. Investments in port facilities must in line with the development of local and urban infrastructure as it will otherwise become an unattractive destination for not only passengers on a cruise, but also stationary tourists. In accordance with the concept of sustainable development plans he development of cruise port facilities must be incorporated into development plans of higher level (local and national), in particular tourism development plans.

### *3.2.1 Cruising As a Factor of Port and Destination Development*

Today's changes in the tourist market are going on so that the increasingly complex nature of tourist consumption corresponds to an increasing number of elements of the tourist offer. The main characteristics of the development trend of the cruise market in the last few years are:

- Mass occur as a result of the availability of this kind of travel broader economic strata; drop the package price due to economies of scale, technological progress and shortening the average duration of travel
- Growing concern for environmental and safety requirements

- Increase in the number of ports of call included in the market of maritime cruising
- Increasing demand for specialized travel as a result of repeated trips
- Reduction in the rate of growth in demand in the U.S. market – a; high growth in demand in Europe, especially Italian, Spanish, French and German markets
- Construction of terminals in ports for ships and passengers at sea cruises
- Increase the size of ships, more facilities on board

Cruise tourism, primarily because of its mass, has a very strong interactive effect on the environment in which it occurs, changing its socio-cultural, economic, organizational and spatial elements. These changes are needed, and their organization depends on the willingness of local communities anticipate, and directed and shape it in an acceptable manner, maximizing the positive effects and minimizing the negative ones. Unlike the traditional approach in which the ports are isolated units whose activities are incorporated exclusively in the transport and industrial processes, the recent trend appears to create an environment in which cities and ports cooperate in forming integral product. To successfully face the process of continuous growth and development of the cruise industry, many passenger port in the Mediterranean have focused their development plans to build multi-purpose modern passenger capacity, conscious that the basic, purely functional receptive facilities are not sufficient to maintain competitiveness in the increasingly demanding market conditions . Port facilities are adjusted to consumers who constantly raise the expected standards of services including the entertainment and leisure, shopping centers, restaurants in their content. Guided by the idea of an integrated approach to the development of cruising, port is oriented to a much broader field of business, constructing the so-called waterfront zone of interaction of port and urban functions and activities

### *3.2.2 Role of the Port in Delivering Destination Tourist Product*

Tourist destination product is an all – inclusive service package that tour operators offer to the consumer. The destination tourist package, as a part of an arrangement, has, therefore, to be harmonysed with its quality, modality and the standard. The package of services that represents the tourism destination product basically consists of service parts, ie, passenger ships and in port, and consumption of tourist offer. Consideration of destination-market issues supports recognition of the inevitability of the port management as an important component of destination management.

The development process of the port area which is defined through the medium and long term business and marketing plans, and which is responsible for port administration, implies a far-reaching direct and indirect effects. Therefore, the function of strategic port development, as well as the bearer of these functions, inevitably integrated into the wider urban and regional business – economic context.

## 3.3 Models of the Port Governance

According to the port management functioning, ports can be divided into: nationally controlled ports, ports that are controlled by the state, ports under the city administration, the ports with the autonomous administration and private port.

The so-called "tool port" is a model in which the port authority, or the public sector in general, invests resources in the development of all elements of the port, like infrastructure, superstructure and equipment. They are at the same time the coordinators, managers and holders of service. "Landlord ports" is a model in which the public sector determines priorities and plans for development, labor standards in the port and environmental standards, while the financing, construction and maintenance of port facilities, and providing customer service is let through concessions to private entrepreneurs, who in such projects need to find their interest. This model is inherent in the port of Dubrovnik (Gruz), as well as all Croatian ports. The model of port management system determines the holders of certain types of income.

Depending on a regulated model of governance, the ports are present various forms of privatization.

### *3.3.1 Model of Port Governance in Croatia*

In the Croatian port system, port area in the port open for public transport is determined as a public maritime domain. Considering special treatment of maritime domain, as well as the public interest under special state protection, the property cannot be realized over a territory within the port area. The right to use certain parts of a harbor for commercial purposes by the private sector is regulated through granting concessions. The coastal 6 m width quay is intended solely for the performance of basic port operations (mooring and departing, loading and unloading). This is part of the port cannot be given in a concession that would be excluded from general use, meaning that the management and coordination process of accepting the vessel and passengers and other basic port operations always stay under the jurisdiction of port authority.

In Croatia, the management of ports varies with the character of the port. Ports opened for public traffic are managed by the Port Authority. Six port authorities are formed to rule the ports of special (international) economic interest for the Republic of Croatia and the 22 port authorities in ports of county importance. Way to manage the ports, organization and structure of port authorities, classification of ports are due to their importance in the Croatian port system, which is influenced by size and type of port traffic, condition and size of port capacity and connections with the port hinterland.

### 3.3.2 Managing of the Port System

Management of the port system consists of the following functions:

- Management of the private sector, performance of the concessionaire activities
- Control the behavior of the concessionaires
- Control the behavior of users of the port area
- Managing and maintenance and development of port infrastructure
- Management of the procedure of the acceptance of ships in the harbor
- Management of safety standards
- Managing the strategic development plans and marketing plans of the port area

A prerequisite for the successful management of the port system is making plans. The bearer of this activity is the port authority. Short-term plans and those at the operational level refer to implementation of basic port activities and the maintenance of its existing technical and organizational characteristics. The development process of the port area is defined through the medium and long term business and marketing plans carried out by port authority, and imply far-reaching direct and indirect effects. Therefore, the function of the strategic port development, as well as the holder of these functions, inevitably integrated into the wider urban and regional business – the economic context.

The objectives of the port management are designed primarily based on the fact that it is a public maritime domain;

- Management of public goods and efficient exploitation of resources in terms of public benefit
- Functioning of the main port activities and processes,
- Development projects
- Functioning as part of the business environment and the successful integration of business activities and development plans in the plans of a higher order of local and regional
- Generating revenue and successfully re-investment in port infrastructure and the functioning of the port system

### 3.3.3 Models of Investment in the Port Facilities

Model of investment in the port facilities depends on whether it concerns port infrastructure or superstructure. Investment in the port infrastructure (quays, berths, energy plants, ..) and its maintenance is a part of the business process of a port authority. It reallocates the income gathered on the basis of port use into the infrastructure projects. Since the infrastructure projects are really financially feasible, sate donations are usually also needed to fulfill the lack of own assets.

Investment in the port superstructure and economic exploitation of the port area is realized on the basis of concessions for the port area. Concessions include the

right to use the port area to carry out certain activities by the concessionaire – undertaking. The port authority considers a system of concessions in two dimensions, in the short term (1-year) period, defined as the manner of issuance of concessions, the number, types and conditions for carrying out certain activities, in order to more efficiently operationalise existing resources in the port area, and meet growing demand, especially in terms of ships and their guests on a cruise.

Long-term concessions, on the other hand, involves determining the guidelines in the medium and long term development plans, designing mechanisms for managing the port area, the positioning relationships between the various entities operating within the port system, etc. Through a system of concessions harbor administration was in a position to dictate standards and high prices for services that are available in the port area. In this way, the port management has a direct impact on product design cruise destinations.

## 3.4 Project of Passenger Port Modernization: Case Study Port of Dubrovnik

Porto of Dubrovnik (Gruž) was founded in the early twentieth century as a cargo port, and its main purpose was to transport cargo from Bosnia. The First World War brought stagnation that lasted until the mid-twenties. Building a railway through the port has been further stimulation of its orientation on the transport of cargo, and this trend lasted until the middle of last century.

The port has been specialized for the reception and further transport of timber. Along with the development of tourism in Dubrovnik, passenger traffic has become increasingly important, and its progressive growth was interrupted by the Homeland war that destroyed much of the infrastructure and superstructure facilities. Port was at that time was Dubrovnik's only connection to the world, because Dubrovnik was completely blocked.

Today the port of Dubrovnik (Gruz) oriented purely to passenger traffic with an emphasis share of international traffic. Development projects that are currently in the initial phase of implementation, the port should be converted into a modern passenger port.

With a view to the appropriate valuation of the port area which is of strategic importance and interest to the entire region, in terms of achieving the highest possible positive socio – economic effects, the Port Authority has launched a comprehensive development project whose ultimate goal passenger port, adapted to the highest modern standards, both in terms of content and quality of services, as well as in terms of organization of a sophisticated port system.

The mission of this institution is to create maximum positive effect on resources available, and serving the public good. This includes the design and implementation of appropriate management mechanisms, in order to create optimal conditions for

business, as well as achieving a competitive package of services, controlled by a combination of price and quality.

### 3.4.1 Port Infrastructure Investment Project

Planned development projects include the reconstruction and building of port infrastructure and port superstructure development.

- Reconstruction of operative quay, moorings 10–16 – Reconstruction of 1,000 m coastline intended for operational acceptance of cruise ship, completed 2009
- The project of reconstruction and building operational quay in berth 17 / Batahovina I – construction of 200 m of the new operating coast, work began 2011th
- The project of reconstruction and building operational coast in Batahovina II – Construction of 400 m of new coastline, the planned start of construction 2013th
- The construction of port superstructure (planned start of 2012).

By the reconstruction of quay wall Port of Dubrovnik (Gruz) in season 2010. It started to dispose of the additional capacity of about 1,000 m intended acceptance of cruise ship, and is now able to accept a three mega-ships simultaneously.

### 3.4.2 Port Superstructure Investment Project

Investment in the port superstructure will be organized through granting the concessions. Issuance of long-term concessions will mean establishing a new model for the functioning of the port. The management and the possibility of establishing mechanisms of control over concessionaires will largely depend on the parameters defined in the concession contract. Therefore, the importance of detailed planning of future port system and inclusion of all necessary elements in future contracts is great. In the future, the implementation of the principles of landlord port by port authorities will be emphasized. Setting standards of business will require much more active role in insisting on their implementation.

When defining the model of investment in the upgrading of port facilities is necessary to take into account the many elements that arise from the complicated assembly of objective factors which affect the port area. The basic parameters of a legal background include:

- Law on Maritime Domain and Seaports
- Law on Concessions
- Law on Public Private Partnerships
- Law on Physical Planning and Construction
- Law on Public Procurement

Although the model of investment has not defined jet, it can be generally given, as per law background, that it would be a concession model of PPP, the version recognized as BOT (build-operate-transfer) will be applied.

Public-private partnership is a form of a long-term collaboration between public and private partners, whereby the private partner, having the objective to implement PPP project, assumes the construction risks, accessibility risk and/or demand risk, as well as one or more tasks such as:

- Financing, project engineering, construction, maintenance or reconstruction of a public building,
- Providing management of a public interest building, namely rendering services to end users in the building constructed, in such a manner that public partner grants right of construction or any other real right and/or a concession, whereas the public partner reserves the right of supervision and accepts responsibility for paying rates, unless bespoken that the rate is collected entirely from end users.

### *3.4.3 Planned Facilities*

Draft of Urban Development Plan envisages the development of the port area as a waterfront, multi-port zone of direct interaction with urban urban-oriented amenities to residents and visitors to the city.

The planned division of the Port zones, and planned Facilities:

- Zone 1 (the area Friday, today's operational buildings): receptive facilities, convention center
- Zone 2: multifunctional facilities, shopping center, recreational facilities
- Zone 3 (Solska base): entrance to the port, green area
- Zone 4 (at the entrance to Gruz): passenger terminal, bus station, shopping mall
- Zone 5 (Kantafig): content is not yet defined
- Zone 6 (Batahovina): ferry port

## 3.5 Conclusion

The main purpose of paper is to emphasize a very important issue when creating the investment model in the port facilities and that is the precise defining the long time Concession Agreement with the future investor. This concession is to be the basis for managing the port system for next 30–50 years. The Agreement is to support the phase of projecting, construction, performing services and maintaining, which means that it is a very complex one. It will design and determine the future relation between port authority and concessionaire monitoring, controlling and managing mechanisms. It will establish the future port system; determine the new role and way of function for port authorities. This is very likely to have the great influence on

the regional level, because it makes the basis for the Port of Dubrovnik development, which is the basic infrastructure object in the region. The model of investment in th port facilities shows that it needs to be done in cooperation between public and private sector and between the port management and local and regional authorities so that it can produce optimal results in the terms of the feasibility of the project, as well the wellbeing of the whole community.

# Chapter 4
# Branding Strategy for Specialist Tourism Products

**Neven Seric and Mate Perisic**

**Abstract** Branding strategy is very complex on the field of specialized tourist products. Each specialized tourist brand need to be more differentiated on the global market. Applying of the branding concepts to the touristic business could be different from product to product. But few of them treat in a wider sense branding strategy toward the brand management. Choosing a right branding strategy for the brand management is paramount for achieving a substantial growth that ensures a steady future development of the national income of tourism. Some specialized tourist products are nearby crowded tourist route, some others are far from there. The branding strategies for each of them need to be different. Specialized tourist product is a promise for a kind of the magical vacation, sometimes on very attractive destination. Branding strategy needs to interact with the brand identity of such destination. It is suggested the evaluation of the brand from the standpoint of the marketing strategy. Right branding strategy of the specialized tourist product is the only way for the commercialization on the global market. The main premise of such brand is creating added value for the specialized tourist product. For that reason the right branding strategy has become the biggest intangible asset of the tourist brand. If tourist has not enough time to search for exact tourist product, he judges it by its brand. It is very difficult for a brand to convince tourist what to think about. The paper deals with issues that define how branding strategy can protect and preserve the integrity of the specialized tourist brand through the effective evaluation of the brand implied by the chosen

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branding strategy. The success of the tourist brand depends on the application of the branding strategy. The main hypothesis is that efficient branding strategy for the specialized tourist product need to be primarily influenced by the perception of potential demand.

## 4.1 Introduction

Classic approaches of shaping branding strategies have been constantly changing and improving for the last 20 years. The recession on the global market and changed conditions give a different approach to the branding strategies and to the ways of their shaping. Modern bottom approaches to the market have again a focused need as starting point. Branding activities in practise grow from business function to the key connection of the company management. Model "*Build primary demand*" has formed in the author's branding practise (Šerić and Luković 2007). It has been called "*BPD*" because the shaping of branding strategy has been done on a platform of concrete market need to which the product is intended. Today organizational systems of value depend on market behaviours. Suitable way of shaping the branding strategy is the precondition for wished market positioning as well as for the satisfied customers (Doyle 2002). Most of the tourist companies today do business with only a part of total capacity. Suitable practical model of shaping branding strategies is a presumption that a tourist company does business with the full capacity. The essence of modern market thinking is in the fact that nothing in the beginning is as the management expected to be. Previous projections and readiness for some possible problems are in the postulates of modern marketing strategies in modern practise (Brooke 1995). Branding strategy should be primarily focused on possible future growth of sale and doing business, as well as on operational models of managing tactical market operations in relation with the competition and with all important levels of public on the market. Shaping of exact branding strategy means a good quality informational system about all development and business possibilities of the product. That way, branding activities are placed on the position between the market environment and the company. Can the model of shaping the branding strategy be observed through communicational connection which is used for mutual understanding of company, its products and the market? In this concrete case of "*BPD*" model, the answer is yes, because the modern branding strategy includes an interactive role in generating company's business plans together with executive and coordinative tasks on all functions. That kind of approach to the model of shaping the branding strategy represents some sort of research challenge because with its practical knowledge it can question certain theoretical postulates. Branding with its modelling of suitable strategies can give a possible guarantee for company's survival on the market. Scientific and practical goals of this paper have a function to represent the model of shaping the branding strategy which will offer suitable ways for resolving the market collision. Scientific goal is to define a model of shaping the sustainable branding strategy and its

variables, as well as to represent an approach to their practical elaboration with the combined tactics in the function of insuring the company's survival and its future prosperity. Research in that sense was directed towards typical market approaches and author's branding experiences in "*Stone Light*" project (Lighthouse's tourism). Practical goal of this paper is to represent the model of estimating the branding strategy before its practical application. Sustainable branding strategy should primarily be adjusted to the products and services. In the business practise it is often noticed the usage of approaches in which products and services are adjusted to some standard strategies already used by a company. The model shown in this paper is primarily in the function of tourist product.

## 4.2 Sustainability of the Model of Shaping the Branding Strategy

For the efficient branding strategy in tourism it is necessary to be adjusted to the market reality. There are two processes in the same time. With the first one subject is expanding through concrete activities towards appointed goal of business mission. The second is acted upon the first one, it is happening as constant dialectic of market environment. It wouldn't be appropriate to expect that set up branding strategy, by which are appointed activities carried out, is generally accepted rule. No matter how complicated it is every branding strategy represents static model which is going on in the dynamic of environment. Happenings in the environment should be systematically followed and analysed, so that the strategy could be adjusted to them in the space and time. By this approach, strategy which is supposed to be a static model becomes an interactive dynamic model.

All the happenings and processes on different tourist markets are very hard to fit in the formalized schemes because identical situations are almost impossible to exist. There are too many variables which determine different resolving of market collisions. The practicing of the "*bottom-up*" approach is not complicated by the shaping of "*BPD*" model. The model of shaping the branding strategy in tourism, often used in practice, is shown on Fig. 4.1.

Despite the frequent use of this model shows a number of weaknesses:

- Targeted travel segment is seen as a short-term profitability;
- Targeted travel segment is analyzed as a potential demand which should offer and sell something before the reaction of competition;
- The competition is analyzed primarily to evaluate the free market share;
- The environment is treated as a constraint;
- It is not anticipated to adaptation of selected branding strategy environment;
- Brand is based solely on the specific characteristics of the product;
- Tourist needs was ignored, analyzing the causes and incentives;
- Model is based on automatic process of implementing the strategy through the selected tactics etc.

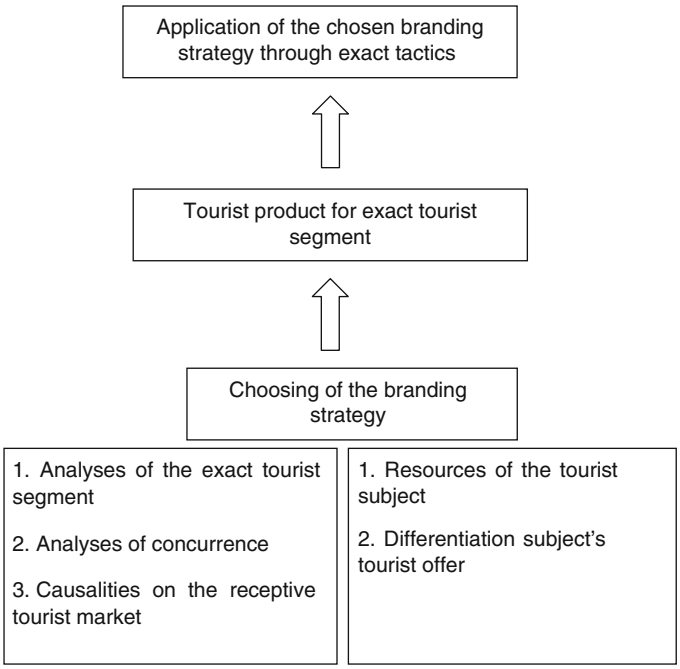


**Fig. 4.1** Ordinary model of shaping the branding strategy in tourism (Resource: author's analyses 2007–2009)

In order to eliminate the identified weaknesses the authors suggest the "*BDP*" model Fig. 4.2.

In this model the brand becomes the main communicator in the chosen strategy. A strong tourist brand simplifies tourist's behaviour and decision-making and reduces the risk inherent choosing, but also establishes quality and high expectations. Strong brands create strong thoughts and emotions in the customer's awareness (Kuhn and Alpert 2009). Through the brand management exact strategy is lead as a process of creating, planning and communicating the brand. The identity of a brand is the main concept of a tourist product. Brand image is the perception of brand in the tourist's consciousness. The right branding strategy interacts of the brand identity. It is suggested evaluation of the brand management from the standpoint of the branding strategy, which is the key of right brand management. The main premise of brand management is creating added value for the customers. For that reason the right branding strategy has become an intangible asset of the brand. People evaluate products and services, choose them, like or dislike them based on stereotypes and clichés (Aaker 2001). If you do not have time to know the product, you judge it by its brand. The principal difference between branding products and brand management is in the structure of the branding strategy. Adopting an adequate branding strategy for the brand is the most logical reaction

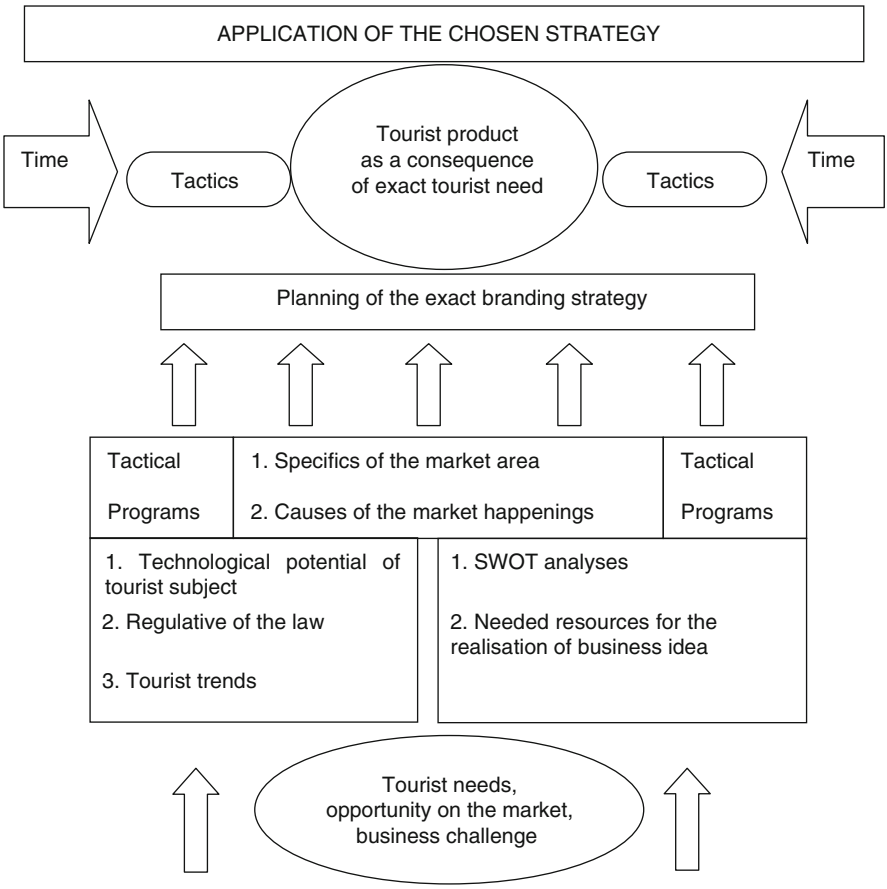


**Fig. 4.2** "*BPD*" model of shaping the branding strategy in tourism (Source: author's analyses 2009–2011)

to the prevalent difficulties on the market in recession. An immediate alignment of the right branding strategy for specialized tourist product is prerequisite. This can be defined by the increase of tourist visits, the retention and growth of national tourist market share, as well as the future development of the brand's image.

## 4.3 Theoretical Platform

The "*BPD*" model through the branding strategy is more complex, but there are more influences and more possibility for the success. The process of branding is not simple, and it is quite long, but it is the result of the need to establish the strong

image of the tourist product and creating attracts-recognizable features and forms. Branding strategy is not a promotional campaign. Branding and creating a brand is a prolonged part of business strategy. Branding strategy in such process has to teach how to listen to the market information, how to recognize guest's wishes and needs, and how to behave as better competitors. Brand management through the branding strategy is an addition to the process. It has to secure loyalty of the guests, and recognition of branded specialized tourist products on the market through years. Basic functions of branding is communicating, creating the perception of the brand, creating the relations and creating the brand value. The brand is, among other, subordinated to the product it self (Hankinson 2004). Brand identity actually means communicating desired image and vision of the tourist brand to potential guests. From the aspect of branding strategy, the role of brand as communicator is the process or the manner of managing the brand at construction of one's own brand identity based on recognizable features chosen for their competitiveness, uniqueness and desired identity. Right branding strategy will make the overall tourist product identity measurable and tangible. In the past times brands were considered as having a public image subjects of perception, brands actually affect customers' feelings, their emotions and requests (Hankinson 2004). The image of the tourist brand is defined as notions or feelings of the guest about a tourist product. Identity of the brand is something for the communication, and perception, or images and impressions the buyers have acquired about. From such aspect identity and brand image are quite different. From the perspective of branding, perception and considerations of perception are focused on the brand. From the perspective of the branding strategy, perception and considerations of perception are focused on the added value of the brand. Such relations are particularly related to guest attempts to construct their own image. The tourist and the brand realize a certain interdependent relationship. Branding strategy in tourism requires interaction with elements of the marketing mix along with interaction and creation of relations with guests.

## 4.4 Branding Strategy in Tourism: A Generator of the Value of the Tourist Brand

Tourist brand started to be perceived as part of national tourist offer assets that have to be maintained and invested in nowadays. This is a right platform for the creation of the notion of brand equity. Branding strategy through presented "*BPD*" model could be also considered as financial asset. From the marketing standpoint, brand equity in tourism is considered an indicator of future tourist income through brand loyalty, distribution and recognition. Such standpoints have produced a need to continuity of the development of the brand through the brand management. Brand management is the way for managing a tourist trademark, particularly its identity. Tourist brands contribute to the creation of added value for guests. For them, the

brand acts as risk reducer in terms of quality, expectations, and other parts of vacation. The tourists trust for brand reduces the business risk. Tourists in such case know exactly what they get from a brand. Well known tourist brands have loyal guests, high prices, and guaranteed tourist traffic through the all year, which directly reflects on overall tourist income. The success of all the tasks done by brand management can ultimately be judged by the level of market success the brand makes. Final target need to be leading tourist brand. That way is hard and usually supported by continuous capital investments. Such development cycle is longer than usual, as is their life cycle (Cooper 2001). The interaction between the brand management and the branding strategy is an absolute prerequisite for securing the market share. The branding strategy is essentially a platform that directly transfers clear information concerning the market demand to the brand, which needs such information to make relevant decisions. Nowadays the adequate brand management is absolutely necessary for the future of the brand. Summing up the activities for the development of the branding strategy in tourism it is important:

- To collect and analyse all market information about competitors and the guest's perception;
- Develop new tactics, and tactical programs that are in congruence with the demand of the brand target potential guests;
- Supporting the sale forces of the brand;
- Adequate market positioning of the brand.

The effectiveness of branding strategy suggests the use of a project method for brand communication. Project method is a programme of reorganization of the brand tactics, and tactical programs. The reorganization implies a stabilization of basic operating tactics. Other suggestions are formation of the tactics group, analysis of the conditions of a brand, a strategic marketing analysis, and the making of a project that deals with the reorganization and revitalization of the brand. Final important modification is a change of the brand's culture. The process of revitalization encompasses the activities that lead to the revival of the brand, leading to the solid, base growth. Besides the above mentioned activities, a formation of the brand management structure, the identification of strategic brand activities, formulation of a new vision of the brand, the assurance of resources and conditions to implement new tactics for the brand management. This approach in tourism focuses on the brand itself. Because of this, the whole branding strategy, as well as certain specific tactics made for exact brand has to adapt to the expectations of the target guests. Brand strategy need to assume a new role in tourism. The crisis-directed brand management, beside its regular activities, has to proactively push the brand, and helps in solving market problem during crisis. The branding strategy therefore collects information on the tourist market, systematically adopts it to the model of brand management and launches needed corrective activities. This definition places the branding strategy in tourism inside a brand serving as the crucial interlink that connects brand and a guest through added value.

## 4.5 Conclusion

Tourist brands are created as a consequence of growing competitiveness on the global tourist market. Specialized tourist products are well platform for the right branding strategy. Branding strategy and brand management represents and comprises all brand assets. It is helpful to do it through some model. Here is presented ordinary model form praxis, so as "*Build primary demand*" model. In today's global tourism offer brand management have become the principal and the most important distinguishing features of particular branded products. Branding strategy refers to managerial process that endows any given brand with a unique identity and image, presents brand with a possibility of being clearly and positively identified and thus different and recognizable from competitors. Compared to ordinary model "*BPD*" model is a process whereby a brand actively creates its identity with the objective of as quality as possible positioning on the market as desirable for potential tourists. Guests choose with emotions and minds. The branding strategy indicates a direct connection of particular parts of brands and their possible influence in the future period either as fall or increase depending on the success of brand management. The prime question of the paper addressed the role of branding strategy, as well as the role of the interaction between brand and the branding, as far as the process of preventing and solving different problems on the tourist market. A project approach dealing with the brand problems solving that is universally recognized is now achieved trough the exact model of the branding strategy offers real possibilities for efficient solutions in branding.

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# Chapter 5
# Cruise Tourism Environmental Risks

**Hrvoje Caric**

**Abstract** Growth of cruising tourism in Croatian Adriatic is viewed by policy makers as only through financial benefit variables, neglecting perspectives of pollution issues and biodiversity degradation. Cruisers produce environmental damage and risks that are mostly unaccounted for although, paradoxically, they could be avoided or significantly decreased. In this article those claims will be discussed by disclosing environmental risks cruising tourism produces: air emissions, communal and hazardous waste, black and gray waters, eco-toxic metals from antifouling, invasive (alien) species, hydrocarbon pollution, etc. Dubrovnik will be used as a demonstration site to asses environmental risks by using three different sets of indicators: tourism trends, pollution costs, and pollution ratios. The methodology presented here is potentially replicable to other Mediterranean destinations. Paper will close with recommendations for environmental mitigation and monitoring that could help improve quality of existing environmental management practices.

## 5.1 Introduction

Cruise tourism is new economic, social and environmental phenomena with potential serious impacts on the three pillars of sustainability. This paper will look into the environmental impacts in order to disclose potential hazards in port of Dubrovnik. Subsequently, existing mechanisms to deal with the hazards will be analyzed to determine their effectiveness to mitigate the impacts. This process will use indicators from: tourism trends, direct pollution costs and by comparing environmental loads of cruise tourist vs. local inhabitant.

Goals of the article are:

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1. Confirm that the use of sea for tourism and transport is
   - Perceived by policy makers as free resource available for opportunistic exploitation and unlimited in pollution absorption and
   - Serious potential risk for environment.
2. Point to key pollution management issues and discuss possible solutions to some of the pollutions aspects.

The methodology used in this article was desk research and data gathering focusing on potential impacts on eco systems that might appear from the cruise tourism activity. The data gathering on the site level focused on tourism statistics and pollution indicators from existing empirical research and technical standards. This data was then used to calculate pollution loads and costs for Croatian Adriatic and Dubrovnik. Peak day, as maximum saturation situation was used for situation analysis where environmental loads of a cruiser were compared with those of a local inhabitant. Detailed calculations from this paper are available in the PhD thesis of Hrvoje Carić submitted and defended with Institute for oceanography and fisheries in Split (Carić 2011).

## 5.2 Risks to Environment from Cruisers

Risks to the marine environments are becoming extremely high due to pressures: population growth on the coast, unsustainable and large scale fisheries, exponential growth of merchant fleet, pollution from diverse sources and content, climate change, elimination of high-value biodiversity habitats, etc. National legislative framework and international treaties, conventions and agreements have produced very little protection, and additional pressures like development of large-scale cruise tourism should therefore raise concern.

International Convention for the Prevention of Pollution From Ships (MARPOL) is one of the most important international marine environmental conventions. It was designed to prevent and minimize pollution of the seas, including dumping, oil and air pollution. It was adopted by the International Maritime Organization (IMO) in 1973 and updated in 1978 and therefore is often referred as MARPOL 73/78. The convention includes both accidental pollution and pollution from routine operations through six technical annexes.

MARPOL have defined Mediterranean sea, due to reasons relating to their ecological condition, as Special Area in which is required adoption of special mandatory methods for the prevention of sea pollution. Under the Convention, the special areas are to be provided with a higher level of protection than other areas of the sea. However, since Adriatic Sea is very sensitive, complex, and valuable ecosystem rich in bio-diversity, six countries surrounding the Adriatic have initiated additional and even more rigorous protection one level higher of mentioned Special Area. A request for this protection was to be submitted to IMO titled

*Particularly Sensitive Sea Area – PSSA Adriatic*, but unfortunately the application was not submitted due to unjustified blocking of a partner country (Carić 2011).

Beside risks emerging from policy making and implementation of existing legislation there are real and significant threats to environmental and human health. In order to understand those here are described two key principles related to pollution paths and their impacts – bioaccumulation and biodiversity.

Bioaccumulation is accumulation of substances, such as eco toxic metals (heavy metals), pesticides or other chemicals in an organism or part of an organism. The process involves the biological accumulation of substances that enter organism through respiration, food intake, epidermal contact with the substance, and/or other means. Higher organism is on the food chain, higher the concentration of substances is going to be in it. For example toxic waste that enters ecosystem from ship waste dumped at sea enters food chain of humans via fish or muscles he or she consumes can create permanent damage (Rawling 1999). In a similar manner viruses and bacteria of human origin can enter marine ecosystem and transfer diseases to flora and fauna.

Biodiversity hotspots – coral reefs have suffered from anchoring that destroy marine organisms and damage sensitive ecosystems (Rogers et al. 1998). Mediterranean equivalent, in both value and risk, would be *Posedonia oceanica* that is listed in Adriatic as both endangered specie and habitat. Its slow growth (cca. 1.5 cm/year), climate change and invasive species introduced via anchors and ballast waters have raised concern over its future and related future of fisheries that directly depend on the health of *posidonia*.

## 5.3 Direct Pollution from Cruisers

Understanding risks requires understanding the cause-effect relationship of environmental impacts. Activities of cruise ships while anchored, on dock or in movement produce number of emissions that have wide range of impacts on the environment. The materials leaving the cruisers in form of solids, vapors, liquids, particles and energy are:

- Waste (communal, hazardous, floating, Persistent Organic Pollutants)
- Gases (SOx, NOx, Volatile Organic Compounds, particles)
- Nutrients
- Bacteria, viruses and pathogen organisms
- Biocides
- Hydrocarbons (oil and derivates)
- Invasive and alohtone species
- Noise
- Light.

Potential Negative effects of cruise activities on human and nature well-being and health are:

- Climate change
- Respiratory diseases
- Epidemics
- Viral and bacterial contamination
- Contamination with (eco toxic) metals
- Acidification
- Eutrofication
- Smog and ground-level ozone
- Biodiversity decrease
- Fragmentation and deterioration of ecosystems
- Collisions with larger and slower animals (especially mammals like whales).

In order to disclose in more detail the cause (i.e. merchant shipping and cruise activities) – effects relationship some of the environmental issues will be briefly described.

### *5.3.1 Ballast Waters*

Ballast waters transport organisms large distances and introduce them to new locations where they can become invasive and sometime dangerous for humans as for example is toxic phytoplankton *Pfiesteria piscada* or cholera. Smithsonian Institute have also conducted a research of ballast waters in Mexico bay and discovered disturbing findings of cholera in fish, muscles and shells (Rawlling 1999). Cholera originating from ship ballast can be extremely dangerous and have claimed 10.000 lives in South America during the 1991–1994 epidemic (Rawlling 1999). State of California have recognized the threat and banned discharge of ballast waters within their jurisdictions (Dobson and Gill 2006). This was based on number of research conducted, one of those have registered 230 invasive species in San Francisco bay (San Francisco Estuary Project 2009). It is not surprising that IMO, UNDP (United Nations Development Program) and GEF (Global Environment Facility) have proclaimed In their Global Ballast Water Management Programme (GloBallast) that "*Invasive aquatic species are one of the four greatest threats to the world's oceans, and can cause extremely severe environmental, economic and public health impacts*." (http://globallast.imo.org/). In relation to cruise ships some literature have named them as potential contributor to the problem (Copeland 2008, p. 6; Kurtela et al. 2007), however there is no research available to disclose specifics.

### *5.3.2 Air Pollution*

Fuel type, engine type, travel speed, maneuvering and electricity production are all elements that determine air emission production on cruisers. The quantity and

**Fig. 5.1** An incident in Dubrovnik (1) Soot discharge, (2) Soot deposited on the sea surface i (3) Pollution remains gathered from the sea surface (Source: Iris Čimić; Dubrovački vjesnik 2009; www.dubrovacki.hr/clanak/8199/aaa)

content can vary significantly but it is known that most cruisers use fuels rich in sulphur which is up to 1,000 times dirtier then the fuel used in the road transport (TRT – Trasporti e Territorio Srl 2007). Ship emissions consist of mainly NOx, SOx, and COx gases, and suspended particles.

Studies conducted in harbor areas such as Vancouver show that pollution coming from merchant shipping is responsible for 95 % sulphur emission of the region that inhabits 2.3 million people (Ware 2002). SOx and NOx gasses from ship's engines when inhaled as aerosols increase probability of asthma or lung cancer 5–10 times as the Los Angeles study showed (US Senate 2007). Smog is combination of fog (moisture) and smoke (gasses form emissions) that, besides described human health, also causes acidification of ecosystems (soil, lakes, green cover, coastal sea, etc.). Furthermore, emissions from waste incinerators can be dangerous for human health what stimulated State of California to ban the ship incineration 20 NM of their shores (State of California Act A.B.. 741 of 2003) Fig. 5.1.

### *5.3.3 Solid Waste*

Content of cruiser solid waste is similar to communal waste. In international waters, ships dispose of the organic waste by grinding it and throwing over board. Fifteen year old study illustrated that shipping in general produces approximately one million tones of organic waste per year, 24 % of which originates from cruisers (NRC 1995). There is evidence that this practice also involves other inorganic waste. In new generation cruisers inorganic waste is incinerated and the ash disposed at sea, whilst in older ships inorganic solid waste is landed ashore (Copeland 2008).

**Fig. 5.2** Floating waste probably arriving from Albania have "choked" the Old Port, one of Dubrovnik's main tourist attractions on Christmas 2010 (Source: Slobodna Dalmacija; www.slobodnadalmacija.hr/Dubrovnik/tabid/75/articleType/ArticleView/articleId/ 125165/Default.aspx#)

Plastic waste on surface of oceans has become a global environmental problem. Data gathered from US Coast Guard more than 15 years ago state that annually 1,000,000 birds and 100.000 mammals are suffocated due to plastic waste (NRC 1995). US Academy of Arts and Sciences have estimated that 13,000 pieces of plastic float per square kilometer of an ocean (Jeftic et al. 2005). Charles Moore, an American oceanographer discovered the "*plastic soup*" of waste twice the size continental United States – about 100 million tons of flotsam, floating 500 nautical miles off the Californian coast, across the northern Pacific, past Hawaii and almost as far as Japan (Marks and Howden 2008). Recent research conducted by French Ifremer Institute and University of Liege estimate 500 t of plastic micro-fragments in the Mediterranean sea (Cousteau Society 2011; Terre d'avenir 2010), with potential extreme consequences for contamination of ecosystems and humans Fig. 5.2.

### *5.3.4 Hazardous Waste and Emissions*

Photo processing, laundry, photocopying, general maintenance, medical services, and household chemicals, etc. are sources of hazardous waste. Substances are diverse, ranging from heavy metals such as lead and mercury, to hydrocarbons, chlorinated hydrocarbons, benzene, toluene and other hazardous materials (Commoy 2005). There are serious concerns that cruise ships do not manage hazardous waste properly and that unknown quantities end up in the marine environments (Carić 2010, pp. 167–168). Source of hazardous emissions are also ship incinerators that emit eco-toxic metals and toxic plastic compounds (US EPA 2008).

### 5.3.5 Eco-toxic Metal Emissions from Antifouling Coating

Ship bottoms are coated with antifouling paints that protect them from algal and other growth by preventing photosynthesis and reproduction through mutation of proteins and enzymes. Antifouling paint contains eco toxic metals such as Cu and Zn that are emitted to the marine environment and accumulate in sediments and organisms, especially mussels, but also fish and humans that consume them. The bioaccumulation and concentration of toxic metals in marine organisms through food chain has a long history of negative effects on environment and health (Kevin et al. 1999). Compounds used in antifouling coating such as tri-butil-copper is banned by IMO conventions, however still significant source of anthropogenic source of metals in marinas and harbors is caused by emission of antifouling. The research available calculating emission speed of eco toxic metals into the environment show that dissolved eco toxic copper (Cu) mass emissions are around 14 μg/cm$^2$/day (ACE 2000; Schiff et al. 2003; Valkirs et al. 2003) and an estimate surface of a large cruise carrying over 3,000 guests is around 9,700 m$^2$. Multiplying the 14 μg/cm$^2$/day with 9,700 m$^2$ gives the estimated figure of 1,358 g/day or 1.3 kg/day.[1]

### 5.3.6 Waste Waters

Cruisers emit black, gray and bilge waste waters. Black water are sewage from toilets, and gray water are wastewaters from sinks, showers, baths, washers, ship deck cleaning, swimming pools, saunas, etc. Bilge water is coming from the lowest part of the ship where residues of oil, lubricants, cleaning chemicals and metal and glass shards are gathered. Eutrofication is also known in marine environment as algal bloom – it is a process of dissolving nutrients that entered sea through wastewaters and waste. This process decreases available oxygen in sea and therefore decreases or eliminates marine life. Waste waters are also sources of viral and bacterial infections for humans that come in contact with contaminated sea water through bathing or contaminated fishes and shelves (Clark 2006) Fig. 5.3.

### 5.3.7 Underwater Noise Disturbance and Collisions

Noise is undermined pollutant that significantly influences marine environment due to increase of traffic and the fact that noise has amplifying effect in water. Source of marine noise pollution are mainly ship engines that create short and long term

[1] Ship surface was calculated from formulas (Hempel 2007) and dimensions of cruiser MSC Poesia, converted (μg/cm$^2$ to g/ m$^2$): $14 \times 10^{-6} \times 9{,}700 \times 10^4$, and finally multiplied with the eco toxic copper (Cu) mass emissions of 14 μg/cm$^2$/day (Schiff et al. 2003)

**Fig. 5.3** In front of the Old Port of Dubrovnik protected by UNESCO – waste waters discharge of cruiser MSC Lirica 13.October 2006 (Source: dr.sc. Adam Benović)

**Fig. 5.4** Most collision accidents were recorded in Alaska where Cruiser Summit have speared a whale (Kizza 2006; Source: Anchorage Daily News)

disruptions of eco system functioning. For example in Yakutat bay in the last 10 years cruise traffic have increased 10 times while the number of seals have decreased by two thirds (Cohen 2006). There are records of cruiser colliding with large mammals, most likely caused by disorientation caused by noise pollution Figs. 5.4 and 5.5.

### *5.3.8 Hydrocarbons (Oil and Derivates)*

Big accidents in shipping gain allot of attention due to devastating impacts they have on polluted ecosystems and destroyed local economies. However only 2.5–12 % of (Clark 2006; Baker 2001, p 353) total hydrocarbon pollution come from this cause, the remaining majority come from standard operations in shipping such as bilge water management. Although MARPOL, Annex 1 regulates this issue the practice is concerning when consequences are presented such they are in the satellite image below Fig. 5.6.

**Fig. 5.5** Cruise ship Sapphire Princess of Carnival Corporation 28th July 2010 discovered 13 m whale while on the route from Ketchikan to Juneauu, Alaska (Stojmenović 2010; Source: Reuters, www.24sata.hr/zivotinje/uginuli-grbavi-kit-zaglavio-na-pramcu-broda-na-aljasci-184472)

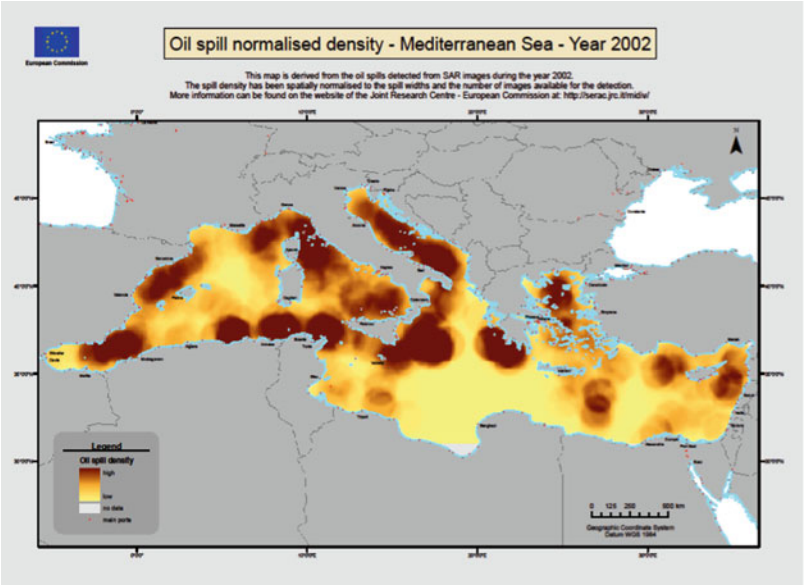


**Fig. 5.6** Satellite image of Mediterranean from 2002 show the Adriatic sea shaded as having very high density of oil spill (Source: Joint Research Centre; Miaola et al. 2010)

### *5.3.9 An Example of Impact on Human Health*

There is potential higher risk for human health especially when already polluted ecosystems are additionally polluted in densely populated regions. One of the examples of that type of concern comes from Ma'at Tours, an Australian tour agency operating in Egypt, and is quoted here:

> "*The Egyptian Organization for the Advancement of Children reiterated the conclusions of the Habi Center for Environmental Rights in its report on the pollution of the Nile waters. The studies confirm that every year some 17,000 children die from gastroenteritis caused by*

**Fig. 5.7** Typical waste disposal at Nile river (Source: www.maat.com.au/floatinghotels.html)

*polluted water. The same study indicated that kidney failure, also caused by polluted drinking water, is four times higher in Egypt than in the rest of the world. It notes that there are some three hundred floating hotels between Luxor and Aswan which are responsible for the pollution of the river water, due to their lack of efficient water treatment systems*." (Source: allaboutegypt.org)

Concluding remark for this section could be that there are obvious environmental risks and health hazards coming from cruise ships that require serious consideration and further analysis Fig. 5.7.

## 5.4 Dubrovnik Case Study: How to Analyze Pollution Flows

Dubrovnik is one of the most significant cruising destinations in the Mediterranean and it takes majority of cruise tourism activity in Croatian Adriatic. In this section three different approaches will be demonstrated in order to illustrate the scope of the environmental risks from cruisers:

- First cruising tourism trends will be discussed,
- Then pollution loads and costs will be presented, and
- Pollution ratio of cruise guest vs. local person compared.

### *5.4.1 Cruising Tourism Trends*

Rapid growth of cruise industry worldwide is evident in statistics. In 1970 there were 1.4 million, in 1980, 3.6 million passengers and by 2006 the growth speeded up to 16 million, increasing 250 % for the 10 year period (Dowling 2006). Current cruising tourism development trends show emphasis on building larger vessels of cca 3,000 or more passenger capacity (Passenger Shipping Association 2006).

**Table 5.1** Cruise ship activity in Croatia. Sources: Central Bureau of Statistics 2010 a; Central Bureau of Statistics 2002–2010

| Year | Number of passengers | No. Cruise calls (ships) | Days spent | Average stay (days) |
|---|---|---|---|---|
| 2002 | 225,784 | 307 | 624 | 2.03 |
| 2003 | 420,542 | 582 | 1,086 | 1.87 |
| 2004 | 440,254 | 420 | 528 | 1.26 |
| 2005 | 511,417 | 456 | 658 | 1.44 |
| 2006 | 597,708 | 565 | 800 | 1.42 |
| 2007 | 694,104 | 628 | 990 | 1.58 |
| 2008 | 936,424 | 822 | 1,569 | 1.91 |
| 2009 | 989,272 | 754 | 1,264 | 1.68 |

Since this trend will mark the future of this industry and will deliver many different impacts on the ports and destinations, this paper is going to consider environmental issues typical for larger ships (over 500 guest capacity).

The Mediterranean is the most intensive tourism region in the world with growing cruise activity that in 2006 made 18 % of the world cruise market (McCalla and Charlier 2006). The growth of cruising tourism is increasing competition and pressure on the coastal resources and infrastructure additionally burdened by the new generation of cruise ships designed as floating resorts of mass tourism that create large environmental burden while providing limited economic benefits to local communities (Clark 2006; Klein 2008). These concerns will be investigated in this paper through scoping of Environmental Risks.

Dubrovnik is an icon of Croatian tourism, basing its attraction on the scenic medieval city and the city walls along with valuable, UNESCO recognized historic heritage that place Dubrovnik shoulder to shoulder with the top Mediterranean cruise destinations such as Venice. The cruising tourism in Croatia is evidencing a rapid growth. The statistics reveal an increase of 4–5 times in only 8 years. In 2009 there were registered 754 cruise trips (with port calls) that have spent 1,264 days in the territorial seas of Republic of Croatia. The 989,272 passengers on the average have spent 1.68 days in Croatia (a 12 % decrease compared to the previous 2008) and most of them have visited Dubrovnik. Compared to the 2008, number of cruise trips have decreased by 8.3 % and total days spent have decreased by 19.4 % while the total number of passengers increased by 5.3 %. The increase in passengers with simultaneous decrease in the number of cruise calls and average time spent in the ports, discloses a possible negative trend. Less time available for cruise guests in ports could mean less money spent in the destination, while the decrease in less ships arriving (cruise calls) with more guests on board means more large, or supersized cruisers with 3,000 or more guest capacity. Those newer types of cruisers as mentioned earlier are perceived as the mass tourism outfits (Weaver 2005) with significant environmental impact (Clark 2006) Table 5.1.

Population of Dubrovnik is 48,795 (Central Bureau of Statistics 2005). It has a long history and international visibility since the Classical Roman period and through famous medieval Republic up to the twentieth century when it started to host tourists.

**Table 5.2** Parallel representation of cruising activity in Croatia and share of Dubrovnik port in it

| Year | Republic of Croatia Number of passengers | Dubrovnik Number of passengers | Dubrovnik share % | Republic of Croatia No. Cruise calls (ships) | Dubrovnik No. Cruise calls (ships) | Dubrovnik share % |
|---|---|---|---|---|---|---|
| 2009 | 989,272 | 845,603 | 85 | 754 | 628 | 83 |

Tourism capacities of Dubrovnik are 16,500 beds in all types of accommodation (BIST 2010). There are 31 hotels with the most significant 5-star hotels are located just outside the Old City – the zone that is most frequently visited by cruise guests. Cumulative tourism statistics of Dubrovnik are: 520,000 arrivals and 1.8 million overnights in 2009 (Central Bureau of Statistics 2010 b). The region of which Dubrovnik is the capital city (Dubrovnik – Neretva County) account for the total of 957,000 arrivals and 4.3 million overnights (Central Bureau of Statistics 2010b). The region accounts for 62,000 registered beds and this number represents the figure of potential visitors to the city of Dubrovnik, mostly in form of excursions to the old city, however the real statistics of 1-day, non stationary visits to Dubrovnik are not available.

Altogether the tourism intensity from stationary guests can be viewed as relatively high and an additional increase of tourism activity through cruising should result in practice of caution and environmental concern.

Dubrovnik hosts cruise ships on two main (see the picture below) and one alternative location. The Dubrovnik port Gruž holds 70 % and the anchoring area in front of the UNESCO protected Old Town around 30 % of the traffic, and an alternative location for anchoring near island Daksa. Over the 2009, Croatia recorded 754 cruise calls with 989,000 passengers (Central Bureau of Statistics 2010 a). Dubrovnik is dominating Croatian cruise market with shares of 83 % for cruise calls and 85 % for passengers, and this proportion does not represent actual situation due to the fact that Dubrovnik port recently have been through the 20 million Euro worth reconstruction and expansion of docking capacities for cruisers and now docking capacities are 1.205 m in length Table 5.2.

There is an estimation by Dubrovnik port authorities that around half of cruisers are larger ones (carrying 1,000 or more passengers) and that Dubrovnik port is hosting cruisers more than 200 days a year with peak loads in summer months of up to 10 cruise calls with 13,000 passengers in a day (Institute for Tourism 2007) Fig. 5.8.

### *5.4.2 Direct Pollution Loads and Costs*

After viewing cruise tourism rends pollution costs will be allocated to in order to set up a cost-benefit analysis that will indicate financial benefits to the economy and costs to the environment.

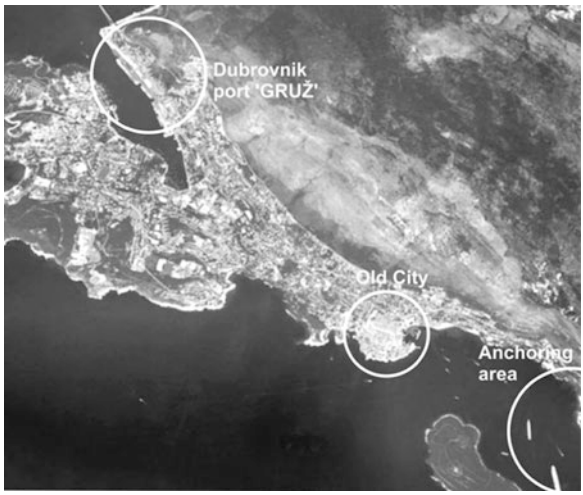


**Fig. 5.8** Dubrovnik harbor Gruž is located a couple of kilometers from the Old City. 30 % of cruisers anchor in front of the Old City harbor as well, especially in the peak season (Source: Google Earth)

**Table 5.3** Direct pollution loads for Croatian Adriatic and Dubrovnik port in 2009

| Pollution type | Daily pollution quantity/guest | Direct pollution for Croatian Adriatic | Total pollution for Dubrovnik port |
|---|---|---|---|
| Solid Waste | 4 kg | 6,648 t | 1,777 t |
| Air pollution $CO_2$ | 0,40 kg/km | 1,063,835 t | 904,115 t |
| Black waters | 40 L | 66,480,000 L | 23,676,000 L |
| Gray waters | 340 L | 565,080,000 L | 201,253,000 L |
| Bilge water | 10 L | 16,620,000 L | 5,919,000 L |
| Hazardous waste | 0.16 kg | 265,920 kg | 94,708 kg |
| Eco-toxic metal | 0.45 g | 748 kg | 266 kg |

*Note on Air pollution calculation*: to calculate the annual emission of $CO_2$ for Croatian Adriatic in 2009, it is necessary to reasonably estimate the travel route of a typical cruiser. The estimation here is that the vast majority of cruisers visit destinations in Croatia as part of their travel to Venice. This indicates that most cruisers travel the full length of Adriatic to the north and back, totaling approximately 1,600 km (Average length of Croatian Adriatic is 783 km and width is 170 km. Therefore calculation of total $CO_2$ emission in Adriatic is: 401 g $CO_2$ × 989,272 passengers × 1.68 days × 1,600 km = $1.063665 \times 10^{12}$ g $CO_2$ = 1,063,665 t $CO_2$. Since Dubrovnik holds 85 % of cruise ship traffic their share would equal 904,115 t $CO_2$

*Note on Eco-toxic metal calculation*: is based on commercial prices of extracting and processing contaminated sediment of Gruž harbor. Emissions of metals were calculated based on ships' submerged surfaces and anchoring time. Source: Carić 2011

Total pollution loads calculations for Dubrovnik port were presented in the paper *Direct pollution cost assessment of cruising tourism in the Croatian Adriatic* (Carić 2010). They are based on the multiplications of daily pollution quantities with number of cruise guests and days they have spent in Table 5.3:

- Croatian Adriatic (989,272 cruise guests × 1.68 average days spent) = 1,662,000 guest/days
- Dubrovnik port (845,603 × 0.7 average days spent) = 591,922 guest/days

Direct pollution costs are calculated under assumption that all pollution loads are negative externalities, meaning that pollution is not properly treated and subsequently have an effect on the environment (Carić 2010). The calculation of pollution costs was done based on multiplying above pollution loads with already established costs as presented in the Table 5.4.

Direct pollution costs are between 390 million Euros for Croatian Adriatic and 328 million Euros for Dubrovnik port.

The Institute for Tourism conducted a survey that analyzed the expenditures of cruise ship visitors in Croatia in 2006 (Institute for Tourism 2006). Based on the findings of that report, and subsequent work presented in a study on cruising tourism in Croatia (Institute for Tourism 2007), it was possible to calculate that the total income for Croatian economy from cruising tourism in 2006 was 29–32 million Euros. Since the base year in this study is 2009, this figure should be increased according to the growth in cruise tourism of 65 % from 2006 to 2009. This would give an economic benefit of 47.9–52.8 million Euros for the Croatian economy in 2009. Hence, the analysis equation (cost minus benefit) produces a negative balance of approximately 337 million Euros. Since Dubrovnik share of cruising in 2009 is 85 % the negative balance would be $52.8 \times 0.85 - 328 = 283$ million Euros.

**In short, cost – benefit analysis show that cruise tourism pollution costs are more then six times larger then financial benefits.**

### *5.4.3 Pollution Ratio of Cruise Guests Verses Locals: Comparing Environmental Footprints*

The calculations presented here compare environmental loads of cruise guests with those of local inhabitants, i.e. the footprinting. Available literature and research indicate that cruising tourist's lifestyle pollutes much more than the lifestyle of local people relating to which the presented calculations are trying to determine ratios that would disclose the proportions. The ultimate purpose of this exercise is to create easy to understand pollution interpretation that can help communication with decision makers and broader public. The comparations are going to be conducted for three groups of pollution: air, waste and waste water. The intensity of cruiser pollution will be analyzed in the context of a typical peak, or a very busy, day in Dubrovnik as it was recorded on May 10th 2008 when five cruisers visited Dubrovnik carrying a total of 12,500 guests (Dubrovački list, May 2008).

The pollution ratios were calculated in a research (Carić 2011) in order to see how many times more a cruise guest pollutes compared to the local person is presented in the Table 5.5 below.

**Table 5.4** Estimated direct pollution costs (DPC) for cruising tourism in Croatian Adriatic and Dubrovnik port in 2009 based on EU prices of environmental management charges. Source: Author's calculation (Carić 2010)

| Pollution type | DPC (EU) | Unit | Direct pollution for Cro. Adriatic | Direct pollution for Dubrovnik | DPC for Cro. Adriatic | DPC for Dubrovnik |
|---|---|---|---|---|---|---|
| Solid Waste | 0.15 | €/kg | 6,648,000 | 2,367,688 | 997,200 | 355,153 |
| Air pollution | 0.24 | €/km/passenger | 1,582,835,200 | 1,352,964,800 | 379,880,448 | 324,711.552 |
| Black & gray waste waters | 0.0089 | €/L | 631,560,000 | 224,930,360 | 5,620,884 | 2,001,880 |
| Bilge water | 0.22 | €/L | 16,620,000 | 5,919,220 | 3,656,400 | 1,302,228 |
| Hazardous waste | 1.53 | €/kg | 265,920 | 94,708 | 406,858 | 144,903 |
| | | | | | 390,561,790 | 328,515,716 |

*Note on Air pollution calculation*: Average route of a cruiser is 1,600 km multiplied with 989,272 cruise guests in Croatia for 2009 gives 1,582,835,200 km/passenger. Same goes with Dubrovnik port where 845,603 cruise guests multiplied with1,600 km give 1,352,964,800 km/passenger

**Table 5.5** Cruise guest pollution in local person equivalents for the 'peak day' of 12,500 guests

| Pollution | Ratios | Peak day visitors from cruise ships |
|---|---|---|
| | (in local persons) | |
| $CO_2$ air pollution | 7.9 | 98,750 |
| NOx air pollution | 11.1 | 138,750 |
| Wastewater | 2.9 | 36,250 |
| Waste | 4.4 | 55,000 |

**Comparative per capita calculations in the context of the peak day in Dubrovnik produced the ratios of the indicators analyzed here: $CO_2$ and NOx air emissions, wastewater and waste show that cruise guests have an environmental impact of 7.9; 11.1; 2.9 and 4.4 times more intensive compared to domicile population.** The numbers indicate that on peak days like the one observed carrying capacity of the destination could be jeopardized.

The confirmation of this may be found in incidents caused by cruise ships: due to overcrowding in the anchoring area in front of historic part of Dubrovnik cruise ships collided and caused damage to underwater installations (Index 2004), on the other occasion they have slightly collided without serious damage (Dubrovački list 2008). More recently a cruiser have accidentally discharged soot, impure carbon particles resulting from the incomplete combustion, polluting a local beach (Dubrovacki vjesnik 2009).

## 5.5 Mitigation

Mitigation of environmental impacts from cruise tourism should become a policy priority in destinations such is Dubrovnik. Developing an effective system should be initiated via local decision-makers that should formally commit to environmental quality and ensure effective protection. The system could be generally divided in sections:

1. Monitoring
2. Management of communal services,
3. "Cleaner" solutions for cruise ship operations,
4. Direct ecological threats.

### *5.5.1 Monitoring : 'To Measure is to Know'*

Monitoring changes in biodiversity or analysis of toxic substances in sea and air are priorities in minimum level – basic environmental management. Available scientific and expert methods can produce reliable information on key environmental indicators within reasonable or low cost. Sampling air emissions or opacity approach in monitoring is commonly used and can produce quick and significant

improvements in air quality. Monitoring biodiversity, metal content in sediment, and DNA change in harbor shells or mussels can be done periodically and available methods are not expensive.

### 5.5.2 Management of Communal Services

Management of communal services needs an accurate charting of pollution flow, i.e. mapping activities and quantifications of solid waste and waste waters. For example, the material flow would show, most likely, that cruise ships are separating waste according to the MARPOL protocol Annex V and that this waste is then improperly managed and disposed. The central waste management site for Dubrovnik and the region with needed recycling facilities and ground filling is not constructed so most of the waste is mixed and dumped in improvised and poorly managed sites. Therefore, expanding the regular waste loads with the ones coming from cruisers, diminish sanitary and ecological safety.

In regards to the waste water management – there is no system available to treat black and gray waters from the cruisers, so it is only to hope that cruise ships discharge wastewaters according to MARPOL protocol Annex IV.

Named waste and wastewater management issues create serious limitations to tourism development. Lack of infrastructure and poor management makes carrying capacity level very low.

### 5.5.3 "Cleaner" Solutions for Cruise Ship Operations

"Cleaner" solutions should aim at the problems that have significant environmental effect, and are not properly managed. Those kinds of impacts should be treated from the perspective of precautionary principle.

Air pollution is that type of significant pollutant that is not adequately regulated nor controlled. Cruisers burn so called Bunker or No. 6 Heavy Fuel Oil. This is probably the dirtiest fuel available with confirmed serious environmental impacts such as acidification and health-respiratory impacts such as asthma or increased risks of lung cancer. Cleaner solution here can be found in switching to the low-sulphur (Su) fuel that can be conducted quickly and with reasonable economic costs to the cruise operations. IMO have established Emission Control Areas where the sulphur content is 0.1 % in opposition to existing global standard of 4.5 %.

Other significant pollutant is antifouling coating that emits eco toxic metals to marine environment. Eco toxicology is complex scientific field and many parameters contribute to the final impacts on environmental and human health. To mitigate those risks the biocide free options should be considered. For example, Hempel company has developed so called *hydrogel technology* that use non-reactive polymers to prevent fouling organisms from attaching. The efficiency of

the new antifouling system produce cost savings in fuel consumption and maintenance making it a very sound investment (Hempel 2010).

### *5.5.4 Direct Ecological Threats*

There are other impacts to consider such as ballast waters and invasive species, destruction of *posidonia oceanica* due to anchoring, underwater noise effect on sea mammals etc. Available research point that marine ecosystems are under considerable stress. For example, there is already noted presence of invasive species in Adriatic (*caulerpa taxiofolia and racemosa*) also biodiversity reach meadows *posidonia oceanica* are already on the list of endangered ecosystems. Furthermore, an issue like underwater noise that creates problems in communication of marine mammals is under-researched but none the less is a serious problem.

Here are described only a few ecological problems with a purpose only to superficially sketch the risks to marine ecosystems.

## 5.6 Conclusion

The paper argues that pollution from cruisers and maritime traffic is significant from perspectives of both varieties and volumes – subsequently resulting in potential environmental risks and health hazards.

Dubrovnik is following global trends of higher presence of larger cruise ships that produce more pollution per person onboard and leave fewer earnings to the local communities. Existing stationary tourism is already intensive and additional pressure from cruisers will produce environmental instability.

Therefore, potential of environmental hazards cannot be ignored. Calculations of total pollution loads and costs show that current cruise tourism is being conducted on the expense of the environment. The calculation shows that pollution costs are 6–7 times larger than economic benefits. Confirmation of this can be found in environmental footprinting where comparation of cruise tourist vs. local inhabitant confirm that, due to much larger cruiser tourist footprint, cruisers on a peak day create enormous environmental burden. In numbers: 12.500 cruise gests produce wastes and waste-water as much as whole city of Dubrovnik together, and $CO_2$ and NOx two to three times the city.

Croatian legal framework dealing with pollution and regulations emerging from the MARPOL convention often are not fully placed in the practice (Carić 2010, 2011). Due to EU integration processes it is expected that waste and wastewater infrastructure and pollution monitoring will improve. This will remove some of negative impacts in relation to solid and hazardous waste, and maybe waste waters, however environmental issues of air emissions, eco toxic antifouling, ballast waters, and endangered marine ecosystems remain. In order to control and mange

the risks and impacts local and national decision makers should moving along the lines proposed in the Mitigation chapter. More concretely *"Cleaner" solutions for cruise ship operations* paragraph offers some alternatives to air and antifouling pollution. Key idea here is to mitigate through imposing more environmentally sound solutions. This practice coincided with environmental management strategy often used: BATNEEC (Best Available Technology Not Entailing Excessive Cost) aiming to propose alternatives that are economically feasible while environmentally friendly. This also presents a marketing opportunity that could additionally stimulate ports and cruise lines to engage in environmental management more seriously. Consumer awareness trend show inclinations to use more environmentally friendly products and services so cruise corporations cannot afford to ignore this fact because they risk being labeled polluting mass tourism business as some concerned stakeholders have already marked them (Cohen 2006; Klein 2008).

At this point cruising tourism is far from the concept of sustainability or sustainable tourism as the World tourism organization promotes it (WTO 2010), making it everyone's concern and responsibility to ensure that cruisers' environmental impacts are monitored, managed and reduced.

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# Chapter 6
# Generated Economic Impact on Cruise Destinations: The Piraeus Case

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**Abstract** The cruise industry, exhibits robust upward demand trends over the last decades worldwide. Regarding the major cruise destinations, the Caribbean holds the first place followed by Mediterranean Sea and Alaska. The Greek Maritime Tourism section can be considered as a significant building block of the broader East Mediterranean market. The objective of this paper focuses on the assessment of the major economic implications that the cruise industry induce to Greek economy. Methodology is based on empirical research and data that are based on national accounts, tourists' spending patterns questionnaires as well as on interviews of experts.

## 6.1 Introduction

The cruise industry is considered to be the most rapidly growing tourism sector over the last two decades experiencing an average annual rate of growth of 8 % against traditional tourism sector growth at approximately 4 % per annum (Peisley 2005). Modest forecast estimates indicate that prospective end-users are going to surpass the level of 17 million cruise passengers by 2010 (Ashcroft 2005; Peisley 2005). To a large extent, this growth has emanated firstly from shifts in the corporate strategy of the cruise firms, which proceed to cruise fare reductions, in order to stimulate demand and attract potential passengers of different economic statues, secondly

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from expansion of cruise ships order book[1] with simultaneous increase of ships size[2] and thirdly from diversification of passengers sourcing.[3]

Despite the recent spectacular expansion of the cruise market, the favourable outlook of upward future demand and the resilience of the industry to adverse events (the 11/9 terrorist event, the Iraq war, SARS, economic crisis), the complete empirical research of the economic implication from the cruise business remains surprisingly thin (Wie 2005; Wild and Dearing 2000). A number of relevant studies – mostly economic-have dealt with the cruise business in the US, Canada and Australia and there are numerous studies for the impact of cruise industry on South American ports, e.g. Port of Portland, Maine, (2002), Seattle (Marti 1990, Martin 2004) and Australian ports (Dwyer et al. 2004). Recently, Guerrero et al. (2008) examined the economic impact of Western Mediterranean leisure ports. The cruise sector's impact on European economies has only recently received some attention. Organizations, as the European Cruise Council (ECC) and European Commission (EC 2009; ECC 2009; Douglas-Westwood 2005) strived to estimate systematically, the direct impact of cruise industry for the total European countries that participate in the cruise market. This is a somewhat surprising conclusion, since Europe consistently receives significant international tourist flows (Syriopoulos and Sinclair 1993; Syriopoulos 1995) and a number of major European ports rank on top of the most popular cruise destinations European Cruise Council (2009) .

While economic impact assessment receives major attention, there are also studies that stand critical to the social and environmental impact of cruise business (Brida and Zapata 2010; Klein 2009; Butt 2007) which is an unexplored field. According to Papathanassis and Beckmann (2011) cruise research is subject to fragmentation, managerialism and lack of unifying theoretical perspectives to characterize empirical research; this is referred to as "*poverty of cruise theory*".

This paper attempts to generate knowledge and to respond to the cruise economic impact question, concerning the Greek cruise sector. The aim of the research is twofold, firstly, to estimate the direct impact from cruise activity and secondly to estimate the indirect impact derived from cruise passengers spending. Since the Port of Piraeus is the major Greek port concentrating the majority of cruise traffic, it was selected as case study, with reference year 2008. The paper is organized as follows: First part reviews cruise industry developments and literature on economic impact of cruise shipping. Section 6.2 discusses the impact generated from cruise activity to host communities. Section 6.3 presents the applied methodology and

[1] Till 2014 18 new cruise ships will be added to global cruise fleet (Ebersold 2008).

[2] Indicative is the fact that in 1970 the average size of a cruise ship was 20,000 gt with carrying capacity 800 passengers, while in 2009 the average global fleet had average size 40,000 gt with average capacity 1,135 passengers (Ebersold 2009).

[3] Till recently the main passenger tank for cruise companies was North America with market penetration to 3.5 %. During the last 2 years European passengers is an emerge market, with penetration percentage 1.8 % (ECC 2010/2011 Report).

data collection, based on structured questionnaires and experts interviews. Finally, the last section concludes by discussing the research results and their importance.

## 6.2 The Economic Impact the of Cruise Sector

Cruise tourism is an interesting case of a complex globalized industry in an environment of international competition, capital mobility and labor migration (Douglas and Douglas 2004a, b; Wood 2000; Bull 1996).

Cruising today is completely different from the original activity back at the 1970s (Bull 1996). The structure of the market can be considered either as an oligopoly (Bull 1996) due to high barriers of entry (Papatheodorou 2005) or as monopolistic competition, since different cruises are not considered as exact substitutes (Vogel 2009). According to product definition, the level of substitutability and the geographic specification make possible to determine the market. The cruise market is dominated by three groups of companies namely Carnival Group (43 %), Royal Caribbean International (20 %) and Star Cruises (8 %) (see Ashcroft 2005). This share concentration makes these three companies major key players for the development of a destination, while their strategic decisions can affect the impact and respectively policy makers' orientation.[4]

Despite severe constraints in disaggregated data (Wilkinson 1999), the contribution of the sector to the national and local economy depends crucially on the level of expenditure realized by the producers and consumers of the cruise product. The economic impact of cruise shipping is disseminated to the whole economy via an income multiplier effect (Sinclair and Stabler 1997). In order to identify the flows of impact, we should distinguish whether the port under study is a home port or a stopover port (Vina and Ford 1998). Furthermore, we should take into account whether a cruise company is of foreign interests and is established in a third country (Dwyer and Forsyth 1998) or whether the activity is developed by national companies. This distinction is crucial because, the expenditure categories may differ and so the relevant economic implications. Also, the size of the destination can be another factor of impact differentiation. A major classification can be among mainland's ports and small islands or peripheral ports. In addition, the economic impact is anticipated to diverge in local and national level (Dwyer and Forsyth 1998). This means that, at local level, the cruise activity can be proved to be of core importance, while, at national level, the contribution to the GNP may not be substantial (Dwyer et al. 2004). The development stage of the destination is another important factor, which can affect the volume of impact. Having said that, it has been argued, that visits to particular tourist destinations follow an asymptotic curve,

[4] This is the case of many destinations, where policy makers while trying to maintain specific volume of calls and passengers are influenced from cruise companies' decisions (Brida and Zapata 2010).

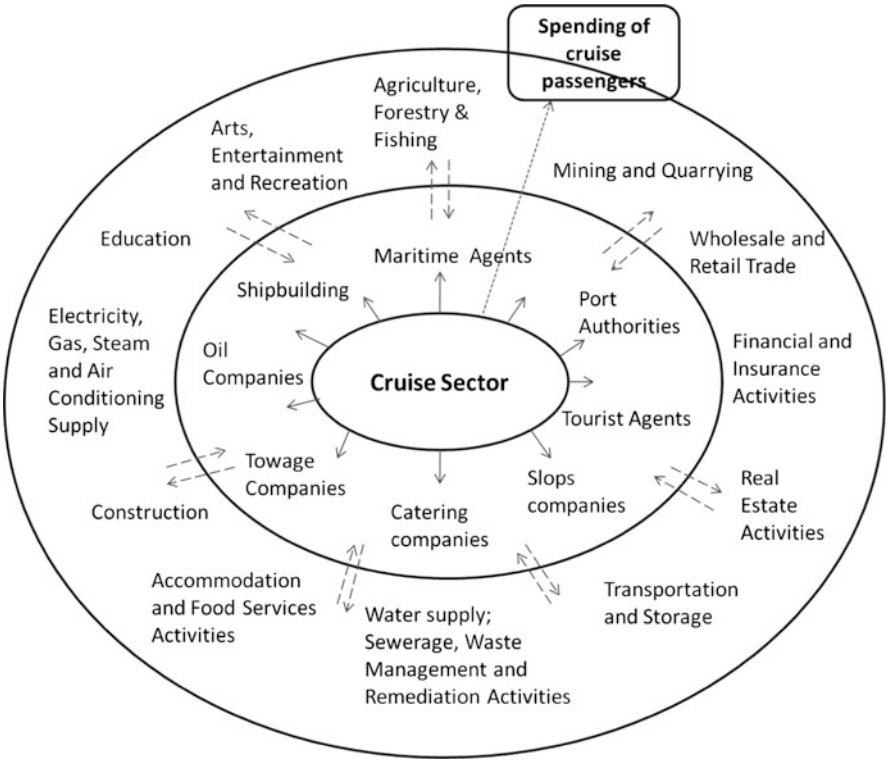


**Fig. 6.1** Multiplier effects from cruise activity

marked by slow initial growth, then rapid growth, stability and decline or rejuvenation (Butler 1980; Wilkinson 1987) (Fig. 6.1).

In a similar model of tourism development, six phases can be distinguished: rapid growth, short-run success, awareness of problems, tourism recession, serious difficulties and reflection (Lundberg 1990). Finally, the specialization of the sector (including satellite enterprises) can be considered of high importance. Overall, there appears to be a substantial economic contribution from the cruise sector to the national or regional economy. Summarizing the impact process, generated from cruise sector:

**Direct impact:**

- Through the expenditures of the cruise companies – locally located- and the various ship agents, which represent foreign cruise companies to ports (on-board-side staffing, shore-side staffing i.e. headquarters marketing and tour operations, expenditure for goods and services spending for port services at ports-of-embarkation and ports-of-call, expenditures for the maintenance and repair of vessels at shipyards, as well as capital expenditures for port terminals, office facilities and other capital equipment.

- Through passengers' expenditures for goods and services associated with their cruises including travel between their places of residence and the ports of embarkation as well as pre- and post-cruise vacation spending
- Through crew expenditures

**Indirect impact:** through the related to cruise sector companies – via supplies and the additional production to meet the increased demand.

**Induced impact:** through the generation of income and household consumption.

## 6.3 Methodology

The literature review was focused on studies and academic papers concerning methods and practices for the assessment of the cruise economic impact. The research occurred in a wider area since the methods applied in the maritime sector, as well in tourist sector were included to our initial methodological review.

Previous research may be classified in four main categories:

- Papers investigating the economic impacts or the contribution associated with economic activities such as the maritime transport business (Haralambides 1996; Van der Linden 2001; Douglas-Westwood 2005) and tourist sector (Briassoulis 1991; Dwyer et al. 2004; Frechtling 2006; Frechtling and Horvath 1999; Wangner 1997; Hughes 1994; Zhou et al. 1997)
- Papers examining the cruise industry in a broader perspective, distinguished into papers focusing into the organizational structure of the cruise sector and relevant European policies (Bull 1996; Wild and Dearing 2000; Lekakou et al. 2005; Marti 2003); and, into papers investigating the contribution of the sector into the national and the local economy (Access Economics 2008; BREA 2002, 2003, 2004, 2005, 2006, 2008; Brida and Zapata 2010; Dale 2007; CLIA 2007; Wild 2005; Chase and McKee,2003; Dwyer and Forsyth 1998; Vina and Ford 1998; Archer and Fletcher 1996; Hobson and Perry 1993)
- Papers referring to the study of relevant port implications due to cruise shipping business (Marti 1990; Gabe et al. 2003; Lynch 2004; Lekakou et al. 2009) and,
- Papers focusing predominantly on the Greek shipping paradigm (Diakomichalis et al. 2007, 2009; Diakomihalis 2006; Lekakou et al. 2005, 2007; Lekakou and Tzannatos 2000).

The relevant empirical data of this study have been collected from a number of divergent sources, since there is no single authority or official database to focus on the cruise sector. Questionnaires to cruise passengers, interviews with experts of the sector were the major tools for data collection, while simulation procedures for the calculation of public services income were applied.

The data can be categorized into: (1) quantitative and qualitative data with reference to the traffic at the port of Piraeus and, (2) financial data (mainly

expenditure by major cruise sector players, which, directly or indirectly, generates income for other productive sectors or the State and the Authorities).

### *6.3.1 Input–Output Analysis*

Input–output analysis is the oldest but at the same time the most widely used methodology (Briassoulis 1991; Dwyer et al. 2004; Zhou et al. 1997) for the systematic quantification of the relations among different industries/sectors.

The main advantage of the model is that it provides an holistic picture of the economic structure of a nation or a region (Briassoulis 1991), describing how industries interact with each other, as well with the rest of the world, thought imports and exports (Babcock et al. 1997; Kwak et al. 2005). The greatest importance of the model is derived by the calculation of multipliers which is a tool for economic analysis. More specific via multipliers, policy makers can evaluate alternative policy scenarios (Fletcher 1989), estimate the effects that a change in final demand can cause to general production level, design the appropriate economic policy and even weight the pros and cons of alternative investments plans (Livas 1994).

Input–Output analysis is not void of shortcomings. The assumption of constant returns to scale in industrial production functions can be a first cause for concern, particularly if dated I/O tables are used without adjustment for the impact of technological change. (Haralambides 1996)

For the estimation of the indirect impact of cruise passengers' spending to local economy we utilize the regional aggregated input–output table of the National Statistic Service for year 2005 regarding the region of Attica. The number of cruise tourists is a very important parameter, when estimating contribution as well as their spending patterns, meaning the kind of products they purchase and the financial amount.

The first component – number of passengers- is provided by local port authorities, who record the cruise tourists annually. In order to keep consistent with the second parameter-spending patterns, the results of a previous year survey were used. This survey-even if it needs to be updated- still can be used in order to provide valid results because reflects the actual purchasing patterns of cruise passengers in the Greek port and it is not borrowed from another research or another area.

Since these critical parameters were determined, the next step is to allocate the spending of each category to the appropriate industrial classification according to NACE (Nomenclature Général des Activités Economiques dans les Communautés Européennes). It is noted that the match was made to the disaggregated national input–output table and then was adjusted to the aggregated regional table. The collected data are at purchaser's prices, so it was followed all the necessary procedures so that expenditures can be used for our calculations. After following these steps, the appropriate sector multipliers were applied to conclude to the direct

and indirect impact of cruise passengers' spending to local economy. Summarizing the procedure:

- Obtain the spending patterns of cruise tourists, in the study area, by spending category.
- Match of the expenditures with the appropriate NACE classification.
- Apply the corresponding import index and trade margins, since the expenditures are at purchasers' prices,
- Consider tourists' expenditures equal to tourists output for service industries.
- Application of the appropriate output multipliers

The economic impact (EI) from cruise passengers' spending is calculated as follows:

$$\mathbf{EI} = \mathbf{N}^{*}\mathbf{AS}^{*}\mathbf{M} \tag{1}$$

Where:

N is the number of cruise passengers;
AS is the average spending ($ per passenger);
and M is the appropriate multiplier

## 6.4 Assessment of the Economic Impact of Cruising on the Local Economy of Piraeus

Greece is ranked highly among the most popular cruise destinations in the Mediterranean, due to the country's geophysical characteristics and an extensive island network (427 islands). The majority of cruise programs that include Greece as a destination most frequently visit multiple Greek ports-islands. Piraeus is the prime domestic port along with other popular tourist destinations, such as Mykonos or Santorini, which are also included in the cruise programs.

The Port of Piraeus is the major cruise port of the country due to its ability to host large cruise ships combined with the multiple options for shore excursions (like visiting archaeological places, museums or the centre of Athens or Piraeus) with Acropolis monument steadily occupying the first place in tourists' preferences. The main Greek cruise port, Piraeus, has 11 berths, 2 terminal buildings, 4 passenger processing areas, customs security clearance and baggage handling and secured parking shuttles. Piraeus also provides services like: bunker fuel, watering, slops collection, customs house brokers, pilots, port agents, ship chandlers/marine supplies, ship repair, tugboat assistance, and warehouse. Additionally a cluster has been developed that serves cruise vessels and satisfies their passengers' needs (port agencies, tourist agencies, repair companies, suppliers etc.).

During the last 4 years (from 2005 and onwards), Piraeus notes a significant increase in terms of calls and passengers. Specifically, from 2005 till 2008

**Table 6.1** Evolution of passengers' volume growth and calls

| | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|
| Passengers | 607,135 | 741,850 | 990,472 | 1,150,938 |
| Calls | 603 | 673 | 876 | 875 |

Source: Piraeus Port Authority

**Table 6.2** Assessment of the direct economic impact of cruise activity on Port of Piraeus ($)

| Revenue category | 2003 | 2008 |
|---|---|---|
| State revenues | 741,360.89 | 1,694,819.84 |
| Port revenues | 2,252,167.23 | 7,108,440.77 |
| Cruise companies revenues | 194,107,663.67 | 111,336,835.02 |
| Seafarers income | 13,360,320.00 | 17,368,416.00 |
| Employees income | 14,654,601.00 | 4,203,435.01 |
| Suppliers revenues | 677,204.00 | 12,388,097.86 |
| Shipyards revenues | 913,790.22 | 23,586,531.60 |
| Oil companies revenues | 38,577,924.00 | 153,231,969.21 |
| Chartering | 10,437,750.00 | 169,509,060.00 |
| Cruise passengers spending | 84,494,977.95 | 168,184,843.53 |
| Total | 360,217,758.97 | 668,612,448.86 |

Source: Authors

passengers' volume increased by 89 %. Increase is also observed to the number of calls by 45 %. The following Table 6.1 presents the increasing trends.

In 2008, 120 different cruise ships, had either visited the port of Piraeus or used Piraeus as home port. The peak period for the Greek port is from May till October, receiving an average number of four cruise ships per day. It must be noted that during this 6 months period, almost 83 % of the annually calls are realized. October is the month with the highest number of calls annually (135 calls). From November till April the number of calls is decreased and this is attributed to the fact that the cruise activity is transferred to the Caribbean and to other warmer weather destinations.

### *6.4.1 The Empirical Data*

The following Table 6.2 presents the major income categories, generated from cruise activity in the region of Attica (Piraeus port). As referred, during data collection procedure, many constrains existed due to the fact that there is no database concerning the specific activity and so alternative sources and methods were used for this purpose (Fig. 6.2).

The first category State revenues includes (a) all kind of expenditures realized from foreign cruise ships during a call (e.g. pilotage ) and (b) expenditures realized from Greek cruise companies (e.g. taxation) where the state produce the service or receive taxation or some kind of fees. According to our estimations, the revenues for the Hellenic Coast Guard reached 1.13$ million in 2008. Concerning the Port

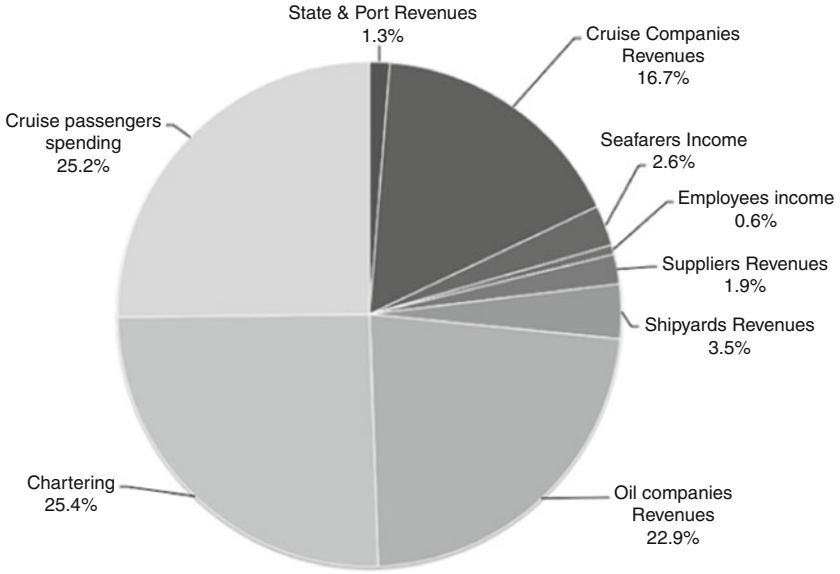


**Fig. 6.2** Direct cruise impact in Greece, 2008

Authorities Revenues for the base year, these rights were estimated at the amount of 7.1$ million. These two categories represent only a small percentage of total activity (1.3 %).

Based on data collected from the P.N.O. (Pan-Hellenic Federation of Seafarers), Seafarers' Pension Fund (SPF) and the National Statistic Services of Greece, it is estimated that a total number of 800 Greek seafarers were employed in 2008; of those, a 30 % concerns deck and engine officers . To calculate seafarers' compensation, it was assumed that they work 8 months per year and that there was an average legal payment for each classified category. Calculations reveal that the total compensation for seafarers is 17.3 million dollars, representing 2.6 % of total generated income.

Piraeus used to host at least five cruise companies in the past. Nowadays, houses only one Cruise Company, and 19 port agents, which represent the major European and American cruise lines. The total employment amounts to 140 people. In 2008, the employees' compensation exceeded 4.2 million dollars. (0.6 %).

The major impact category with 25 % is this of the cruise passengers' expenditures. For the calculation of this spending category we use the results of the passengers' survey conducted in the Port of Piraeus (Lekakou et al. 2007). The specific survey was realized during July and August 2006, with a pilot questionnaire proceeded in June of the same year. Passengers were chosen randomly and interviews took place in Xaveri, the cruise terminal. Questionnaires were completed in a period of time between 2 and 3 h before embarkation. Answers came from 200 passengers from ten different cruise ships, contrary to common practice of choosing

one or two cruise ships. According to the findings, each passenger spends an average amount of 146$. That is in accordance to the relevant research of the European Cruise Council (2008) which concluded that in home ports passengers spend an average amount of 139$ and 69$ at each port of call.

Chartering of cruise ships is the second expenditure category, which according to experts' data reached 168 million dollars during 2008, representing 25 %. Comparing this number with the corresponding one of the year 2003, we conclude to an increase of more than 1,500 %. This result reflects a trend according to which some companies select to operate older cruise ships, instead of investing in new buildings. This can be combined not only with the recent global crisis but also with the trend towards the strengthening of cruise tourism, the involvement of more people and the presence of tour operators.

Oil companies' revenues represent 23 % of the expenditures occurred in the Greek port. According to market experts' estimations, the total value of cruise bunkering (for all three categories of cruises offered in the Greek seas) is estimated at 153 million dollars. The great majority of cruise ships (80 %) choose to supply oil and lubricants from the Greek market because these are of good quality and of lower cost compared to Mediterranean competitors.

Cruise companies revenues constitute 17 % of the direct spending. The estimation of the cruise firms' income was based on an average price for a week cruise; this was, subsequently, multiplied by the number of passengers in each vessel. However, cruise companies gain also some revenue generated by passengers' spending on-board, during cruising. The prevailing trend indicates decreasing time of eve in various ports and the lengthening of passengers' stay on-board. In respect of the Greek reality, there is no official estimation of the average per day amount passengers spend on cruise ships. In order to take this prominent factor into account (as pointed by past research), we had to rely on interviewees' estimations that indicated an average amount of 56 dollars per day. This figure was, in turn, multiplied by the number of passengers and the days of the cruise. According to these calculations, base year passengers' on-board spending soared at 7.6 million dollars. These estimations refer only to vessels under Greek flag. It should be noted that this figure appears to be lower compared to the daily spending on cruise vessels of others flags.

In year 2008 the Greek supply sector's benefit from cruise activity was 12.4 million dollars. This amount represents the demand of the Greek flagged and Greek owned cruise ships, while only a small percentage originates from foreign cruise ships. The suppliers' revenues process a minor percentage (2 %) of total income compared to the size of the Greek cruise sector. Package, cost and specific nutrition standards of passengers elucidates why cruise companies select their nationals' suppliers. At the European level, 342 million dollars were spent on food and beverages (ECC 2009).

Even though the cruise sector has recorded a steadily increasing trend, shipyards revenues is limited to the income created by Greek cruise ships' repairs and annual surveys, since no records are available for shipbuilding investments (neither in Greek nor in foreign shipyards). According to the ECC (2009) annual report, in

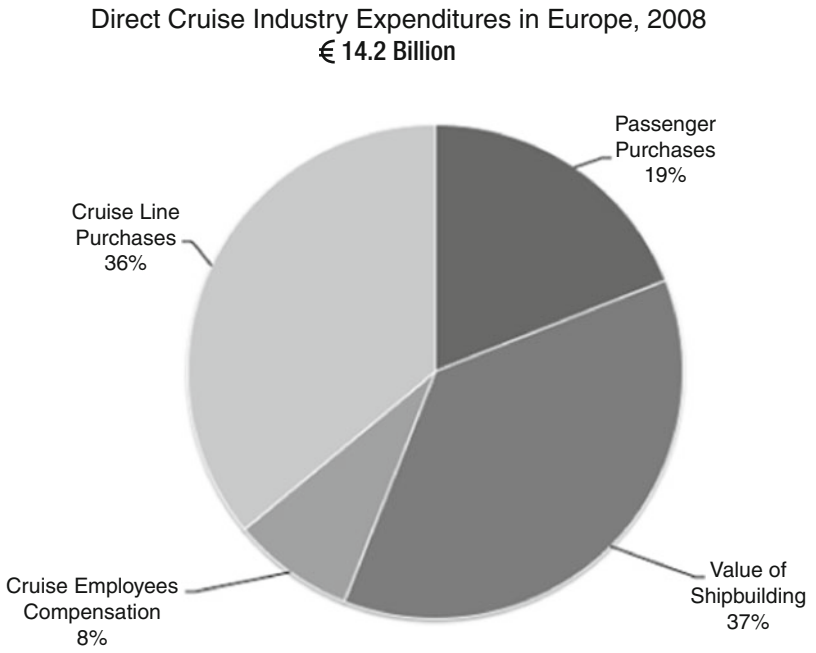


**Fig. 6.3** Direct cruise industry expenditure in Europe, 2008 (Adapted from European Cruise Council 2009)

2008, 7.2 billion dollars were spent on new buildings, maintenance and refurbishment of existing ships, in European territory (mainly in Italy, Germany and France). In contrast to the Greek shipyards, which are mainly selected by very few foreign flagged ships for emergency repairs, the direct spending represents only 3.5 %

Figure 6.3 presents the direct impact categories, for the year 2008, in Europe. Comparing the composition of the direct impact in E.U., to the Greek case, it is reflected the degree of development of the local cruise market. In the European case, the revenues of shipbuilding industry possess the greatest percentage and the explanation is the dominance position of European shipyards. Greece does not present any cruise shipbuilding activity. Therewithal, cruise lines purchases represent the second most important income category for Europe (36 %). This can be judged in combination with the fact that each cruise company uses its own national suppliers.

Concerning the passengers' spending category, it represents the 19 % of the total direct expenditures in Europe. On the contrary, in Piraeus, this is a major income category (25 %). Finally, 8 % of the European expenditures represent the employees' compensation. In the Greek case, this percentage amounts to the half (3.5 %).

**Table 6.3** Expenditure classification to NACE coding

| Expenditure category | Reg. code | Regional industry | Cruise passengers expenditures (million $) | Distribution % |
|---|---|---|---|---|
| Food and beverage and hotels | AYH | Hotels and restaurants | 73.8 | 52.47 |
| Ground transportation | AYI | Transport, storage and communication | 13.9 | 9.91 |
| Entertainment | AYO | Recreational, cultural and sporting activities | 12.1 | 8.59 |
| Shopping | AYD 17_19 | Manufacturing | 6.5 | 5 |
| | AYD 29_36 | Wholesale and retail trade | 14.0 | 9.92 |
| | AYG | | 20.4 | 14.51 |
| Total | | | **140.7** | 100 |

**Table 6.4** Estimation of total output from cruise passengers spending

| Regional coding | Regional multiplier | Total output (million $) |
|---|---|---|
| AYH | 1.4438 | 106.6 |
| AYI | 1.3226 | 18.9 |
| AYO | 1.2484 | 15.0 |
| AYD 17_19 | 1.8906 | 12.1 |
| AYD 29_36 | 1.4553 | 20.3 |
| AYG | 1.4091 | 28.7 |
| Total | | 202 |

### *6.4.2 Indirect Impact of Cruise Industry*

The completion of this research is related to the estimation of the contribution of cruise passengers' spending to local economy.

Table 6.3 presents the correspondence of the spending categories with the classification of the regional input–output, as well as the expenditures of cruise passengers per category. The amount that is totally spent and remains in the region of Attica is 140 million dollars. As it is shown in the last column, the main expenditure category is this of restaurants and hotels, followed by the shopping category.

Table 6.4 shows the total output, resulting from the initial expenditures of cruise passengers. At it is illustrated, the generated output to local economy from an original injection of 140 million dollars is 202 million dollars. Once again, the hotel and restaurant category is the one which is more affected and generated the highest output (106.6 million dollars), while the less affected is the manufacture category (12.1 million dollars. The most important result that derived from the specific table is the estimation of the impact that cruise passengers' expenditures create to the local economy. This can be utilised in order to attract the interest of policy makers

to the cruise industry and design and evaluate development plans, which could lead to the increase of Greek cruise sector and respectively to stimulate the domestic demand.

To authors' knowledge, there is no previous study concerning the estimation of the multipliers effects of cruise passengers spending, neither at national nor at local level, so as to examine the potential changes in the sector and make valid comparisons.

## 6.5 Conclusions

According to the available data for the major cruise port in Greece, Piraeus, there has been an increase of 95 % on cruise passengers and 45 % on total annual calls during the last 4 years. Although there is a lack of any cruise policy, Greek islands are attractive enough to make many cruise companies to include Greek ports into their itineraries. This reality serves cruise companies for two main reasons: Firstly, companies are trying to reduce ships operating cost by including in their itineraries more and closer ports of call. That way they achieve reduction in bunker cost (important factor of operating cost). Secondly, they accomplish their primary target by offering to their clients' high standard destinations. Aegean Archipelago, can serve as a "***cruise islands cluster***", since islands with completely different characteristics are situated in short distances.

The empirical analysis has introduced a range of interesting conclusions. In the case of Piraeus the passengers spending category is a major contributor for regional economy. In general this impact pattern applies in many destinations, which serve cruise industry mainly as port of call. In this basis a question to be answered is how the attitude and the characteristics of cruise passengers affect the volume of impact through their spending. This knowledge is essential especially for policy makers when planning in order to attract business.

Till 2010 the Greek cruise sector operated under cabotage conditions. In August 2010 the Greek government proceeded in a change of the cruise regime and liberates the Greek cruise market establishing an application procedure for all the non European cruise ships that willing to use any Greek port as home port. This political decision was followed by the fierce opposition from labor unions. The expected results were the increase in the number of calls, the increase in the number of cruise passengers and successively the increase of economic impact. As proved above this is a reality; the cruise sector can accelerate local economies and may become a development pillar. Recently, in 2011, government decided to reform further the regime towards the liberalization, following the paradigm of other European countries, by removing any institutional barrier to entry. So far the economic impact of liberalization has not been estimated; meaning that the impact of deregulation is unknown and not documented- since before the implementation there was not any impact assessment report. In our opinion the lack of economic, social and environmental impact studies is the critical parameter that should

complete the missing part of the cruise puzzle. The recommendations of these studies should be the main body of cruise shipping policy and could provide to policy makers the providers and the citizens all the necessary data so as to design or to accept policies aiming at the development of the cruise sector in the wider context of sustainable development.

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# Part II
# Cruise Sector Image and Marketing Challenges

# Chapter 7
# Nautical Tourism and the Media

**Zeljana Dulcic and Tihomir Lukovic**

**Abstract** Nautical tourism as a tourism industry with a strong maritime element combines two major industries, such as cruise industry and marina industry that we need to extend to vessel chartering as a smaller industry. There is no direct competition between these industries. They are complementary and loosely bound. Each of the above-mentioned industries develops its own products and services and places them onto the global market of supply and demand. In so doing, the communication takes place with the help of the communication media; that is by means of public relations departments established within each industry, operating as organizational units within the business entities of nautical tourism. Public relations departments play a vital role in the implementation of the strategy of social responsibility as an instrument of management and a key promoter in achieving strategic goals of an organization. In implementing communication strategies, as well as social responsibility strategies aimed at the public, public relations departments use the media as one of the tools of public relations that contribute to the success and competitiveness of business entities on domestic and international market. Depending on the level of development of each of the three above-stated industries of nautical tourism, as well as on the competition within the industries, the communication with the market of supply and demand varies significantly. In order to achieve success, the public relations experts, with the help and support of the company's top management, carry out regular and detailed research that helps businesses enrich their offer with the aim of meeting the standards and requirements of demand. What is the research about? What is the aim of it? In what way the social responsibility strategies are developed in line with the general principles of sustainable development? Which industries use and develop effective communication with the global market of demand, and in what way? These are the questions to which we will provide the answer in this scientific paper. The subject matter of this paper is the role and utilization of the media and

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public relations departments in the communication between business organizations in nautical tourism and the public. In wider terms, the communication on the market of demand takes place by means of marketing mix that has been developing almost on a daily basis. The purpose of the paper is to identify the differences in the utilization of the media among several industries of nautical tourism and to explain the reasons why the difference occurs. The paper aims to highlight the role of the media in contributing to the success of the management of business entities in nautical tourism. The communication technology at the global market of supply and demand in nautical tourism is not distributed uniformly. Therefore, our hypothesis is presented in order to identify the differences among the industries based on different levels of competition found within each of the three above-stated industries. The purpose of the study is to test the hypothesis on the utilization level of the communication media.

## 7.1 Introduction

The development in communication has contributed to the rapid growth of global economy. Nowadays, when social values and the goals of stakeholders are being challenged, business entities have been devising innovative tools and solutions in order to encourage sustainable development, thus increasing the importance of the role of the communication and the media. The development of global communication and the emerging of new challenges and opportunities have contributed to addressing the issue of public relations and communication that would help top managers incorporate sustainable development into their business strategies, thus contributing also to the success of the management within organizations. The rapid development of the mass media has imposed new tasks and challenges on the communication processes and strategies. Organizations are expected to carry out research and development in the area of communication. A quality internal communication system is a prerequisite for a successful operation and management of an organization, and of the entire market, as well. The information technology has become a key factor in bringing the markets of supply and demand together, which has enabled businesses to manage them successfully worldwide.

The communication and media play a vital role in nautical tourism and its sub-industries. Therefore, the *subject matter* of the research paper is to define the role of the media in developing the offer of business entities in nautical tourism, and to determine the way in which each of the sub-industries of nautical tourism communicates with the media.

*The objective* of the research is to define and to analyse the role of the media in developing the offer of business entities in nautical tourism, so as to raise the awareness of the importance of the media in contributing to the success of companies in nautical tourism.

The *purpose* of the research is to establish the role of the media and communication within business entities in nautical tourism in order to be able to utilise them

properly and to manage them efficiently. Heretofore, the media have been developing independently, and each industry and its business entities needed to adapt to this. The development of the market-oriented media that would meet the demands of its stakeholders and be in line with the principles of sustainable development is of vital importance for business entities, as well as for the community in general. *The main hypothesis* of the research is that the communication and the media need to be developed according to the specific needs and demands of their users. The products and services that business entities of nautical tourism offer to the market of demand through the media they adjusted in order to suit their needs contributes to the competitiveness of their offer on the market. Auxiliary hypotheses derived from the principal one are as follows: (1) well-organized and socially-responsible media contribute to the sustainable development of the nautical tourism industry, and (2) socially-responsible media contribute to the increase in the level of social values, and they adjust social values to the environment.

The analysis and assessment of the role of the media in the quality of the offer of business entities in nautical tourism, as well as their market representation will be carried out in this research using both qualitative and quantitative *methods* of data analysis, in order to determine the means that business entities in nautical tourism have devised to communicate with their end users and meet their needs and demands. The obtained data will be collected and analysed using the methods suitable for that purpose, such as the a forecasting method and extrapolation method.

## 7.2 The Basic Classification of Nautical Tourism Industries (Luković)

Nautical tourism has been rapidly developing as a part of tourism industry, prompted by a rapid growth in maritime industry. Due to a strong influence of the maritime and sailing elements the economic and tourism aspects as the basis of the development of nautical tourism have been put in the back burner. Therefore, the term nautical tourism has developed various meanings, such as yachting tourism, maritime tourism and other, all of the terms referring to the ***nautical tourism as a tourism industry with an emphasis on the maritime component,***[1] which is the shortest and the most clear definition of nautical tourism.

It needs to be emphasised that nautical tourism consists of several big sub-industries each one powerful and profitable, and developed, so as to be integrated into one big nautical tourism industry only in scientific terms.

Each of the three sub-industries of nautical tourism contains itself some sub-industries that possess financial strength and have been developing within the

[1] Luković and Gržetić (2007), p. 28, according to the lecture *Nautički turizam* by Mr. Tihomir Luković, dr.sc. at the University of Dubrovnik, Economica and Business Economics Dept. (2006).

industry of nautical tourism. Some of the sub-industries have achieved a high level of development, such as the cruising industry, and big cruise ship industry as a part of it.

Fierce competition on the market of demand of *big cruise ships* generated not only complex forms of connecting and merging among organizations, but a complex system of communication and integration with the market of demand as well.

Except for big cruising companies and corporations, the market of supply contains a *small cruise ship fleet* pertaining to the small cruise industry that has been developing as a part of entrepreneurship. The industry of small cruise ships implements communication models and the media for the purpose of communicating with the market that differ significantly from the ones used by large organizations.

For the past 10 years, *the ports* that are the fundamental component of the overall cruise industry have been developing rapidly in Europe, and especially in the Mediterranean, improving the communication system with the market. The ports accepting big cruise ships represent a sub-industry of nautical tourism that is ever more complex and improved, providing solutions for their issues by implementing the ways of communication and the media that suite their purpose best.

As for the *marina industry,* the berthing of yachts in ports and marinas is keeping up with the current trends and requirements of the development in communication by providing Internet access to the yachts in ports and marinas on a regular basis.

The third sub-industry of nautical tourism, which is the *charter industry*, has been developing by means of acquiring new charter fleet that include ever bigger and luxurious vessels. The key factor of a successful business activity among extremely competitive relations within the charter industry is the conducting of market research in order to meet the needs and demands of its customers. Since the charter industry does not offer only the service of leasing a vessel but it offers the service of a skipper as well, the proper communication and utilization of the media is of vital importance for a successful operation of each of the company in the charter industry.

Various means of utilization and development of the media, as well as the development of communication within each of the sub-industry of nautical tourism contribute significantly to the success of the management of each nautical tourism business entity (Fig. 7.1).

## 7.3 The Role of the Media and Communication on the Global Market of Demand

Communication is the key factor of social, economical and technological development of an organization, as well as of the environment that surrounds it.

The success and survival of an organization on the market does not depend solely on its financial operation and management anymore, but it depends on the implementation of communication and sustainable development strategies.

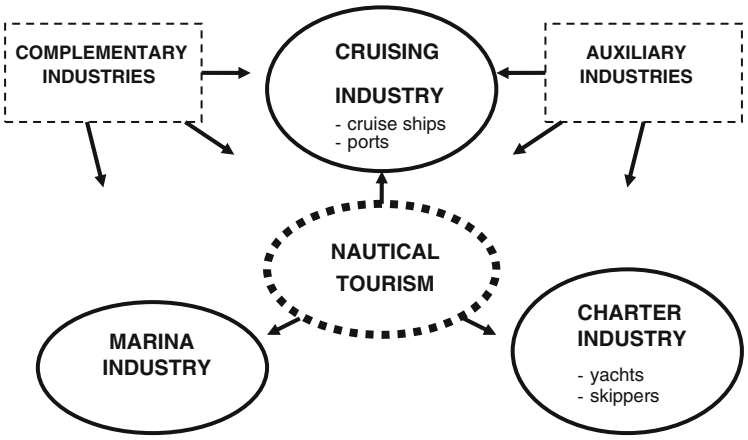


**Fig. 7.1** The basic classification of nautical tourism sub-industries (Source: by authors Ž. Dulčić and T. Luković)

The organizations that are not transparent or socially aware, and do not have a long-term sustainable development business strategy perish, and are replaced by the companies that know how to communicate with the public, that have a proactive approach towards internal communication and the support of the management in planning and implementing communication activities.

The role of the management in implementing communication strategies and activities is crucial, because it consists of individuals or groups that can determine the forms of communication and influence the implementation of the concept of corporate social responsibility. First of all, it is necessary to establish whether the organization has developed a quality internal communication strategy, because the internal communication is the basis for the implementation of other communication strategies and activities aimed at external public.

Communication activities are aimed not only at customers, that is at the users of products and services the company has to offer, but also at the suppliers, investors, media, government and the members of local community that the organization needs to help and promote good neighborly relations with for the benefit of both the organization and the wider community. Thus, the communication has become a strategic tool of an organization in fulfilling its mission and vision statements, and strengthening its position on the market.

In order for the strategic communication process to be implemented successfully, a fundamental plan and program needs to be devised, and a communication media selected that would enable the implementation of communication activities and building of successful long-term relations between the organization and its public. So as to achieve a successful communication with their public, companies need to establish specific public relations departments the purpose of which is to

devise a strategic communication plan aimed at the public. The means of communication used for that purpose are various, and Holtz distinguishes between two different categories, such as:

1. Traditional means of communication, and
2. *Online* means of communication.[2]

Holtz considers the "face-to-face" communication as the only real form of communication, because it is the most direct, and it creates an atmosphere of trust, including the nonverbal communication that improves the exchange of information between the participants in the communication process. Simultaneously with the development of *online* communication, *online* communication strategies have been developed. Public relations experts have been keeping up with the trends in information technology, and have been using blogs, forums, podcasting and social networks ever more, in order to reach the public in real time and promptly obtain feedback information.

Therefore, the companies are trying to come up with interesting web sites so as to attract new customers. The cost of advertising on the Internet is much lower that the usual cost of advertising on television, radio or in the newspapers. Therefore, the low-cost Internet advertising is being used as a new and efficient marketing and public relations strategy in attracting new customers and delivering messages to the customers and from the customers to the companies. One of the main activities of PR departments is the communication with the media.

The media are according to its very definition the channel through which individuals and companies communicate with their public. The mass media are one of the most rapid and the most cost-effective tools that PR experts use in exchanging information with the public. They act as intermediaries in transferring the message in one direction, such as: radio TV, newspapers, or in multiple directions, such as telecommunications and the Internet. The importance of public relations in organizations has been recognized only recently, and only in large organizations in Croatia. Public relations as a part of management function help top management in making business and strategic decisions, and in achieving success acting as an intermediary between the top management and its public.[3] Many companies worldwide have started implementing corporate social responsibility strategies, as a response to various social and economic pressures. In this way they want to show the members of the local and wider community that by voluntarily engaging themselves in such activities they are both willing and capable of contributing to the development of the society and of the environment. Skoko (2006, str. 47)[4] states the following: "Social responsibility of corporations is based on a form of "enlightened personal interest", because it links philanthropy to the achieving of organizational goals." *(translated by the author)* Socially

[2] Holtz (2007).
[3] Dulčić (2010).
[4] Skoko (2006).

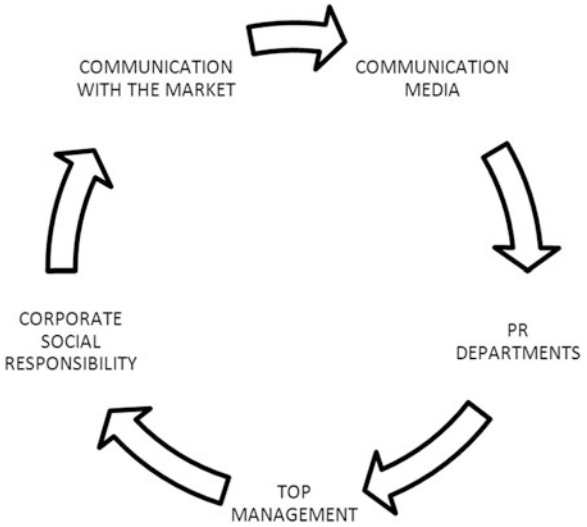


**Fig. 7.2** The communication of nautical tourism business entities on the market of demand (Source: by Ž. Dulčić and T. Luković)

responsible practice is based on integrating social responsibility into the everyday business practice, with the aim of improving the quality of life in the community. Thus, the communication of nautical tourism business entities on the market of demand looks as follows:

The role of public relations departments in the management process is still minor and marginal, but the companies with a developed business vision are well aware that public relations start with the top management. The importance of the top management support towards public relations practitioners has been recognised as a key factor contributing to the achieving of business goals of an organization.

In order for the organization to cooperate successfully with its local community, its public relations specialists need to find the best approach to inform the community on the business activity of their organization. The local community has to be familiar with the activities, goals and objectives of an organization so that it can give it its support without which the company would not manage to succeed.

Therefore, besides the usual communication activities with employees, journalists, investors, suppliers, government representatives and local community representatives, writing press releases and newsletters, public relations specialists should participate more actively in organizing various trade fairs, open days, press conferences, and other business events that would introduce potential customers and business partners, as well as other local community members to the activities of the organization, thus contributing to the growth and development of both the company and the community (Fig. 7.2).

## 7.4 Identifying Major Differences in the Utilization of the Media Among the Sub-Industries in Nautical Tourism

Technological development has accelerated tremendously in recent years, prompting the development of the means of communication within sub-industries of nautical tourism, thus blurring the traditional boundaries between them. They have become complementary, which helped in creating a synergistic effect on the organization and the social community. The Internet has enabled companies to communicate and exchange information simultaneously with their shareholders. With this in mind, a research has been conducted, showing that the Internet is slowly overtaking television and radio as the most utilized means of communication with customers, because it introduces multidirectionality in the exchanging of information and accelerates information flow. The Internet has become an essential means of communication in nautical tourism and other tourism industries, as most bookings of products and services are done via the Internet.

### *7.4.1 Research Results on the Utilization of the Media in the Port and Marina Industry*

Nautical tourism ports supply is diversified and it has been developing rapidly, which requires an ever more complex communication system. With regard to the current state on the European marina industry market of demand, the demand is much lower than the supply, and the research shows that the ratio is 2:1.[5]

Marinas have got an ever more developed infrastructure that, besides water and electricity supply possesses Internet connection for vessels, thus enabling customers to communicate with the people all over the world. The research results on the utilization of various media in the port and marina industry are presented in (Fig. 7.3), with telecommunications as the most frequently used communication media represented with 40 %. This is due to the increasing demand which has caused *online* means of communication to become redundant as the existing port and marina infrastructure has not been adequately developed.

The implementation of proactive strategies in developing ports and marinas and investments in the infrastructure have prompted a rapid growth in demand, but unfortunately deregulated construction and poor spatial planning have resulted in overcrowded ports and marinas, in which case the advertising becomes redundant, as well as the communication activities aimed at the target end users of their services. Therefore, this sub-industry has not developed an *online* marketing strategy of advertising and communication yet and the communication with the market is carried out mostly via telecommunication channels.

[5] Istraživanje TOMAS- nautika, Institut za turizam, Zagreb (2004).

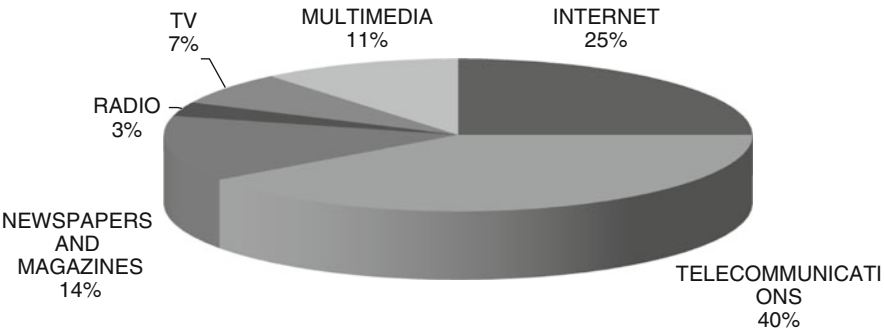


**Fig. 7.3** The results of the research on the implementation of each type of media in port and marina industry (Source: by Ž. Dulčić and T. Luković)

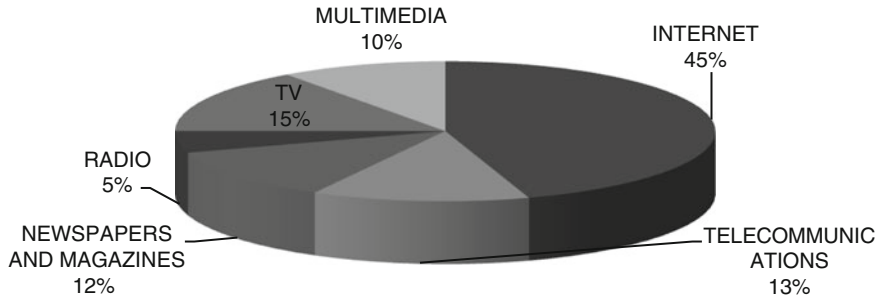


**Fig. 7.4** The results of the research on the implementation of each type of media in charter industry (Source: by Ž. Dulčić and T. Luković)

### *7.4.2 Research Results on the Utilization of the Media in the Charter Industry*

Charter industry, although being the most recent industry in nautical tourism has developed rapidly at the global level. Charter supply regards the ports of nautical tourism, and it has been improved by adding a skipper service, which has contributed significantly to the development of nautical tourism and its accompanying industries. Thus, the communication development has helped in generating quality products and meeting the requirements of the customers. This enabled charter companies to achieve *value for money* and improve the quality of the goods and services it offers. The competition on this market increased significantly, resulting in the increasing importance and role of the media in the communication of business entities on the global market of demand. The Internet is the main communication media that is used in presenting the supply of products and services in chartering industry, although other media are used, as well. The research results are presented in Fig. 7.4. The Internet is the main communication media used in presenting the offer of organizations in charter industry. It is represented with 45 %,

which is more than three times bigger than telecommunications, represented with 13 %. The results show that the competition on the market has increased, thus causing the role of the media in the communication of business entities with their public to become vital.

In the charter industry the Internet is much more used that the telecommunications, due to a more adequate and cost-effective communication of charter companies with tourist agencies via the Internet. It needs to be emphasized that by integrating various technologies, such the Internet, telecommunications and other media into a huge multimedia communication service the supply and demand in charter industry has increased significantly.

### 7.4.3 *Research Results on the Utilization of the Media in the Cruise Industry*

The cruise industry has reached a high level of development, especially in the sub-industry of big vessels. In the large cruise ships category, consisting of 300[6] large cruise ships there are several big cruise and cruise ship corporations. The largest one is called *Carnival UK* owns 99 large cruise ships.[7] The communication on the market of demand is excellent, better than in all the other nautical tourism sub-industries. Regardless of the competition intensity, the cruise industry has maintained an average annual growth rate of 11 % within the last 30 years, owing this to the development in communication.[8]

The competition within the category is intense, and the products and services the industry is offering are placed onto the market through various communication channels, mostly Internet. It is represented with 45 % in this part of the survey. The multimedia is still a new form of communication on the market, but it is developing rapidly. Specialized cruise travel agencies also participate in promoting and selling cruise industry products and services to customers, often merge together into big global corporations. At the same time, a simple booking and payment systems have been developed. Cruise industry business organizations are not the only ones participating in the promotion and selling of cruise products and services, but specialised cruise agencies are involved, as well. The cruise industry is developed through big cruise associations, acting as key factors in growth and development of the cruise industry. The research results of the implementation of the media in the cruise industry are represented in Fig. 7.5.

As we can see in Fig. 7.5, the Internet is the most frequently used communication media in the cruise industry, accounting for 58 %, which is more than all the other communication media together. Both cruise ships and specialised cruise harbours

[6] Ward (2010), APA Publications Services.

[7] http://phx.corporate-ir.net/phoenix.zhtml?c=140690&p=irol-index.

[8] TOMAS nautics research, Institute for Tourism, Zagreb (2006).

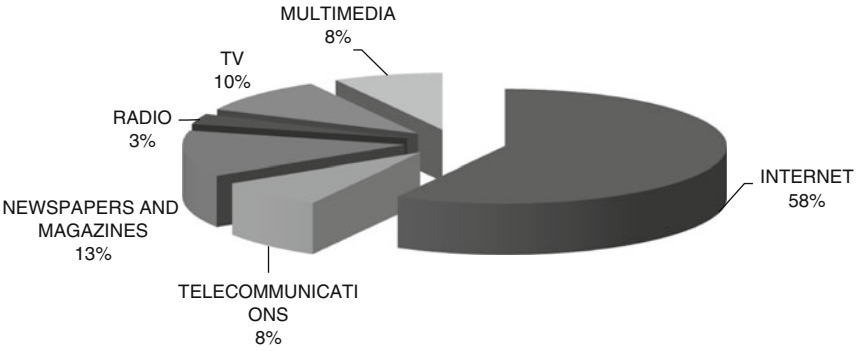


**Fig. 7.5** The results of the research on the implementation of each type of media in cruise industry (Source: by Ž. Dulčić and T. Luković)

have been developing rapidly and merging into associations, thus developing their means of communication as well. There is a well-known Mediterranean cruise ports association, called Med Cruise,[9] giving much attention to communication, especially to *online* communication. As a result of its adequate implementation within the cruise industry, the Internet is the most widely represented, efficient and cost-effective communication media. Its role in linking the supply and demand is remarkable. It is estimated that, regardless of the formal merging of telecommunications and Internet together, the Internet will maintain its leading position in this industry.

## 7.5 The Assessment of Future Development in Communication of Business Entities Within Nautical Tourism Sub-Industries

Owing to the development in information and communication technology, port and marina infrastructure, as well as to the growing compliance of business entities with environmental laws and regulations, we expect the nautical tourism and the industries accompanying it to continue to grow and increase further, as long as they embrace the new information and communication technology and learn how to use it as a powerful tool in improving their business and their relationship with the community in which they work and live.

Due to market expansion and development companies have been seeking new ways of differentiating themselves from their competitors. In order to achieve their business goals, they start integrating ethics and sustainable development policies into their business strategy, thus converting the original economic value into an

[9] www.medcruise.com.

added value for the benefit of the society. Successful companies have developed communication at all levels and in all directions, and the task of public relations departments is to coordinate communication activities is directed towards internal and external public. Organizations, and thus their public relations departments as well are expected to obtain and to maintain competitiveness on the market of demand, while preserving natural resources and complying with social norms.

Owing to the abundance of natural resources, its strategic geographic location in the Mediterranean, as well as its mild climate, technologic and economic development and a continuous increasing in the supply of nautical tourism products and services, Croatia has got a development potential necessary for it to succeed on the European and international market. A key to successful communication on the international market of demand in nautical tourism is the attaining and preserving of the quality of tourist offer, as well as the promoting of sustainable development and building long-term relationships with the users of products and services and members of the community.

With the ever increasing range and structure of tourist offer in all the categories of nautical tourism, the rapid development in technology and communication and in the quality and safety of products and services and their compliance with laws and regulations, ethical standards and socially responsible practice, the prerequisites have been established for a continuous growth and development of nautical tourism in Croatia in a competitive environment of the global market of supply and demand.

## 7.6 Conclusion

The rapid growth of nautical tourism and its sub-industries and the increasing competition between them has lead to the development in communication tools and strategies that companies operating in this sector are using in their communication on the market of supply in order to be competitive and successful. Nautical tourism of Croatia is well-developed, and its sub-industries such as: the port and marina industry, charter industry and cruise industry have been developing as well. The competition within each of the nautical tourism sub-industry is big, prompting business organizations to implement various communication media and communication strategies in new and innovative ways in order to get ahead of the competition and achieve success on the market.

Due to an intense competition among the above-mentioned sub-industries, as well as the competition within each of the industry and an unequal growth and development of the port reception facilities, in some of the industries, such as: the port and marina industry telecommunications are still the predominant communication media, while in the other sub-industries, such as the charter and the cruise industry Internet is the main communication media. Due to the increased growth and development in nautical tourism, both in Croatia and worldwide, the role of communication media among business entities of nautical tourism sub-industries is vital, since they contribute to establishing an effective and longterm cooperation

between business entities and their customers, and to protect the environment they live in. At the same time, the role of public relations departments has been increased. Their task is to help the top management in establishing a long-term relationship with their customers, investors and other company shareholders, as well as other members of the community. The communication media are not longer unidirectional, expensive and available only to a small number of users. They have brought change into the business communication and the entire society.

The emerging challenges and demands on the market of demand have prompted business entities in nautical tourism to improve their communication tools and strategies so as to expand their touristic offer, increase financial strength, develop port infrastructure, as well as to provide future growth and development opportunities for both business organizations and the community.

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# Chapter 8
# Customer Feedback Systems Onboard Cruise Ships

**Philip Gibson and Francesca Di Dino**

**Abstract** While customer satisfaction is relatively easy to see, it is notoriously difficult to define (Ghobadian & Ashworth, 14(5):35–51, 1994) and potentially even more difficult to measure (Rust *et al*. 2004). This is especially true to the cruise business, as this contemporary industry offers an extensive and frequently interrelated array of products and services allowing much scope for potential error. As the industry continues to grow, the market becomes more competitive, making it imperative for cruise companies to provide service quality and customer satisfaction to build customer loyalty and create repeat business. Essentially, products and services are only as good as customers say they are and the best way to measure this is through customer feedback. This notion is reinforced by the Zeithaml, Parasuraman and Berry (1990) who assert that customer feedback is one of the most important analytical tools used to establish what their customers really want. Cruise companies use a number of different methods to enable them to measure and monitor the perceptions and expectations of their passengers. This research paper attempts to critically analyse the various customer feedback systems used onboard cruise ships, endeavouring to underpin the perceptions and implications as held by the key stakeholders, shoreside management, shipboard management and customers. This study aimed to distinguish the key variants in customer feedback systems as used onboard several well-known cruise brands and examine the magnitude of the implications of these results; reflect the perceptions of the stakeholders and; ultimately to make recommendations for best practice. A multi-method approach was used in order to improve the validity of the findings and to provide a greater depth of information. Qualitative data was collected in the form of 10 interviews. Five interviews were undertaken with shipboard personnel from both Princess and P&O Cruises and another five interviews completed with shoreside managers who were employed by brands under the Carnival Corporation umbrella. Finally, quantitative data was collected in the form of a questionnaire returned by

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112 participants. The questionnaire was constructed to examine the understanding of customer feedback from the UK passenger's perspective. Paper-based questionnaires have remained the normal practice for many years. However, results show that in 2010, both Princess Cruises and Carnival Cruise Lines decided to implement a new, more technologically advanced system in the form of an electronic questionnaire. Though the architecture of each survey method differed slightly, the concept and key objectives remained the same. Findings identified that both positive and negative implications of the new electronic format were identified but customers' perceptions implied that although many preferred completing paper-based questionnaires the notion of receiving the survey when at home was even more attractive.

## 8.1 Considering Customer Feedback

According to Dowling (2006), even though cruising is one of the fastest growing sectors of the tourism industry, the cruise industry has received very little attention in respect of how customer satisfaction is measured and service quality is monitored. Many business leaders and academics suggest that what is not measured cannot be managed thus implying the measurement of service quality and customer satisfaction is imperative for improvement (Davies and Davis 2011; Kirk 1996; Normann 2002). Furthermore, Schneider and Bowen (2010) believe that in order to manage and improve service quality, companies need to build strong relationships with customers so as to appreciate their customers' wants and needs. The expectation is, when service providers engage with their customers, resultant data that emerges provides the company with the valuable information it requires in the battle for competitive differentiation and customer retention.

The cruise industry faces a much greater challenge in delivering a high quality service at the point when the product is being consumed or service experienced, compared with other tourism service sectors. It is argued that the dynamic of customer engagement with the cruise experience begins when passengers initially board the ship right through until they disembark at the end of the cruise and as a result each aspect of customer engagement has some form of cumulative effect on the overall 'cruise experience' (Leclerc and Teye 1998; Huang and Hsu 2010). So the major elements of a cruise product component such as transportation, accommodation, dining, onboard entertainment, recreational and leisure activities, domestic and foreign ports of call and shore excursions (Gibson 2006) have both individual and a cumulative impact on the customer's overall cruise experience. In other words, by providing such a broad array of services there are many opportunities for customers to feel dissatisfied. Verma (2008) confirms this service dilemma when asserting that service quality, is the result of numerous customer interactions or 'moments of truth' in service organisations. But, according to Wirtz and Tomlin (2000:206), 'this is the key area from which to obtain feedback, as it often has the strongest leverage on overall quality, and is often the most difficult to manage'.

Theorists such as Bitner (1990), Elliott et al. (2002) and Wirtz and Tomlin (2000) attest to the increasingly difficult act of satisfying knowledgeable or more experienced customers. Within the market place there is a ready understanding that the ultimate competitive advantage for a firm is to learn and change faster than the competition (Baker and Sinkula 1999). Invariably this means developing sophisticated instruments to capture customer feedback and, according to Princess Cruises (2010), the most important tool to identify where improvements can be made is the customer service questionnaire.

This study examines various models of the practice for capturing customer feedback from UK cruise passengers as used onboard several well-known cruise brands. In so doing the research develops a stakeholder analysis that helps to reveal perceptions about these models and presents recommendations for improving the process.

## 8.2 Reflecting on Theory

Predominantly, total market surveys, annual surveys and transaction surveys are the preferred feedback collection tools used onboard cruise ships to evaluate overall satisfaction. These surveys typically measure satisfaction with all major customer service processes and products (Chung and Wirtz 2003 as cited in Lovelock and Wirtz 2007). Dowling (2006) notes that most cruise lines utilise a post-cruise questionnaire to gather data and determine how successful they have been. The typical survey asks questions relating to guests' satisfaction with their experiences. This customer feedback method is said by the authors to be the most representative and reliable. However, although this type of feedback quizzes passengers on their satisfaction levels, it neglects to identify passengers' perceptions of value. Woodruff (1997:139) states, 'if customer satisfaction measurement is not backed up with in-depth learning about customer value and related problems that underline their evaluations, it may not provide enough of the customer's voice to guide managers where to respond'.

Different data collection tools can be beneficial depending on what type of feedback is required, for example, service, process, product or specific service encounters. Indeed it has been suggested that because of the complexity relating to the inter-related nature of the cruise experience, the use of a combination of various collection tools could be the most effective approach (Berry and Parasuraman 1997).

Customer feedback can also be used to reward or discipline employees and as a motivational tool. Some companies have made results of customer feedback measurements easily accessible to everyone through a computer networking system that permits each employee to look at the latest results in their own time (Horovitz and Jurgens-Panak 1992). This allows management to intervene at the right moment to improve performance and to help staff, who are struggling or to spur forward those who are not achieving. This is in accord with a perception that if organisations are not actively learning and applying solutions from an integrated customer feedback system, they will never have the factual data to convince the uncommitted to move forward.

So far this discussion has considered feedback relating to service delivery and service quality. Another angle to be considered is that of the service encounter. Philip Crosby (1979) was a firm advocate of the 'zero defects' concepts: the notion that the ultimate target of any business is to do whatever they do right first time, every time (Crosby 1984). However, within the service industry there is considerable debate about the challenge of achieving zero defects when in every service encounter no human interaction can ever be the same (Heskett and Schlesinger 1994; McDougall and Levesque 2000). Hart et al. (1990:150) affirm, 'no matter how rigorous the procedures and employee training are or how advanced the technology, zero defects is an unattainable goal.' Bateson (1995) believes that the key for effective service is to plan for service recovery and as part of a strategy it then follows that this process must also be monitored.

The process of data collection creates real opportunity for a business to develop and improve practice, yet there are also other benefits to be accrued. For example, Berry and Linoff (1999) highlight that this form of data gathering approach fits well with the business that seeks to engage in customer relationship marketing (CRM). Reinartz, Krafft and Hoyer (2004) describe a process that makes good use of data to maximise the way the business engages with the client. It is postulated that CRM is particularly well suited to travel and holiday businesses and, subject to addressing issues concerning data protection and ethical matters, this form of survey can develop useful datasets for such a process (Ku and Fan 2009).

In terms of current practice, there is a scarcity of research about customer feedback systems on cruise ships. Gibson (2006) identifies the Passenger Satisfaction Questionnaire (PSQ) that is made use of by many cruise brands. This process is managed by delivering to the passenger stateroom on the final evening of the cruise and returned to the Purser's or reception desk prior to disembarking. Recently, in a development of the process, Princess Cruises introduced a new method for capturing feedback data. All passengers with an email address are to receive an electronic survey within 48 hours from the last day of their vacation (Princess Cruises 2010). The new survey is considerably shorter than its predecessor but has the capacity to be extended if the customer wishes to give more detailed feedback.

The literature points towards the need to undertake a study into customer feedback as a key business process in the cruise industry along with an investigation into implications for various stakeholders. As Zeithaml et al. (1990) assert, a business cannot survive without its customers neither can it evolve without its customer feedback.

## 8.3 Research Methods

In designing an appropriate research plan for this study the researcher reflected on the context of the research, the aims and objectives of the project and the research purpose. The study is inductive as the focus begins with descriptive research and then moves towards explanatory thus leading to the development of theory.

Crowther and Lancaster (2008) explain that this type of approach is best suited to management research because a development in theory can pre-empt unforeseen implications for managers and help develop recommendations for best practice. In addition, this research makes use of an interpretive approach as it was intended to access the thought process of the managers, enabling the researcher to reflect on their views by looking at the research from their perspective. Triangulation has been adopted in order to increase validity and create a broader more complete understanding of the issues at hand (Finn et al. 2000 and Veal 2006). Combining research methods through triangulation will make it possible to obtain the attitudes and opinions of the key stakeholders within the cruise sector, whilst endeavouring to highlight any key differences in perspectives (Bryman 1988).

In the first instance qualitative research was carried out in the form of face to face and email interviews with executive management and operational managers over an 8 week period in December 2010 and January 2011. This was undertaken in order to identify the viewpoints of management employees on feedback within various cruise companies. By gaining an insight into management opinions the researcher can have a better understanding of the processes used onboard. Thereafter, quantitative research was conducted in the form of a questionnaire targeted at cruise passengers. This was completed in the period between February and April 2011. The purpose of the questionnaire was to verify cruise passengers' perceptions and expectations of the customer feedback processes.

Questionnaires and interview schedules were piloted prior to use and, in line with assurances supplied to research subjects on confidentiality and ethical matters, respondents are not identified but are referred to using code names or pseudonyms. The sample of companies that were interviewed and the codes that are used to identify these in the findings section are as follows: P&O Cruises (P&O); Princess Cruises (PCL); Carnival Cruises (CCL); Holland America Cruises (HAL); and Costa Cruises (COSTA). This purposeful sample was selected because of accessibility. The sample selected for the survey was sourced through a data base from a travel company and was selected on a convenience basis that was intended to identify those who had been on a cruise. Data collection ceased when there was no longer any time to collect further responses.

The framework model was selected to analyse the qualitative interview data. The framework method is an analytical approach, constructed by Ritchie and Spencer (1994) and modified by Brunt (1997). The model is said to be an effective method for establishing a logical sequence in relation to analysis when considering qualitative research. It enables the researcher to prioritise key issues in a mass of qualitative research, whilst keeping the original purpose and aim of the study in mind (Brunt 1997). Statistical Package for the Social Sciences (SPSS v10) was used to extrapolate findings from the quantitative data.

The research project is limited by certain features of the study, namely that the quantitative survey is relatively small and is focused on a sample that was accessed via one travel company in the South of England. While this provides access to a typical cruise sample in this part of the country it may not be representative. Secondly, the qualitative interview data is biased towards one cruise company.

This constraint was a function of access. The researcher was allowed access to Carnival Corporation brand managers but was unable to access contacts from other cruise companies. Issues with time and resources meant that some interviews were face to face while others were by email.

## 8.4 Interpreting the Findings

A selection of findings, in respect of the qualitative data that were collected using face to face and email interviews are presented in this section. The data selected were judged to be the most illuminative for this study.

Table 8.1 identifies that P&O Cruises, Holland America Cruise and Costa Cruise use paper based questionnaires. Whilst, as previously noted, Princess Cruise and Carnival Cruises have recently introduced an electronic format with their guest satisfaction survey dispatched using email.

The data in Table 8.2 underpins the various perceptions as held by managers as to why customer feedback is important to their company. Although the responses differ marginally, there is a common view in that customer feedback is essential for the organisation and assists the company in making important strategic decisions for improvement and progression. Critically the data collection tool also enables managers shoreside to have an oversight of practices at sea, to identify elements of the service offer that the customer rejects and to strengthen justifications for introducing a new offer.

The findings within Table 8.3 illustrate a disparity in management opinions on implementing an electronic feedback questionnaire. P&O1 and 2 do not feel that their employer would benefit from this approach and P&O2 believes that sending the questionnaire via email could lead to a decline in response rates.

Both Princess Cruises and Carnival Cruise Lines have introduced this new electronic format and both employees stress the new method's strengths and ability to capture the overall vacation experience by including both embarkation and disembarkation process. PCL also states that the preference of paper based or electronic questionnaires could be dependent on their age demographic.

With regards to the quantitative data collection, an aggregate dataset of 112 questionnaire results was collected and analysed using SPSS. The questionnaire was aimed only at those who had experienced a cruise vacation before. Table 8.4 demonstrates the key characteristics and demographics of the respondents.

The principal age group of the respondents was between 46 and 59. As the questionnaire was targeted at people who had previously experienced a cruise, this age profile is not surprising as the majority of cruisers tend to be of an older generation (Douglas 2004). Thereafter, the data identifies that the majority of respondents were first time cruisers or fairly new to cruising (77.7 %) and 35.7 % of respondents stated that P&O Cruises was their preferred cruise brand.

**Table 8.1** The main customer feedback processes used onboard various cruise brands

| Company | What is the main customer feedback processes used onboard? |
|---|---|
| P&O | 'Share your views' paper based questionnaire |
| PCL | 'Passenger Feedback' questionnaire via email |
| CCL | 'Online guest feedback survey' questionnaire via email |
| HAL | 'Guest satisfaction survey' paper based questionnaire |
| COSTA | 'Questionnaire on the customers' satisfaction' paper based questionnaire |

**Table 8.2** Interviews with Managers – why is guest feedback important?

| Respondent | Why is guest feedback important? |
|---|---|
| CCL | *Guest feedback is a critical component of strategic decisions. Put simply, if you're not truly listening to your guest's feedback, you're not able to make the best, most informed strategic decisions* |
| HAL | *HAL relies heavily on guest feedback as it assists us in daily operational and brand specific decisions* |
| COSTA | *Guest feedback is used to measure performance, to implement changes, and simply to get an immediate feel of the overall impact of the work done during a specific cruise* |
| P&O 1 | *It gives the company a good indication of how they are doing, it is also very important to the shore side staff to get customer feedback as they are constantly using and reviewing the data to see where things can be improved* |
| P&O 2 | *Yes I think it is very important as it gives the company an idea of what the customer wants and what they don't want. And also if an employee deserves an extra reward then they can be recognised through the questionnaires* |
| P&O 3 | *Any feedback is important but the feedback of the customer is especially so, as it is the customer who we have to impress every time whether they are cruising for the first time or the 100th time. Regular and relevant feedback allows us to see trends, not only in the scores that are produced but also in the comments that we receive on the questionnaire form. It is this questionnaire that is used most when working to better the overall service* |
| PCL | *Customer feedback is a vital part of delivering the correct services and products to the company's consumer market. Using customer feedback allows the company to see what their customers want and if there is anything they can do to improve the service and or to introduce new products or services* |

Respondents were asked how often they completed the customer feedback questionnaire. Sixty-two of the respondents (55 %) said they 'sometimes' complete the questionnaire, 46 (41 %) 'always' complete it and 4 (3.6 %) never complete the survey.

In relation to questionnaire design, Fig. 8.1 confirms a significant perception that many respondents believe the questionnaires are too long in length. Sixty-two respondents (55 %) confirmed this view whereas only 6 respondents believe the questionnaire was too short.

While Fig. 8.2 demonstrates that most respondents would prefer not to complete an electronic questionnaire and 33 % of respondents stated that they disagree that they would prefer a questionnaire in an electronic format, the response showed a combined 47.3 % of respondents strongly agreed, agreed or were neutral towards the concept.

**Table 8.3** Interviews with managers – views on the electronic format

| Respondent | What do you think of an electronic questionnaire distributed via email? |
|---|---|
| P&O 1 | *It is a good concept, but depending on your target market it may not work and I don't think with P&O's demographic it would be effective* |
| P&O 2 | *I think it is more important to do it onboard than through an email, I think other cruises like Princess have younger passengers but P&O passengers are older and won't all have access to email. . .If you ask people to fill in a questionnaire once they get home they will have more important things to get on with they will not be bothered to fill in a questionnaire* |
| PCL | *There are three feedback processes in place onboard Princess ships. The demographic is very wide and each demographic in terms of age, can express their concerns in different ways according to which method they prefer. I think the electronic format is effective for the younger passengers* |
| CCL | *An online guest survey is emailed to our guests within 24–48 h after the completion of their cruise. The online survey was designed to discover the guest's total cruise experience from embarkation to disembarkation. As the guest completes the survey online, the data is available to Carnival in real time via a secure online reporting tool. Onboard, Carnival continues to document and track all guest input via guest services and that data is often matched with the data from the online guest feedback surveys for analysis* |

**Table 8.4** The key characteristics and demographics of the respondents

| Age | | Frequency | Percent |
|---|---|---|---|
| Valid | 18–30 | 17 | 15.2 |
| | 31–45 | 24 | 21.4 |
| | 46–59 | 44 | 39.3 |
| | 60+ | 27 | 24.1 |
| | Total | 112 | 100.0 |
| How many cruises experienced | | Frequency | Percent |
| Valid | 1–5 | 87 | 77.7 |
| | 6–15 | 22 | 19.6 |
| | 15+ | 3 | 2.7 |
| | Total | 112 | 100.0 |
| What is your preferred cruise brand | | Frequency | Percent |
| Valid | P&O | 40 | 35.7 |
| | Royal Caribbean | 27 | 24.1 |
| | Princess | 17 | 15.2 |
| | Cunard | 8 | 7.1 |
| | Other | 12 | 10.7 |
| | Total | 104 | 92.9 |
| Missing | missing data | 8 | 7.1 |
| Total | | 112 | 100.0 |
| Nationality | | Frequency | Percent |
| Valid | British | 112 | 100.0 |

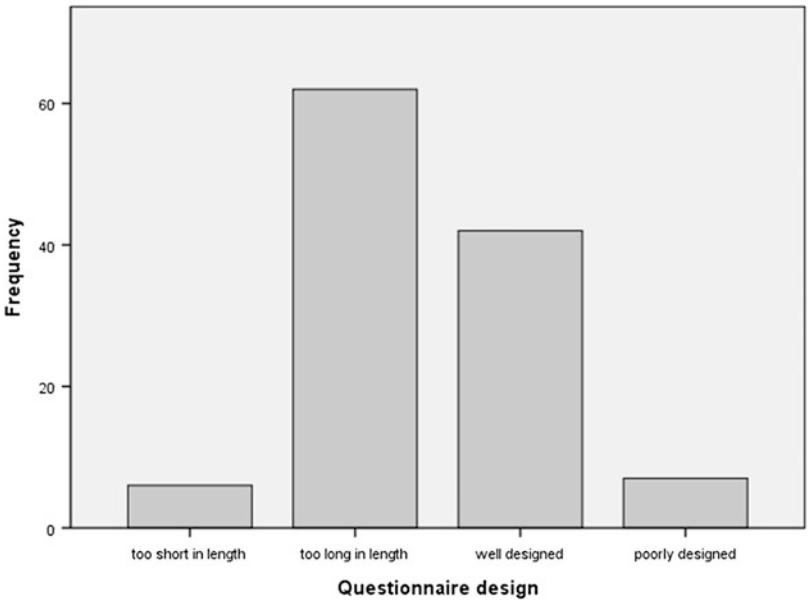


**Fig. 8.1** Questionnaire design

## 8.5 The Future of Customer Feedback for the Cruise Industry

It is evident from the findings that both executive and management employees feel that customer feedback is vital when monitoring and measuring performance. Management perceptions as reflected in the data support the clearly uncontested notion that customer feedback is of vital importance. For example CCL comments that *'if you're not truly listening to your guest's feedback then you're not able to make the best, most informed strategic decisions'*. This view is supported by the literature which asserts that companies need to build strong customer relationships by listening to and acknowledging customer's wants and needs (Normann 2002). The in-depth interviews concluded that both executive and management employees share the belief that collecting and analysing customer feedback is an invaluable activity for generating continuous improvement for their company. Donovan and Samler (1994) maintain that customer feedback is a key driver of change and a rich source of market intelligence.

The data suggests that there is an opportunity to make use of electronic surveys rather than the more common paper based alternative but that managers are correct to be wary of an element of resistance from those who may not be as willing to make use of digital technologies. P&O Cruises' perception that age plays a part in this dynamic is borne out by the data and yet the ratios of those in favour and against digital media for harnessing data collection are less distinct than was probably the case in the past. According to Fielding (2012) 86 % of over 55s are now said to shop

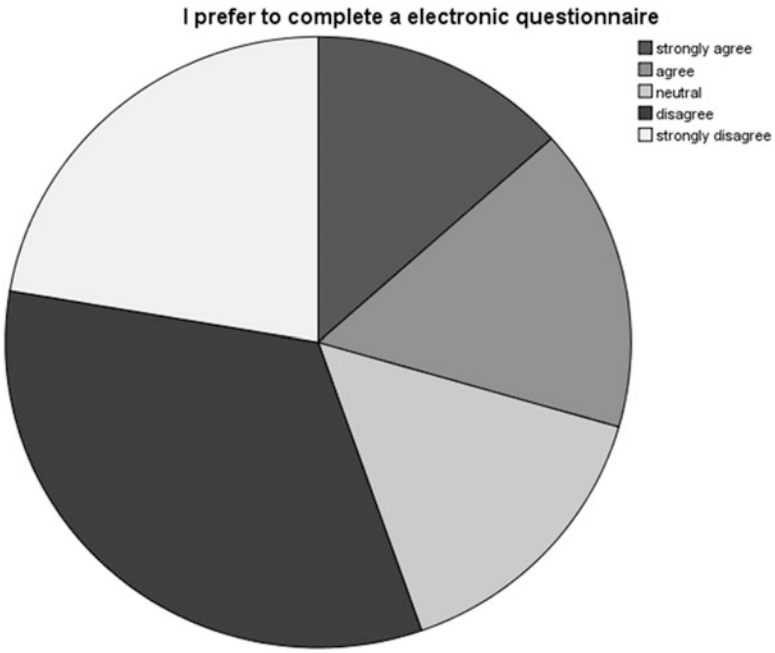


**Fig. 8.2** Customers preference for an electronic questionnaire

online regularly and while this does not necessarily mean they would prefer to complete an e-survey to a paper based survey it does demonstrate that over 55s are not necessarily technophobes. Therefore when the executive from P&O Cruises declares *'with an older generation it is unlikely that all of them will have an email addresses'*, it may be this point of view is accurate but only within a certain timeframe.

Princess Cruises (2010) state that their principal objectives of implementing the electronic format of data collection are to become more environmentally friendly, to capture experiences of the embarkation and disembarkation and to ensure that the survey will only expand when the customer wants to give more detailed feedback. This approach has logic but for a British market, at the point this survey was undertaken, it would appear that the data suggests there is greater preference for the familiar paper based approach.

## 8.6 Multi-method Customer Feedback Systems

The demography on cruise ships is changing. Indeed PCL in Table 8.3 states that the age range onboard Princess Cruise ships is diverse, and, as a result, the company propose various customer feedback methods in order that their guests can express

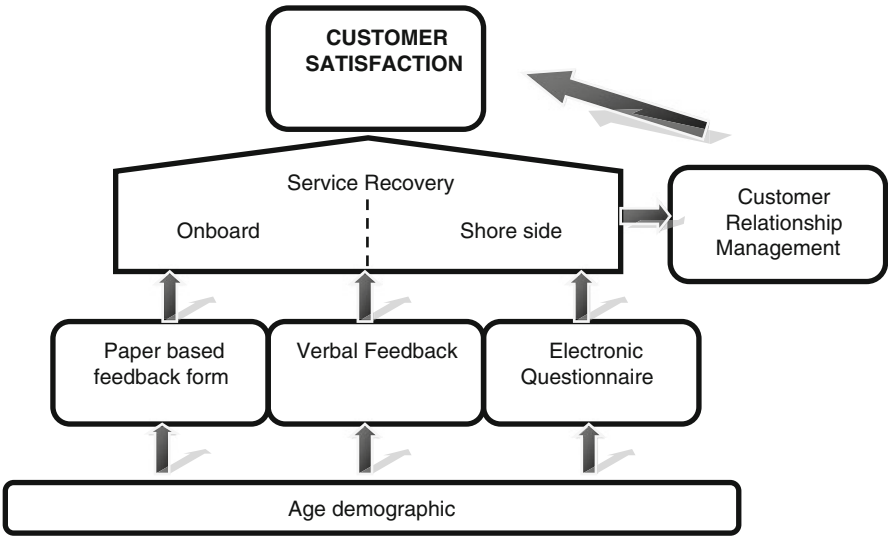


**Fig. 8.3** Customer feedback system using multiple feedback collection tools

their concerns in different ways according to the method they prefer. This notion of allowing the customer to complete the questionnaire at their discretion along with the method of their choice is reinforced by Berry and Parasuraman (1997) who believe that a combination of different feedback collection methods will enable a company to amalgamate the strengths of each and compensate for any inherent weaknesses. This concept of a multi method approach to obtaining customer feedback can be identified in the model that has been constructed above (Fig. 8.3).

This model is constructed using the evidence supplied by cruise companies of existing practice onboard and is proposed as a useful tool for analysing or planning complex feedback collection approaches.

It is suggested that it is vital to gain as many responses as possible to enable the company to see the whole picture and gain a better understanding on how they have performed. This research project has presented evidence that the age demographic of the passenger can determine the preference of the customer feedback method they select but moreover that preferences in relation to method for feedback are changing. Therefore this model presents the notion of a customer feedback process that provides the customer with the choice of how to express their feedback; whether it be through a paper based feedback form which could be administered to their cabin, verbally, by visiting the passenger services desk or electronically by email once they return home. This preferred method can then determine where the service recovery process takes place. Finally this model can also interface with a customer relationship management system, so as to develop a customised approach to managing the customer experience as was suggested by (Ku and Fan 2009).

This model is proposed as a vehicle to inform planning for further developing in relation to the customer feedback process and to ensure data are treated as valuable

resources in a more sophisticated model than has hitherto been the case. The approach ensures that issues, such as identifying best timing for distributing the questionnaire and deciding on the most appropriate length of questionnaire, are no longer a problem as the guest would have the ability to select their preferred feedback method. In addition this would help to encourage a better response rate.

## 8.7 Conclusion

The purpose of this paper was to critically analyse the customer feedback processes used onboard cruise ships by interpreting the views of the key stakeholders with the intention of highlighting any similar or dissimilar traits. This research presents an argument that customer feedback processes onboard cruise ships are a vital component when monitoring and maintaining customer satisfaction. By encouraging effective customer feedback systems, cruise companies can identify positive and negative trends prompting investment in corrective action for the negative issues whilst implementing replication of the positive issues.

Some customer views inferred that the feedback questionnaires were too long and distributed at an inappropriate time, yet the clients clearly recognised the importance of the questionnaires and their importance to the company. Findings revealed a complexity of issues surrounding selection of a traditional paper based system or the alternative electronic customer feedback process. By engaging with the data and reflecting on evidence relating to practice, a multi-method customer feedback system was presented as an alternative business model for consideration. This process could be used by cruise companies in order to ensure a high response rate to customer feedback.

The research project had certain limitations. Due to the researcher's time constraints and difficulties in getting access to industry professionals, it was not feasible to undertake face to face interviews with the entire sample. Moreover, access to the cruise setting was limited to companies under the Carnival Corporation umbrella. In addition further studies could collect data from a larger sample that was more geographically dispersed.

Throughout the study customer loyalty was emphasised as being essential when measuring customer satisfaction. If customers are content with the product or service then they will then return time and time again. Further research could be undertaken in relation to customer feedback and customer loyalty and the importance of customer feedback and its impacts on retaining customers. This project exemplified the perceptions of solely British cruise passengers yet the same study carried out on U.S passengers or European passengers may well generate different outcomes.

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# Chapter 9
# Cruising Routes and Differentiation

**Katja Rakusic and Neven Seric**

**Abstract** The problem of the research is to evaluate the impact properties of cruising routes to its differentiation, and thus competitiveness. Perceived characteristics of routes by the target clients are defining valuation of the service, and the resolving dilemma for prices. From the point of cruising itinerary route, this perception ultimately influences satisfaction and pleasure of the guests. The subject of this research is the evaluating determinants of the cruising route's characteristics (functional, social, and emotional). It determines the formation of the guest's value perceptions. Cruising product is no longer selected primarily for the cruising service, but for the content of cruising route. In this sense the approach called "*the land sea cruising in product development*" is increasingly becoming an area of interest. This is also a new area of research interest in marketing, which is aimed to evaluate the experiences, thoughts, and attitudes of the target clientele, but also to predict what impacts the decision making process of choosing the cruising product as well. In a conducted study the authors want to determine the affirmative characteristics that contribute the perception of cruising route of the target guests. Given the subject and the research problem, the main objectives of research were:

- Determining the direction and the intensity of the effects of the individual cruising route characteristics on service value's perception;
- Providing an evaluation model of the route's characteristics and thus explaining the cruising product value's perception and indicating the most significance variables of attraction;

Based on the goals of the research work, the following questions are offered to answer:

- What factors of cruising tourism are determining the value's perception for a potential guest in the selection of cruising route?

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- What are the determinants of cruising routes that prospective customers consider when assessing its value?
- How does each of the identified determinants affect the overall perceived value of the cruise route?
- How the overall perceived value of the cruise route affects customer behavior intentions in terms of seeking additional information, route selection, and positive word of mouth?

Based on the research work, authors have offered a new evaluation model of the cruising route differentiation, which represents a fundamental contribution to the scientific research.

## 9.1 Introduction

The main reason for this research is the aspiration for defining characteristics and relationship variables of cruising routes as an integrated tourist product, in order to realize better differentiation for cruising guests. The research will identify the most important features of cruising routes, which determine its choice, or the skepticism by potential cruise guests. Exploratory preliminary research made by the authors reveals that tourist destinations provided by cruising route present variable of great importance. Managing these variables can result in positive or negative repercussions in the guest's selection. Insights from the research could, also, be used in the evaluationof value determinants in destinations selection. It is important to recognize factors that determine the perceived value of cruising routes. Systematic analysis of the authors and other's previous research are going to be used (Šerić and Luković 2010) for designing a new model that would better explain the layered causal relationships among these variables. Such model can explain the formation of perceptual value of the destination product from the point of cruising guests. In the cruise tourism marketing goes throw operational and tactical processes and becomes an important organizational function of the cruising company. Marketing in cruising tourism not only represents a driving force to attract clientele, but also a mean of communication with the target population, so that nautical products can be offered and introduced across all its peculiarities and the component variables. The ship has become only a tool, while the offered route whose attractiveness highly influences the impression of the guests has become crucial. Marketing managers are now making important strategic decisions such as:

- Selection and promotion of the destinations features that cruising route includes;
- Selection and promotion partial tourist products during the cruise;
- Balancing price policy for cruising route depends on destinations etc.

A very important factor in understanding the competitiveness of offered cruising products is the guest's perceived value.

## 9.2 Perceived Value When Selecting a Service Provider

Consumer behavior in cruising segment includes all the activities and influences in the selection of the specific cruise route. These activities result in decisions and actions related to a defined price, selection and reselection of cruising company (Cant et al. 2006). The findings on facts how the target clients think, feel and on what basis make decisions, allow accurate analysis, forecasting, control and influence on the process of making strategic business decisions (Crouch et al. 2004). Mudie and Pirrie (2006) argue that there are two concepts related to the consumption of services, expectations and perceptions. Expectations reflect the customer's expectations of "*what will happen"*, structured as a pre-experience of the future. Buyer perceptions are subjective evaluation of services, particularly in relation to prior expectations. Because of these proven facts cruising companies should be of primary importance to ensure a continuous flow of information about the behavior of their guests. This behavior represents an effective starting point for developing appropriate marketing strategies (Cravens and Piercy 2003). Imperative for any cruising company should be required to consistently differentiate, or distinguish itself from its competitors by offering higher value to their customers (Cant et al. 2006). Previous studies from many marketing researchers (Cravens and Piercy 2003) agree that knowledge about the perception of the value is a key instrument in attaining a competitive advantage based on the offer differentiation. Understanding the difference between consumers' perceptions and their expectations will significantly affect the effort to improve the perceived value (Mudie and Pirrie 2006). Gallarza and Saura (2006) argue that consumer behavior can be understood better if analyzed through the perspective of perceived value. Such an approach enables further explanation of the products selection and repetitive purchases. De Bono (1993) states that the cognitive value presents the main motivator of purchase intentions. Since it is proven that the consumer behavior can be influenced by marketing activities, cruising companies should be focused on activities that may contribute to a higher perceived value of the cruising route. The perceived value significantly depends on the destination and destination's offer that route covers. According to Zeithaml et al. (1996), there are favorable and unfavorable behavioral intentions. They found that positive perceptions of customer value have a positive impact on their behavioral intentions. Ultimately, it is obvious that understanding of perceived value may have significant practical advantages for cruising companies. It is necessary to evaluate the perceived value throw the position of the cruising customer in the focus of selected marketing strategies. This approach focuses on the process of creating value for clients in order to gain competitive advantage. Understanding how existing and potential guests evaluate offered cruising routes in relation to competition will ultimately influence defining their selection.

Today, cruising companies are no longer passive observers trying to discover the intentions and desires of their clients relying on high quality accommodation and ancillary services offered. Increasingly, companies collaborate with the cruise guests as co-creators of the value of offered route. Acceptance of this concept has

allowed the prediction of guest perceptions, analyzing their expectations and guiding their behavior to directly influence the decision-making processes (Lusch and Vargo 2006). Clients select a route (as a product) in order to meet some of their needs or desires, often without complete information about other similar products at the cruising market. Nevertheless, cruising customer is sometimes unsure of the overall quality of the product he evaluates if there is no experience with the same company. This uncertainty in the phase of selecting a product for purchase is a long-proven in the marketing (Nelson 1970). Many decisions are taken as the optimization of some customer's dilemma. The customer is striving to achieve the highest possible value for money, and maximize benefits. In the cruising market, there are also imperfect and asymmetric information about the cruising routes, and the quality looking from the experiential aspect of perception. It is essentially important to perceive what cruising customer values, in order to recognize their intentions with respect to the selection offered cruising route. What does the cruising customer really expects of its overall shopping experience? Which offered attributes of cruising routes are the most important in perceptual evaluation of cruise offer? Some earlier studies (Luković and Šerić 2009) have indicated that the value perception of cruising routes is often related to the attractiveness of destinations and partial destination products that routes include.

## 9.3 Term of Value in Evaluation of Cruising Routes

Primarily it is important to define what presents value for cruising customer, of what kind it can be, and how he perceives the value of cruising, while taking into account the advantages and disadvantages of particular choices. Many authors define the concept of value at a general level. So Woo (1992) identified four fundamental significance kinds of value for the customer:

1. Value is what presents a true value in terms of welfare and life of the individual and society as a whole. This value is reflected in what the customers are trying harder in life.
2. Value refers to what society in general is considered as significant, regardless the way those values actually contribute to the betterment.
3. The value can be related to what the individual is considered worthy to own, in fact, what he yearns for. This meaning is individual and subjective.
4. Value refers to the degree or amount of properties that buyers consider essential for the specific object of observation that want to maximize the pleasure of purchasing or using the same. This value is derived from the purchase.

Starting with the platform in the cruise tourism can also be spoken about four categories of value for cruising guests:

1. Internal value;
2. Exchange or transaction value;
3. Use value;
4. Utilitarian value.

In making strategic business decisions, it is necessary to analyze whether these values are based on subjective assessments, or object-oriented (individual vs. collective valuation), and take into account whether the value is measured in terms of market characteristics, or customer sacrifices. The internal value of cruising routes is based on an objective assessment of the route value, regardless of market conditions. In cruising tourism, this value can be evaluated as the attractiveness and perception of experiential destination that route covers (Šerić 2009). When is measured, value of the internal gains. In the case of cruising tourism, it would cover the number of destinations included in the route, each destination attractiveness, diversity of partial tourist attractions of those destinations etc. The exchange value of cruising routes are also based on the objective characteristics, but is influenced by the market conditions. In this case the value characteristics of cruising routes will be evaluated through the tourism constants, which greatly depend on the availability of funds for tourism products of the target population. Use value of cruising routes is based on the subjective experience, and shows how individuals assess the route during, or immediately after sailing. It is affiliated with the benefits that cruising guest realize by choosing a route, and it is subjective because it depends on the individual assessment (photos taken on the route for one guest presents just a family souvenir, and for professional photographers are embodied financial capital). The utilitarian value is also subjective-oriented, and is tied to the point where the inner and usability of cruising routes are compared with the sacrifice of the client (money and time). According to Woodall (2003), the utilitarian approach is based on balancing the positive and negative sides. The value is considered as the outcome of the comparison of sacrifices and personal benefits, which is resulted in essentially utilitarian nature. The utilitarian approach assumes that the value of each customer is often different, because of personal subjective valuation of each guest.

Value in the case of cruising tourism is primarily determined and analyzed from the aspect of observed customer, and exists only in the terms of customers (Piercy 1997). Woodall's (2003) conceptual model represents different kinds of value and impact of human values on these types of values. It is assumed that consumers are leaded by human values (e.g, quality of life, origin) in their daily decisions that affect the criteria by which decisions are taken. Human values defined in this kind are considered as factors affecting the valuation (Woodall 2003). These four types of values illustrate the differences in the meaning of value and difficulties in developing the concept of value. For the cruise tourism industry, different types of value may have more or less significant role in creating the total value of cruising routes, depending on various factors in the environment, but also the value systems of targeted guests.

## 9.4 Research: Perceived Value of Cruising Routes

The perceived value of cruising routes is a fundamental starting point for research that aims to improve the competitiveness of the cruise company. Perceived value of cruising route is one of the main determinants in the selection of cruise products,

based on what is considered. It is important to create a superior perception of product value as an imperative of effective marketing communication. In order to make specific cruising route accepted on the market it is important that the value perceptions of the target clientele are based on its actual superiority. The same is, in addition to variable of quality and variety of accommodation on the boat, achieved through the components of the destination route. Incorrect perceptions regarding the selection of cruising routes as well as an excellent perception of the value of a new cruise route will not result in a long-term market success of the route, neither of cruising company. There is always present a dilemma: how to recognize the value for cruising guests? Perceived value is a multidimensional concept that is difficult to define and measure. The perceived value of the cruising routes is affected by many variables that are part of the benefits perceived by the cruising guests. In a marketing theory, the compilation of Woodall (2003) about the evaluation value for the consumer is very interesting. The most commonly used terms for perceived value are: "*perceived value*" (Chang and Wildt 1994, as cited in Woodall 2003), "*the value for the client*" (Anderson and Naruse 1998; Holbrook 1994, 1996; Oh 2000, as cited in Woodall 2003), "*value*" (Berry and Yadav 1996; De Ruyter et al. 1997; Ostrom and Iacobucci 1995, as cited in Woodall 2003), *and "value for money"* (Sirohi et al. 1998; Sweeney et al. 1999, as cited in Woodall 2003). Somewhat less used terms are: "*the value for the customer*" (Reichheld 1996, as cited in Woodall 2003), "*the value for customers*" (Treacy and Wiersema 1993, as cited in Woodall 2003), "*customer perceived value*" (Grönroos 1997, as cited in Woodall 2003), "*perceived customer value*" (Chen and Dubinsky 2003; Lai 1995, as cited in Woodall 2003), "*customer value*" (Holbrook 1999, as cited in Woodall 2003), "*the consumption value*" (Sheth et al. 1991, as cited in Woodall 2003), "*the value of services*" (Bolton and Drew 1991, as cited in Woodall 2003), "*the transaction value*" (Grewal et al. 1998; Parasuranam and Grewal 2000, as cited in Woodall 2003), *"the net value for the client"* (Butz and Goodstein 1996, as cited in Woodall 2003), "*the perceived value of the service*" (LeBlanc and Nguyen 1999, as cited in Woodall 2003), "*the consumer benefits*" (Brynjolfsson et al. 2003, as cited in Woodall 2003) and "*the expected value*" (Huber et al. 1997, as cited in Woodall 2003). By analyzing these approaches it can be well developed a potential cruising route that would be innovated, differentiated and competitive product on the cruising market.

In the conducted research of the author in the context of the open questions about the concept of the cruising routes value, which was conducted at the specialist sample (40 women and 40 men who were at least five times the visitors of different cruising routes) of reputable cruise company answers can be grouped as follows:

- The value of cruising route presents its content that attracts me (25 responses);
- The value of cruising route is the amount of new experiences and adventures (15 responses);
- The value of cruising route is its originality (14 responses);
- The value of cruising route is covered by the attractiveness of the covered destinations (12 responses);

- The value of cruising route is the quality of accommodation and experience for its price (six responses);
- The value of cruising route is a lower price with more destinations covered (four responses);
- The value of cruising route is the quality of accommodation and meals on boat (two responses)
- The values of cruising route are the facilities for the passengers on board (one response);
- The values of cruising routes are the facilities for the passengers on board and on land (one response).

Starting from these insights, the perceived value of cruising routes can be defined as an overall assessment of its benefits through the all new experiences and costs. This definition is consistent with a universal definition of perceived value (Al-Sabbahy et al. 2004; Gallarza and Saura 2006; Petrick 2004). It is important to emphasize the importance of a destination as a partial variable that significantly determines the perceived value of cruising routes. Especially it is necessary to take into account the current trends in the cruise tourism industry, because the concept of cruising product quality that were used primarily (which was based on the higher quality of accommodation and related services) is today transformed into the content of cruising routes. Considering that the understanding of cognitive value is closely associated with understanding of consumer behavior, perceived value of cruising routes should be evaluated throw the benefits and the price. That is also directly pointed as one of the prevailing responses in the conducted survey. From the obtained responses, it is evident that the cruising customers evaluate a combination of perceptions about cruising route quality with the perception of prices for what it offers. Perceived value of cruising routes thus, greatly depends on the attractiveness of destinations and facilities that cruising route includes. In the context of the arguments that may result in unacceptance of the specific cruising route offer, conducted research obtained responses that can be summarized as follows:

- The distrust that the promised facilities of the route would be completely satisfactorily realized (26 responses);
- Insufficient communication and responses to the customer queries about the route (18 responses);
- A small number of route destinations and additional contents considering the price (16 responses);
- Selecting a cruising route from a new cruising company for the first time (eight responses);
- Fear that the planned destinations tour and its facilities would be physically exhausting (six responses);
- Various risks associated with cruising route (navigation conditions, bad weather, etc.) (six answers).

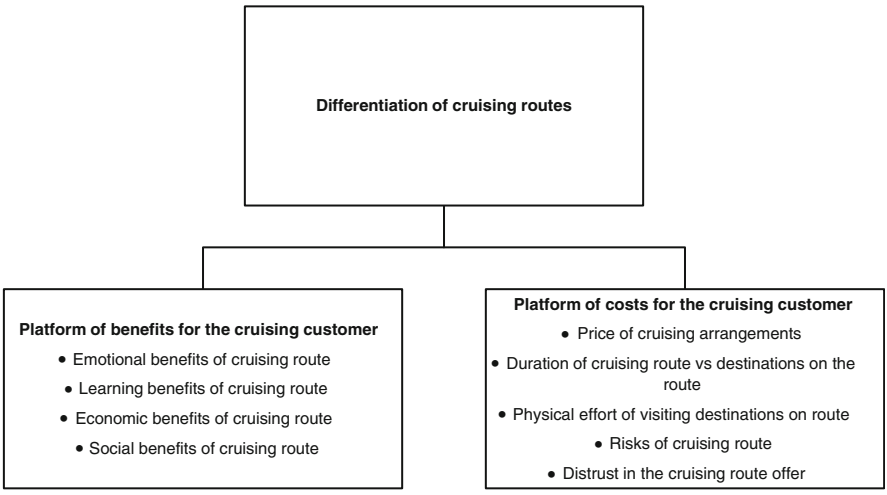


**Fig. 9.1** Evaluation model of cruising routes differentiation (Source: Author's analyses 2011)

It is interesting that in the explanation of these responses, destination was a very significant variable. Thus, the most common response to the argument of not accepting a certain cruising offer is that the program seems as inconclusive due to overly destinations that the route provides. The argument related to inadequate information in the communication about the route is often stated that they did not receive concrete answers to questions regarding the route of the destination. Apparent paradox is that some respondents emphasize a fear that the route would be exhausting due to a number of planned destinations, and for others disincentive acts too few destinations that the route provides.

## 9.5 Evaluation Model of Cruising Routes Differentiation

Starting from the findings presented in the designed model of estimating the perceived value of cruising routes it is necessary to evaluate two platforms: platform of benefits and the platform of costs for the customer. It is important to note that the cost platform for the customer should include the opportunity costs as well (time spent on the cruising route, physical effort, etc.) (Fig. 9.1).

The platform of benefits for the cruising guests that are associated with the perceived value includes:

- Emotional benefits (affective uses) of the cruising route – new experiences and adventures, attractive destinations, attractive partial destination products;
- Educational benefits of cruising tours (tours of new and unknown destinations, getting to know the local customs and cultural heritage of destination on the route);

- Economic benefits of cruising routes – the total cost of the destinations tour on the route compared with the same experience achieved from a different form of tourist travel and stay;
- Social benefits of cruising routes – the benefits associated with the recommendations of acquaintances to select route, tourism trends and fads, meeting new people with similar values and attitudes, etc.

Cost platform associated with the customer perceived value of cruising routes in the proposed model includes:

- The cost of the perceived cruising route price – the perception of potential cruise guest whether the price is higher than expected for the presented content (number and attractiveness of the destination that the route provides);
- The cost of the perceived duration of the cruising route compared with the destinations and facilities that the route assumes. In addition the customer evaluates the perception of time spent on transfers to certain destinations, etc.
- Perceived physical strain of a tour for the planned destination and destination content on the route – in accordance with the age of a target customer;
- The perception about different risks on the cruising route – internal (related to the cruising company, and the ship) and external (related to the environment along the route, weather conditions at sea, and all tour planned destinations);
- Perception about the lack of confidence in cruising route offer – confidence in the cruise company, lack of confidence in the quality of content implementation that the route provides (inconclusiveness regarding the amount of questionable quality and content of cruising route). This variable has a significant relationship with previous negative experiences of the individual. The definition and evaluation of the cruising route value perception suggests a relationship between benefits and costs. In accordance with the findings of the study and proposed model, it is important to emphasize, that the price is not the only sacrifice that cruising customer pays for. In addition to monetary and non-monetary costs, the reputation of the cruise company and the expected quality of the cruising route are also important variables that affect the perceived value of specific offer. One of these special variables is also an emotional attitude of guests towards the offered cruising route (encouraging feelings, which are often connected with the destinations that are included in the offer and already experienced pleasure). Emotional reactions, costs, reputation and perceived quality of services are one of the most significant variables that affect the perceived value of the specific cruise route.

## 9.6 Conclusion

Influence of the cruising routes characteristics certainly affects its differentiation and competitiveness in their selection. These features are closely related to the perception of what is offered. Cruising route is no longer perceived only through the quality of the ship observed as an accommodation unit which includes related

services, but primarily through the total experience of all cruising route components. In the totality of the content that the cruising route comprises, attractiveness and a number of destinations that the route includes have a particularly significant role in the selective decision making process. Potential cruising customer is cognitively balancing between personal perceptions of the quality and the perceptions of costs in order to estimate the value of the tourism product. In other words, a potential customer's decision depends on the marketing communication that can significantly contribute to increasing the perceived quality of cruising route (by increasing the perceived benefits, or reducing the perceived costs). Different combinations can be used to increase the perceived value, but the most desirable is the one that involves increasing the perceived benefits at the lowest level of perceived cost. Increasing the quality is the surest way to create superior value of cruising routes. The increase in quality should be implemented in the content of cruising routes. But also, it is necessary to be careful in order to avoid the complex and too rich content that could be rejected from certain segments of the route for which the unfolding dynamics of these contents can leave a negative impression. Benefits and costs are two mutually dependent elements in cruising tourism, because the perceived increase in benefits means reducing the perceived cost for the customer, but only to a certain extent, observing in the terms of specific cruising route content. Taking into account the aforementioned, it is recommended to make an evaluation of cruising route differentiation according to the proposed model. It can be stated that human mind perceives what it wants to look for, and decisions are usually made on perceptions rather than facts. Therefore, the evaluation of the target clientele perceptions is of crucial importance to the efficiency of operations. The perception of the target customer is the process of interpreting stimuli and giving meaning to these stimuli. Each stimulus is received by some of the sensors. The level of influence on the customer's perception depends on the characteristics of a targeted customer, environment influences, and his mental condition. All these factors, and diversity of expectations, can explain variations in perceptions among the target customers. In the case of the cruising tourism, target clients need to compare the offered alternative options. Conducted study proposed in the context of cruising routes indicates that one of the most significant variables that influence the differentiation and competitiveness of cruising route are the number and specificity of destinations involved in the route. Finally, if is not understood how the target clientele perceive offered goods despite the accepted standards of business, the final potential of success will be questionable.

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# Chapter 10
# A Specific Technology Acceptance Model for Mobile Services in the Cruise Sector

**Rouven Wiegard, Nadine Guhr, and Michael H. Breitner**

**Abstract** In few years only mobile devices have evolved from a utility object for voice communication to smart phones capable of a variety of tasks. Research on mobile technologies has received increasing attention and technology adoption has been studied from a variety of perspectives. Researchers from different research areas have come up with various models incorporating factors and phases to predict adoption through technology acceptance that, in turn, will lead to persistent use and user satisfaction. In tourism research there is a lack of such technology acceptance models (TAM) as the focus of research lies on the evaluation and development of mobile tourism applications and on general tourist needs and behavior. With increasing popularity of mobiles devices this is an opportunity for a development of innovative mobile tourism services, depending on technology acceptance. There is much research on the evaluation and development of mobile services for the tourism sector as a whole but for the cruise sector mobile technologies and services are widely assumed to play a minor role. Currently several TAM exist which are helpful to increase understanding of the different critical success factors (CSF) on user acceptance, but they are not suitable to support the development of mobile services in a highly competitive tourism sector like the cruise sector. The paper will investigate the technology acceptance of mobile services on cruise ships. We will carry out a TAM analysis using a structural equation modeling (SEM) technique. The results of an extended TAM based evaluation shows, that users can be grouped into three different clusters: enthusiastic mobile technology users, normal mobile technology users and mobile technology critics. After presenting the results of the quantitative study, important CSF for mobile services on cruise ships aligned with a generic business model are discussed. This paper about technology acceptance of cruise passengers addresses researchers, designers and decision-makers on technology adoption.

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## 10.1 Introduction

Mobility has become an essential part not only in our everyday life, but also in the global economic market. Being available and able to operate at "anytime" and "anywhere" is a feature of nowadays' world (Paavilainen 2002). Ubiquity and flexibility are just a few keywords distinguishing the economy. Out of this, the adoption of mobile information and communication technologies arise with an increasing rate, allowing the users to bridge areal distances and their stationary dependency. Whether moving between home and work or on travel, no one wants to miss the comfort, to be always and everywhere available. Already today, mobile services are used in many segments of the tourism industry (Schindler and Helten 2002). With an average growth rate of 7.2 % since 1990, the cruise sector is one of the fastest growing categories of the tourism industry market and the market potential is still strong. Vessels have been crossing the oceans for centuries now, but their purpose of serving as a mean to end, that carrying commodities and passengers from one point to another, became an end in itself when air travel began dramatically decrease travel time during the 1950s and the cruise sector transformed into an important and constantly growing part of the tourism branch (Gulliksen 2008). While the mobile penetration rates in 2012 are predicted to 4.9 billion subscribers, which would mean an increase to 70 % of the world's population, mostly on cruise travel there is still a lack of mobile information and communication technologies (Doherty and Mink 2006). Today, the mobile Internet is already possible on some cruise ships, but the costs of the required sophisticated technology via satellite link are very high. In addition, satellite links are usually very expensive and also very slow. The evolution of mobile broadcast technologies and technical capabilities of mobile devices could, in connection with the shift towards an information society and the context-sensitive adaptation of mobile services to the specific usage situation on a cruise, offer a variety of innovative business ideas. So far, there is only a small range of mobile services on cruise ships. Hence, the success or failure of other versatile mobile services depends on the acceptance of the consumer. Without the consumer's acceptance innovations will fail, as the past has already shown. Localization and personalization are ways to ensure a breakthrough for mobile solutions. The acceptance and use of mobile devices in tourism, which allows us to be ubiquitous information recipients on vacation, has therefore a multi-faceted history (Egger and Jooss 2010). Increasing acceptance of mobile services has been experienced in the recent years, but in the cruise sector, the potential of mobile service is still largely unexplored. Therefore, the fundamental question that motivated this study is which factors determine the consumers' acceptance of mobile services on cruise ships. For this purpose, we carry out an extended technology acceptance analysis. SEM techniques were accomplished for measurement validation and model testing by using SmartPLS (Partial Least Squares). The constructs of the research model we use, arise from the findings of a literature review. This study concentrates on what desires and preferences the passengers have and which aspects need to be improved to increase the acceptance.

## 10.2 Literature Review

### *10.2.1 Business Models*

Information systems must be omnipresent. This is one of the most important aspects of our today's information and knowledge society. Therefore, the potential of mobiles services on cruise ships have to be successfully and sustainably introduced to the market. For that reason, it is necessary to develop appropriate and sustainable business models. The term business model is widely used in both practice and academia with different meanings and many different approaches have been proposed and studied for representing business models (Afuah and Tucci 2003; Alt and Zimmermann 2001; Kaplan and Norton 2000; Osterwalder 2004; Timmers 1998). In general a business model can be understood as "an architecture for the product, service and information flows, including a description of the various business actors and their roles; and a description of the potential benefits of the various business actors; and a description of the sources of revenues" (Timmers 1998). A sustainable business model for mobile services in the cruise sector consolidates and integrates strategic prepositions concerning an activity sub model, a market sub model and an asset sub model. In line with (Breitner and Hoppe 2005) an analysis of these issues provides the identification of critical success factors for the commercialization of mobile services in the cruise sector. The revenue model for electronic markets as part of the asset sub model that usually describes the generation of revenues streams, can make use of four different types of revenue streams (Breitner and Hoppe 2005; De Reuver et al. 2008):

- *Mobile applications* as an advertising opportunity itself.
- *Fee per use* (e.g. the purchase to use the mobile service on a cruise).
- *Revenues by brokerage* (commissions or fees for bringing interested parties together and facilitating the transaction).
- *Usage independent fees* (e.g. a membership fee for the duration of a cruise).

To motivate users to a good intensity of use the mobile service before, during and after the cruise the activity sub model needs to be linked to the market sub model that itself is strongly characterized by critical user acceptance factors as well as added values. A mobile service must provide special added values that cannot be gained without mobility (Pousttchi et al. 2003). Furthermore, the cost sub model is linked to the asset model. The cost model of mobile services in general are highly impacted by application development and maintenance costs (Jorgensen and Shepperd 2007).

### *10.2.2 Mobile Services*

Regarding the literature, it turns out that there is no uniform definition of mobile services and different approaches for the classification are available in the literature. Tscherning and Mathiassen e.g. "*consider mobile services and applications as part of*

*advanced mobile devices*" (Tscherning and Mathiassen 2010). Some researchers consider the technical properties (Mallick 2003), some researchers the way the service is delivered (Amberg et al. 2004), some view the service's benefits and ease of use (Anckar and DÌncau 2002) and some consider the support of the service (BenMoussa 2004). Outlined the basic characteristics of services in general and for mobile services thus retain their validity. A variety of approaches to the characterization of mobile services can be found in the literature, although there are differences in terms of relevance to the characterization. Efraim and David (2002) mention characteristics such as convenience, ubiquity, localization, personalization, etc., Zeng et al. (2003) add to this list the currentness and accessibility. Reichwald et al. (2002) could already work out similarities of existing publications and summarized them to eight characteristics of mobile services, automation/digitization, time flexibility, inclusiveness/interactivity, individualization, local flexibility, personal sphere, constant connectivity and context sensitivity Reichwald. Based on the characteristics of mobile services, furthermore a classification of mobile services can be made. Heinonen and Pura distinguish four classes of mobile services based on: the context of use, the type of consumption, the social setting and the relationship with the provider (Heinonen and Pura 2006). For the basic classification posted by suppliers of mobile services in the cruise sector in the present study, we use a classification of mobile services by Nicolai and Petersmann (2001). From the four product classes, information, communication, selection and transaction, Nicolai and Petersmann (2001) identify two application areas for mobile services, location-based and time-critical services. Relevant application technologies for mobile services on cruises are SMS and MMS, Location-Based Services, Push- and Pull-Services, Communities, Portals, Blogs, Instant Messengers etc.

### *10.2.3 Research Design*

The TAM is an IS theory that models how users accept and use a technology, which has also been applied for understanding the adoption of mobile services (Kwon 2000; Lee et al. 2002). The TAM was originally introduced and developed by Davis, FD (1989) and further developed by a variety of authors. Two critical success factors (CSF) determine user acceptance:

- Perceived usefulness (PU) is defined as the prospective user's subjective probability that using a specific application system will increase his or her job performance within an organizational context.
- Perceived ease-of-use (PEOU) refers to the degree to which the prospective user expects the target system to be free of effort.

In an empirical study, Davis et al. (1989) determined that the frequency and intensity of use of computer technology can be reasonably well predicted from a person's intentions. PU is a major determinant of people's intention to use computer technology (INTUSE) and PEOU is a significant secondary determinant of

their intention to use. Beyond PU and PEOU, the user's attitude towards using technology influences INTUSE, which is then influenced by PU and PEOU. The explanatory power of TAM is just as good as without regarding the originally included construct of 'attitude towards using' (Venkatesh 2003). Therefore, we propose the following hypotheses:

- $H_1$: PEOU will have a positive effect on PU.
- $H_2$: PEOU will have a positive effect on INTUSE.
- $H_3$: PU will have a positive effect on INTUSE.

To identify other important factors influencing the technology acceptance of mobile services on cruises, we gathered the most important and most consistent positions from the literature. Ubiquity, localization, accessibility, context specificity, personalization, convenience, affordability, security, interaction and integration of entertainment are specific success factors of Mobile Business which lead to the additional constructs below.

In addition to PEOU and PU, the first construct which will be considered in the research model is "Trust" (TR). This construct is therefore so important because the mobile internet and the mobile services are a very recent phenomenon and it is therefore even more important to identify the determinants influencing the trust of consumers for mobile Services on cruise ships and to providers (Lee and Turban 2001). Innovations are mostly associated with trust, uncertainty and risk. Trust is the key for a successful and long relationship with consumers. Trust takes a long time to build, can be easily destroyed, and is hard to regain. More trust in the mobile system on cruise ships will also increase the intention to use mobile services as well.

- $H_4$: TR will have a positive effect on INTUSE.

Due to the increasing prevalence, and the technical requirements in terms of functionality, size and portability, smart phones are in the context of tourism and especially for the present study a kind of reference device. The perceived "Network effects" (NET_EFF) are considered in addition to the mobile devices as well as the mobility as a feature of mobile services. Here, the effect of the device as a status symbol, the attractiveness, the sense of group membership and the possible penetration are queried.

- $H_5$: NET_EFF will have a positive effect on INTUSE.

A consumer who is confronted with a new technology for the first time has three options to meet it: (1) he can simply ignore it, (2) he can extensively deal with the innovation to acquire additional information about it, or (3) he can draw conclusions based on its existing knowledge about the new technology (Mukherjee and Hoyer 1999). Therefore, the "attitude towards new technologies" (NEW_TECH) plays an important role for the future use of this technology.

- $H_6$: NEW_TECH will have a positive effect on INTUSE.

The introduction and use of mobile services on cruise ships is associated with costs, particularly with additional costs such as mobile internet prices and fees for

**Table 10.1** Demographic data

| Gender | N | % | Profession | N | % | Age | N | % |
|---|---|---|---|---|---|---|---|---|
| Female | 64 | 45.1 | Student | 23 | 16.2 | <18 | 2 | 1.4 |
| Male | 78 | 54.9 | Employee | 74 | 52.1 | 18–25 | 17 | 12 |
| Net income per month | | | Public officer | 14 | 9.9 | 26–30 | 36 | 25.4 |
| <500 | 16 | 11.3 | Self employed | 3 | 2.1 | 31–45 | 35 | 24.6 |
| 500–1,500 | 42 | 29.6 | Pension | 23 | 16.2 | 46–60 | 32 | 22.5 |
| 1,501–3,000 | 63 | 44.4 | Not specified | 5 | 3.5 | >60 | 20 | 14.1 |
| >3,000 | 2 | 1.4 | | | | | | |
| Not specified | 19 | 13.4 | | Respondents N = 142 | | | | |

using some special services. The consumers in the market each have a maximum amount of money they are willing to pay for each of the products. To find out what the consumer accepts for additional cost, the construct "Willingness to pay" (WTP) is added to the research model.

- $H_7$: WTP will have a positive effect on INTUSE.

The aim of the acceptance research is to perform a research study informative for which a representativeness sample is an essential prerequisite. For this reason, care was taken to ensure that an adequate number of test persons are within the target group, which is, in this case, cruisers. Therefore, the operation of some mobile services are demonstrated on location e.g. in the port of Hamburg. Depending on the need the respondents could try out the smartphone and the operation itself. The survey is conducted in the period from 21 October to 9 November 2010.

The following (Table 10.1) presents the demographic data of the respondents from the quantitative analysis.

## 10.3 Measurement and Model Testing

Measurement validation and model testing were conducted using SmartPLS (Partial Least Squares), a variance analytical structural equation modeling technique that utilizes a component-based approach to estimation. In general, SEM is a technique for testing hypothesized relationships among variables by estimating a series of independent, separate multiple regressions. We choose SEM because SEM provides the researcher with the flexibility to model a relationship among criterion variables and multiple predictors, such as model errors in measurements for observed variables, to design unobservable latent variables, and statistically test a priori theoretical and measurement assumptions against empirical data (Chin 1998). PLS uses a least squares estimation procedure, allowing the flexibility to represent both reflective and formative latent constructs, while placing minimal demands on measurement scales and distributional assumptions (Chin 1998). Thus SmartPLS was used to perform the analysis.

**Table 10.2** Validity and reliability criteria for reflective measurement model

| Construct | ICR | AVE | Indicator | Factor loadings | KMO |
|---|---|---|---|---|---|
| INTUSE | 0.960903 | 0.924748 | INTUSE1 | 0.962534 | 0.500 |
| | | | INTUSE2 | 0.960742 | |

Firstly, the reflective construct intention to use (INTUSE) is analyzed. In this context we have examined the composite reliability, and the convergent and discriminate validity. The composite reliability (also known as internal consistency reliability-ICR) is similar to the Cronbach's alpha and measures its internal consistence, "except that the latter presumes, a priori, that each indicator of a construct contributes equally (i.e., the loadings are set equal to one). Fornell and Lacker (1981) argued that their measure is superior to Cronbach's alpha because it uses the actual item loadings obtained within the nomological network to calculate internal consistency reliability. This measure, which is unaffected by scale length, is more general than Cronbach's alpha, but the interpretation of the values obtained is similar ad the guidelines offered by Nunnally can be adopted" (Howell and Avolio 1993). ICR should be 0.70 or higher (Diamantoloulos et al. 2008). The value is above the threshold, so that the internal consistency reliability is given. Convergent and discriminant validity was assessed by the average variance extracted (AVE). AVE represents the overall amount of variance in the indicators accounted by the latent construct. The reported values provide evidence of discriminant and convergent validity since the AVE is well above the recommended level of 0.50 (Afuah and Tucci 2003). The AVE values for all constructs in this model are higher than the recommended threshold value of 0.50, suggesting the convergent validity of the scale (Afuah and Tucci 2003). Table 10.2 shows internal consistency reliabilities and convergent and discriminant validities for the research data. The KMO value should be at least 0.5 (Chin 1998; Fishbein and Aijzen 1975; Streiner 2003). Here the KMO is 0.500 for the whole reflective measurement model. Overall, the evidence of reliability, convergent validity, and discriminant validity indicates that the measurement model was appropriate for testing the structural model at a subsequent stage.

In the next step, the formative constructs of the model are analyzed. In this case, formative indicators reflect the idea that "..., indicators could be viewed as causing rather than being caused by the latent variable measured by the indicators" (MacCallum and Browne 1993). For this purpose, the variance inflation factor (VIF), which assesses the degree of multicollinearity of formative measurement models, in samples has to be controlled. In the literature, a VIF-value of $\leq 10$ is assumed as cut-off-criteria (Weiber and Mühlhaus 2010; Diamantoloulos et al. 2008). The highest VIF calculated is 5.319 and is therefore below the cut-off-criteria of VIFi $> 10$. In the next step, the measurement model was tested, to specify the relationship among the measures underlying each construct. The results are shown in Table 10.3.

**Table 10.3** Measurement model test and structural model test

| Formative indicator weights | | | | | Effect size | | |
|---|---|---|---|---|---|---|---|
| Measurement model | | | | | Structural model | | |
| *Latente variable* | *Item* | *Weight* | *t-value* | *Sig.* | *Hypotheses* | $f^2$ | *Effect* |
| TRUST | TR1 | 0.859 | 25.607 | *** | $H_4$ | 0.00 | None |
| | TR2 | 0.823 | 18.680 | *** | TR → INT | | |
| PU | PU1 | 0.787 | 26.249 | *** | | 0.08 | Weak |
| | PU2 | 0.912 | 59.587 | *** | $H_3$ | | |
| | PU3 | 0.891 | 37.884 | *** | PU → INT | | |
| | PU4 | 0.873 | 40.291 | *** | | | |
| PEOU | PEOU1 | 0.813 | 24.895 | *** | | 0.02 | Weak |
| | PEOU2 | 0.911 | 53.269 | *** | $H_2$ | | |
| | PEOU3 | 0.893 | 34.478 | *** | PEOU → INT | | |
| | PEOU4 | 0.934 | 70.651 | *** | | | |
| NEW_TECH | NT1 | 0.914 | 77.982 | *** | $H_6$ | 0.00 | None |
| | NT2 | 0.954 | 127.365 | *** | NEW_TECH → INT | | |
| | NT3 | 0.905 | 57.918 | *** | | | |
| INTUSE | INT1 | 0.963 | 133.297 | *** | | | |
| | INT2 | 0.961 | 110.730 | *** | | | |
| WTP | WTP1 | 0.694 | 9.339 | *** | $H_7$ | 0.01 | None |
| | WTP2 | 0.589 | 5.130 | *** | WTP → INT | | |
| | WTP3 | 0.876 | 31.985 | *** | | | |
| NET_EFF | NET1 | 0.798 | 13.635 | *** | $H_5$ | 0.00 | None |
| | NET2 | 0.852 | 19.954 | *** | NET_EFF → INT | | |
| | NET3 | 0.845 | 28.812 | *** | | | |

*n.s.* no significance
*p < 0.05, **p < 0.01, ***p < 0.001

Analyzing the structural model, it can be stated that the overall model explains with its determinants very well the latent construct. To put it all in a nutshell, the determinants are explaining 76.38 % of the construct. Besides inspecting the R2 metrics, the alternation in the determination coefficient also shows whether an independent latent variable has a strong influence on the dependent latent variable or not. Likewise to traditional partial F-tests, Cohen (1988) developed the so-called "Effect-size $f^2$", which indicates what effect on $R^2$ could be measured without or with this independent variable. Cohen (1988) distinguishes the effect in three categories: Values for $f^2$ of 0.02 up to 0.15, 0.15 up to 0.35 or > 0.35 indicate the latent exogenous variable's a weak, moderate or strong effect (Chin 1998; Cohen 1988). The results are shown in Table 10.3. The model's predictive validity can be tested with the Stone-Geisser $Q^2$-test (Fornell and Cha 1994; Geisser 1975; Stone 1975). The test criterion $Q^2$ shows how well the data collected can be reconstructed with the help of the model and the PLS parameters (Fornell and Cha 1994). A $Q^2 > 0$ means that the model has a predictive relevance, which is the case here.

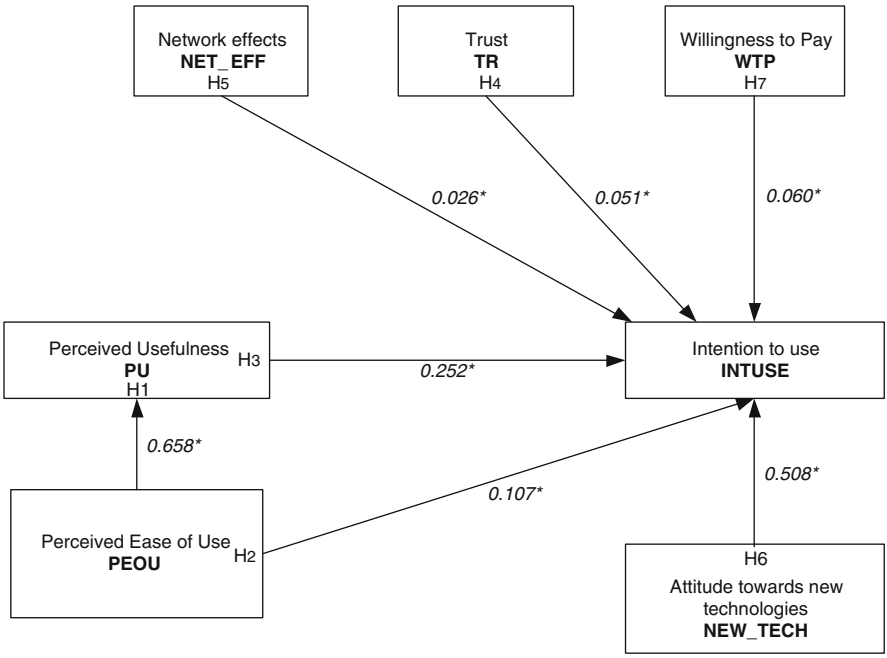


**Fig. 10.1** Research model – results

## 10.4 Results, Discussion, Limitations and Further Research

### *10.4.1 Results and Discussion*

To provide an overview SmartPLS is used to test a structural model. The path's coefficients for the research model are shown in Fig. 10.1. To get valid results, the bootstrapping resampling procedure with 1,000 resamples and 142 cases are used. The reason is to obtain estimates of standard errors for testing the statistical significance of path coefficient using the *t*-test. Out of the 21 indicators chosen for the analysis all indicators are significant. $\mathbf{H_1}$ predicts that PEOU has a positive effect on PU. This hypothesis is supported by the data ($\beta = 0.658$; t-value $= 11.094$, $p < 0.001$). $\mathbf{H_2}$ predicts that perceived ease of use has a positive effect on the intention to use mobile services on cruise ships. This hypothesis is also supported by the data. From Table 10.3 it becomes clear that the indicator PEOU4 ($\beta = 0.934$), which measures the usability and menu navigation, has the strongest positive influence on intention to use with a high significance level of $p < 0.001$. $\mathbf{H_3}$ predicts that PU has a positive effect on INTUSE. The strongest effect has PU2 ($\beta = 0.912$; t-value $= 63.782$). It shows that the users could imagine that they feel more independent by using mobile services on a cruise ship. $\mathbf{H_4}$ describes the effect

from perceived trust with the intention to use mobile services on cruise ships. The study shows a weak positive influence with high significance. $\mathbf{H_5}$ predicts that the network effects have a positive influence on the intention to use mobile services. As Table 10.1 show, the hypothesis can be supported with a weak positive influence as well. The construct NET_EFF was operationalized by three indicators, of which all indicators are highly significant. $\mathbf{H_6}$ describes whether the attitude towards new technologies plays a role for the future use of mobile services on cruise ships. The analysis shows that the respondents can be divided into three clusters: enthusiastic mobile technology users, normal mobile technology users and mobile technology critics. $\mathbf{H_7}$ predicts a positive influence of the consumer's willingness to pay with the intention to use mobile services. This hypothesis can be supported as well as already seen in Table 10.1.

The market model which defines various players will be influenced by a lot of factors. It is expected that the market situation of mobile devices and services remains fragmented and dynamic in the next years. Therefore it is essential that a mobile service is designed as a consumer orientated and easy to use application to support the perceived ease of use which has a positive effect on the intention to use and the perceived usefulness. The application must also be aligned to the user, the application context and the technological environment. Based on the conducted acceptance analysis it was confirmed that the technology enthusiasts have the highest intention to use mobile services on cruise ships. They represent the typical customers. Confidence in the technology, the customer wins by the security of a risk-free data transmission. To improve sustainability for a revenue model such as e.g. fee per use it is necessary to evaluate the willingness to pay for mobile services which influences the intention to use. The quantitative research study of the evaluation phase confirmed a positive relationship between the willingness to pay and the intention to use. A good intensity and frequency of use is necessary for e.g. the mobile service advertising itself. For these more complex services, which are characterized by a higher value for the customer, there is a slightly higher overall willingness to pay.

### *10.4.2 Limitations and Further Research*

The generalizability and abstractability of this study to mobile services on cruise ships is limited due to the following reasons. Firstly, this study considered the adjustment of customers only in Germany, but different countries have notable differences caused by cultural and economic differences. Further research is required to further test and validate the findings of this study worldwide. Secondly, this study does not include other CSF's such as subjective norm, psychological and environmental CSF's or factors such as information and system quality which are the factors affecting the information system success (DeLone and McLean 1992).

In the past, the focus was on the technical aspect for the implementation of mobile services. For the success and user acceptance of mobile services on cruise ships, the essential requirement is to understand and design mobile services from the consumers' point of view, without obeying technical aspect. User acceptance arises only, if the mobile services fulfills the requirements, and minimizes existing concerns, prejudices and fears. Mobile services should also create an additional benefit for the consumer. Further acceptance analysis should be tailored to specific cruises, specific regions, specific countries, specific cruise ships and corresponding customer segments. A detailed acceptance analysis has to be done best with the help of a prototype and respective cruise operators. Mobile service providers have to consider the following factors: security, trust and willingness to pay when implementing the IT or the information systems.

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# Chapter 11
# Sexual Crimes on Cruise Ships: A Historical Perspective on Security Issues for Passengers and Crew

**Ross Klein**

**Abstract** Sexual assault on a cruise ship first appeared in the media in 1989 when a crew member was charged with raping a 14-year-old girl onboard a Carnival cruise ship. Twenty-one years later a cruise ship captain pled guilty to sexually assaulting a 14-year-old girl when she was onboard his ship. This paper takes an historical look at the problem of sexual assault on cruise ships. It provides an historical account of how the problem of sexual abuse onboard cruise ships came to be seen as a problem, and how the industry influenced the attention it was given. This paper gives an historical account of the political and social processes involving the cruise industry, victim rights groups calling for attention to crime aboard cruise ships (including the International Cruise Victims Association), government, and other interests. The paper concludes with discussion of some trends in the cruise industry's response to onboard sexual assaults. The paper draws data from a range of sources: informants in the industry and onboard ships, documents provided in the discovery phase of lawsuits related to sexual assault on cruise ships, records of Congressional hearings and other government documents, the author's participation in meetings with the industry and advocates of victim rights, and media and other reports.

## 11.1 Introduction

Many were surprised when a cruise ship captain with Princess Cruises pled guilty in October 2010 for the sexual assault of a 14-year-old girl onboard his ship. *The Spalding Guardian* reported on October 18th, that the 64-year-old man had been jailed for 9 months for sex offenses against the girl while she slept in her cabin. The victim thought she had dreamt the incident but it later came to light when the captain chatted to her on MSN Messenger and made obscene suggestions. She told her parents.

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The problem of sexual assaults on cruise ships, especially the sexual assault of minors, is not recent. However it is not always taken as seriously as it should be. "Cruise ships are as safe an environment as you can find," was what a Carnival Cruise Lines spokesperson said during a court case involving a 14 year old child who was raped in 1989 on Carnival Cruise Line's *Carnivale*. Rape, he said, "happens in houses, offices, hotels, and parking lots" (Adams 1990, p. 1).

In this child's case, the rape occurred onboard in a cleaning closet. As the ship was returning to Miami from the Bahamas she went to the family's cabin (while other family members remained on deck) at 5:30 A.M. to check on a suitcase. While in the elevator, a male crewmember—a cleaner onboard the ship—kissed and fondled her. He then dragged her from the elevator to a cleaning closet and raped her on the floor. In February 1990, he was found guilty of the charges and sentenced to 30 years in prison. The case received considerable attention because it was the first time a crewmember on a foreign flagged cruise ship had been successfully prosecuted. The assault had occurred while the ship was within U.S. territorial waters (Adams 1990, p. 1).

The purpose of this paper is to describe the response of the cruise industry to the problem of sexual assault, concentrating on when the problem first appeared in the media in 1989 to present day. The discussion includes action taken by the industry to address the problem internally, as well as activity directed at public perceptions and lobbying Congress on matters related to the issue. It also discusses the interaction between the cruise industry and sexual assault victims, including the International Cruise Victims Association.

## 11.2 Scope of the Problem of Sexual Assault on Cruise Ships

Although there hasn't been much media attention, there are indications by the number of civil suits filed that sexual assaults on cruise ships have been an ongoing problem. There were, for example, other cases involving children in the 1990s. In 1991 a 12-year-old girl was fondled in the elevator of Carnival Cruise Line's *Jubilee*. In 1992 a 15-year-old girl was raped on Windjammer Cruises' *Fantome*. In 1994 a crewman on Dolphin Cruises' *Seabreeze* molested a 13-year-old boy. And in 1995 a crewman broke into a cabin and raped two girls under the age of 10 (Klein 2002, pp. 60–61).

At least eight additional cases involving children were reported between 1995 and 2000: a 16-year-old girl celebrating her birthday was raped on Royal Caribbean Cruise Line's *Monarch of the Seas* after striking up a conversation with a bartender who later was her attacker (Frantz 1998); a 14 and a 16-year-old girl were both raped in separate incidents several weeks apart in 1996 by the same crewman aboard Carnival Cruise Line's *Fascination*—the latter case came to light because of publicity from the first (Frantz 1998); a 13-year-old child was the victim of an attempted sexual assault by a 30-year-old passenger in 1997 aboard Premier Cruises' *Atlantica*; a 15-year-old-boy was molested in 1998 by a bartender on a Royal Caribbean Cruise

Line ship after he was served more than a dozen glasses of champagne and then taken to an empty cabin where he was stripped and sexually assaulted (Oliphant 1999); and in 1999 a 13-year-old girl was assaulted by a waiter aboard Celebrity's Cruises' *Galaxy*, and a 12-year-old boy was molested by a kitchen steward aboard a ship belonging to Norwegian Cruise Lines. In October 2000 a 30-year-old youth coordinator on Norwegian Cruise Line's *Norway* was arrested and charged with sexually assaulting a 12-year-old girl who had come with him to his cabin. In this last case, the parents sued Norwegian Cruise Line for not properly screening their employees: the youth coordinator had an arrest record that included indecent exposure (Travel Weekly Crossroads Daily e-letter, June 28, 2001).

Sexual assaults are not limited to children. In 1990, a passenger with Carnival Cruise Lines accused her cabin steward of entering her cabin while she was asleep. He climbed on top her and fondled her but was scared away when the woman and her roommate both began screaming. In 1992 a 31 year old woman travelling on Carnival Cruise Lines' *Festivale* claimed that a waiter had snuck into her cabin while she was getting dressed in the bathroom. She filed a report with the Barbados police, but nothing happened. She settled her case against Carnival Cruise Lines out of court (Frantz 1998). And in 1993 a 62 year old woman on Seawind Cruise Line's *Seawind Crown* was strangled to death following a failed rape attempt when she was using a public toilet at 9:00 AM. The two crewmen were caught because they were seen throwing the body overboard as the ship left the harbour in Aruba. They were detained and prosecuted in Aruba (Glass 1993, p. 3).

## 11.3 The Cruise Industry Responds: 1995

In the face of mounting claims by victims of sexual assault on cruise ships, the cruise industry attempted to limit their liability. This was addressed by the U.S. Congress in a tort reform measure attached to the Coast Guard Reauthorization Bill passed on May 9, 1995. The amendment, for the most part written by the International Council of Cruise Lines (ICCL, which later merged with Cruise Lines International Association – CLIA), passed the House by a vote of 406–12. Only afterwards did people read the final print (Glass 1996, p. 1)

Directed at mounting claims from injuries and sexual assaults, the legislation limited liability to passengers and crew for "infliction of emotional distress, mental suffering or psychological injury" unless negligence or an intentional act can be proven (Gugliotti 1996, p. A15). The American Trial Lawyers Association characterized the amendments as "dangerous legislation" that "jeopardized the safety of women on cruise ships." Opposition also came from the Women's Defense Fund, the National Organization for Women's Legal Defense Fund, the Maritime Committee of the AFL-CIO, and rape treatment centers (Fox and Fox 1995, E4).

The amendment languished for more than a year waiting to go to a House-Senate conference where lawmakers would resolve the House and Senate versions of the Coast Guard Reauthorization Bill. Lobbying by the industry continued, including a

delegation of cruise line executives in March 1996 (Rowe 1996). By October 1, 1996, a compromise had been negotiated, however Ernest Hollings, from the Senate's Commerce, Science, and Transportation Committee, didn't like the compromise and when the Conference Committee convened, threatened to kill the entire reauthorization bill if ICCL's amendments remained. But in the end he capitulated after amended language was adopted. Under the final legislation ship owners were prohibited from limiting their liability in cases involving sexual harassment, sexual misbehavior, assault, or rape in cases where the victim is physically injured – limitations were allowed in all other situations (Glass 1996, p. 1). Despite this attention in the U.S., the problem received no attention from other regions of the world.

## 11.4 The Problem Doesn't Go Away: 1998

The problem of sexual assault on cruise ships became an issue in the national media for the first time when, on November 16, 1998, *New York Times* investigative reporter Douglas Frantz wrote an article entitled, "On Cruise Ships Silence Shrouds Crimes." He reported many of the cases already mentioned involving both minors and adult women, as well as others.

In June 1997 a 35-year-old woman aboard Royal Caribbean Cruise Line's *Majesty of the Seas* said she was raped after returning from the nightclub at 4:00 AM, where she had consumed only non-alcoholic beverages. She said she had been attacked by a member of the cleaning crew and picked him out of a line-up conducted by the ship's security officers. Questioned by the ship's security officer and a company lawyer who had flown in, the worker denied being anywhere near a passenger. He said he had been washing decks at 4:00 in the morning. He attributed the scratches on his body to minor work accidents. He was indicted and as his trial approached DNA evidence linked him to the assault. He switched his story and his lawyers argued that the woman had consented to sex. Because the woman had filed for bankruptcy just before going on the cruise they suggested the suit against Royal Caribbean had been planned. A jury acquitted the alleged attacker after 4 h of deliberation. In court papers, Royal Caribbean ". . . said it was not responsible for a crew member's actions outside his official duties" (Frantz 1998).

There were two cases reported against Carnival Cruise Lines in 1998. In one a woman on a Caribbean cruise with her husband accused a waiter of drugging their dinner drinks and later raping her in their cabin as her husband lay unconscious (Frantz 1998). In another case a woman travelling with her mother claimed a room steward had raped her (Korten 2000). Also in 1998, a 54 year old woman who worked at the ship's gift shop on *Crystal Harmony* initiated a lawsuit claiming she was forced to engage in sex with the captain for fear that if she refused she would lose her job. (SF Gate News 1998).

And then in July 1999, in the midst of considerable media interest and attention, Carnival Cruise Lines and Royal Caribbean disclosed together they had received

166 sexual assault complaints from 1993 to 1998. The disclosure was made in discovery in a lawsuit brought by a woman who had worked as a nurse for 3 years. She said she had been raped and sodomized in August 1998 by the ship's engineer, allegedly an experienced sexual predator, while working on Carnival Cruise Lines' *Imagination*. She had immediately reported the incident and the engineer was promptly fired; not because of the rape but because he had been drinking within 6 h of going on duty and for being tardy. (Senes 1999, p. 40).

## 11.5 The Cruise Industry Responds: 1999

In the midst of the heightened media coverage and interest, four cruise corporations (Carnival Corporation, Royal Caribbean Cruises Limited, Crystal Cruises, and Princess Cruises) representing more than 75 % of the industry signed a letter of commitment in July 1999. Issued under the auspices of ICCL, they pledged a "zero tolerance policy" for crimes committed onboard ships and established an industry standard requiring allegations of onboard crime be reported to the appropriate law enforcement authorities. For vessels calling on U.S. ports or crime involving U.S. citizens this meant the Federal Bureau of Investigation (FBI).

Interestingly, cruise lines were already expected to report to the U.S. Coast Guard all crimes involving U.S. citizens on cruise ships but it isn't clear that the information was being reported or sought. U.S. authority in these cases extends from the special maritime and territorial jurisdiction of the United States (USC 18 CFR).

The cruise industry announced its zero tolerance for crime policy with a press release. It reassured passengers of background checks on prospective employees; that crew members violating rules against fraternization with guests would be dismissed; that there were highly trained security personnel on every vessel and that there were established procedures to investigate, report and refer incidents of onboard crime to appropriate law enforcement authorities. The press release told American passengers that they were protected by U.S. laws, that cruise lines were subject to civil liabilities in U.S. courts and that they were safer on a cruise ship than in urban or rural America. The industry said the number of reported shore side aggravated sexual assaults was at least 20–50 times greater than the total number of all reported shipboard assaults of any type, a claim that was never measured against actual rates on and off ship. The industry's claims went unquestioned and the issue of sexual assaults on cruise ships seemed to evaporate from the arena of public awareness.

At the same time, some cruise lines (if not all) undertook initiatives to address the problem of sexual assaults and other crimes, though this was mostly done out of the public's sight. Royal Caribbean, for one, received reports in May/June 1999 from two consultants charged with making recommendations for preventing sexual harassment and assault. The problem was obvious. As one report stated, "... improper activity occurs frequently aboard cruise ships, but goes unreported and/or unpunished" (Krohne 1999, p. 2). The other report acknowledged that

"crew members generally understand that if they commit an offence and are caught they are most likely going to lose their job and be returned home, but not spend time in jail" (Greenwood 1999, p. 4).

The reports make a range of recommendations. These include: increased video surveillance of high risk areas; cameras already in place be monitored periodically, at least on a random basis, and be recorded at all times; an increase in the number of security staff by two per ship; and increased training and education of staff and crew members. In addition they recommended that response to sexual harassment and assault be standardized across brands and ships, that training for medical personnel include an interview protocol for sexual assault incidents, that a staff member be identified and assigned responsibility to serve as an advocate for the target of sexual harassment or assault, that a shore side hotline be established to receive telephone reports of wrongdoing and that investigations be consistent and evenly handled. Given their assumption that cruise passengers were unaware of the prohibition between crew and guest social interactions (and that passengers often, unintentionally, put a crew member in an uncomfortable position by engaging him or her socially), they also recommended better educating passengers and better signage onboard demarcating areas that are "off limits" to passengers. The recommendations are great, but the degree to which they were embraced and implemented is questionable. Given that sexual assaults continued, and actually increased in frequency, all indications are that the consultant's recommendations were ignored, or at least not implemented.

The consultants also identified cultural challenges to reducing sexual harassment and assault. For example, senior officers and management need to break from the traditionally hierarchical and militaristic structure of a ship and instead treat their crew and staff members fairly and respectfully. They need to reinforce the need for staff and crew members to treat each other and passengers respectfully. If they wish to prevent sexual harassment and abuse then they must have zero tolerance for both no matter the rank or position of the offender. This point is also made by Klein and Poulston (2011).

Diverse cultural perceptions of sexual harassment and conduct among a ship's crew present another challenge. There is a diverse population drawn from around the world and in many of these cultures women, women's rights and sexuality are seen quite differently than they are by most North Americans. These differences need to be addressed through better training and more effective oversight and supervision.

## 11.6 The Issue Re-Emerges: 2005

The issue of sexual assaults on cruise ships re-emerged as a public concern in late-2005. It isn't that sexual assaults on cruise ships had ceased, but the media had moved on to cover other issues and concerns. But media interest returned in December 2005 and was kept alive with the establishment in January 2006 of

International Cruise Victims Association, an organization devoted to promoting concern for and representing the rights of victims of crime on cruise ships.

Congressional hearings in 2005 focused upon safety, security and crime on cruise ships. It heard from government officials, cruise industry representatives and received written testimony from family members of passengers who had disappeared. The cruise industry used the hearings to promote the safety and security of a cruise ship. The hearings concluded with an assurance they would reconvene in March in order to hear directly from victims.

Hearings reconvened March 7, 2006. The cruise industry was challenged to provide committee members with an understanding of their onboard security systems. It was also asked to present honest statistics about the incidence of crime on cruise ships. For the latter the industry hired James Alan Fox, a sociologist at Northeastern University in Boston, to compare incidents of sexual assault on cruise ships with incidence in the U.S. generally. This is a difficult task given that the U.S. does not keep track of sexual assaults; its crime statistics are limited to reports of rape. Fox compared reports of sexual assault (without clarity of what he had defined as "sexual assault") on cruise ships with the rate of forcible rape in the U.S.

In his testimony, Fox concluded that passengers were far safer onboard a cruise ship than in their home communities. He determined, based on data provided by the cruise lines, that the rate of sexual assault on cruise lines is—at worst—half the U.S. rate of forcible rate and said the low levels of rape "makes reasonable sense in view of the confined and highly secured environments offered on major cruise ships" (Fox 2006). Fox suggested a person is more likely to get struck by lightening than sexually assaulted on a cruise and that the odds of disappearing from a ship are less than one in a million. Committee Chair Shays expressed skepticism about the accuracy of the statistics

The hearings also heard from six witnesses who were either victims or related to victims. Two were victims of sexual assault: Janet Kelly, a 49 year old real estate agent from Arizona who was raped by a cruise ship employee in February 2000 after drinking two alcoholic beverages which she suspects were laced with drugs, and Deborah Shaffer's 15-year-old daughter who had been raped on *Carnival Legend* in April 2003. The Committee heard a number of recommendations from the ICV, many of which addressed known gaps or problems identified through victim experience. The cruise industry was less than enthusiastic about ICV's recommendations even though many of the recommendations corresponded with recommendations made by the consultants hired by Royal Caribbean in 1999.

Subsequent to the hearings Representative Shays introduced on June 28, 2006 HR 5707, the *Cruise Line Accurate Safety Statistics Act*, which would require cruise ships that call at a port in the United States to report all crimes occurring on the ship in which a U.S. citizen is involved and that this information be made available on the Internet. The cruise industry didn't embrace the legislation and with the current session of Congress near-complete the legislation died in committee. However, curiously the cruise industry was already obligated to report such crimes under USC 18 CFR.

## 11.7 Congressional Hearings Phase 2: 2007

The issue of crime on cruise ships could have ended with the shift in Congress from a Republican to a Democrat majority. But two things appear to have stemmed that possibility. First, the *Los Angeles Times* published an article on January 20, 2007 which, based on internal documents from Royal Caribbean, said sex related onboard incidents was a larger problem than the cruise industry suggested in March 2006. The documents revealed 273 reported incidents within a period of 32 months, including 99 cases of sexual harassment, 81 of sexual assault, 52 of inappropriate touching, 28 of sexual battery and 13 cases that fit into other categories (Yoshino 2007). When the company-specific numbers were subjected to the same statistical analysis as done with industry-wide data for James Fox's 2006 testimony before Congress, the rate of sexual assault was not half the average rate for rape in the U.S. but 50 % greater than the U.S. rate (see Klein 2007). The second factor that pushed for a new round of hearings was that Representative Doris Matsui from California had a constituent, Laurie Dishman, appeal to her for help after being raped by a safety officer onboard a Royal Caribbean ship.

The first witnesses before the Subcommittee, the Coast Guard and the Federal Bureau of Investigation (FBI), opened by announcing an agreement that had just been reached with the cruise industry whereby cruise line members of the CLIA agreed to report to the FBI all crimes against Americans on their ships. To many the timing of the announcement was suspicious. As well, the agreement appeared to be a rehash of the "zero tolerance" policy announced by ICCL in 1999 and it was redundant to reporting requirements already in place in law.

The second set of witnesses presented concerns of victims, including Laurie Dishman who in heart-wrenching testimony told her story of being raped on Royal Caribbean's *Vision of the Seas* in February 2006. At one point she asked whether the cruise industry had forgotten about their pledge in hearings held 4 weeks after she was raped where they said they would cooperate with victims and provide them information. Her experience was that the promise was not being fulfilled. Representatives of the cruise industry also testified and, as previously, used the forum to talk about their commitment to passenger safety and to re-emphasize that cruising is safe. The contrast between their statements and the story of victims was startling.

At the end of the hearings the subcommittee chair, Elijah Cummings, called on CLIA and ICV to get together and to attempt to find some common ground and solutions. He said he'd prefer a solution that did not require legislation but also said that legislation was always an option. He gave the two sides 6 months and said the hearings would reconvene in September.

A meeting between ICV and CLIA finally took place late-July. It allowed for a sharing of views and perspectives but did not resolve with any firm agreement or direction. To the contrary, progress was limited given that while CLIA was dragging its feet in agreeing to meet with ICV it was working to convene a meeting of cruise victims with a view toward establishing its own survivor's working group.

Ironically, CLIA expected ICV to cooperate in establishing this group by inviting its members to attend even though the advisory group would overlap ICV's mission and would likely be used to marginalize and usurp ICV's role in the process.

Attendance at the CLIA convened meeting of victims was light with a total of 13 victim families. Eleven families were members of ICV; the other two were invited by Carnival and were qualitatively different than victims represented by ICV—each had experienced a family member dying from natural causes while on a cruise. The July meeting between CLIA and ICV concluded with CLIA president, Terry Dale, announcing plans to establish a survivor working group. CLIA appeared to prefer a hand picked group under its control.

The day before the Congressional subcommittee reconvened September 19, 2007, Representatives Matsui and Shays with 23 co-sponsors introduced a House Resolution calling attention to crime on cruise ships and the lack of federal regulations overseeing the cruise industry. In announcing the resolution, Matsui stated:

> "*It is simply unacceptable that American citizens are susceptible to such nefarious crimes on cruise ships. Victims continue to have little or no recourse when they have been assaulted. Awareness is a key part of prevention ... Congress needs to provide the oversight and leadership to ensure that vacationers and families are safe and understand their risks.*" (Matsui 2007)

The purpose of the reconvened hearings was to receive an update on the status of discussions between ICV and CLIA and to examine whether the security practices and procedures aboard cruise ships are adequate to ensure the safety of all passengers. Not surprisingly the cruise industry painted a picture that said everything was under control, that it is working diligently to improve situations raised as sources of concern by its critics and that cruises continue to be safe (see Dale 2007). The picture painted by the four victims who testified was quite different (see Klein 2008).

Hearings were again convened in Washington, this time by the US Senate Subcommittee on Surface Transportation and Merchant Marine Infrastructure, Safety, and Security, on June 18, 2008. The hearings heard from the ICV, the cruise industry, the Rape, Abuse, and Incest National Network, and cruise researcher Ross Klein. Subsequent to the hearings, John Kerry from the Senate and Doris Matsui introduced the Cruise Vessel Security and Safety Act when Congress convened in 2009. The legislation passed in 2009 and became law July 28, 2010. It is too early to tell whether the legislation addresses all of ICV's outstanding issues and whether the industry will comply with both the letter of the law and the intent. Early indications are that the cruise industry has successfully lobbied to water down the intent of the legislation and to undermine the protection of cruise passengers. At the end of 2011, there were media reports of two young women being raped onboard cruise ships. On November 22, 2011 the *Sun-Sentinel* reported a shipboard employee had been charged with engaging in sexual acts with a minor; according to the criminal complaint filed, the 35 year old crewmember allegedly engaged in sexual acts in the bathroom with the 14 year old victim while the ship was sailing in international waters on November 4 and 5. On January 4, 2012 the *Orlando Sentinel*

reported a 15 year old girl said she was raped by two passengers while aboard, lured from a teen dance club to a private room in the wee hours of the morning; a teenage boy and a young man were arrested at Port Everglades on Tuesday. The teen and her family set sail from Fort Lauderdale on Christmas Day for a 10-day cruise.

## 11.8 Are There Patterns?

The purpose of this paper was to layout the historical processes related to safety and security on cruise ships (for a discussion of the dynamics and analysis of incidents of sexual assault see Klein and Poultson (2011)). As seen, the landscape appeared to change when International Cruise Victims Association became an active advocate for victims of crime on cruise ships. Aside from ICV's influence, there are several interesting patterns in looking at the history. The most pervasive is the cruise industry's ability to remain under the radar. They are infrequently subjected to scrutiny by the media, though with ICV pushing its agenda this is one of the few instances in which the cruise industry was unable to shape what happened in, and the legislation that came from, the U.S. Congress. ICV had developed alliances with key members of Congress so the issue couldn't be swept away. Regardless, the topic of sexual assaults on cruise ships is again becoming somewhat dormant as regards an issue in the public eye.

Another set of patterns relate to the way the cruise industry tended to handle cases of sexual assault. They deny sexual assault on cruise ships is a problem and therefore refuse to make passengers aware of the problem. When an assault happens, they deny responsibility or control – they want to claim they are not responsible for the behaviour of their employees and do not feel obligated to provide increased security. When a passenger sues, they generally settle out of court with confidentiality agreements attached.

The industry has also failed to address the culture underlying many sexual assaults. Part of the issue is the culture employees bring with them to the ship, but it is also the culture that develops on the ship. Some behaviour not tolerated on some ships, including behaviour that is abusive, may be allowed on others. The onboard culture could include ignoring the presence of sexual predators and ignoring information when it comes forward with regard to sexual misconduct.

What is most curious about the history of the issue is that the cruise industry has consistently promised to deal with the problem – its zero tolerance policy in 1999, its agreement with the FBI and U.S. Coast Guard in 2007 – despite it was already obligated to report incidents under USC 18 CFR, but the problem appeared to get worse as opposed to better. For example, according to FBI data there were 93 sex related incidents on Carnival Cruise Lines' ships between October 1, 2007 and September 30, 2008, yielding a rate of 115 per 100,000 – not only higher than Royal Caribbean's rate in 2003–2005, but more than 50 % higher than the rate for sexual assault on land in Canada (Klein and Poulston 2011).

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# Chapter 12
# User-Driven Innovation Concepts and the Cruise Industry

**Brita Schemmann**

**Abstract** For the past 20 years, cruise tourism has seen impressive growth rates with an average annual increase in passengers of more than 7 %. These impressive growth rates however cannot hide the fact that the cruise industry is facing several external and 'home-made' challenges which underlines the importance of innovation in the cruise industry. The ability to innovate is crucial for the sustainable success of any industry. Despite the importance of innovation for the future success of the cruise industry and the tourism sector in general, innovation is an under-researched theme in the field of tourism research. Customer needs and user involvement play an important role in the innovation process. This should especially be the case in the tourism industry as consumers are very much involved in the production of the industry's services. Over the past 30 years, user-producer interaction and its effects on innovation has been widely assessed and described, and several concepts of user-driven innovation have been developed. These concepts differ depending on the level of user initiative, involvement and ownership in the (new) value creation process (here referred to as *user focus*) and the *innovation generation potential* that can be derived from the respective concept. According to these two dimensions, a model is proposed that opens up a spectrum of very different forms of user-driven innovation. The potential of these concepts for innovation in the tourism sector and cruise industry in particular as well as the state of research is outlined. Concepts with a low or medium user focus in particular bear a lot of immediate potential for the cruise industry. Concepts with a high user focus can also be an interesting option, but they require a very open attitude towards innovation and further research to identify ways of how these concepts can be applied.

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## 12.1 No Need for Innovation (Research) in the Cruise Industry?

In recent years, several reasons have been identified why tourism companies have to increasingly focus on innovation. Among these are changes in consumer behaviour and demand, overcapacities, saturated markets, uniform offerings, increasing competition, shrinking profit margins as well as environmental and social burdens as a result of mass tourism (Müller 2006). But does this also hold true for the cruise industry? For the past 20 years, cruise tourism has seen impressive growth rates with an average annual increase in passengers of more than 7 % (CLIA 2011). These impressive growth rates cannot hide the fact that the cruise industry is also facing many of the challenges mentioned above. The North American cruise market is already reaching maturity state of the industry life cycle (Kwag and Lee 2009). In addition, the increasing number of cruise ships leads to overcapacities and a growing number of exchangeable 'me too' products (Papathanassis 2006). The Cruise Lines International Association (CLIA) reported that their member companies added a further 12 ships to their fleets, with an additional 22 cruise ships on order for 2011 and 2012 (CLIA 2011). This increases competition and puts pressure on prices and profits – not only in times of economic recession (Dake 2009). Many of the prime cruise destinations are becoming less attractive as they are often overcrowded in the peak season. However the cruise industry is not only facing such 'home-made' challenges, but outside factors such as rising fuel prices or stricter environmental regulations are putting pressure on cruise companies as well. These are only some reasons that underline the growing importance of innovation in the cruise industry. And what is true for the cruise industry can at the same time be seen as a challenge and a chance for the entire tourism sector or as the OECD recently stated:

> *"No country, region or city can rest idle on its natural endowment or cultural heritage: a policy of permanent innovation is needed to stay competitive in a global tourism, travel and leisure market dominated by stiff competition. Tourism is one of the most dynamic segments of the service sector; it is on the forefront for testing new non-technological innovations centred on best use of human capital, new forms of organisation and management, new frontiers of entrepreneurship and new developments of intangible assets based on reputation, image-building, marketing and communication."* (OECD 2010, p. 9)

The ability to innovate is crucial for the sustainable success of any industry and company. In the early twentieth century, Schumpeter (1993), in his *Theory of Economic Development*, already identified innovation as the critical dimension of economic change and economic success. Results of previous research also showed that innovating firms in the service sector outperform non-innovating firms in terms of economic growth rates as well as productivity levels (Cainelli et al. 2004).

Despite the importance of innovation for the future success of the cruise industry and the tourism sector in general, innovation is an under-researched theme in the field of tourism research (Hjalager 2010). One reason for this shortcoming could be that tourism products are mostly service products, and service innovation in general receives a lot less scientific attention than innovation focused on manufactured

goods or high-tech products. Service innovation is often perceived as the soft side of innovation (Hertog 2010), resulting in a lack of attention despite the still growing importance of the service economy. Another reason might be that service innovations are sometimes harder to spot, grasp and describe than manufactured product innovations. To avoid confusion and to provide clarity with regard to the different definitions of innovation, this paper is based on the following definitions and assumptions.

## 12.2 Innovation in Tourism and Cruise

Many researchers have created definitions of innovation. A lot of them are based on Schumpeter's early work and his definition of innovation, namely the generation of new or improved products, the introduction of new production processes, the development of new sales markets or new supply markets and the reorganisation and/or restructuring of a company (Schumpeter 1993). But how can 'new' be defined? According to Rogers, innovation can be defined as follows:

> *"[. . .] an idea, practice or object that is perceived as new by an individual or other unit of adoption."* (Rogers 1995, p. 11)

What matters, therefore, is the subjective perception of adopters such as users or consumers. In addition, it is essential that these new ideas, practices or objects are actually applied to business processes and lead to the creation of (new) value as this distinguishes an innovation from an invention. This is supported by Betje, who defines innovation as

> *"[. . .] new things applied in the business of producing, distributing, and consuming products or services."* (Betje 1998, p. 1)

Innovations in the service industries such as, for instance, cruise tourism can appear in many different forms. Whilst some of them become very visible to the customer as innovations, others will not be visible or perceived as innovations by them. Table 12.1 categorises and defines the different forms of innovation that are taking place in the cruise industry.

Another reason why innovation plays a fairly minor role in tourism research could be that tourism companies are often described as being reluctant to implement innovations for fear of scaring away existing customers (Keller 2008). The fear of scaring away existing customers is often linked to a very radical understanding of innovation. Such radical or big-change innovations, which lead to entirely new products, are fairly rare and make up only about 10 % of all innovations (Rothwell and Gardner 1989). They are usually quite a challenge for existing user-producer relationships (Lundvall 1992). The majority of all innovations, however, take place in a much more subtle way. Such incremental innovations are very common and are based on the gradual improvement in knowledge, materials and technology, leading to the enhancement of existing goods or services (Smith 2006).

**Table 12.1** Types of innovation in cruise tourism

| Category | Type | Description | Examples |
|---|---|---|---|
| Product[a] Innovation[b] | (Manufactured) Product Innovation | Development of entirely new or improved tangible, storable goods. These innovations play a comparatively minor role in cruise tourism. | New types of souvenirs (such as a professionally produced CD), novel food creations |
| | Service (Product) Innovation | Development of entirely new or improved intangible, interactive, non-storable services which involve the active participation of the consumer. Often such innovations are based on new technologies or the transfer of an existing technology to a new environment. Service innovation can also be linked to the emergence of new or very different business models or the creation of niche markets. Service innovations make up the majority of product innovations in cruise tourism and mostly focus on the creation of new (holiday) experiences. They are often directly linked to process innovations. | Creation of 'club' and 'free-style cruises' (transfer of the holiday resort business model onto a cruise ship), special-interest cruises (such as heavy metal cruises), new destinations, novel services on board (such as a glassblowing), new leisure activities (such as Segway tours, 4D cinema), new bonus or loyalty programmes |
| Organisational Innovation[c] | Process Innovation | New ways to enhance the performance of existing processes and operations by using new or improved technology that has often been developed outside the industry. Also the introduction of new processes in connection with service innovations. Often linked to or resulting in product innovations. | Computerised monitoring services, self-service devices and changes in service delivery (such as online diving theory training), crowdsourcing of duties (such as waste separation), cleaning robots, energy-saving appliances |
| | Managerial Innovation | New job profiles, collaborative structures or management systems. Often linked to product or process innovations. | Introduction of training programmes at university level, new staff development programmes, introduction of a suggestion system |

(continued)

**Table 12.1** (continued)

| Category | Type | Description | Examples |
|---|---|---|---|
| | Logistics & Affiliate Innovation | Tourism and cruise products are usually made up of a range of different services delivered by different enterprises (from booking to return). These innovations change the position of an individual enterprise in the value chain or introduce new enterprises to the value chain. This also includes alliances with other companies inside and outside the industry. Often linked to product or process innovations. | Internet marketing and booking, integrated destination information systems, 'Sansibar' bar onboard a cruise ship, new affiliate programmes |
| Structural Innovation[c] | Institutional Innovation | New collaborative/ organisational structures or legal frameworks or regulations which redirect or enhance the business in certain fields of tourism. Such innovations affect the business of many companies and their customers. | CLIA agent certification, ISPS regulations, new environmental concerns and regulations (resulting, for example, in shore-side electrical power systems), changes in visa processing, new financial services and structures |

[a]Based on a marketing view that defines a product as anything offered to a market that satisfies a (consumer's) want or need (Kotler 2003)
[b]Perceived as innovations by customers
[c]Usually not perceived as innovations by customers or not visible to customers
Definitions developed by the author based on Hjalager (1997, 2002, 2010), OECD (2006), Smith (2006), Theiner and Steinhauser (2006)

Here, existing users or consumers may even play an active role in the innovation process, e.g. by articulating their needs regarding product or service improvements. Such innovations, which base on the needs of consumers, are more likely to be successful than innovations that do not consider and actively involve users:

> *"This is particularly true in the tourism industry as customers are deeply involved in the production of a tourism service in order to enhance their experience value."* (Baglieri and Consoli 2009, p. 353 f.)

Most innovation areas in the tourism industry can be classified as incremental innovation, and customers and users have been identified as the prime divers of innovation (OECD 2006). Of the 10 themes that deserve more scientific attention in tourism innovation research, Hjalager (2010) considers innovation processes one of them as there is an incomplete understanding of how innovation takes place in tourism companies and organisations. With regard to the close consumer-producer interaction in the tourism sector, the role of the consumer in the innovation process deserves special attention.

It thus makes sense to take a closer look at the user-producer relationship and their interaction in the cruise and tourism industries as well as the importance of this relationship for the innovation process.

## 12.3 Purpose of This Paper

Over the past 30 years, user-producer interaction and its effects on innovation have been widely assessed and described, and several concepts of user-driven or user-centric innovation have been developed and described. These concepts differ depending on the level of user initiative, involvement and ownership in the innovation process (here referred to as *user focus*) and the *innovation generation potential* that can be derived from the respective concept. On the basis of these two dimensions, a model is proposed which opens up a spectrum of very different forms of user-driven innovation. The potential of these innovation concepts in the tourism and cruise industry will be outlined. The aim is to identify concepts that offer potential for the cruise industry and to define areas for future research.

## 12.4 Innovation in Tourism: The Role of User-Producer Relationship

User-producer interaction and its effects on innovation have been widely assessed and described by Bengt-Ake Lundvall (1985, 1992). He describes innovation as an interactive process. This process usually involves a range of different 'agents' which take part in the creation and adoption of innovations. The competence, motivation and focus of the different agents involved vary, each adding a useful part to the innovation process. In the knowledge-intensive economy – where many service industries play an important role – agents will be involved more or less permanently in innovation processes and interactive learning. In the service sector in particular (potential) users need to be involved both in the creation process by providing the producer with useful insights regarding their needs and in the diffusion process by communicating information about product innovations, whereby the latter probably is the most basic function of the user-producer relationship. Therefore, it can be said that the co-operation of users and producers in the innovation process can take place at very different process stages, for example while defining the problem, while developing a solution or while introducing it to an organisation or market (Lundvall 1992).

As Hjalager (2010) pointed out, innovation research in tourism is still a fairly young phenomenon. Therefore, most issues, including those concerning the role of the user in the innovation process, are only gradually elaborated in theory and hardly illuminated by empirical evidence. One of the different user participation

concepts in the value creation process, which have been discussed with regard to the tourism sector, is the so-called 'prosumer' phenomenon (Vogel 2005; Werthner and Klein 1999). The term 'prosumer' was coined by Alvin Toffler (1980) who predicted that the role of producers and consumers would begin to blur and who saw the user (con*sumer*) as an increasingly important player (*pro*ducer) in the value chain.

As an experience industry, travel and tourism services have always counted on the active involvement of the consumer but since the 1990s, the tourism industry has increasingly integrated users in the different aspects of value creation. As described by Geser and Markus (2008), many business activities are being shifted to consumers. The first level of prosuming, the so-called efficiency prosuming, was reached at the end of the 1990s through touristic information portals with search and booking functions. Although consumers have no chance to configure their own service products or co-create new ones, service providers benefit due to the cost advantages of online self-services. Currently, we are witnessing a level of individualisation prosuming that involves consumers in the production process by giving them the opportunity to configure their own services through personalised bundling or unbundling of predefined travel package components (so-called mass customisation, e.g. via dynamic packaging). The next step, called innovation prosuming, envisions the consumer as an innovation partner and co-creator in the definition of new services or business processes – a practice widely observed in other industries, but which is under-researched in the service industries and tourism in particular.

## 12.5 Dimensions of User-Driven Innovation Concepts

As the prosumer phenomenon has already shown, consumers/users are increasingly seen as an important element of the value creation and innovation process. Over the past 30 years, a range of different phenomena dealing with this theme have been described and different concepts of user-driven innovation have been developed. Some of these concepts overlap, and sometimes it is not easy to distinguish between substantial new insights and the creation of new definitions for the sake of creation.

However, the role of the user in each of these concepts can differ quite a lot depending on the level of user initiative, involvement and ownership in the process on the one hand and the potential to generate innovation on the other hand. Therefore, a range of current concepts dealing with user-driven value creation and innovation will be examined on the basis of these two dimensions (see Table 12.2).

Based on these dimensions, the following classification of concepts, shown in Fig. 12.1, is suggested.

**Table 12.2** Dimensions of user-driven innovation

| | Low | High |
|---|---|---|
| Level of user focus | Concepts are marginally user-driven: level of user initiative and involvement is comparatively low. Potential innovations are 'owned' by the company, not the user (community) | Concepts are highly user-driven: level of user initiative and involvement is comparatively high. Potential innovations are 'owned' by the user (community), not the company |
| Innovation generation potential | Introduction of this concept can be an innovation; the potential to generate further innovations through these concepts is comparatively low $=>$ *innovative* concept | Potential to generate ideas and further innovations through this concept is comparatively high $=>$ *innovation* concept |

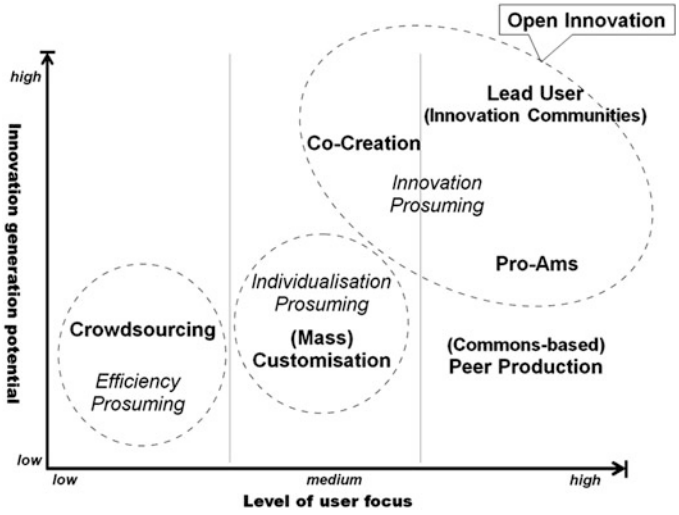


**Fig. 12.1** Classification of user-driven concepts

### *12.5.1 Concepts with Low User Focus*

These concepts involve the work of users/consumers. However, the initiative to create value comes from the companies and organisations involved. Concepts such as *efficiency prosuming or crowdsourcing* (Geser and Markus 2008; Howe 2006) mainly see the user as a part of the production process and not so much as a source of potential innovation. Companies working with such concepts mostly use consumers and the 'crowds' to outsource work to them, which formerly would have been the duty of the company itself or another company. The main advantages of such concepts are cost reduction and, to some extent, the integration of outside expertise. Although this may be a process innovation in its own right, the potential to generate innovations is comparatively low. Potential innovations are owned by the company.

Crowdsourcing has long been practised in tourism and cruise and has led to the involvement of customers and outsiders (crowds) in the service production process. The options range from introduction of self-service facilities (booking, check-in, restaurant, etc.) to outsourcing company tasks to guests, e.g. waste separation. More recently, crowdsourcing has become increasingly important for the marketing process. Tourism companies make use of online stock photography sites such as Fotolia (fotolia.com) that offer thousands of up-to-date crowdsourced professional pictures of destinations around the globe. For a very small fee these photographs can be used for brochures and other advertising products. Online travelogues containing interesting insights on destinations, cruises and excursions, which are written and posted by consumers, are integrated in the marketing efforts of tourism companies. Cruise passengers thus act as prosumers and play an important role in cruise tourism marketing and communication (Vogel 2005).

A recent survey on the travel review platform TripAdvisor (tripadvisor.com) shows that the motivations of tourists to generate content are very social and intrinsic as they are not related to economic incentives (Gretzel et al. 2007) – an interesting prospect for future crowdsourcing activities in tourism and cruise.

### *12.5.2 Concepts with Medium User Focus*

These concepts require more user/consumer involvement than the concepts mentioned before. However, the initiative to create value this way still mostly comes from the companies involved. The main focus is on the customisation and individualisation of goods and services. The **mass customisation** (Tseng and Jiao 2001) as well as the **individualisation prosuming** concept focuses on producing goods and services to efficiently meet individual needs on a large scale. The main role of the user in these concepts is to articulate and configure their needs – mostly with the help of the Internet. In a way, these concepts are based on a limited form of co-creation as users can only act and decide within a fairly narrow scope defined by the company. The role of the user is restricted to the production, consumption and usage process (Kristensson et al. 2008).

Almost 20 years ago, Auliana Poon (1993) already anticipated the end of mass tourism which until the early 1980s was perceived as best practice in the tourism industry. Mass products, defined by standardisation and rigid packaging, will increasingly be replaced by flexible, customised and specialised ones. The rise of cruise tourism in the 1990s can be seen as a good example of this new and flexible holiday production trend. New information technology and changes in consumer behaviour and characteristics are key drivers for the (mass) customisation trend in tourism (ibid.). Mass-customised travel packages are an attractive option for travel companies to allow more customer choice at a price which can still compete with standardised mass products. Truly customised holiday offers, which fulfil the specific needs of an individual customer, are at the same time an attractive and profitable niche for small or specialised tour operators and travel agents (as shown

in a study by Reichwald and Piller 2006). Customisation trends facilitated by the Internet can also be spotted in maritime tourism. The company 48 Options (48options.com), which offers sailing holidays, for example, operates an innovative interface dealing with a special form of maritime tourism that allows consumers interested in chartering a yacht in the Mediterranean to post their request and receive suitable offers from different companies within 48 hours.

Currently, a third wave of mass customisation can be witnessed as some companies started offering design, manufacturing and retail capacity to everyone. This encourages users not just to customise to fulfil their own needs, but to create niche markets and serve them efficiently (Piller cited in Scott 2008). This eventually leads to the concept of co-creation. The **co-creation** concept no longer limits the role of the user to being a mere consumer of a product. Instead, the user is seen as an active collaborator right from the beginning of the value creation process and can be involved in many ways (Kristensson et al. 2008). Therefore, the co-creation concept has a fairly holistic approach to value creation. According to Prahalad and Ramaswamy (2000, 2004), co-creation does not merely describe a trend of jointly creating products or services. The purchase of products is no longer simply a transaction but part of an experience. Companies counting on co-creation benefit from the user in a much wider sense than simply the generation of revenue, such as the generation of new ideas and knowledge or superior brand value and loyalty.

Over the last 5 years, co-creation has become an important concept due to the rise of the so-called Web 2.0. For instance, the Web 2.0 enables users to play an active role in many forms of marketing. As members of social and consumer communities consumers increasingly transform the product experience by acting as ambassadors, fans, consultants or reviewers of goods, services and entire companies. Companies can also use such communities and user-generated content to gain an insight into consumer needs, create new products or services and develop new markets. In the tourism industry – a prime example of an experience-based economy – collaboration with users and consumers plays an important role for innovation in tourism and cruise and is challenging the traditions of product and company-centric innovation (Binkhorst and Den Dekker 2009). Co-creation as a source of innovation in tourism and cruise can take shape in many different ways, ranging from regular monitoring of consumer comments published on tourism-related review websites and intensive focus group workshops with key customers to the co-creation of new products in collaboration with suppliers and regular customers (Shaw et al. 2011).

Another typical form of co-creation are online idea competitions (often including co-creation toolkits) run by companies for their own innovation needs or by specialised companies which host idea calls and competitions for different companies (Finzen et al. 2010). Such co-creation can also take place on the initiative of a third party: the travel guide publisher Lonely Planet recently carried out a successful call for ideas among its online community of frequent travellers and asked them to submit ideas on what needs to be improved at airports around the world (Lawford 2011). Co-creation platforms are mostly used for manufactured goods or high-tech products, but there are also online idea platforms operated by

service companies, such as "My Starbucks Idea" operated by the Starbucks Corporation (Riedl et al. 2009). Such platforms could also offer potential for co-creation attempts in the tourism sector. For cruise lines, which can usually count on a fairly large number of repeaters and fans, such online idea platforms may prove to be a valuable way to generate new ideas.

### *12.5.3 Concepts with High User Focus*

These value creation and innovation concepts require both a high level of user involvement and user initiative. Companies and their initiative play a comparatively minor role or even no role at all in each of these concepts which are truly user-driven. **Commons-based peer production**, also known as 'social production' or 'mass collaboration', describes the production of goods and services through self-organising communities of individuals who come together to produce a shared outcome (Benkler 2006). With its characteristics being openness, peering and sharing it forms the backbone of the open source economy – whereby open source software is the most popular outcome (Reichwald and Piller 2009) – which focuses on a decentralised social production and a sharing of resources as well as outcomes. The production of encyclopaedias, news and commentary or immersive entertainment is also a common field of peer production (Benkler 2006). Travel wikis, not-for-profit platforms for online travelogues or photo sharing sites are typical examples in the tourism context and contain a vast amount of peer-produced information on travel, holidays and destinations. Increasingly, travel and tourism-related companies are benefiting from the willingness of people to peer-produce content on the web. Peer-produced contents, such as reviews, suggestions, photos and videos, are increasingly becoming part of the content offered by travel and tourism booking sites (Schemmann 2011) and seen as a cost-effective way to enhance marketing in travel and tourism (Litvin et al. 2008). Independent peer-rating platforms (such as cruisecritic.com) could eventually become a competition for professional tourism services rating systems, such as the *Berlitz Complete Guide to Cruising & Cruise Ships*. At its core, the commons-based peer production concept is more of an *innovative* concept than an *innovation* concept.

Within these peer production communities one can often find individuals who blur the distinction between amateurs and professionals. These **professional amateurs (Pro-Ams)** have professional standards and knowledge and are no longer satisfied with consuming goods or services (Leadbeater and Miller 2004). Instead, they also involve themselves in the production and innovation of goods or services. The development and success of the computer operating system Linux is only one example that shows the capability of such Pro-Am communities. The travel technology company Amadeus describes the rise of so-called *Amateur-Expert Travellers*, who are not only frequent travellers but who are also frequently using the Internet to gather information on tourism services, destinations and attractions. Therefore, such expert travellers can become more knowledgeable than the service

providers themselves (Amadeus IT Group 2010). Among these empowered users of travel and tourism services there will also be individuals who can play an important role as Pro-Ams in production and innovation.

Innovating users tend to be **lead users** (Hippel 1988) who have needs that foreshadow general demand in the market place. Lead users are highly motivated as they expect to benefit substantially from the solution to their needs. Often, lead users innovate collaboratively in lead user innovation communities, and the Internet plays an increasingly important role in connecting these people (Hippel 2005). Lead users can be both other companies in the value chain (B2B customer) or end users (B2C customer). Although the lead user concept has mostly been assessed for industrial and high tech goods as well as extreme sports communities, the value and importance of lead users for innovations in tourism has been theoretically recognised and described (Bidmon and Matzler 2006). One of the main challenges will be to identify relevant lead users as their background and interests can be very diverse.

Most of the concepts mentioned above play an important role in the **open innovation paradigm** defined by Henry Chesborough (2006, 2007). They challenge the traditional understanding of innovation, which is mostly in line with the closed innovation paradigm. The open innovation paradigm is based on the assumption that new ideas and useful innovations are not developed solely within a company, such as by a company's R&D department. Instead, companies should also make use of external ideas and innovations which might, for example, be created by users, suppliers or competitors.

Von Hippel states that an innovation can be seen as a **user innovation** when the developer expects to benefit from using it. On the other hand, he defines **manufacturer innovation** as innovations where the developer benefits from selling it (Hippel 2005). However, as all of the concepts described require the – mostly substantial – involvement of users and consumers they are considered to be **user-driven innovation concepts**.

## 12.6 Conclusions and Limitations

Henry Ford once said "If I had asked people what they wanted, they would have said faster horses". Although Ford may have been right in many ways, no organisation or human being can be omniscient. Yochai Benkler already pointed out in *The Wealth of Networks* that our world is becoming so fast, complex and networked that no organisation or company can have all the answers needed inside (Benkler 2006). Current research shows that user-driven innovation is a much more extensive concept than simply asking customers what they want, and it demonstrates the value that lies in opening up the innovation process and involving outsiders such as users. Instead, users can be involved in innovation in very different ways as the classification of concepts shows. This, however, requires a partially different attitude towards innovation and further research to create a better understanding of user-driven innovation in cruise tourism.

### 12.6.1 Change of Attitude?

Companies that want to make use of the open innovation concept need to change their attitude from a negative 'not invented here' to an open and enthusiastic 'proudly found elsewhere' (Hück et al. 2009). A 'not invented here' syndrome could be one of the reasons why companies are reluctant to incorporate the user as well as other external partners in the innovation process. Concepts with a high user focus in particular require a very open attitude towards innovation. Further research is needed to gain a better understanding of innovation strategies and processes in the cruise industry.

### 12.6.2 Afraid of Opening Up?

Incorporating the user in open innovation concepts can only be an option for companies that are not afraid to openly share information and knowledge with outsiders as well as bringing in – perhaps even radical – ideas from outside. In particular when using Web 2.0 sites, which are open to all Internet users including competitors, openness may become an issue. At the same time, concepts with a high user focus are, for the most part, difficult for the company to manage and control. On the other hand, concepts with low and medium user focus show that there are ways to incorporate users in innovation in ways that are still company controlled.

### 12.6.3 Hype or Hope?

As described above, companies often try to involve users via the Internet and, more specifically, via Web 2.0 sites. There currently is quite some excitement on the part of professionals and academics alike when it comes to the potential of the so-called Web 2.0, which enables billions of users around the globe to articulate themselves via user-generated content and share their opinions in online social networks. During the recent ENTER 2011 conference, the world's largest eTourism conference, 25 of the 62 research papers presented focused on the influence of user-generated content and social media on consumer behaviour, marketing and sales, brand development and reputation building. There is hope that the vast amount of free, unprompted and 'unbiased' user-generated content available as well as the potential to directly communicate and network with users will also help to incorporate the user in the innovation process. Empirically however, there is a lack of evidence that innovation in the cruise industry can be enhanced by using such content.

### 12.6.4 Which Users are Useful?

Not all users are the same. This is also true when it comes to innovation. Some users, such as lead users and Pro-Ams, have been identified as being particularly important for the generation of ideas and potential innovations. But where can cruise and tourism companies find such users and how can their knowledge and initiative be used? So far, there are hardly any scientific insights available to answer that question.

### 12.6.5 Learn from Other Industries?

User-driven innovation has hardly been assessed in the service industries. Most of the research carried out in this area focuses on IT software as well as manufactured goods, ranging from medical equipment to (extreme or trend) sports equipment. Although the academic interest has increased in the last 5 years, research on user-driven innovation in services or service industries is still fairly limited in number and scope. Nevertheless, by using an assimilation approach it can be argued that theories and research methods employed in other industries can also be applied to services, and the findings may – up to a certain extent – also be used in cruise tourism.

Different user-driven innovation concepts have been described here with respect to both their level of user initiative, involvement and ownership in the (new) value creation process (here referred to as *user focus*) and the *innovation generation potential* that may be derived from the respective concepts. Based on these two dimensions, a model is proposed that opens up a spectrum of very different ways of how users can be involved in innovation. Although all of these concepts may lead to new ways of value creation, not all of them will become a source to generate new ideas for further innovations.

Examples show that different concepts have already been put into practice in tourism and cruise. This, however, can only be considered a starting point for future research regarding the user's role in this industry. Overall, it needs to be said that there still is a general lack of research when it comes to innovation in cruise tourism. As to the scientific assessment of user-driven innovation concepts in this field, the research situation is even more serious. This is surprising as many user-driven innovation concepts – in particular those with a low or medium user focus – are already applied in many areas of the cruise and tourism industry. However, as there is a lack of research regarding innovation in service industries in general, this may not be a tourism-specific issue. The application potential of concepts with a high user focus seems to be large and mostly untouched. As these concepts require a very open – and probably new – understanding of innovation, more research is needed to tap the full potential of such concepts for the cruise industry.

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# Part III
# Cruise Research and Education

# Chapter 13
# The 'Cruise Ship Railing Dance': Conducting Academic Research in the Cruise Domain

**Alexis Papathanassis, Imke Matuszewski, and Paul Brejla**

**Abstract** Cruise-related research is regarded as interdisciplinary, pre-paradigmatic. As a research domain, cruises are characterised by high specificity and scarcity of available documented research. Thus, transferring methodological approaches from a variety of academic disciplines is inherently associated with epistemological risks and practical obstacles for cruise researchers. This paper synthesises research methodologies commonly applied in the cruise sector, ranging from conventional methods (hypothesis testing, case-studies, qualitative interviewing) to emerging, non-traditional approaches (e.g. web-based data analysis). Reflective accounts and examples are utilised in order to discuss their applicability and relevance in the chosen context. On this basis, requirements for cruise-adapted research methods are drafted and recommendations are made.

## 13.1 Introduction and Background

There is an anecdote of a cruise passenger dancing alone on the deck of a cruise ship, while the rest of the guests were inside dancing in pairs. When asked on what is the point of dancing alone, at a place where nobody could see him, the passenger replied that given the large amount of alcohol consumed, this was the only suitable location to do so; simply because there was a railing to hold on to. Academic

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research lacking methodological rigour, practical relevance and generalisability is somewhat comparable to the 'railing dance'; fun for the researcher, but otherwise pointless and insignificant for the rest of the cruise community. Papathanassis and Beckmann (2011) conducted a systematic review of cruise-related literature published between 1983 and 2009 in order to discuss the progress and assess the status of cruise research. More specifically, the authors analysed the available publication meta-data in order to establish the degree of fragmentation and managerial focus pertaining academic research in cruise tourism. Their findings suggested that despite the exponential growth of cruise related publications over the last decade:

> One could argue that the issues surrounding tourism research (i.e. fragmentation, managerialism) are intensified in the context of cruises due to its inherent characteristics (p. 154). . .
>
> Perhaps, the observed degree of fragmentation is merely a symptom of an evolving research field (p.162). . .
>
> Indeed, cruises are primarily perceived as an economic phenomenon explored from a managerial-business perspective. Nevertheless, a corresponding methodological limitation is not visible (p. 163).

In an attempt to contribute to the development of cruise research the authors concluded by constructing and proposing a unifying thematic framework as an orientation aid for future research. In our view, this abstract level of advice is still missing the specificity required to address the empirical challenges facing cruise researchers. Returning to the 'railing dance' analogy, a deck plan has been constructed. The 'lone dancer' may well be able to find his way to the rest of his fellow travellers, but nevertheless still needs to hold on to the railing. Thus, the 'intoxication' needs to be addressed first. In our view, methodological rigour and the factors preventing it need to be more extensively addressed. In accordance with the above, this paper aims to critically examine the methodological specifics of published cruise research. Following this examination, requirements for cruise-adapted research methods are drafted and implementation-related recommendations are made.

## 13.2 Analysis and Discussion

Papathanassis and Beckmann (2011) have shown that research approaches in the cruise industry are fairly balanced; out of 145 relevant papers, equal amounts were of a qualitative, quantitative and conceptual/descriptive nature (Table 13.1).

### *13.2.1 Overview: Quantitative Versus Qualitative Approaches*

The analysis of the 45 quantitative papers revealed that the vast majority utilise descriptive statistics (e.g. Douglas and Douglas 2004; Teye and Lecrerc 1998; Marti 1992). In terms of primary research the predominant data collection method

**Table 13.1** Distribution of cruise-related published papers according to the methodological paradigm

| Research focus | No. of published articles | Proportion (%) |
|---|---|---|
| Conceptual/discussion papers | 45 | 31 |
| Qualitative research papers | 45 | 31 |
| Quantitative research papers | 45 | 31 |
| Book reviews, conf. reports and editorials | 10 | 7 |
| *TOTAL* | *145* | *100* |

Source: Adapted from Papathanassis and Beckmann (2011)

involved structured questionnaire surveys conducted in the scope of a single cruise or cruises of the same operator. The average sample size for cruise surveys was 340 respondents. Secondary data such as economic indicators, reported incidents, websites and brochures were also analysed quantitatively, producing descriptive statistics.

Measures of statistical comparison such as ANOVA, Chi-Square, Cluster Analysis, Z- and T-Tests were also frequently employed; mostly comparing voyages of the same vessel (e.g. Brownell 2008; Cramer et al. 2006; Sirakaya et al. 2004; Petrick 2003; Miller et al. 2000; Moscardo et al. 1996). The average sample size for these was 1,188 respondents. There are also cases where secondary sources were utilised, mainly involving the mining of data from larger travel market studies or medical records. Finally, statistical modelling and association testing methods such as Wald Test, Univariate Analysis and Exploratory Factor Analysis were rarely utilised (e.g. Hung and Petrick 2010; Jones 2007; Gabe et al. 2006; Marti 2004). Respondents mainly originated from single port visitors, single cruise voyages and even from undergraduate students. The average sample size for associative research was approximately 350. Apart from structured questionnaire surveys, semi-structured interviews have also been complementally utilised to interpret the results.

On the other side of the spectrum, the analysis of the 45 qualitative papers revealed a balanced application of the most commonly implemented methods in qualitative research such as interviewing (e.g. Gibson 2008; Szarycz 2008; Stewart et al. 2006; Toh et al. 2005; Testa 2004; Miller and Grazer 2002) and participant observation (e.g. Jaakson 2004; Thompson 2002, 2004; Tracy 2000). Moreover, there are instances of other qualitative approaches such as case studies (e.g. Dwyer and Forsyth 1996; Foster 1986), secondary data analysis (e.g. Dev 2006; Dale and Robinson 1999; Douglas and Douglas 1997) as well as critical incident analysis (e.g. Petrick et al. 2006).

As the brief overview suggests, ground-breaking research methods in cruise tourism are almost absent. This is somewhat surprising, taking the following obstacles for academic research in the industry into account.

### *13.2.2 Key Issues*

#### 13.2.2.1 Data Availability, Access and Opportunism

The cruise phenomenon takes place in a rather controlled environment (Weaver 2005; Jaakson 2004). Thus, accessing this environment needs to take into consideration its controls; or more specifically those who control it. Getting on board to conduct academic research requires the permission of the cruise operator. Distributing questionnaires requires access to proprietary customer databases and conducting interviews or applying ethnographic methods requires consent of those being observed and the cruise operator. Cruising is primarily a business phenomenon and its 'gate-keepers' prefer to grant access to research serving managerial motives (Papathanassis and Beckmann 2011).Thus, academic research that does not primarily focus on economic advantages (e.g. sociological and psychological studies) is difficult to conduct. Consensual issues might be at its extreme in studies focusing on employment issues because living and working conditions on board cruise ships have been severely criticised. In these cases, ethical harm has to be considered carefully (i.e. would the covert presence of a researcher on board cause disadvantages for various target groups).

The predominance of descriptive statistics in quantitative cruise research papers and the corresponding sample origins (i.e. single cruise or single cruise operator) suggest a research design serving primarily market research purposes. In other words, the research is driven by a narrow business interest to understand the composition and preferences of a particular set of consumers. Testing hypotheses in this context is limited to generalising the composition and preferences of cruisers. However, understanding who the customers are and exploring their preferences does not readily shed light on determinants and causalities of cruise-related phenomena.

On the other hand, survey research serving managerial interests still represents a passport for the 'cruise research gate'. Gaining access to the cruise domain via serving market research objectives enables the researcher to collect data, potentially containing answers to academically-relevant questions. In this case, the collected data determines the research question(s). In turn this poses a limitation on the scope and type of research questions addressed and leads to repetition (e.g. Petrick 2004; Petrick and Sirakaya 2003) and data-recycling (e.g. Hung and Petrick 2010, 2011).

Particularly for qualitative inquiry the objective nature of cruise ships is a challengingprospect. Accessing cruise ships is complicated by the geographic nature of ships, their sea-based mobility (Weaver 2005) as well as the contained space on board. Related challenges are research resources. These consist of a financial and temporal nature, and access issues frequently arise owing to the requirements of covering costs of accommodation on board or for travel to cruise ship ports of call. Moreover, the duration of data investigation, which in extant studies to date appears to be remarkably short is problematic, leading to the issue of data saturation, and specifically highlighting the common question of 'how much

data is considered to be enough'? Further, the cruise industry is marked by high fluctuation, both in terms of employees and passengers, with the majority of people spending short periods of time on board, making longitudinal studies difficult. Even when researchers obtain consent to spend a certain amount of time on board, the objective nature of cruise ships greatly determines the research scope; due to the size of the ships and limited communication facilities (e.g. mobile phone availability/access, costs) employees and passengers may be difficult to contact and in longitudinal studies in particular researchers may encounter problems trying to reconnect with participants.

Qualitative inquiry is still lacking, particularly with respect to longitudinal and ethnographic studies. This is surprising considering the variety of advantages these studies offer: (1) Qualitative inquiry is comprised of 'grounded' data collection and analysis. Taking the challenging characteristics of the industry into consideration, a variety of theoretical studies conducted in different contexts might not be applicable to the cruise industry. According to Johns (2006) it is imperative to focus on research settings and focus on the impact of contextual factors on research results instead of accepting taken for granted outcomes (e.g. friendly staff leading to increased sales). It is therefore worthwhile exploring qualitative studies in the cruise industry in order to draw closer conclusions about the nature of contextual issues such as the challenging context of cruise ships. (2) Qualitative inquiry offers rich data which oftentimes aim to create an understanding of complex situations. Studies therefore are "able to deal with the intricacies of a situation and do justice to the subtleties of social life" (Denscombe 2003, p. 280) rather than testing hypotheses. These data offer space for a multitude of explanations from a variety of people, taking the active role of the researcher into account. Nevertheless, qualitative research in the cruise industry has its pitfalls (Denscombe 2003): Taking the wide array of cruise ship types into consideration, studies are difficult to generalise and they are always highly linked to ontological and epistemological attitudes of the self of the researcher. Finally, research findings are at risk of being portrayed descriptively, thus oversimplifying the complex nature of the situation.

**Survey Data Versus Research Data: An Example**

Simply-stated, knowing that 80 % of cruisers are willing to pay more for a cabin with a balcony, does not explore the cruisers' value perceptions; nor does it outline the factors determining their behavior in the physical on board environment. Although such a finding can be interpreted serving as supporting evidence or triggers for further scientific analysis, they are incomplete when it comes to revealing associations and / or causalities. For example, the popularity of cabins with balconies, could be interpreted as willingness to spend more private time (or having the possibility to do so) during a cruise due to overcrowding in public areas or ports. Even though this contention is supported by the data it is neither tested nor proven.

#### 13.2.2.2 Sampling and Representativeness

Statistical inferences for the entirety of the cruiser population or cruise staff, at a national or international level are obviously questionable; simply because of the extent to what passengers or staff of a particular cruise operator or cruise journey, are typical for the population as a whole. On the other hand this could be seen as a general limitation of quantitative survey research and is not unique to the cruise domain. Nevertheless, an explicit population definition is often not included in the titles of cruise research papers and this type of inherent limitation is not sufficiently underlined (or even mentioned) in the papers' texts. This in turn could be misleading, enabling a larger than appropriate generalisation scope for the less critical reader.

Aside the fallacy of generalising for an entire cruiser population, the statistical inference for its subsets is also questionable. Partly related to the challenge of data access, a truly random selection of respondents for surveys is hindered by the nature and limitations of available sampling frames. Random sampling requires access to a so-called 'complete' sampling frame, where each and every member of the population is represented once and has an equal and known probability of being selected. The reality of interviewing passengers on board or at port usually involves randomly selecting respondents who are physically-present and willing to cooperate. Assuming that the selection is unbiased (e.g. ask every third passer-by) the incompleteness of the sampling frame (e.g. passengers who decided to stay on board or passengers who are currently in their cabins) challenges the condition of 'respondents having an equal and known probability of being selected'. There is of course the option of distributing questionnaires in the cabins and common areas. Here, the condition of having 'each member of the population represented once in the sampling frame' is challenged. More often than not cabins are occupied by more than a single person and passengers occupy their cabins as well as the public areas. Utilising the deck plan as a sampling frame entails the risk that a single person fills in more than one questionnaire (e.g. on behalf of their spouse). Finally, one could randomly select respondents from passenger or booking lists and contact them directly. This is arguably not a practical option as cruise operators and travel agents are rather protective of their customer data and strive to prevent 'unnecessary disturbance' from external parties. This is especially the case for academic studies which are not perceived as directly and managerially relevant.

Another representative issue is of epistemological nature focusing on the role of the researcher. Whereas quantitative research typically enables the researcher to maintain a detached view from the sample studied, qualitative research typically focuses on reflexive accounts, wherein the researcher begins to analyse their underlying assumptions. This is particularly true of methods like ethnography which require the researcher to be immersed in the field. Questions such as 'What is the role of the researcher?', 'What influence do I have on my findings?', 'Can I act solely as researcher and remain detached from the population being studied?', 'How do I deal with friends in my sample?' are common companions of qualitative research. In addition, the multicultural environment fosters cultural difficulties;

how people construct realities might be related to their natural culture which might differ from the cultural values of the researcher. According to Lukas (2009, p. 66):

> a cruise ship represents nearly the full range of differentiation in the global labour market: low paid staff from developing countries below deck, up to quite highly paid officers on the bridge, which is not only a broad scope of professions and skill levels, but represents a widespread multicultural arena

highlighting a great diversity of employees and the need to specify participants studied in this environment, particularly in regard to employment issues.

### *13.2.3 The Contribution and Potential of Academic Research in the Cruise Sector*

Despite the above mentioned obstacles, academic inquiry in the cruise industry offers potential research possibilities. According to Klein (2005, p. 192)

> on an academic level, the cruise industry is interesting as a model (on a small scale) of how corporations behave and how they wield influence. As corporations and industries get larger they are more difficult to track and analyse than the cruise industry.

Gibson (2006, p. 100) interprets the contained space of a cruise ship and describes the nature of a cruise ship as a *"society in microcosm"* and Klein (2002, p. 59) elaborates further:

> a cruise ship is a microcosm of larger society. The problems that are common on land follow you onto the seas.

Although generalisations from cruise ships towards larger society are questionable, there may be opportunities in terms of employment issues; to show similarities between cruise ship employees and workers in mining camps, island resorts and oil rigs (due to the isolated and contained working environments), and similarities with employees in resorts, restaurants and theme parks (Douglas and Douglas 2004).

Generally, qualitative inquiry in the cruise industry is promising but there is still ample room for methodological improvement. Rich descriptions of situations from a variety of perspectives (passenger, employee, organisation) showing high validity (minimal impact of the researcher on the research setting), would offer a greater understanding of the complexity of the industry. Methodologies such as action research might help to narrow the gap between academics and practitioners and furthermore grounded theory approaches might be useful for generating theory focused on real-life issues.

However, in considering the above, one may be tempted to question the relevance of cruise-related quantitative research altogether. Indeed, what is the point of conducting quantitative studies if one cannot sufficiently generalise their results? If one accepts a synthetic model of knowledge creation, then quantitative research could be seen as a valuable and complementary component for understanding cruise-related phenomena. The usefulness of quantitative research extends beyond

mere statistical inference and generalisation. It may complement, and be complemented by qualitative approaches as well. The statistical testing of hypotheses can serve as a starting point for a more in-depth interpretation and the subsequent theoretical development. Similarly, quantitative results supported by qualitative findings strengthen their validity and generalisation potential. This argumentation leads to a call for more methodological triangulation in the cruise research domain. Simply stated, the more methodological approaches support a particular finding, the more likely its validity is.

## 13.3 Emerging Approaches: Cruise Research 2.0 Example

With the beginning of the World Wide Web, the nature of data collection has changed. In other words; various alternatives to traditional data collection methods emerged. The following example highlights one possibility for research in the cruise sector which is not necessarily constrained to this domain. Nonetheless, it addresses consensual issues that are particularly relevant in the cruise industry.

### *13.3.1 The Potential of Opinion Portals*

Publishing consumer experiences about products and services has increased with the introduction of the so-called Web 2.0. (Illum et al. 2010; Haythornthwaite and Gruzd 2007).In the tourism industry the most prominent examples include websites like Expedia and Trip Advisor and cruise specialised websites like CruiseCritic.com (Hao et al. 2010). Travellers use these published experiences to guide their future booking decisions that can be understood as a form of electronic word of mouth (Smith 2009; Litvin et al. 2008). Through this process customers change their role from being receptive spectators to active participants, thus bargaining power in the travel market is increasingly shifting towards the consumer (Burton and Khammash 2010; Akehurst 2009; Smith 2009; Porter 2001). Assuming that listening to what customers say is beneficial for cruise operators, Web 2.0 applications offer an enormous potential for academic research due to data availability. Since this idea of a 'listening economy' challenges traditional mass communication models, it will consequently have an impact on how market research is conducted (Smith 2009; Hoffman and Novak 1996).

### *13.3.2 Online Research Data Mining: Cruise Critic Example*

The subsequent sections describe and give hands-on examples on how data pulled from the holiday review platform CruiseCritic.com can be used for tourism research and marketers alike.

#### 13.3.2.1 Sampling

The experiences expressed in holiday reviews on opinion portals enable researchers and tourism organisations alike to gain access to valuable insights and broad sampling frames that have previously been difficult or impossible to obtain (Akehurst 2009; Carson 2008).Some even argue that using user-generated content as data source in marketing studies might achieve higher representativeness than traditional paper-based surveys (Akehurst 2009; Smith 2009; Bulkeley 2005). Instead of using a survey, user-generated data can be retrieved using a methodology called Web Content Mining which automatically pulls large amounts of unstructured data from hypertext documents in the World Wide Web (Facca and Lanzi 2005). Web content mining is the procedure of obtaining significant information by instructing machines through algorithms to extract data from the World Wide Web (Dreyfus 2008). It also refers to a range of methods dealing with the *"[...] extraction of interesting knowledge from the World Wide Web"* (Facca and Lanzi 2005, p. 225).

#### 13.3.2.2 The Data Source

CruiseCritic.com is a holiday review platform for veteran and first-time cruisers, or as its operators state:

> Five million visitors strong, Cruise Critic is a critically acclaimed interactive community comprised of avid and first-time cruisers who enjoy the fun of planning, researching and sharing their passion for cruising. (Cruisecritic.com 2011)

The most traffic on CruiseCritic.com originates from English-speaking countries, with the majority of users coming from the United States (59.8 %), Canada (7.3 %), and India (6.4 %) (Alexa.com 2011). Figure 13.1 portrays a holiday review published on CruiseCritic.com. This cruise review holds a textual description and rating of several features of a cruise as well as background information such as the ship's name and cruise line, the name of the embarkation port, and the date of the cruise.

#### 13.3.2.3 Retrieval and Processing

To retrieve, store, and analyse large amounts of cruise reviews published on the holiday review platform CruiseCritic.com, an experimental tool running on the Unix command line under Mac OS X had been developed during the period between January 2011 and April 2011 (Fig. 13.2).

Using a set of retrieval and processing algorithms implemented in the programming language Python, a large number of holiday reviews contained in HTML documents were pulled from CruiseCritic.com and processed so that each aspect

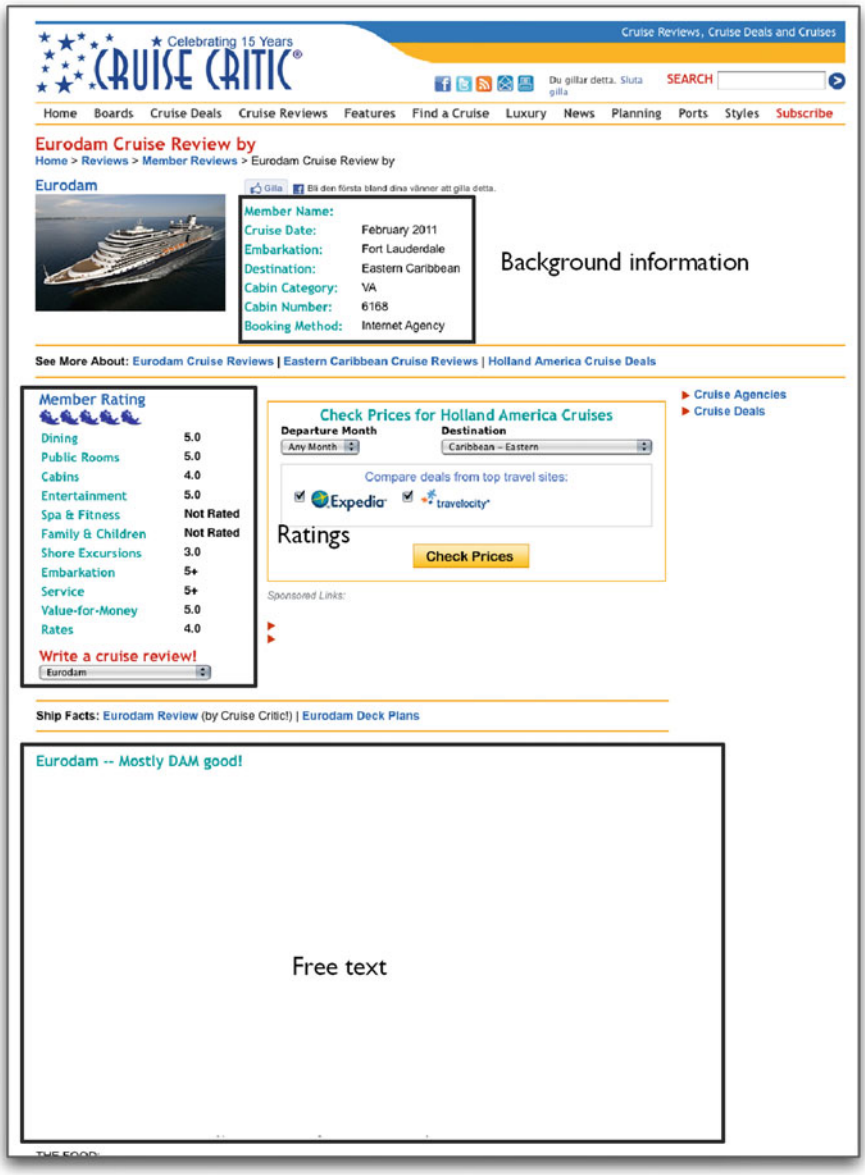


**Fig. 13.1** A holiday review on CruiseCritic.com (Source: Author's screenshot)

from each review was extracted and brought into a tabulated form. The process of retrieval and processing was broken down into three steps:

1. Crawling
2. Pre-Processing
3. Storage

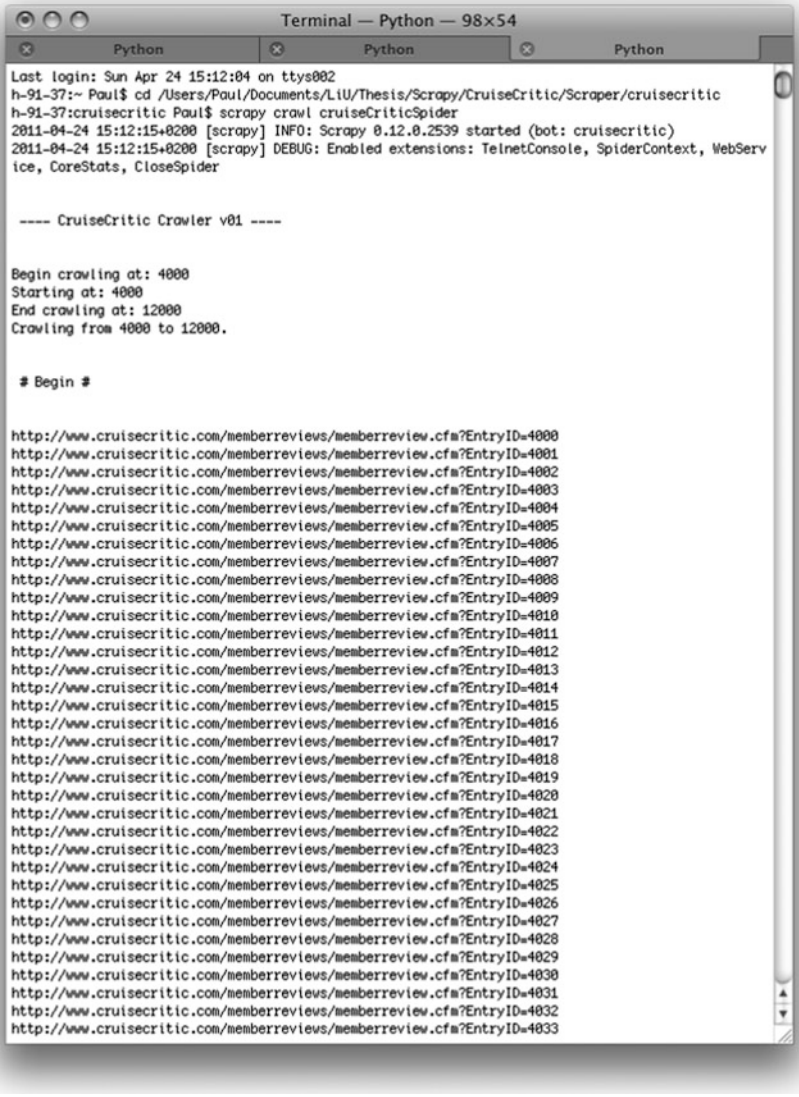


**Fig. 13.2** The web content mining tool in action (Source: Author's screenshot)

First, a large amount of holiday reviews was pulled from the Web according to a set of rules by instructing a Web crawler or spider (Manning et al. 2009). The crawler used for this task was the 'Scrapy' framework, an

> application framework for crawling web sites and extracting structured data which can be used for a wide range of useful applications, like data mining, information processing or historical archival. (Scrapy Development Team 2011)

**Table 13.2** Extracted variables and data types (Source: Author's CruiseCritic.com content analysis)

| | Aspect | Data type |
|---|---|---|
| Member name | Background | Text |
| Cruise date | Background | Date |
| Embarkation | Background | Text |
| Destination | Background | Text |
| Cabin category | Background | Text |
| Cabin number | Background | Text |
| Booking method | Background | Text |
| Overall rating | Rating | Scale (6 p.) |
| Dining | Rating | Scale (6 p.) |
| Public rooms | Rating | Scale (6 p.) |
| Cabins | Rating | Scale (6 p.) |
| Entertainment | Rating | Scale (6 p.) |
| Spa and Fitness | Rating | Scale (6 p.) |
| Family and Children | Rating | Scale (6 p.) |
| Shore excursions | Rating | Scale (6 p.) |
| Embarkation | Rating | Scale (6 p.) |
| Service | Rating | Scale (6 p.) |
| Value for money | Rating | Scale (6 p.) |
| Rates | Rating | Scale (6 p.) |
| Review text | Free text | Text |

The result of this phase was a local repository of raw HTML documents containing holiday reviews. During the second step, the retrieved reviews were pre-processed. In this phase of pre-processing, noise was removed and aspects of each review (Table 13.2) were extracted and transformed into a tabulated form. Table 13.2 shows the variables and data types that became available.

Thirdly, tabulated variables were stored in a local repository in the form of a CSV document that was ready for further statistical processing using software like R, SPSS, or Excel (Fig. 13.3).

During April 2011, a total number of 34,425 unique reviews comprising opinions on 210 ships, 27 cruise lines written by 27,712 authors were retrieved using the aforementioned process. To preserve the privacy of the reviewers, user names were removed and replaced by a randomly generated unique identifier (Table 13.3).

#### 13.3.2.4 Analysis

After retrieving, pre-processing and removing missing variables, the data set comprised 17,066 cases.

Table 13.4 demonstrates how some aspects comprised in a holiday review can become variables that can be processed with statistical software.

Table 13.5 shows how variables extracted from CruiseCritic.com can be used for further calculations like correlations using software like R or SPSS.

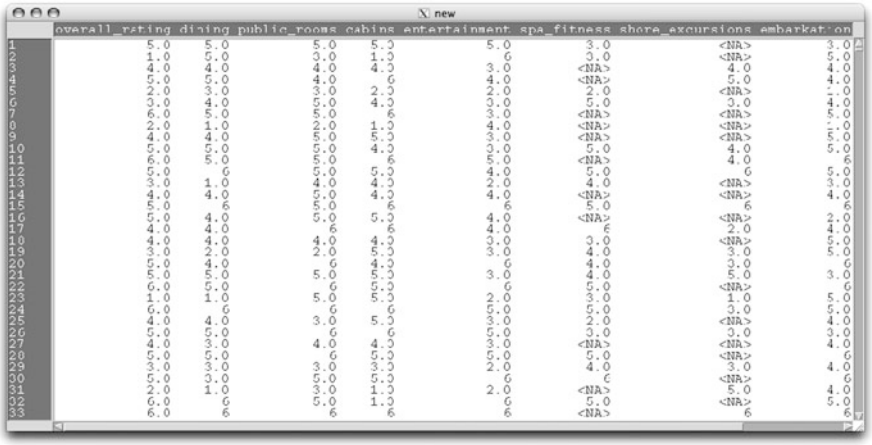


**Fig. 13.3** Retrieved reviews in a tabulated form (Source: Author's own screenshot)

**Table 13.3** Sample size (Source: CruiseCritic.com data set)

| Table | Size | Identifier |
|---|---|---|
| Reviews | 34,425 | Entry ID |
| Ships | 210 | Ship name |
| Cruise lines | 27 | Cruise line name |
| Reviewers | 27,712 | User name |

**Table 13.4** Descriptive statistics for all rating items (Source: CruiseCritic.com data set)

| Item | Mean | Median | Std | N |
|---|---|---|---|---|
| Overall rating | 4.411315 | 5 | 1.282121 | 17,066 |
| Dining | 4.217919 | 4 | 1.416254 | 17,066 |
| Public rooms | 4.617719 | 5 | 1.057669 | 17,066 |
| Cabins | 4.547521 | 5 | 1.169441 | 17,066 |
| Spa and fitness | 4.292687 | 4 | 1.144959 | 17,066 |
| Shore excursions | 3.987050 | 4 | 1.310467 | 17,066 |
| Embarkation | 4.606176 | 5 | 1.375055 | 17,066 |
| Service | 4.667585 | 5 | 1.386157 | 17,066 |
| Rates | 4.270831 | 4 | 1.290553 | 17,066 |
| Entertainment | 3.990039 | 4 | 1.340271 | 17,066 |

Not only the rating aspects can be extracted and analyzed—with the help of a range of methodologies related to the field of Natural Language Processing, the textual content of reviews can be analyzed and opinions or sentiments can be mined and brought into relation with other aspects (Haythornthwaite and Gruzd 2007; Pullman 2005; Russell 2011).

**Table 13.5** Correlation matrix for rating aspects (Source: CruiseCritic.com data set)

| | $R_{ove}$ | $R_{din}$ | $R_{pub}$ | $R_{cab}$ | $R_{ent}$ | $R_{spa}$ | $R_{sho}$ | $R_{emb}$ | $R_{ser}$ |
|---|---|---|---|---|---|---|---|---|---|
| **$R_{ove}$** | 1 | | | | | | | | |
| **$R_{din}$** | 0.73*** | 1 | | | | | | | |
| **$R_{pub}$** | 0.67*** | 0.53*** | 1 | | | | | | |
| **$R_{cab}$** | 0.59*** | 0.45*** | 0.54*** | 1 | | | | | |
| **$R_{ent}$** | 0.59*** | 0.50*** | 0.48*** | 0.35*** | 1 | | | | |
| **$R_{spa}$** | 0.57*** | 0.44*** | 0.54*** | 0.43*** | 0.45*** | 1 | | | |
| **$R_{sho}$** | 0.50*** | 0.36*** | 0.37*** | 0.33*** | 0.36*** | 0.37*** | 1 | | |
| **$R_{emb}$** | 0.43*** | 0.30*** | 0.37*** | 0.28*** | 0.26*** | 0.30*** | 0.27*** | 1 | |
| **$R_{ser}$** | 0.73*** | 0.64*** | 0.54*** | 0.48*** | 0.47*** | 0.46*** | 0.38*** | 0.33*** | 1 |
| **$R_{rat}$** | 0.70*** | 0.55*** | 0.50*** | 0.47*** | 0.45*** | 0.47*** | 0.43*** | 0.34*** | 0.53*** |

***Correlation is significant at the 0.001 level (two-tailed). N = 17,066

## 13.4 Discussion and Synthesis

Having provided an overview on the state and issues pertaining research in the cruise sector, we identified a number of challenges that need to be addressed. These can be summarised under the headings: generalisation (of findings), data access and availability, and perspectives (of researchers).

### *13.4.1 Generalisation and the Case for Methodological Triangulation*

Methodological triangulation, defined as the interaction of qualitative and quantitative methods, can be used for validating the results of a particular approach (e.g. using in-depth interviews to interpret the findings of a survey) or to increase validity through applying multiple data collection methods (e.g. qualitative interviews and focus groups). From a wider perspective, triangulation enables a more holistic understanding of a particular domain and can lead to novel conceptual and research frameworks (Olsen 2004). As to facilitate methodological triangulation the following is required:

#### 13.4.1.1 Methodological Pluralism

As demonstrated in Sect. 13.2.2 the internet could be seen as an easily-accessible global sampling frame, somewhat bypassing the data access and representative issues already mentioned. Similarly, online data mining technologies significantly reduce the data collection costs. Setting aside the limitations and challenges of this example, it demonstrates the potential of methodological innovation for cruise research. Nonetheless, innovation in the methodological domain requires, like any other innovation, a facilitating environment. Do the credo of 'publish or perish'

and the allure of high rejection rates in published tourism research provide enough room for methodological innovation? Methodological rigour and transparency are essential for publishing in scientific journals. Based on the predominance of these criteria, reviewers tend to reject non-established approaches (e.g. action research) or unconventional expressions/adaptations of a particular methodology (e.g. online data mining—see Sect. 13.3). This may well constitute a disincentive for the methodological innovation. This is particularly relevant for cruise and tourism research due to the characteristics of the corresponding publication landscape. According to Papathanassis and Beckmann (2011), over half of the cruise-related publications are published in a small number of leading tourism journals. The lack of specialised cruise tourism journals in conjunction with the high rejection rates of tourism journals, implicitly 'punish' cruise-specific methodological experiments and encourage the separation of qualitative and quantitative research paradigms.

#### 13.4.1.2 Research Continuity

Continuing from the previous point, triangulation within the length restrictions of a single research paper is likely to necessitate trade-offs (Sayer 1992), eventually leading to a rejection decision. The development of cruise-specific journals with explicit research agendas encompassing different types of non-traditional, publishable contributions could encourage experimentation and data-sharing amongst researchers. Moreover, refraining from the notion of a 'complete research paper', whilst recognising the publication value of the 'incomplete' research in progress would support thematic continuity and collaborative dialogue over time.

### *13.4.2 Access and the Case for Awareness Creation*

Discussing cruise research methodology ('how') also raises the question of its purpose altogether. Why cruise research? Difficulties related to obtaining research data implicitly raise the question of research relevance. Limited availability and restricted access are arguably traced back to the data source. There is either no perceived incentive to support the generation of research-relevant data, or there are no visible benefits of sharing it with the academic community.

#### 13.4.2.1 Relevance Pluralism: From 'Cruise Practice' to 'Cruise Experience'

From a social science perspective, the question of research relevance ultimately mutates to a question of stakeholder interests and perspectives; which in turn affect the research design. In other words, the question of relevance cannot be separated from: 'for whom?' Berger (2006) highlights 16 ways of looking at an ocean cruise; these are subsequently related to methodological issues. If one accepts the

syllogism: [cruise stakeholder => interests => research relevance => methodological choice], then the lack of methodological diversity and innovation could be traced back to a monism of stakeholder interests. If practical relevance is defined on the basis of cruise organisations' interests it is bound to serve primarily managerial/economic objectives. Perhaps, the underlying issue here is not the absence of stakeholder diversity, but the adjective 'practical'. Practicality, perceived as a possibility for instrumentation, is indeed valuable; but not alone. Exploring and understanding the full spectrum of human experience related to cruise tourism is surely valuable as well. After all, tourism and cruises are not primarily consumed for their practicality, but for the experiences they offer. The challenge for cruise researchers consists of re-defining relevance in terms of human experience.

#### 13.4.2.2 Stakeholder 'Triangulation': Networking and Educational Dialogue

At first sight this may appear more idealistic than pragmatic. Would cruise operators and suppliers provide support and resources for the sake of exploring the human experience of cruise tourism? Is an organisation willing to invest on research which does not directly address their economic and political interests? Organisations maybe not; but individuals are likely to do so. Ultimately, the cruise practitioners, 'gate-keepers' and data providers are individuals and as such they pursue other than economic and political interests. From this point of view, the predominant association of research relevance with depersonalised organisational interests is arguably naïve and limiting. The role of networks like the Cruise Research Society (www.cruiseresearchsociety.com) and cruise conferences are essential in this respect. They facilitate communication and cooperation between individual academics and practitioners and encourage the development of bilateral long-term relationships over time. This can act as a bypass for the scope and access limitations posed by the economic-financial nature of the cruise sector. Through personalised dialogue cruise academics are educated on the needs and realities of the industry and industry stakeholders are sensitised on other social, environmental and ethical aspects. Lack of relevance is perhaps symptomatic of limited awareness and creating it requires direct communication. In this light, cruise-related conferences and networks could aim for a greater diversity of participants not just in terms of organisational affiliation, but also individual interests, backgrounds and motives. Moreover, the scope could be extended from a purely research- and informational-focus to serve educational and social networking objectives.

### *13.4.3 Perspective and the Case for Paradigm Development*

The pluralism missing in cruise research methodology and relevance is evident in the backgrounds, interests and worldviews of its researchers (Papathanassis and Beckmann 2011). Given that the cruise domain has not yet reached the coherence and canon of an academic discipline, it lacks a unique paradigm and standard body

**Table 13.6** Paradigmatic architecture for cruise research

| | Paradigmatic level | Paradigmatic cornerstones | Key principles |
|---|---|---|---|
| Why? | Purpose/relevance | To improve the experiences of those directly involved and indirectly affected by the cruise phenomenon (incl. cruise researchers and educators) | Human-centrism<br>Social action |
| How? | Methodology | By triangulation and facilitation of novel research designs | Pluralism<br>Continuity<br>Experimentation |
| Where? | Knowledge creation and dissemination | Through specialised cruise journals encompassing diverse, unconventional types of contributions and inclusive, personalised networking events | Diversity<br>Participation<br>Personalisation<br>Co-education |

of knowledge. This in turn poses a significant obstacle to research continuity and educational dialogue. Cruise academics unconsciously impose their disciplinary paradigms and worldviews on a cruise domain that is lacking its own. Is cruise tourism a business? Is it a social phenomenon? Is it a psychological issue? Is cruising an engineering, logistical or environmental challenge? Moreover, how is one to categorise cruise research? According to: geography/region? Culture? Segment? Industry structure? Value chain? Most would probably respond positively to all those questions.

Interrelating and unifying the different perspectives in form of an explicit, commonly-accepted paradigmatic architecture, cruise research will remain fragmented and cruise education will be confined in the walls of the particular classroom. Even if the cruiser is not drunk and does not need to hold on the cruise ship rail, they will be still dancing alone. The analysis and recommendations made in the previous pages contribute to the construction of such a paradigmatic architecture and constitutes the main proposition of this paper (Table 13.6).

In terms of relevance, we propose a human-centred perspective with the aim of improving the experiential quality of those involved in and affected by the cruise phenomenon. It follows that cruise research and education entail a potential for social action and change. Concerning methodology approach, pluralism and triangulation are argued as the optimal way to counter the inherent limitations of conducting scientific research in the cruise sector. Moreover, embracing triangulation and pluralism could facilitate the development on novel, domain-specific research designs. Finally, for knowledge-creation and dissemination standards a more participatory, individualised and personalised approach is advocated.

## 13.5 Summary and Conclusion

In this paper, we provided a brief overview of the currently adopted research methods, as well as the challenges and implications characterising their application. The cruise domain's inherent characteristics pose a challenge to the multi-disciplinarity

of those researching it. Strict adherence to epistemological separation (quantitative vs. qualitative) and the polarisation of the traditional media for knowledge-creation and dissemination (i.e. exclusion-centred scientific journals, scientific conferences vs. trade fairs) hinder the evolution of inter-disciplinarity and limit the relevance, cohesion and continuity of cruise research. As a first step towards the formation of a cruise tourism discipline, a paradigmatic architecture was proposed. Empowering cruise researchers to let hold of the 'methodological railing' could allow them to 'dance together' and perhaps even develop a novel music genre.

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# Chapter 14
# Cruise Hotel Managers: Evolution of the Species

**Philip Gibson**

**Abstract** Cruise employers are faced with a highly competitive and challenging task when sourcing tomorrow's cruise hotel service managers. In a globalised setting, cruise companies strive to make their products appropriate for specific target markets and, increasingly, that means paying due regard to the origins of front line hotel managers and their teams. Also working at sea onboard a contemporary cruise ship means employees accepting a different set of terms and conditions compared to similar shore based occupations. So not only is it important to find the right people for the job and the appropriate types of managers to meet the requirements of specific markets, the cruise industry has to attract managers who accept the nuances of maritime employment. This research project was funded by the Centre for Excellence for Professional Placement Learning (CEPPL). It considered the aforementioned set of challenges by examining the perceptions of students who apply to join the BSc (Hons) Cruise Management course at the University of Plymouth – a highly vocational degree programme for hotel management at sea. This course has been running since 2003 and has seen successive graduates progress from the programme, on to work placement or internship, back to complete the degree and then to employment. The study examines students' perceptions and learning motivations in relation to obtaining employment as hotel managers at sea by reflecting on the work of theorists such as Gibson (2005), Bloomer (1997), Bourdieu (1986) and Lave and Wenger (1996). In addition the rather limited but nonetheless revealing body of knowledge surrounding cruise employment is considered. Fifty five people were interviewed either individually or in focus groups in relation to their motivations to join the specialist degree programme. Findings suggest that there is considerable interest for this type of degree and this employment area but for most prospective applicants the act of converting motivation to action appears to be serendipitous. It is suggested the missing link, in establishing a chain of logic for stimulating interest in this employment area, seems to reside in

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the hands of the cruise industry itself and that by accepting a negotiated partnership with educational institutions the industry stands to benefit in harvesting a high calibre supply of talent for the future.

## 14.1 An Industry Dilemma

The cruise industry continues to show resilience and potential despite one of the most severe periods of economic downturn since the Great Depression in the 1920s and 1930s (Eurpoean Union Times 2011). According to the World Cruise Industry Review (Ashfield 2009), industry commentators continued to report relative confidence in what seemed to be unstable circumstances. At the time of this review the industry was experiencing a 7.4 % average growth from the time of the early 1980s and, even after 9/11 growth year, was 4 % in 2002 and 15 % in 2003. The downturn has coincided with the introduction of even larger ships to join the fleets of global giants RCCL and Carnival Corporation but simultaneously has also seen a reduction in the pace of ordering new vessels for construction. The major impediment for future growth appears to be the cost of oil which threatens the strategies employed by cruise marketeers to engage in their targets to maximise yield (IB Traveller 2011). By September 2011 Carnival Corporation, the world's largest cruise business was reporting that a 2 % increase in net profits was being predicted for the year (Travelmole 2011).

This apparently positive situation has a complex back-story. As the recession began to bite the largest corporate players in the cruise industry reacted as it always has to any potential crisis. It changed. Many business analysts believe the industry is more global than it has ever been before: not just redeploying ships to steer clear of the black skies of potential risks but by scanning for new markets and making sure the hardware (i.e. the ships) is well positioned to access these new markets (The Maritime Executive 2011). Larger ships satisfying increasingly diverse global markets inevitably means that crewing becomes more of a challenge but it is worth remembering that the quality and calibre of management is central to operations at sea (Gibson 2009).

This chapter reflects on the factors that prevail when sourcing new managers for this industry. In particular the research associated to this work investigates the reasons why applicants to the BSc Cruise Management degree at the University of Plymouth are attracted to working in the cruise industry. The limited literature relating to this context of cruising and human resource (HR) issues connected to recruitment are considered alongside a discussion about theories relating to motivation for learning in the next section. Thereafter the research that was undertaken for this study is described, justified and summarised. The concluding elements of the chapter discuss the findings in order to make recommendations to develop practice.

## 14.2 Capturing and Nurturing New Talent

Where do cruise companies find talented hotel managers and how do these companies build capacity? Is there some form of sophisticated developmental conveyor belt that cruise employers can plug into in order to source, select and seamlessly deploy? It is possible, by observing practice, to speculate that cruise hotel managers emerge from a variety of sources. For example, industry professionals (Gibson and Walters 2011) suggest that some managers are:

1. 'Grow your own' or promoted from within. These types of managers have learnt all they know from within the industry (Ready and Conger 2007). They possess tremendous accrued contextualised knowledge but are potentially subject to cross-industry myopia, meaning for some employees their range of experience is narrow so, they don't know what they don't know (Davenport and Prusak 2000).
2. Recruited from other industries such as hotels or resorts. This cross fertilisation approach seems to imply that managers in hotels and resorts possess parallel and appropriate skill sets for the cruise industry but the disadvantage is that these candidates may have a tendency to find real problems assimilating (Gibson 2008a, and Gibson and Walters 2011).
3. Identified by considering the studentship route. An example of this is where University students are employed on a work placement and apprenticed through a cadet or trainee manager programme. This type of employee tends to be young, ambitious, full of ideas, industry aware and motivated (Gibson 2006b).

Different cruise brands regard these potential models of recruitment in different ways. According to industry sources (Gibson 2009), for some cruise companies the pace of growth in the period between 2005 and 2010 was so intense that staff deployment was undertaken with a view to replicate practice on other vessels rather than as a co-ordinated and strategic approach without due regard to professional development. While this has changed and evidence of investment in continuing professional development (CPD) is now more prevalent (Marine Hotel Asssociation 2011), the industry has not made serious inroads into establishing a professional *cadre* for Hotel officers (Gibson 2008b).

Recruiting and retaining good hotel managers remains a challenge. Many HR professionals recognise that some prospective hotel officers first enter the industry in order to travel but become less enamoured of the job as time goes by. There is a ready acceptance that those who join the industry on that basis will either become motivated in time or will leave. In addition the sheer scale of some ships creates a need for skills sets that few land-based managers possess. New managers, struggling to cope with the demands of the job and also trying to make sense of a life at sea, face distinctive pressures (Gibson and Swift 2011). There are intense demands on HR teams to secure large numbers of highly skilled hotel managers. Their primary driver is to maintain operational capability whereas, when recruiting deck or engine officers, the HR team face other demands, including the legal

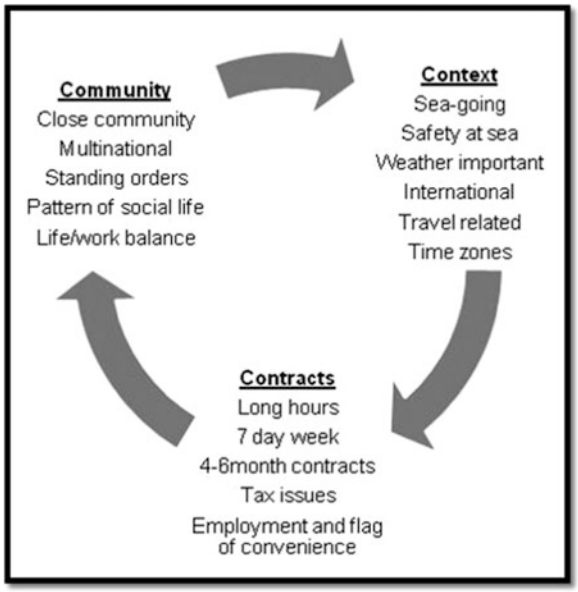


**Fig. 14.1** Community, contract and context

requirement to deploy the appropriate number of certified officers and crew (Barrass and Derrett 2006).

The cruise industry does not appear to analyse data regarding the reasons for staff leaving (Raub and Streit 2006). Clearly the working and living environment on board a cruise ship makes a difference (Testa 2001) and the cruise industry is not immune to staff turnover. This is not a unique issue, many industries struggle to deal with staff retention, especially those where pay can be low and sets of conditions appear to be unattractive to the target employment demography. For example, Deery (2008) lists critical issues such as work life balance (WLB), the attributes of the job and the strategies employed by the employer in relation to training and education as being fundamental for hospitality staff turnover. In addition, Hughes and Rog (2008) believe that hospitality businesses are faced with a real challenge to achieve benefits in relation to recruitment and selection because of the ways that prospective employees tend to view the industry: the operators seem to focus on cutting labour costs while relying on the emotional nature of employment in a people to people industry; unsociable hours and job insecurity; and low status.

The parallels that exist between the cruise industry and the hospitality industry are clear, yet there are distinct differences in terms of the cruise context that challenge these interpretations for the cruise environment. Gibson (2006a) notes that the issues of context, contracts and community (Fig. 14.1) appear to combine to create a different social and professional setting which falls outside the comprehension of those who expect work life balance to fit a standardised model. While some senior officers/managers have privileges that enable them to have shorter contracts and to share their accommodation with partners or family, most hotel

officers/managers work longer contracts (7 days a week for between 4 and 6 months) and, if they are junior, they may have to share a cabin. Hours can be long and all crew have dual roles in performing both their main duty and a safety related function. Many officers are attracted to the international travel that is concomitant for this type of profession.

Plymouth University's BSc (Hons) in Cruise Management was introduced in 2003 as an industry specific hospitality degree that focuses on preparing graduates for entry level management positions in the cruise industry. Unlike the limited number of cruise degrees available world-wide, it remains unique in being designed to suit the needs of candidates wishing to study cruise hotel management rather than cruise tourism or cruise business studies. The degree is designed to attract candidates who have some form of motivation for working at sea and includes a selection interview where students are informed about visa and medical requirements. Students are expected to meet certain criteria if they wish to apply for work placements or work experience on cruise ships immediately after they complete their second year. If they are unsuccessful students are then counselled to secure hotel-type employment as an alternative route to cruise employment at a later stage (Plymouth University 2011).

This research examines the link between students seeking to enrol on the aforementioned programme and their expectations of a cruise career. In order to make sense of this question it is important to appraise literature that relates to learning motivation. According to one of the world's best known and important social constructivist, John Dewey (1938) education should not be seen simply as a technical process to be experienced when going to school, college or university. Rather learning is a life force and education is a process completed during a life time. In that sense it is inappropriate to identify education as being a preparation for life but as part of a continuum. Learning motivation is therefore best seen as complex, multi-dimensional, social and highly individual (Fig. 14.2).

The figure (below) describes a particular way of observing such a complex multi-dimensional reality. The circumstantial curriculum is based on the literature of Pierre Bourdieu (1984), Anthony Giddens (1991), Martin Bloomer (1997), Jean Lave and Anton Wenger (1991) and the findings of a longitudinal research project into the lives of young learners in a college of further education (Gibson 2003). In addition the work of Layder (Layder 2005), Poole and Cooney (1985) and Foucault (1997) were also important to analyse the notions of identity, career and social theory.

The circumstantial curriculum recognises the realities of individuals living in worlds that are their own constructions, constrained or enabled by their perceptions about horizons for change or opportunities for change. In these worlds individuals become located in a specific place where their status as an apprentice changes over time after they engage with their fellow students and others. The notion of choice about decision making is highly personal: lack of choice or constraints may be considered illogical by the casual observer yet the individual engages using their version of logic that makes sense in that individual's world. The circumstantial curriculum model highlights that the world of the individual is a construction where it is the way the individual understands that world that is of critical importance. The individual at the heart of this focus may be perfectly satisfied with her/his lot or may be wishing to make a change.

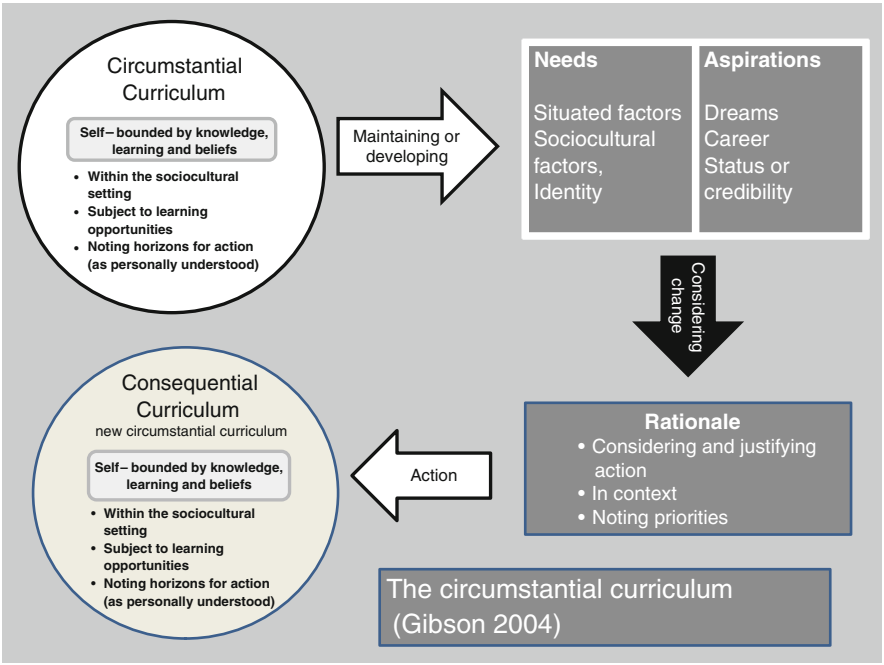


**Fig. 14.2** The circumstantial curriculum (Gibson 2004)

## 14.3 Investigating the Problem

The research project was formulated in order to build on a previous funded study that sought to investigate the management of placements for hospitality and cruise students (Busby and Gibson 2010; Gibson and Busby 2009). The previous research project and this project were funded by the Centre for Excellence for Professional Placement Learning (CEPPL). It aimed to develop a new understanding about the perceptions of students who apply to join the BSc (Hons) Cruise Management at Plymouth University. The study examined students' perceptions and learning motivations in relation to obtaining employment as hotel managers at sea by reflecting on the work of theorists such as Gibson (2004), Bloomer (1997), Bourdieu (1984) and Lave and Wenger (1991) and by making use of the circumstantial model to interpret the findings.

The study takes an interpretive approach and makes use of data collected from 55 applicants over a 24 month period (Clark 1998). Some of the research subjects were interviewed individually and others joined focus groups. Both interviews and focus groups were managed with due care to ensure research subjects were treated with respect, honesty and with due regard to the physical surroundings in order to encourage open and positive engagement with the process (Veal 2006). A semi structured schedule was produced by reflecting on theory in order to provide a logic

and order to the interviews and for the focus groups. Research participants were fully informed about the purpose of the research and permissions received to record data collection.

The data was transcribed and then analysed using framework analysis (Ritchie and Spencer 2002). This form of analysis allows qualitative researchers to make sense of large quantities of text by using themes that are constructed in evolutionary fashion through familiarisation with the raw data (Ritchie and Lewis 2003). This approach to analysis allows for manageable synthesis to occur. Coding is not essential for this approach although the researcher does develop an in-depth understanding of the data through immersion and interpretation. Then, a selection of vignettes or case studies was constructed to present the findings in an accessible format (Bassey 1999). Throughout the process permissions were sought and full appreciation was considered in terms of ethical matters and any names that appear in this paper are disguised to afford anonymity to the respondents (Clark 1998). The research is based on a single university but it is argued that the findings provide useful lessons because of the depth of the analysis and the opportunity to apply the lessons learnt in a broad range of university.

## 14.4 Interpreting the Findings

A small selection of the research results is considered within this publication. It is selected because it is representative and provides insight that is also supported by other cases. In the first two vignettes we meet Lou and Susie.

These are two contrasting individuals. Lou is rather casual and Susie more exuberantly enthusiastic. Lou is thinking about what he calls – 'life style and finding enjoyment' and Susie has a more grounded and focused approach based on her experience of working part time.

**Box 14.1 Lou and Susie**

Lou says, 'I came across cruise management – I thought it was quite interesting, and not what I'm used to. I thought OK I'll look into it a bit more and I grew interested'. He describes the course as a fun version of business and says of the life and work that it seems to be like a lifestyle choice. However Lou goes on to say, 'I wouldn't want to be stuck on a cruise ship all my life. I like the idea of just working in a cruise ship'. Lou is into surfing and he has travelled when on holiday with his parents, but he doesn't know much about cruises. He comes across as gregarious but casual in his demeanour. While he passed the interview Lou did not achieve the right grades to join the course

Susie was persuaded to do the course by her teacher at college. The course leader for the BSc Cruise Management visited and spoke to students at her college. She was also partially influenced by some of her friends. She has limited experience of the cruise industry but has travelled. She was relatively

*(continued)*

quiet, pleasant in terms of her manners and seemed to be a people person. She says, 'my understanding of it is, ah, is that it's really hard work and you're away from home. It sounds good, working with people and doing customer service. I have a part time job at the moment (in a supermarket), I'm working with customers all the time and I really love it. I like making people happy'. Of the job itself Susie says, 'I always wanted to do something that's not in an office. Like first I wanted to be like a holiday rep, and then it's like, ah, cruises. I really like the idea of working with people'. Her experiences working part time have given her a ready understanding about professionalism, teamwork and meeting her employer's expectations.

Emily and Emma both work part time (most of the applicants did) and that helped them to make sense of the world they were talking about. In addition Emily has been on cruising holidays and has a well formed understanding about the employment area from speaking to employees on board. Both are aware of the need to adopt certain

**Box 14.2 Emily and Emma**

Emily says, 'I was on the UCAS website and I was thinking, I don't want to do something stereotypical, I want to do something completely different. I've got a really bit passion for travel as well, and I looked at the travel courses and I saw cruising. I thought, it's what I want to do'. Emily works part-time in a Body Shop and studied travel and tourism at college. She also worked part-time in a pub serving behind the bar. She is very enthusiastic for the course and says she is a really big fan of cruising. Emily's enthusiasm is very apparent. She expresses it verbally and in her body language. She has been on many cruises and spoken to many people about working at sea so she comes to the meeting better informed than most. She speaks with enthusiasm about travel and the places she wants to go to but she also has an awareness about deeper issues in terms of tourism in the third world. She has studied German and French and expresses a desire to study Spanish. She has over the years become more independent partly because her parents split up. She says of cruising 'It's just the fact it's not a "holiday" it's more of an experience'.

Emma from Hereford knew previous students who had done the course so she believed she was accessing an opportunity where she could identify real potential. Her reasons for applying are because, 'I would be meeting new people every day. It's different everyday, I like to travel, and I don't like working in four walls'. She says she has a work ethic and she has a part time job in a local chemist. Partly through the experience of working there, she says, 'I quite like working with older people as well actually. We share different stories'. She prefers work when it is busy and says she recognises that it is good to let people know you are confident, trustworthy and reliable. Emma is 17 but she is a quietly confident young woman.

styles of presentation to do with professionalism and customer service. In addition Emily has also thought about the wider issues of employment at sea. From this initial set of four vignettes a number of issues emerge. The individuality of people shines through as is suggested by Layder's (2005) notion of multifaceted phenomena. Common patterns suggest the significant attractor that appeals is the combination of travel, the 'social' and being out of the ordinary. In some respects this career area appeals to those who are unwilling to travel the same route as others. When electing to apply for the course the information provided by the university mattered and some students had really benefited from finding out information from past students, the course leader and from the industry itself when meeting officers while on a cruise. These interlocutors played a vital part because they came across as sources of information that the applicants believed to be credible.

The level of understanding about cruise jobs was variable and most research subjects were seemingly unsure where to find out more. These applicants were looking for options but had stumbled across the course and this opportunity connected to careers on cruise ships relatively haphazardly. The final two vignettes help to confirm these points.

Betty followed her sister to the same university. She has a strong work ethic that may be because of her culture and nationality. Ella rejected a previous experience but had stored away information about the cruise course and acted on her changing circumstances. She notes that it isn't easy to find out about this sphere of employment.

**Box 14.3 Betty and Ella**

Betty chose to come to the University of Plymouth to study the BSc Cruise Management. She says, 'Well, I thought it would be interesting. I always wanted to do hospitality, and then I realised I can do hospitality on cruise ships, which is even better!' She originates from Poland and has a close family relationship with her parents and sister. Her sister came to study in the UK and it was natural for Betty to do the same. Betty is not afraid of hard work. She says she comes from a country where she believes you get nothing for nothing.

Ella originally enrolled at a University in Scotland to study an undergraduate degree course in business but she found the experience attending mass lectures for this generic subject rather dispiriting. She recalls going back home to see her mum feeling despondent. But she remembered seeing the BSc Cruise Management in a prospectus and she decided to go to the university to see the course manager to investigate further. Her sister had gone to the University of Plymouth so she knew something about the place. Ella was very enthusiastic for the course and she says, she liked what she heard, liked what she saw and, after she enrolled, she never looked back. She only knew about travel and the cruise industry from magazines but she says 'you don't really read much about people's experience who are there to work'.

## 14.5 Evolving Practices

The evidence highlights the importance of process and practice in relation to the various aspects of communicating opportunities. The BSc Cruise Management is a relatively new degree but as time progresses evidence is becoming stronger to demonstrate that firstly it attracts the right type of individual, secondly it is becoming a magnet for those with motivation for this type of employment and thirdly graduates are returning to employment after holding down training or cadet positions during their course. In terms of talent management the opportunity exists for cruise employers to engage with this course in a way that is strategic and targeted to benefit all parties (Deery 2008). There is a high degree of serendipity involved in terms of students finding out about this degree. In some cases the motivated individuals have to make a search and uncover the opportunity by chance. In other cases potential students spot the degree and are then prompted to think about the opportunity.

The missing link appears to be the way that the employers are engaged with in the process. The degree was instigated after consulting with industry yet that relationship has been a challenge to develop. This is the fault of the university in not communicating the true advantages of the programme to employers and a recommendation that emerges from this study is to seek to nurture a more active partnership with cruise partners. The findings suggest that the educationalists should seek new ways to partner with industry and to share the benefits of that engagement with potential applicants and students. The university has been working with the Merchant Navy Training Board, the Cruise Research Association, the Marine Hotel Association and various cruise companies to develop engagement. The University has developed an alumni network so that cruise industry employed graduates are communicated with, involved and their achievements reported.

Further research is essential to continue to develop the degree and ensure it remains the course of choice for future cruise hotel managers. This research project provides interesting information about motivation and study that can inform researchers studying learner progress and choices and also is useful for any other institution considering planning specialised courses for niche employment areas.

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