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Applying the Business Model Canvas to Design the E-platform for Sailing Tourism

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Abstract

In recent years, intensive development of sailing tourism has been observed in various regions of the world. This is a beneficial phenomenon from the point of view of sustainable tourism development because sailing yachts are powered by the wind and therefore do not emit exhaust gas into the atmosphere. Tourists usually travel in small groups, which is not mass tourism that disrupts local communities. It is tourism practised in close contact and with respect for nature. The conducted research combine sailing tourism and Information and Communication Technology (ICT) tools which are insufficiently used by entities associated with the sailing tourism market. Sailing market research allowed to identify the need to design a comprehensive e-platform for sailing tourism. Its functionality would not only allow a wide presentation of the offer and reach a wide range of tourists but also enables transactions. The aim of the paper is to develop the original concept of a business model of e-platform for sailing tourism. The presented concept is grounded on modified Business Model Canvas (BMC) in terms of its structure and operationalization. The role of cooperation for the development of sailing tourism between private entities and representatives of regional institutions and organizations at national and international levels was emphasized. The cooperation manifested in the integration of activities will allow creating a product commonly used by tourists.

1. Introduction

The importance of sailing tourism has been increasing and better acknowledged every day in the world [1–4]. This is a beneficial phenomenon from the point of view of sustainable tourism development because sailing yachts are powered by the wind and therefore do not emit exhaust gas into the atmosphere.

Tourism can bring benefits to individuals, regions and countries – if only it is planned, developed and managed in a responsible way [5]. This applies to all types of tourism, including sailing tourism, whose activities in coastal areas affect local and state economy and the local communities [6]. New technologies can, and probably will, help to manage tourism activities properly [7].

In the article the original concept of a business model of e-platform for sailing tourism is presented. The concept is grounded on modified Alexander Osterwalders' Business Model Canvas (BMC). The goal was to work out the management tool which will support sustainable development of sailing tourism via proper information flow between private entities and representatives of regional institutions, organizations at national and international levels and tourists.

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2. Theoretical aspects of applying e-platforms in tourism

Tourists usually travel in small groups, which is not mass tourism disruptive to local communities. It is a tourism practiced in close contact and with respect for nature. Sailing is by nature a sustainable activity [8]. The key resources of many marinas are based on strategic geographical position, attractive location close to green areas, expertise of artisans (e.g. in the field of boat repairing). Sometimes sailing is seen as a traditional form of tourism which have positive effect on the conservation of local values [9]. Yacht tourism can be regarded as an alternative of hotels and an alternative way of structure-intense forms of tourism [3]. It can also be a form of tourism complementary to others and strengthening the competitiveness of a given destination [10].

Many marinas undertake activities consistent with the three main perspectives of sustainability. Their value proposition for sailors is based on the economic (e.g. relationship with local community, networking), environmental (e.g. accomplish with the highest environmental standards like putting into practice waste management systems) and social dimension (e.g. involvement in local events, promoting sports activities, training opportunities for children) [11].

The development of information technologies and the natural change of generations force economic entities from various industries to use modern marketing tools. The Internet is used in all areas of the digital society, and new Information and Communication Technologies (ICT) affect the functioning of today's world [12]. This also applies to the tourism industry, where in recent years the growing importance of e-tourism in meeting tourist needs has been noticed [13–15].

The growing importance of the internet and new ICT tools in tourism also applies to sailing tourism. The internet is used by sailors and boaters to book charter dates, buy seats on organized cruises and to sign up for sailing courses. It is also used when arranging cruise routes, as it provides information on the offer of ports and tourist attractions in a given region [16] (p. 47). Young sailors are very open to the possibility of using new applications dedicated to sailors [17] (p. 79). In the case of this form of tourism, the expectations of the demand side regarding the form of communication, however, often differ from the supply side.

Although some yacht ports have their own websites and even social media, information about them (conditions, available services, current number of berths and attractions offered) is dispersed, incomplete or outdated according to sailors. This discourages sailors from exploring new places and new yacht ports. Sailors point to the lack of a comprehensive solution dedicated to individual sailing areas in Poland and abroad. Sailors also lack information available (in one place) about [17] (p. 87): car rental options, the ability to combine sailing with sightseeing, available tours, guide offers, accommodation facilities, discos, restaurants and pubs, etc. In addition, in the report respondents point to the lack of attractive events in the ports (e.g. live music, attractions for children) and poor communication (railways, buses, etc.) [17] (p. 76).

The study results, regarding the assessment of websites of Baltic yacht ports [18], showed that they use websites as a tool to communicate with potential customers to a very small extent.

In Poland, only 3 ports out of 18 surveyed had their own websites. The existing ones, own or shared with other entities, lacked a lot of basic information, e.g. on services available at the port, prices, tourist attractions in the area, etc., i.e. information which people planning their cruises are looking for. The vast majority of websites were available only in Polish, which excludes their use by foreigners. The situation of yacht ports in the Mediterranean region looks slightly better. Only 20 ports out of 234 ports (belonging to 10 different countries), did not have websites, but only 129 websites contained information in English (out of a total of 160 ports). The quality and availability of information contained therein, however, is not always sufficient [19].

Every form of tourism, including sailing tourism, is largely conditioned by access to practical and up-to-date information that makes it easier for tourists to choose the place, time, date and type of tourist event. Tourists are also looking for interesting information on the areas of tourist reception, allowing them to broad and enrich their knowledge [20] (p. 65). Yacht ports are often the places where tourists have their first contact with a given locality. Therefore, it is important for tourists to be able to obtain information on the tourist attractions available in the area of the city [21] (p. 13549). Adequate access to information and IT tools dedicated to sailors, such as Internet platforms could further intensify the development of sailing tourism. Comprehensive information obtained in one place could contribute to more effective use of local potentials and facilitate access to this form of tourism for various social groups.

The service offered by yacht ports should be based on flexibility and adaptation as well as on creation of new forms of nautical services taking into account the requirements of various groups of sailors [22] and be created in consultation with consumers, or at least on the basis of research and observation of their preferences, so that sailors are co-creators of the offer, and not only its recipients [23] (p. 236). It is also necessary to translate the information available on the website into at least English to ensure its accessibility for foreign sailors.

Although marketing communications for many entities associated with sailing lack a basic tool, which is a website, it should be noted that, given the current state of society's demand for various ICT solutions, websites are no longer sufficient communication tools. People preparing for a tourist trip usually have to gather a lot of different information, e.g. regarding the destination, way of arrival, accommodation options, tourist attractions, available services, etc. In addition to find information, more often tourists make reservations (e.g. hotel or means of transport) and payments for them, also via online tools. The consolidation of information together with the possibility of booking selected services and payments allows to avoid time-consuming searches. E-platforms are such solutions that consolidate information, services, reservations and payments.

For the purposes of the paper, it has been assumed that e-platforms are complex IT systems enabling the sale of goods or services as well as the exchange of knowledge and information between various types of users (enterprises, private individuals) [24]. By using information and communication technologies, they facilitate interaction (including commercial transactions) between users,

allow the collection and use of data on these interactions and network effects that make the use of platforms very valuable to its users [25]. Thanks to convenient communication, the costs of reaching consumers by sellers and the costs of seeking information about products and services borne by consumers are reduced. In addition, e.g. in the case of e-commerce platforms, consumers use the recommendations, feedback and reviews of other users [26].

The use of e-platforms in the tourism industry is nothing new. They are very popular and there is a wide variety among them. E-platforms include both social networking websites, e.g. LonelyPlanet and transaction and booking platforms, e.g. Booking.com or Trivago [27, 28]. Most of them are also available in the form of mobile applications to maximally facilitate the use of the presented offers for customers [29].

However, as the pilot research on E-platforms dedicated to sailors [30] has shown, the offer is very poor. Existing platforms do not usually allow tourists to take advantage of the full range of services. They are usually focused on either yacht charters or planning trips (sometimes with the possibility of booking berths in visited ports). It is also important that they do not operate on a global scale, but only on selected water areas. This prompted the authors to develop their concept of a comprehensive e-platform dedicated especially to sailors and motor boaters. The aim of the article is to present the original concept of a business model of e-platform for sailing tourism using the Business Model Canvas tool.

3. Methodology

The idea for creating our model is based on several grounds like tourism market demand and supply needs, IT tool development and the belief that Business Model Canvas (BMC) can serve as a useful managerial tool to present the developed concept.

One of them indicates the type of tool used to present the concept - BMC template proposed by Osterwalder, Pigneur and Smith [31]. The decision to use BMC as a tool results from the strong belief of the authors that it has many advantages thanks to which it can be successfully used in the sailing tourism segment. BMC can be treated as a shared language and a tool to structure thinking [32]. Due to the popularity of BMC template in scientific literature and business press, the BMC created in this paper can be easily compared to other BMC developed for demand aggregating platforms (such as e.g. TripAdvisor).

The business model for e-platform in sailing tourism, created in this paper, has its place in the hierarchy of business models, which is in line with the idea of Osterwalder, Pigneur and Tucci [33]. Figure 1 distinguishes three levels of business models. The highest level is an abstract business model concept, defining what kind of elements can be found in a business model. The second level differentiates business models depending on their type categorising them according to their common characteristics. They usually apply to specific industries. For the purposes of this paper, it has been additionally divided into two sub-levels. Sublevel 2a consists of business models created for tourism ventures, while sublevel 2b is a group of models covering all business models dedicated to tourism and at the same time based on IT tools as key to their functioning. The sublevel 2b is kind of an umbrella concept for individual platforms which means that it can be further developed into more detailed models dedicated to specific entities. The first and the second level have a conceptual nature. This paper proposes a model which concerns the third level of the presented hierarchy (framed). It belongs to an entity level. The proposed solution can be easily transferred to real market conditions. The area of its activity in geographical and functional terms is not limited in any way, on the contrary, the overriding goal is to create a concept of a platform integrating entities offering different types of values for sailors planning trips in many different water areas.
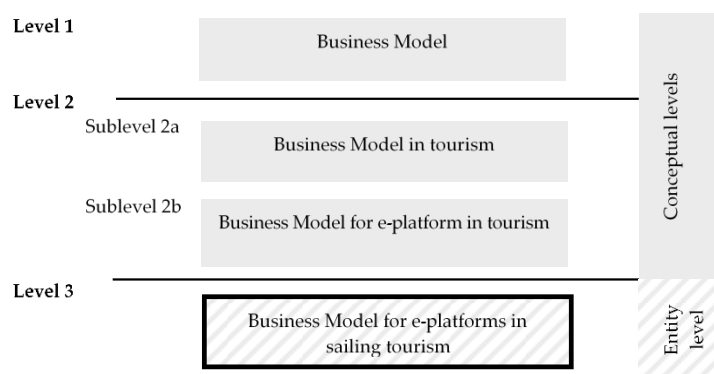

Figure 1. Location of the business model for e-platforms for sailing tourism in the Business Model hierarchy. Source: Own elaboration based on the concept of Osterwalder, Pigneur & Tucci [32].

The original concept of BMC for an e-platform in sailing tourism has been created on the basis of own observations and studies, the results of which have already been partially published [30, 34]. The research procedure used in this paper is shown in Figure 2. The result of the literature research and extensive analysis of the sailing market is the modification of the BMC template proposed for the level 3 and the design of the BMC concept based on it for e-platform in sailing tourism.

The paper not only proposes the concept of an e-platform for sailing tourism, but also modifies the tool used - BMC - so as to better express the expected goals achieved by the designed platform. Similar examples of BMC template modifications can be found in the literature. They aim to adjust BMC to the specifics of the entities for which they were designed [35, 36]. This paper also decided to introduce this type of change in the original template. An additional tenth block called Sustainable Development of Regions is introduced. It is located in the immediate vicinity of the second segment: a unique value proposition to emphasize the close relationship between them. In the authors' opinion, due to the introduced modification, the assumed effect of e-platform for sailing tourism is visible better and in a broader perspective. The results are not only the benefits for direct users, but also for regions in which yacht ports are located. The regional development is a process of positive changes taking place in that area. There can be distinguished 5 aspects (spheres) of this development, i.e. economic, social, technical and technological, ecological and - more and more often indicated as equally important - spatial. With regard to yacht ports, the latter aspect is currently playing an important role due to the intensive development of maritime spatial planning [37].
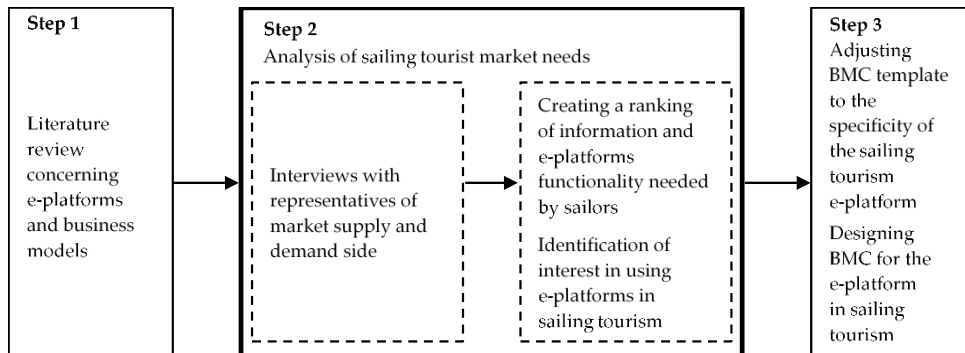

Figure 2. Research procedure. Source: Authors' own.

The indicated aspects of regional development emphasize its multidimensionality. This is important due to the implementation of the goals set out in the document Transforming Our World: The 2030 Agenda For Sustainable Development [38]. It contains 17 Sustainable Development Goals with 169 associated targets which are integrated and indivisible. The Sustainable Development Goals concern the whole world (developed and developing countries) and are based on three coherent elements: economic growth, social inclusion and environmental protection. They should stimulate activities in the most important areas: people, our planet, prosperity, world peace and partnership. They are an expression of common global tasks tailored to the capabilities of the country and also regions.

4. E-platforms for sailing tourism - own research

4.1. Market needs for e-platforms in sailing tourism

The use of e-platforms brings many benefits, both for tourist service providers and for tourists. Examples of benefits are presented in Figure 3. It should not be forgotten that, due to the ease of reaching potential tourists, e-platforms are a tool attracting product and service providers, not always directly related to tourism, but those that may be needed during a tourist trip, the so-called second-order service providers (e.g. catering, entertainment, cultural or medical services).

For the purposes of the paper, individual in-depth interviews were conducted with several experts from Poland and Denmark (Bornholm). The study was conducted in October 2018. Experts are trainers and people involved in the organization of a course for marina operators organized by the Maritime University of Szczecin as part of the SCB project (Establishing durable cross-border boating destination management on the basis of the MARRIAGE cooperation network). The most important factor that influenced the choice of experts was their professional experience in sailing tourism, and in particular cooperation with a large number of ports.

South Coast Baltic (SCB) Project is financed under Interreg South Baltic Programme 2014–2020. It began in October 2016 and will be completed on September 30, 2019. The total budget is more than 2.5 million euros. The project involves fourteen project partners, from Denmark (1), Germany (4), Poland (7), and from Lithuania (2) as well as ten associated partners covering all five programme countries. The partnership consists of local authorities, universities, tourist and sport organisations, and marina management. The core partners are supported by 8 associated partners such as tourism organisations, NGOs operating in the tourism sector, harbour, marina, and local authorities. The overall idea of the project is to make the cross-border boating region durably attractive through establishing a comprehensive cross-border destination management which would combine joint marketing, the aim of which is e.g. brand development, with improvements of boating services and infrastructure.
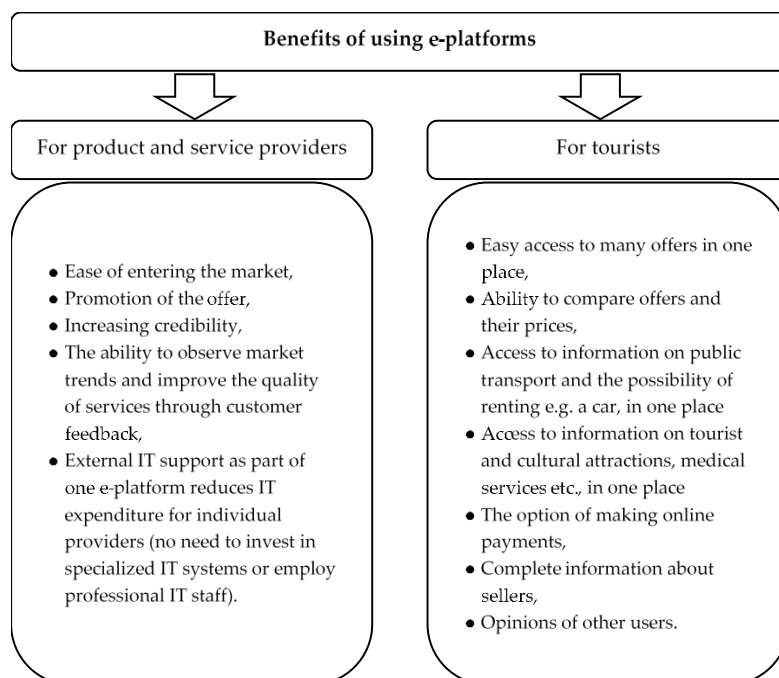
Benefits of using e-platforms

For product and service providers

- Ease of entering the market,
- Promotion of the offer,
- Increasing credibility,
- The ability to observe market trends and improve the quality of services through customer feedback,
- External IT support as part of one e-platform reduces IT expenditure for individual providers (no need to invest in specialized IT systems or employ professional IT staff).

For tourists

- Easy access to many offers in one place,
- Ability to compare offers and their prices,
- Access to information on public transport and the possibility of renting e.g. a car, in one place
- Access to information on tourist and cultural attractions, medical services etc., in one place
- The option of making online payments,
- Complete information about sellers,
- Opinions of other users.

Figure 3. Benefits of using e-platforms. Source: Authors' own.

The course for marina employees and operators lasted three days and was conducted in November 2018. Participants were persons employed in marinas belonging to the countries involved in the project implementation.

The first of the Polish experts is a representative of the Local Tourist Organization of the West Pomeranian Sailing Route, i.e. a network of about 40 ports and marinas in West Pomerania. These ports are located along the Oder, the Szczecin Lagoon and the Baltic Sea [39]. The length of the Route is estimated at 380 km.

The second Polish expert is a representative of Związek Miast i Gmin Morskich [the Union of the Sea Cities and Municipalities] based in Gdańsk. It is an association of about 30 coastal authorities from all over the Polish coast. It plays an opinion-forming role as part of cooperation with the state administration for the development of the coast. In addition, it actively participates in the implementation of projects under European territorial cooperation related to maritime economy and the development of cities and municipalities located in the Baltic Sea region [40].

An expert from Bornholm is a representative of the Regional Municipality of Bornholm. For many years, he has been associated with sailing tourism and management issues in ports and marinas on the island of Bornholm. It is an area where over 20 ports and marinas of various sizes are located. The island's coastline has a total length of about 140 km and has been called the "sailing paradise" for many years [41].

Thus, it can be concluded that experts represented a total of 90 yacht ports.

The purpose of the interviews was to obtain answers to questions about: information that should be on the e-platform, assessment of the usefulness of its potential functions for both sailors and marina operators, and difficulties in the launch process. Individual issues were assessed on a point scale using a variant of the five-point Likert-type scale, which allowed the identification of the importance of individual aspects (where 1 was the lowest and 5 the highest importance). Based on this, rankings were created.

The conducted study allowed to prepare [30] a ranking of information that should be on the e-platform (from the point of view of their usefulness for sailors - from the highest to the lowest) and a ranking of the functions that the e-platform should include (for sailors and marina operators - the same functions were presented for comparison purposes). It was also possible to define potential benefits for ports and sailors from using the e-platform.

Table 1 presents the results of conducted interviews and rankings, ordered from the highest to the lowest degree of usability with regard to information and e-platform functions for sailors and yacht port/marina operators.

Table 1. Rankings of information and functions to be included in the e-platform according to experts. Source: Authors' own study based on individual in-depth interviews (October 2018).

Ranking of useful information for sailors	Ranking of e-platform functions for sailors	Ranking of e-platform functions for yacht ports
1. Price list of services provided	1. On-line payment for port services	1. On-line payment for port services
2. List of services offered at the port	2. Berth reservation	2. Berth reservation
3. Plan (map) of the port	3. Information about tourist attractions near the port	3. Links to marina websites
4. Contact details	4. Links to marina websites	4. Information about tourist attraction near the port
5. Information on tourist attractions available near the port	5. Sailor opinion forum	5. Trip planner
6. Website translation into foreign languages	6. Trip planner	6. On-line tickets for cultural or sporting events
7. Information on facilities for people with disabilities	7. On-line tickets for cultural or sporting events	7. Sailor opinion forum
8. Calendar of events in the port	8. On-line bus tickets	8. On-line car renting
9. Information on restaurant / clubs and other services available in or near the port	9. On-line car renting	9. On-line bus tickets
10. Calendar of cultural / sporting events near the port		
11. Information on urban and regional transport (buses, trams, bicycles, trains etc.)		
12. Advertising		

Information on services (including their prices) has been indicated as the most important for sailors. This is particularly important for services that are not considered as basic. For example, in the ports of the West Pomeranian Sailing Route the range of these services is diverse [42]. Therefore, information in this regard on the e-platform seems to be necessary.

Based on the results presented in Table 1, it can be stated that, according to experts, for both sailors and marina operators, the degree of usability of individual functions of e-platforms is similar. Definitely the highest in the rating were on-line payments and berth reservations. It seems that these functionalities may facilitate the provision of services at the port area for both parties. The least important was the possibility of buying tickets online and renting a car. Both issues are not part of the port's basic services, and perhaps their usability will only increase in the future. Access to the travel planning tool was rated quite low. Perhaps still quite popular is planning trips by sailors with the traditional way.

Experts were also asked about the expected difficulties in the process of creating and using e-platforms for yacht ports. They indicated (in order of decreasing degree of difficulty): lack of funds for development and administration, which could impede the active use of the platform, which should be constantly updated; too little interest from sailors, potential advertisers and ports; insufficient support from regional and local authorities.

Among the potential benefits of participating in the e-platform for yacht ports, experts unanimously pointed to the increase in the number of yachts visiting the port, a good way to promote the marina and integrate the port with other local attractions. Facilitating travel arrangements and reducing costs were indicated as benefits for sailors.

4.2. Business Model Canvas for e-platforms in sailing tourism

The analysis of research results and individual in-depth interviews allowed the authors of the paper to formulate a proposal for a business model of the marina e-platform. The proposal presented in Figure 4 was built using the Business Model Canvas template. The Business Model Canvas (BMC) in the planning and concept phase allows to become aware of the key elements of the proposed project. This method enables describing key areas, identifying clients, mutual relations and channels of reaching them. In the initial phase of the yacht port e-platform design BMC has enabled the rapid creation of many different possibilities for its functioning and the creation of as many ideas as possible about the value that can be offered to the consumer, how it is delivered and how to make payments. Thanks to the BMC application, it was possible to determine the business model proposal for the marina e-platform with its components.

Business Model Canvas

8. Key Partners
- Marina managers
- Local authorities
- Operators enabling online payments
- Tourist chambers
- Travel services agencies
- Transport (road, rail) companies
- Rentals (cars, bicycles, etc.)
- Cultural institutions, clubs
- Yachts chartering companies
- Enterprises providing services for yachts and their equipment (e.g. boatbuilding, sewing of sails, repair of engines)
- Local entrepreneurs (e.g. catering)
- Enterprises offering sailing courses
- Branch shops (sailing)

7. Key Activities Platform
- development and management
- Acquiring more marinas
- Expanding the number of service providers:
  - transport,
  - touristic,
  - cultural
- Ensuring transaction security
- Acquiring advertisers
- Promoting platform services

6. Key Resources
- Mobile application
- Cruise planner, including berth accessibility and local attractions
- Online payment tool
- Cooperation of many entities

2. Value Propositions
- Booking of berths in marinas participating in the system
- Access to the yacht charter offer and the option of booking vessels
- Better and faster planning of trips and accompanying attractions
- Access to current transport / tourist / cultural information
- Booking tickets for events and tourist attractions (or redirecting to relevant websites)
- Online payments
- Access to information about services available in a marina (incl. waste collection) and its surrounding
- Access to current sailing and weather information
- Access to information on medical services in specific destinations
- Access to information on organized sailing courses
- Access to information about facilities for elderly and disabled tourists

10. Sustainable Development of Regions
- Economic
- Social
- Technical and Technological
- Ecological
- Spatial

4. Customer Relationships
- via the Internet
- Entity managing the platform cooperating with yacht ports

3. Channels
- Social media
- Sailing organizations
- Tourist organizations
- Advertising in the regional press, radio, TV
- Yacht ports (information at the Petty Officer or on the information board)
- Industry press
- Trade fairs

1. Customer Segments
- Yacht ports / marinas
- Individual sailors
- Entities organizing commercial cruises
- Enterprises organizing trips for their employees (e.g. integration)
- Entities providing sailing education (e.g. schools)
- Tourists not practicing sailing tourism, but seeking information about interesting events in the visited area

9. Cost Structure
- Platform construction and operation
- Platform development (new functionalities)
- Marketing (platform services' advertising)

5. Revenue Streams
- Fees for yacht ports / marinas
- Grants
- Advertiser fees
- Commissions from chartering companies offering their services on the platform

Figure 4. Proposed business model of the e-platform for yacht ports. Source: Authors' own.

5. Conclusion

In recent years, the growing importance of the internet and ICT tools in tourism has been observed, including in sailing tourism. This is mainly due to tourists who are accustomed to using this type of tools in various areas of life. However, representatives of entities related to sailing tourism do not seem to notice this trend. Research shows that the use of ICT solutions by yacht ports is relatively small. The same is true for other entities operating in this sector, hence the existing e-platforms dedicated to sailing tourism do not fully meet the expectations of sailors. They do not have all the functionality the sailors expect. Most of them contain either yacht charter offers or allow berth reservations.

There is a lack of basic information such as the offer of services provided in and around marinas, transport connections in the region, local attractions and facilities for the disabled. ICT solutions are also not a commonly used solution, as they cover only some regions, and there are no such solutions in Poland at all. Lack of utilization of the possibilities offered by e-platforms means that ports and other entities related to the nautical market lose the possibility of wide promotion of their offer. This includes the promotion of cultural heritage initiatives in the region. This insufficient offer is an obstacle in obtaining information by both sailors and other entities participating in tourism.

In the opinion of the experts participating in the research, consolidation of the service offer available to tourists in one place - via the E-platform - can be a solution to this problem and bring potential benefits to users. The high popularity of e-platforms used in various areas of life, as well as the results of research indicate that the use of such a tool in sailing tourism is justified and this solution should be considered in order for this type of tool to be created.

Therefore, the paper presents the original concept of a business model of e-platform for sustainable sailing tourism using the Business Model Canvas tool. A commonly used template has been modified to better express the expected goals. The introduction of an additional block called Sustainable Development of Regions has allowed a wider perspective of the positive impact of sailing tourism on the regions and local environment. Paying attention to this aspect allows to emphasize the role of cooperation in the development of sustainable sailing tourism between private entities and representatives of regional institutions and organizations at national and international levels. Cooperation manifested in the integration of activities shall allow creating a product commonly used by tourists. This, in turn, might translate into an increase in knowledge about the tourist offer, improve the consumption process and contribute to the further development of nautical tourism.

Comprehensive information obtained in one place could contribute to more effective use of local potentials, better management and facilitate access to this form of tourism for various social groups. The opportunities for further development of sailing tourism on a wider scale, greater interest from young people and increased satisfaction of sailors with this form of recreation will largely depend on the use of ICT tools in its dissemination. The application of the BMC for e-platform for sailing tourism can serve as a tool guide for marinas managers and local authorities to implement the concept, as well as other academics to develop the idea that combines sailing tourism with the ICT tool.

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