D 5.4.1 – Business plan review

Activity 5.4 – Business plan review

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ACRONYMS / ABBREVIATIONS

ACRONYM	DEFINITION
PP	Project partners
PT	Project Team
TC	Technical task coordinator
WP	Work package
IT	Information Technologies

1. INTRODUCTION

The Business Plan Review aims to analyze and validate the Business Plan to determine the economic sustainability of the E-Chain platform even after the end of the PILOT project.

The objective of this document is the analysis and revision of the original Business Model, considering the business model defined in the deliverable D 5.1.1 and the data collected in the Business Plan Simulation (deliverable D 5.2), in order to obtain a business plan that allows the development of the E-CHAIN platform.

This Business Plan should:

a) be economically sustainable even after the end of the project

b) be exportable to other locations, with particular attention to the Adriatic sea area.

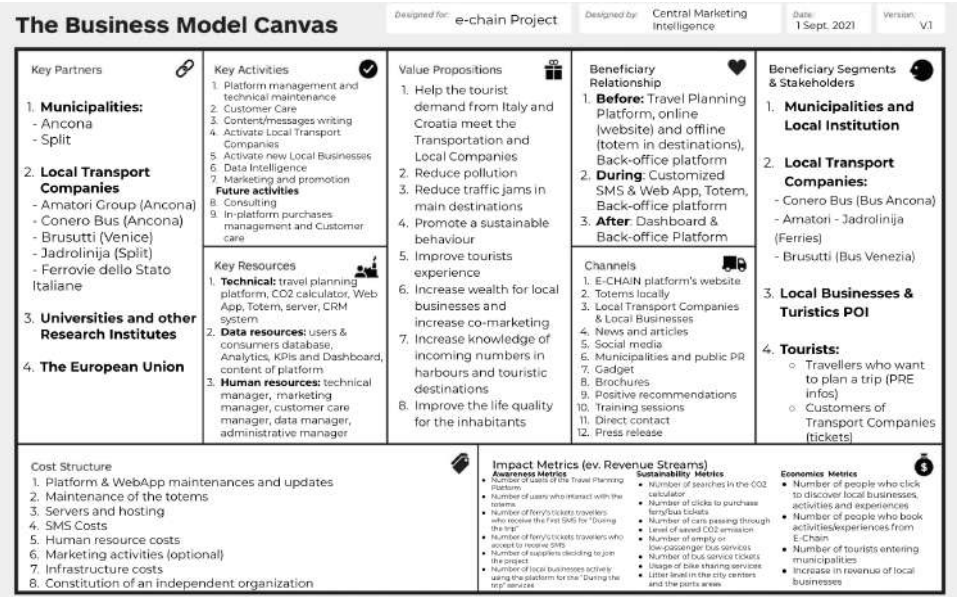
In this final phase of the project the assumptions made in D 5.1.1, Business Model Creation, will be further analyzed and validated.

In fact, the Business Model of E-CHAIN (Image 1) stands on several hypotheses, based:

- on the stakeholders' needs of the project wants to solve (Beneficiary Segments and Stakeholders),
- on the real ability of the platform to solve their problems (Value Proposition)
- on the capability to bring actual improvements to the territory (Impact Metrics),
- on the real willingness of the tourists to use the calculator, web application and totems (Beneficiary Relationships),
- on the capability to reach enough tourists and stakeholders to populate the platform (Channels) and create a positive impact on the environment and their behavior,
- on the stakeholders' willingness to pay (Revenue) to participate and being promoted through the totems and the web application.

Other hypotheses are about the feasibility of the project in terms of Key Activities of the E-CHAIN's team, the Costs that could be sustained over time (according to the long-term management decisions) and the Key Partners that want to participate in the project actively.

Image 1 - Business Model Canvas for E-CHAIN



All those hypotheses have been tested through different methodologies (described in the next section of this document), to qualify their validity and bring out the possible challenges and opportunities. In fact, for each key question during the Review phase some improvements and new insights have been defined, helping to translate the project's plan into its practical implementation.

Therefore, the last part of this document is going to present the possible improvements and the solutions to the main critical points of the project, defining the most important steps to make the project successful after the PILOT phase.

2. METHODOLOGY

To validate the hypotheses and answer the key questions, the results of the Business Model Simulation phase (D 5.2.1) would be the main source of information. In detail, in the simulation phase four distinct methods have been used to simulate the usage of the E-CHAIN platform, both from the stakeholders and the tourists point of view:

1. **Platform Simulation Surveys:** two different surveys have been conducted to get useful information on potential users' behavior:
    - one for the Tourists (link to access it in English, in Italian and in Croatian)
    - and the other for the Stakeholders, such as local businesses, transport companies and other tour operators (link to access it in English, in Italian and in Croatian).

    The surveys were intended to: show the first phase of the E-CHAIN platform to potential users; better understand their interest in the features of the E-CHAIN project; obtain more valuable feedback, and increase user awareness of sustainability in travel.

    Specifically, through the simulation of the usage of the platform, the main objectives have been to understand:

    - the needs of potential users who might be interested in exploiting the platform for their travel planning and the user experience of interacting with the platform.
    - the stakeholders' intentions to join the E-Chain project by including and updating their own data and activities in the platform.

    The surveys, made through the software Typeform, processed in Italian and shared on social media, in tourists/stakeholders groups and through E-CHAIN Partners' mailing lists, obtained a total of:

    - 193 answers for the Tourists survey, distributed as follows: 39,5% <30 years, 31% between 30 - 50 years, 17% over 50 years (the questionnaire is still open, so here in this dynamic report in Italian it is possible to access the results that could also increase in the future);
    - 20 answers for the Stakeholders survey, from 12 local businesses, 3 restaurants, 3 transport companies, 1 textile shop and 1 unspecified enterprise (the questionnaire is still open, so here in this dynamic report in

Italian it is possible to access the results that could also increase in the future).

2. **Assessment and Evaluation Survey (WP 5.3.2):** a survey was developed by University of Trieste in WP 5.3.2. with the aim of understanding the main habits of travelers between Italy and Croatia. In particular, the questions were aimed to investigate the tourists' approach towards the most used means of transport for traveling, the factors influencing the choice of travel, and the most frequently used travel planning apps.

   In addition, some questions were aimed at understanding the needs of specific categories of travelers who were profiled more precisely (families with children, caravans, etc.) in order to define the platform features that interest them.

   The survey, which was made available both in Italian and Croatian languages, received a total of 206 responses, specifically 71 by Italians and 135 by Croatians.

3. **Focus groups:** during the training sessions held for WP5 - D51.1 and the public event in Trieste, four focus groups (that is, moments of discussion on specific topics) have been held to investigate the thoughts of the participants in relation to some key topics for the E-CHAIN project.

   During these for focus groups, in fact, the participants had been free to express their opinion on some initial questions:

   - Three focus groups were held during the Informative Training Session on 12th December 2021 to discuss three many topics: Green Challenges, Connectivity Challenges and Tourism Experience.
   - A fourth focus group took place during the public event held in Trieste on 8 April 2022, where other topics related to the E-CHAIN project in general were discussed.

   The focus groups' participants belonged to three principal categories of E-CHAIN stakeholders, such as Public Administration, Transport Sector, Tourism Sector, and were divided into groups according to the main topics discussed and related to the project.

   In this way, the four focus groups helped to understand the potential of some of the main topics of E-CHAIN through spontaneous discussions. The most important points that help to validate some assumptions are going to be included in the following document.

4. **Other researches**: external data had been retrieved in order to validate some hypotheses. In fact, other types of data were considered, such as reports, examples of success stories or other information to support the hypotheses.

To proceed with the analysis, the Business Model's assumptions have been divided into 5 key points with homogeneous thematics, and then analyzed in depth. The five areas of analysis are:

1. **Needs and Problems**, to verify if the stakeholders and the tourists really perceive the problems that the E-CHAIN project aims to solve. Key questions for example are:
    a. Do tourists really need help in traveling and in being more sustainable?
    b. Do stakeholders need help in promoting their businesses?
2. **Usage of the platform**, to verify if the potential users would really interact with the platform and share their time and personal/business data to receive some benefits. Some of the key questions are:
    a. Would tourists accept to receive messages from the E-CHAIN service?
    b. Are the Stakeholders available to add their experiences and keep updated their data?
    c. Is sustainability a key driving factor for both travelers and Partners to join the project?
3. **Impact**, to validate if it would be possible to positively improve the situation for stakeholders, local area and tourists thanks to the project. Some questions are:
    a. Will E-CHAIN be able to reduce traffic congestion and help decrease traffic jams?
    b. Is E-CHAIN really going to help the stakeholders reach more tourists?
4. **Economic Sustainability**, to validate the stakeholders willingness to pay, proving that they would support the project economically. The most important question to solve is therefore:
    a. Would the project be able to generate revenue?
5. **Internal Project Questions,** to validate the feasibility of the project about the Channels, the Key Resources and Activities, the Partners and Costs. Some of the questions about these topics will not be totally answered in this document, since the decisions will be made after the end of the PILOT Phase, but the main open points will be summarized as future guidelines.

The next part of this document is going to analyze those five areas, answering the key questions thanks to the Simulation data and pointing out insights and possible criticalities to take into account.

3. NEEDS AND PROBLEMS

The starting point for any startup or project is to identify a real need to be solved for a clearly identified segment of people/businesses.

Therefore, the first hypothesis to be validated by the Business Model Simulation regards the real importance of the needs of the tourists and the stakeholders that the overall project wants to solve. To better analyze the key questions, the two main groups will be studied separately.

3.1. Needs of the Tourists

The first goal of E-CHAIN is to help people traveling from Italy to Croatia and viceversa to improve their travel experience, while reducing their negative impact on the environment. The Trip calculator should in fact help in discovering new ways, alternatives from cars, to travel from one Adriatic coast to another. The two most important questions to validate according to travelers are about their needs when planning their trip and in being more sustainable.

3.1.1. Do tourists need help when planning their travels?

The first question to be validated is then if tourists do really need help when planning their travels, therefore needing a solution such as E-CHAIN.

The 13th question in the Assessment Survey can help understand this need (Graph 1): in fact, nearly half of the respondents (47%) stated that they actually would use an application/website to plan their trip, showing the importance of travel platforms.

Graph 1 - Apps and websites used by travelers to plan their trip

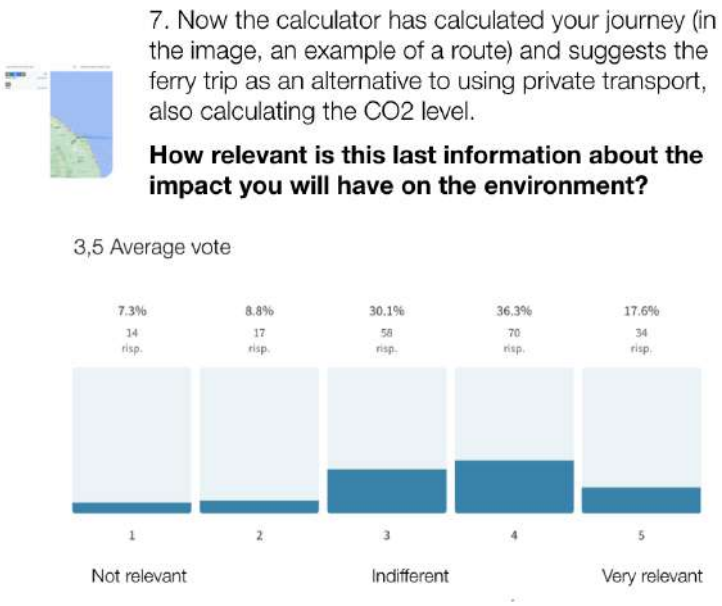
Interesting to notice that some respondents named applications that are very specific for transportation means (Flixbus, Jadrolinja), so for them it's important to start from the route's tickets, their cost and its timing. Then, also from the Simulation Survey it emerged that most users would start their planning from Google and travel applications (better analyzed in chapter 4.1.1), validating the necessity of having a digital support in defining their routes.

3.1.2. Do tourists need help in being sustainable while traveling?

Then, another important point is whether tourists need help in being more environmentally sustainable, making travel decisions that could be positive for the environment. This is a difficult question to answer, since most people would affirm that being sustainable is very important, but then when facing a real purchase decision, they would act differently. For instance the report on Sustainable Travel by Luggage Hero shows that 87% of respondents would like to be sustainable, but only 43% really manage to do some sustainable actions (Source: Luggage Hero, Sustainable Tourism Statistics, 2021). Therefore, the only way to be sure of this answer would be analyzing real behaviors from a relevant number of users, who spontaneously use the platform, click and purchase the tickets.

Anyway, in the Simulation Survey it has been asked to the respondent what do they think about the CO2 emission information that the E-CHAIN Calculator would provide and how relevant they think this information to be (Graph 2).

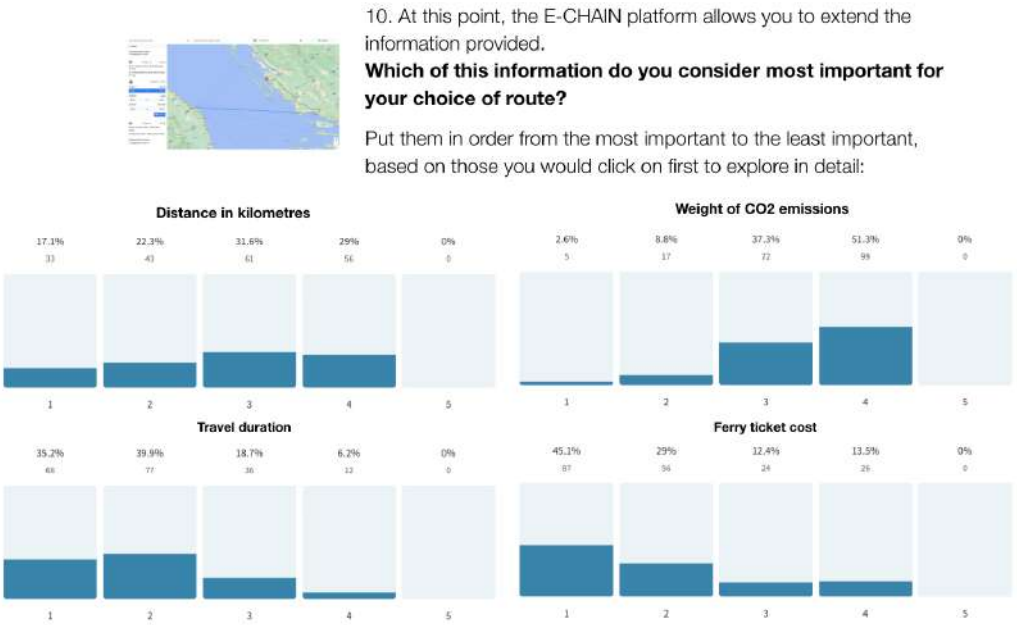
Graph 2 - Travelers' perceived importance of sustainability information



Only for 16% of the respondents this information is not relevant (answer from 1 to 2), while for more than 53,8% it is really relevant (answer from 4 to 5).

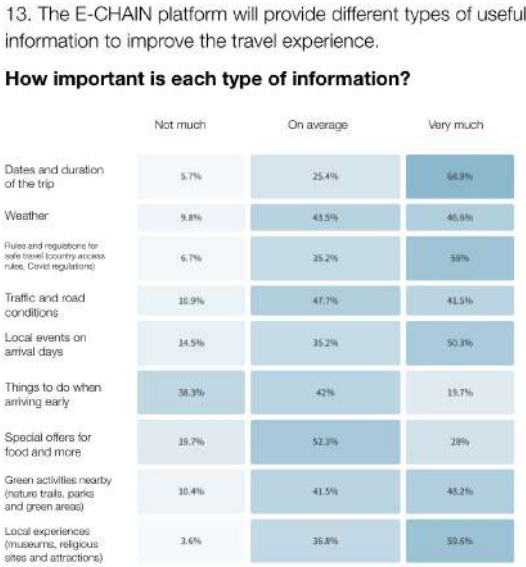
On the other hand, when comparing the green/environmental information with the other types of data provided by the E-CHAIN Calculator, the respondents ranked the CO2 emissions information as the least important, less than ferry ticket cost and travel duration, and even than the total distance in km (Graph 3; the respondents should rank the information from the most important (rank 1) to the least important (rank 4)).

Graph 3 - Travelers' perceived importance of trip planning information



Going further and asking the relevance of several types of information that would be sent by E-CHAIN's messages, the information about "how to be sustainable" has been ranked less important than information about local experiences, dates/duration of the trip, rules to enter the country, weather information, traffic information. The only less relevant information is about offers/coupons and things to do when arriving before the ferry (Graph 4, the respondents have been asked to indicate the relevance from "not much" to "very much" for each type of information).

Graph 4 - Travelers' perceived importance of information provided by the E-CHAIN platform



Then, another way to understand this need to be more sustainable is to analyze the purchase intent for ferry's tickets and its motivations (further analyzed in chapter 5.1 when looking at the Economic Impact of the platform). Data show that, although it is very likely that travelers using the E-CHAIN's Calculator would click on the button "tickets" to go finalize the purchase, the triggers to do so are economic savings and time savings, while CO2 emissions savings are ranked at the last place as a decision trigger to purchase a ferry's ticket.

Anyway, in the last open question of the Simulation, some travelers suggested that after the trip it would be nice receiving information about their overall CO2 emissions - and in case the savings they made from the average tourist.

This evidence shows us that receiving "green information" is not so important for the tourists, who would need more "practical information". Therefore sustainability is not the main trigger for the tourists to use the calculator, but it could be considered as a differentiating factor from other platforms that could attract especially a niche of people more sensitive to these green topics.

3.2. Needs of Local Businesses, Transport Companies and Institutions

For stakeholders, the needs that have been identified are first the problems of the local areas due to the ferry's travelers transit, then the difficulty in intercepting these tourists for the local businesses and lastly the lack of data to optimize their activities.

3.2.1. Do Local Areas need help in reducing the impact of ferry's travelers?

The starting point for understanding these problems is assessing the context in the local areas of Ancona and Split, finding data from external sources about the ferry tourists situation.

According to the data shared from the port of Ancona (source port of Ancona, 2019), in 2019 before the Covid-19 Pandemic there were more than 650 thousand passengers between June and August in the port of Ancona, a result that consolidated the previous year (more than 1 million throughout the whole year in 2018). Of the total, the passengers of the ferries have been 600.678, those of the cruises beyond 51 thousand; of these 281.008 are disembarked to Ancona and 328.887 instead have boarded. Most of those travelers arrive in the area by car, creating traffic jams and congestion at the highway exits, lamented by the local inhabitants.

Image 2 - Photo of a traffic jam in Split

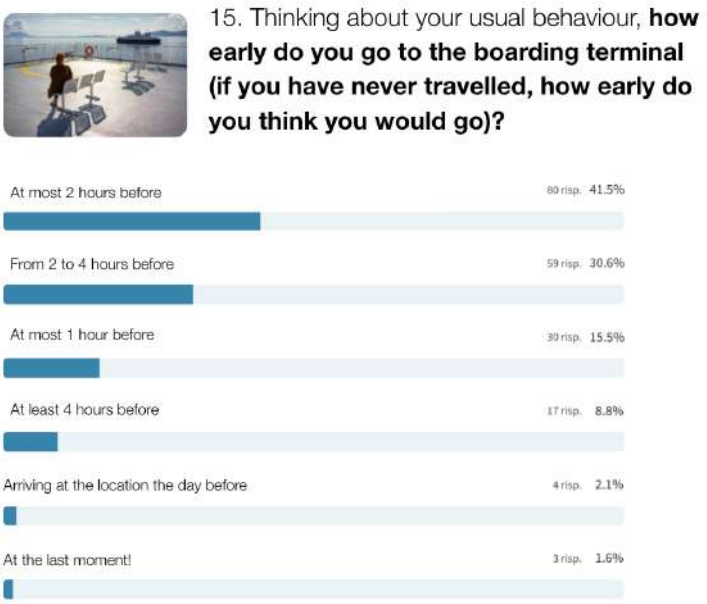
In Split, on the other hand, in 2018 almost 5 million passengers arrived in the port, both domestic and international (source: report di Risposte Turismo per l'Autorità Sistema Portuale Adriatico Centrale, 2018). These passengers cause an enormous number of vehicles arriving in the area: for instance, in July 2021, during one weekend more than 50.000 passengers and 12.500 cars arrived in Split, causing traffic jams on the coast and inland, from Pazar, over to the Ferry Port, and the bridge at Bačvice (Source: Slobodna Dalmacija, 2021).

Apart from the traffic, the incoming tourists also cause other problems, such as the noise pollution. In fact, as stated by the study from the Interreg LIST Port, the presence of an urban port exposes neighboring areas to a wide range of temporal variations in traffic volumes, potentially creating complex changing noise scenarios, especially in tourist destinations, during the peak season. The sound pressure level that occurs at certain times of the year and at certain times of the day can reach or even exceed the limit values set by environmental regulations. In fact, during embarkation and disembarkation there are changes in the intensity and composition of vehicular flow that negatively impact the livability of the waterfront areas as well as the tourist attractiveness of the city itself as a whole, which leads to the waterfront line being perceived solely as a route to reach perceived quieter places. (Source: Interreg LIST Port, Limitazione Inquinamento Sonoro da traffico nei Porti Commerciali, Olbia, 2021).

These problems are mostly caused by the behavior of the passengers, who arrive all at the same time at ports, and several hours before embarking. This way, they create traffic and noise. Then, they all wait for 2-4 hours in the port terminal areas, causing queues and pollution from their engines, often kept on to maintain air conditioning and to move towards the ferry.

To demonstrate these habits (and then verify if it could be possible to change them), in the Simulation Survey some questions have been asked about the embarking behavior. More than 40% of the passengers answered that they would arrive between 2 and 4 hours before the scheduled departure, while only 2% would arrive the previous day (Graph 5). With such a short time available, the tourists do not spend much time and money in the location, causing on the contrary traffic jams and CO2 emissions from their queuing.

Graph 5 - Travelers' arrival time intentions at the boarding terminal



The need to improve the situation, finding ways to improve their embarking behavior have been clearly demonstrated.

3.2.2. Do Local Businesses and Transport Companies need help in intercepting passing-by tourists?

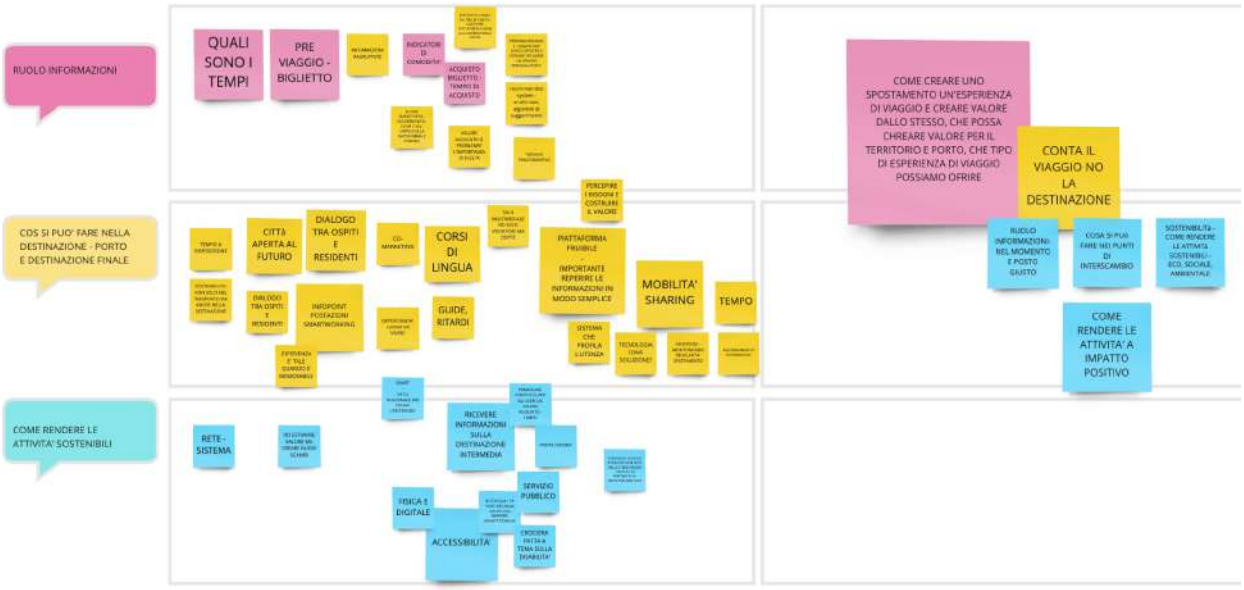
A first way to answer this complex question came from the Focus Groups. The main problem that emerged was not in attracting a higher number of tourists in their locations, but in being able to create more value from the tourists who are already passing through every year. This topic, in fact, was the focus of interest both within the meeting held in Split and within the Experience focus group (Image 3, third column).

In fact, the concept of creating and offering experiences capable of increasing the economic value of tourists' stay is considered particularly important. This increased value would come not only from the offer of different experiences, but also from a better customization, made possible thanks to a better data collection and increased knowledge about incoming tourists.

It has also been emphasized that the added value created is not only addressed to the enjoyment by tourists but is characterized by positive externalities for the entire geographical area involved (Image 4).

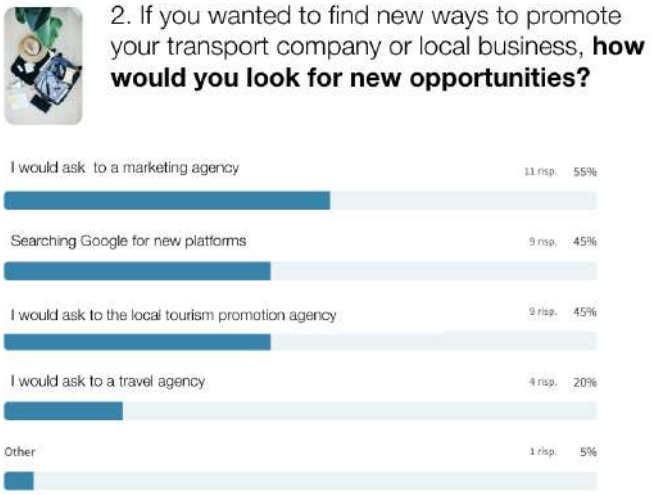
Image 3 - Screenshot of First Training Session's presentation for the E-CHAIN project

Image 4 - Screenshot of the Experience Focus Group with Stakeholders



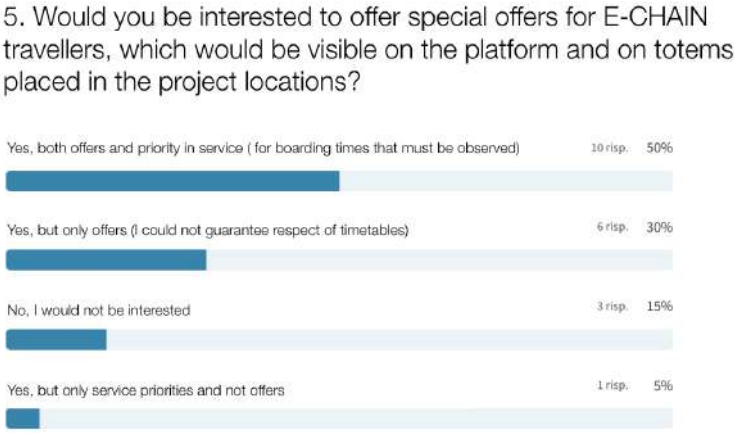
This question has then been analyzed in the Simulation Survey for the stakeholders: it emerged that most businesses are interested in finding platforms to promote their business. In fact, while marketing agencies are the best choice to promote the business, 45% of the respondents would search for new platforms and new opportunities (Graph 6).

Graph 6 - Stakeholders' intentions for promoting their business



Then, to intercept the tourists passing through, local businesses would be ready to provide special offers: half of the respondents would offer both price discounts and priority services, while for 30% it is not possible to offer the priority. Only 3 companies out of 20 would not be interested at all in offering promotions to E-CHAIN's users (Graph 7).

Graph 7 - Stakeholders' intentions for creating special offers targeting E-CHAIN travelers



In conclusion, the need of local businesses to receive help in promoting their businesses through new platforms is validated and therefore could be considered one strong reason

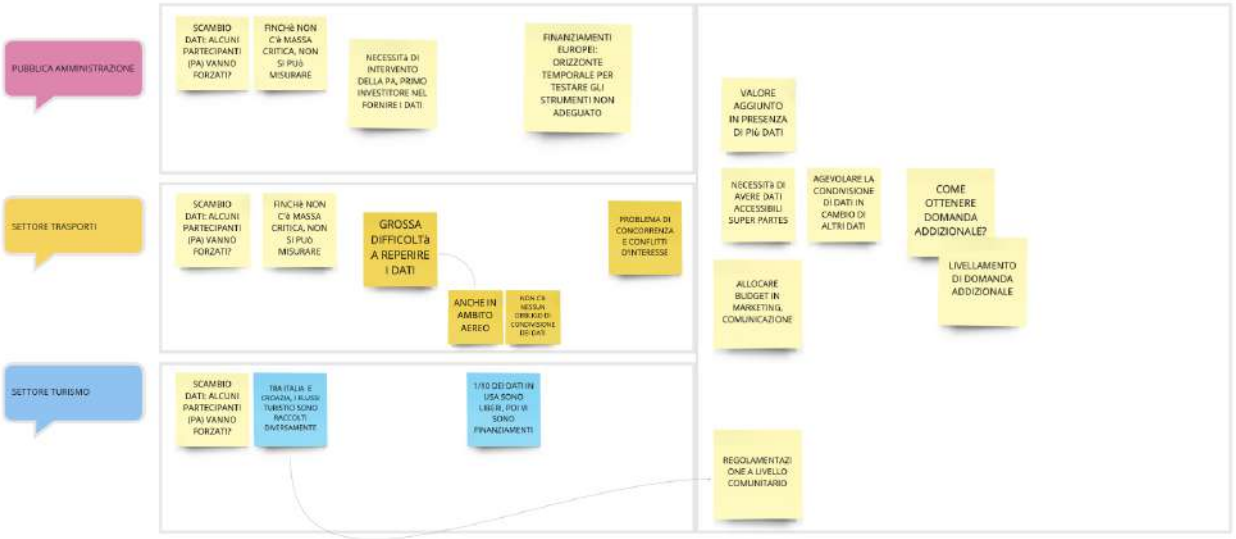
to better involve the stakeholders in the project. In addition, Travel Agencies could be an interesting channel to reach more stakeholders, since they are not in competition with E-CHAIN but could be involved to add their clients' information in the platform as a channel to increase their visibility.

3.2.3. Do local businesses, transport companies and Institutions need more data to optimize their activities?

This question about the importance of data has been answered thanks to the Connectivity Focus Groups. In fact it emerged a particularly strong need among stakeholders to have an adequate amount of data available for the optimization of their activities. The participants pointed out that having a greater amount of data about incoming tourists could be an important value even for small businesses, to become more efficient and plan their activities according to the tourists' needs.

Anyway, today it is not possible to have unbiased and complete data about a location, since each Institution or companies are creating "data silos" with their own data, without any real sharing on the outside. Therefore, since without a sufficient critical mass of data the insights are not so relevant, it is difficult for any organization to use the data efficiently (Image 5).

Image 5 - Screenshot of the Connectivity Focus Group with Stakeholders



Therefore, there is the actual need for initiatives that are aimed to collect larger databases - such as E-CHAIN for instance - or that move Institutions and businesses to share their data into a common database or statistical study that could be publicly available.

4. USAGE OF THE PLATFORM

Another group of hypotheses to be validated is linked to the use of the platform and the interest of potential users in really interacting with it, sharing their data to get the most out of its features.

In order to understand, therefore, the intention to use the platform and the interest of the potential users in the services offered, the features have been divided into five main areas:

- **CO2 Calculator Service:** through answers to specific questions, it's possible to understand what travelers' travel planning habits are and if the environmental impact of their emissions is relevant for them.
- **CRM Service:** this feature is going to be analyzed from both points of view: from the tourists' perspective, how much they are really inclined to subscribe to the platform, leaving their personal data and thus receiving messages and notifications; on the other hand, from the stakeholders' point of view, how much they are really interested in the messaging service by uploading their customers' data to the platform and sending them messages.
- **Experience promotion and purchase**: similarly, this feature has been analyzed from a dual perspective: for tourists, we will understand which are the most relevant experiences to find on the platform and on totems in the transit areas, whether they are interested in using them and purchasing directly from them; while for the stakeholders, we will understand which activities they want to do with the platform and if they are available to upload their own activities offered on the platform.
- **Interest for the Data Dashboards**: another area of the platform is dedicated to the analysis of data collected by the users interaction with the CO2 calculator, the messages received from the CRM and the interaction with the totems. Therefore, in this section the most important data for stakeholders are going to be analyzed.
- **Factors/triggers to join the Project**: finally, the factors that are most interesting for potential users to join the project are going to be investigated.

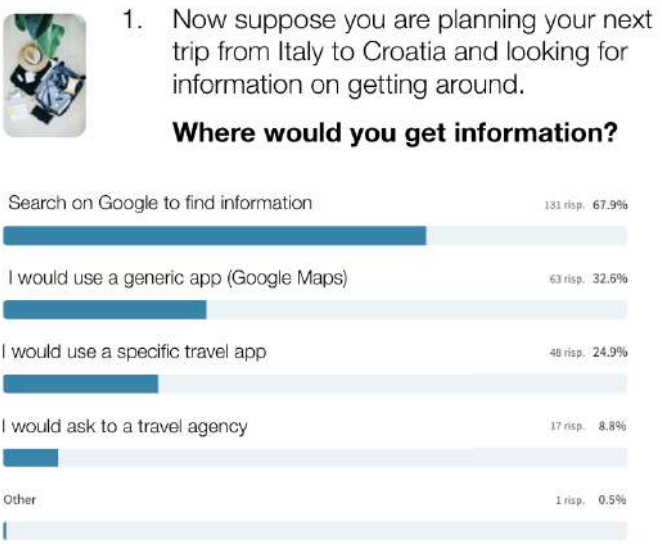
4.1. CO2 Calculator Service Validation

4.1.1. Are tourists really going to use the Trip & CO2 Calculator to find the routes instead of other maps apps?

This is a very important point, since as it has been confirmed by the Survey, the usage of a web platform is strongly related to the visibility on Google. In fact, 68% of the respondents

to the Simulation Survey affirmed that they would start from Google in searching for information about their trips. Then, only 1 user out of 4 would use a specific travel app, while 1 out of 3 would just use a generic app such as Google Maps (Graph 8).

Graph 8 - Travelers' sources of information for trip planning



This shows that to become a successful specific travel platform it's necessary to first be the best choice on Google. Then, it's important to provide a distinctive value to the users, offering complete information (the generic apps are used because it's possible to find any location) and improving the experience for the users, reducing the time and the effort to find the information they need.

The Trip Calculator of E-CHAIN is then going to be used only if its advantages are made clear from the start to the potential users, who should choose to use it instead of a more generic app. For instance, the strongest connection with the Transport Companies or the link with the other features During the Trip (receiving messages and/or offers for the days of the trip).

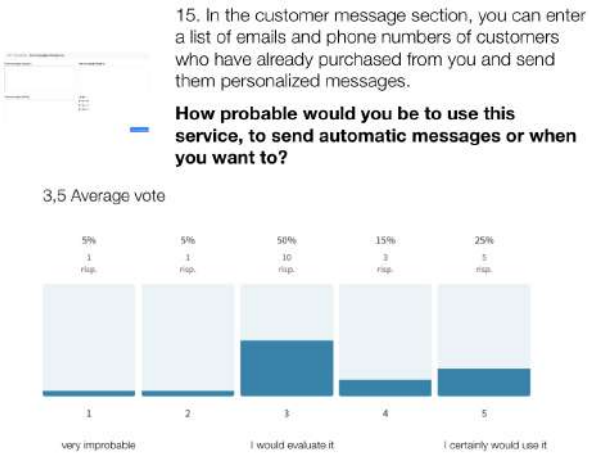
4.2. CRM Service Validation

The CRM Service, that is the possibility for stakeholders to send messages to their clients, and for tourists to receive messages from E-CHAIN's partners, needed to be validated to understand the interest of both parties.

4.2.1. Do Transport Companies really want to upload on the platform their customers' data to send them travel messages and co-marketing promotions?

Almost all stakeholders who participated in the survey are at least willing to consider entering data about their users so that they can later contact them with personalized messages and offers (Graph 9).

Graph 9 - Stakeholder's intention for uploading customer's information for sending personalized messages

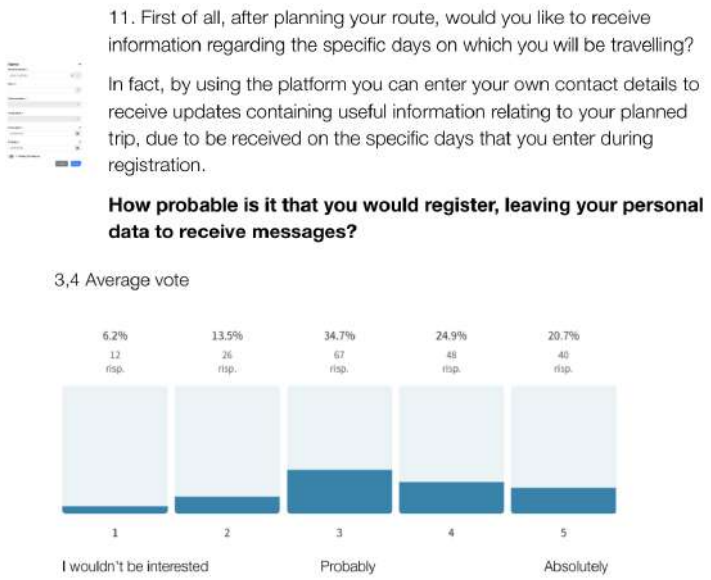


This interest has been voted as "averagely" important (a medium of 3,5 out of 5), therefore it would be necessary to analyze in depth their interest asking more questions, for instance if they are already using other CRM systems, what would they be willing to send to their clients and so on.

4.2.2. Do tourists accept to receive messages from the E-CHAIN service, and does this help them improve their travel experience?

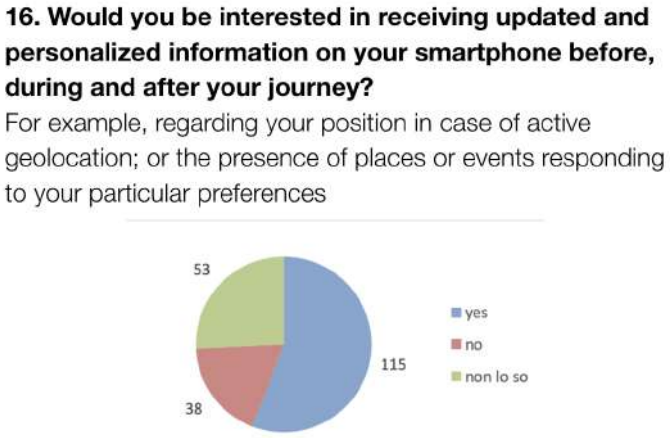
Users who participated in the Simulation Survey showed interest in the process of signing up to receive messages that could improve the experience related to the trip they planned. In fact, almost 80% of them responded that they would probably register to E-CHAIN messaging service (Graph 10).

Graph 10 - Travelers' intention to register for receiving personalized messages and information regarding the trip



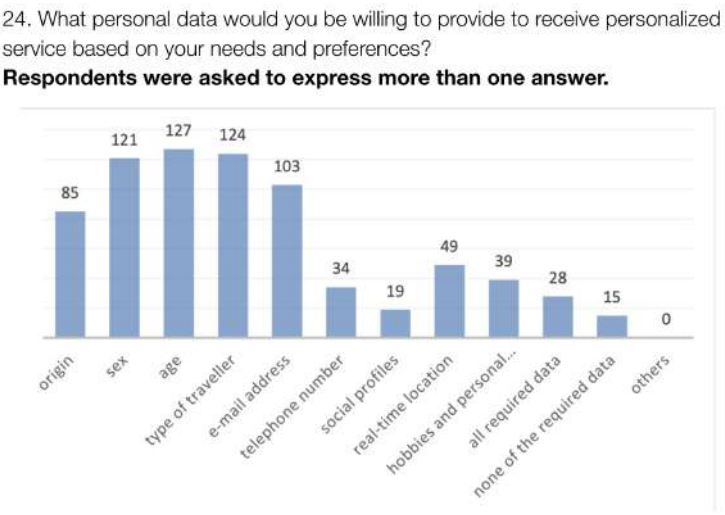
From the Assessment Survey the data are even more encouraging: more than 50% of the respondents would like to give their personal information to receive information during and after the journey (Graph 11).

Graph 11 - Travelers' intention to register for receiving personalized messages and information regarding the trip



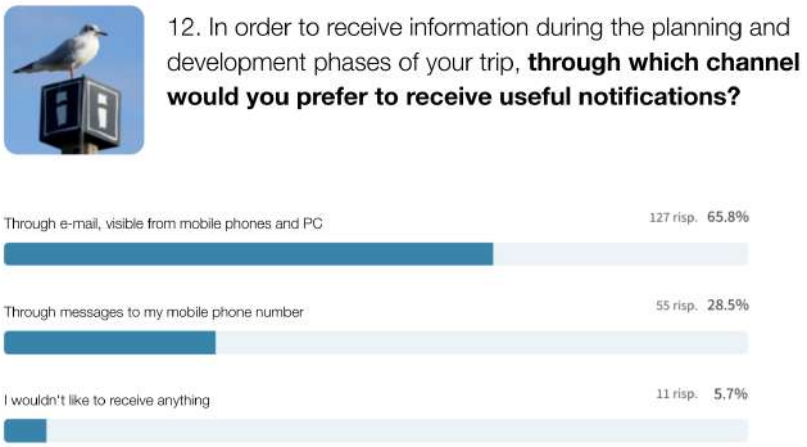
This willingness changes according to the information requested, with a greater propensity to share information such as: gender, age, type of traveler, and email address (Graph 12), while they would not share their actual location real time, nor their social profiles and not even their telephone number.

Graph 12 - Travelers' preferences regarding what personal data to provide



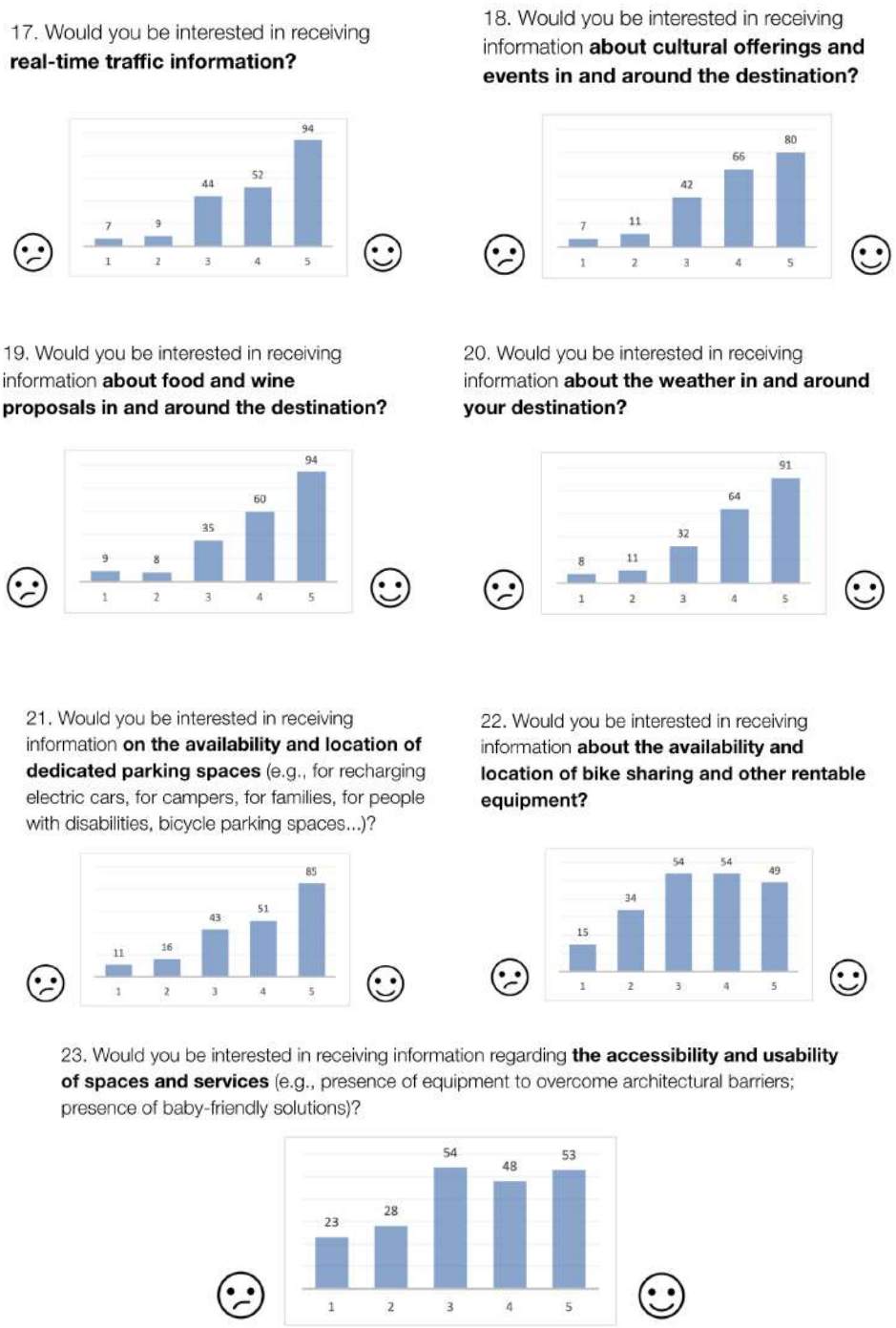
In fact, this last point is further confirmed by question 12 in the tourist Simulation Survey, in which a clear preference of the email channel over the telephone channel is expressed (Graph 13). Interesting to notice that even in this question only 5,7% of respondents affirmed not wanting any notification.

Graph 13 - Travelers' preferences regarding which channel to use to receive updates



According to which types of information they would like to receive, the respondents to the Assessment Survey preferred information mostly about traffic, weather conditions, food and wine and parking spaces (Graph 14). This high level of interest, confirmed also in the Simulation Survey, shows that receiving information would be useful to them.

Graph 14 - Travelers' perceived importance regarding what information to receive



Therefore, considering the results of the surveys both from stakeholders and for tourists, the CRM feature could actually be of interest for both parties if the messages creates value for the tourists and help the businesses to create more loyal customers.

As an additional insight, the information collected from the tourists could be valuable to better explain to the stakeholders what their clients want to receive from them, improving the importance of this feature.

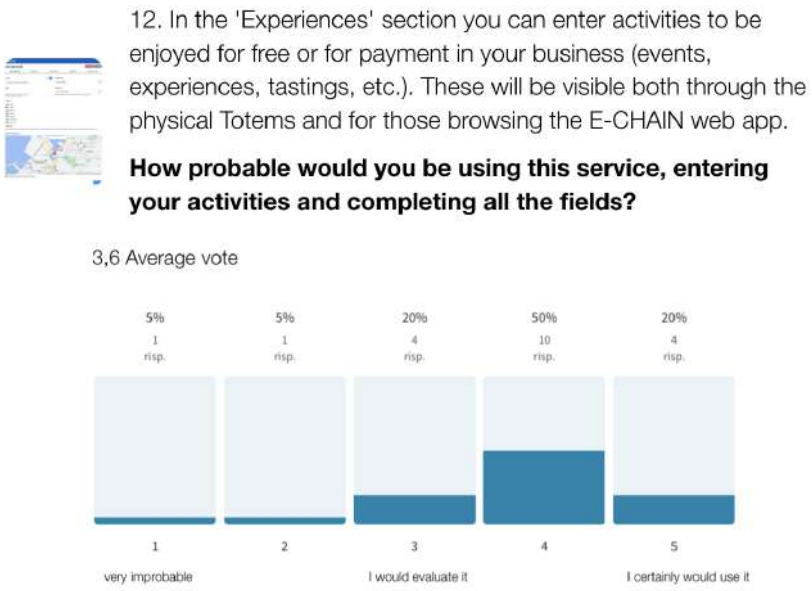
4.3. Experience promotion and purchase

Another important feature of E-CHAIN is the possibility to offer Activities and Experiences to tourists, who can discover them from the Totems of through the mobile web-application with the same interface as the totem's one. To verify the importance of this feature, questions have been asked both to stakeholders and tourists.

4.3.1. Are Transport Suppliers and Local Businesses available to login in the Back Office Platform to add their data and to keep them updated?

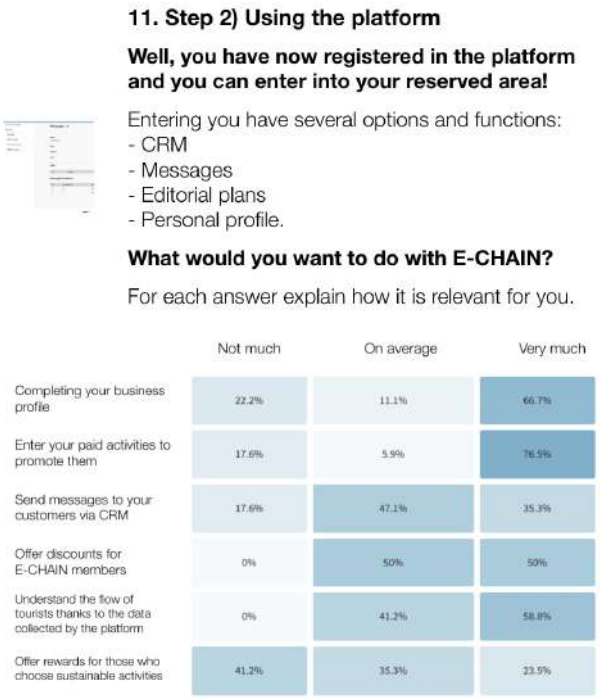
From the SImulation Survey, it emerges that Local Businesses, Transport Suppliers and tour operators are interested in registering on the platform and entering their paid activities in order to promote them: as shown in graph 15, 50% of them declare that they are interested in registering on the platform, complete all the fields and enter their offered experiences.

Graph 15 - Stakeholder intentions regarding uploading information about activities and events



Confirming this interest, 75,5% of respondents consider that uploading their experiences is the most important activity to be done with the platform, followed by completing the business profile, which is considered very important by 67% of respondents (Graph 16).

Graph 16 - Stakeholders' perceived importance regarding the the purposes of using the E-CHAIN platform



In support of that evidence, 65% of the stakeholders also declared that they are willing to login to keep updated their experiences (or that someone from their team will update them) (Graph 17). In addition, 15% of respondents said they would be inclined to integrate the management system they are using so that they can automatically upload and update experiences.

Graph 17 - Stakeholders' intentions on updating the experiences information

4.3.2. Are tourists interested in using the Totems and to purchase activities/experiences from them?

The users who participated in the Simulation Survey for tourists demonstrated a relevant interest in the information provided by Totems. In fact, all the proposed information has been considered averagely or very much relevant.

According to the Local Events and Activities proposed by the stakeholders, 47,1% of the respondents consider it very useful, while another 42% think that they are averagely important. Only 10,4% would not like to receive information about it, so the importance of this feature is validated (Graph 18).

Looking at the other information types, 63,2% of respondents would like to read travel information (timetable of trains, planes, buses and ferries), 45,6% would like to visualize a map of the area, while 49,7% would read about nearby parking spaces.

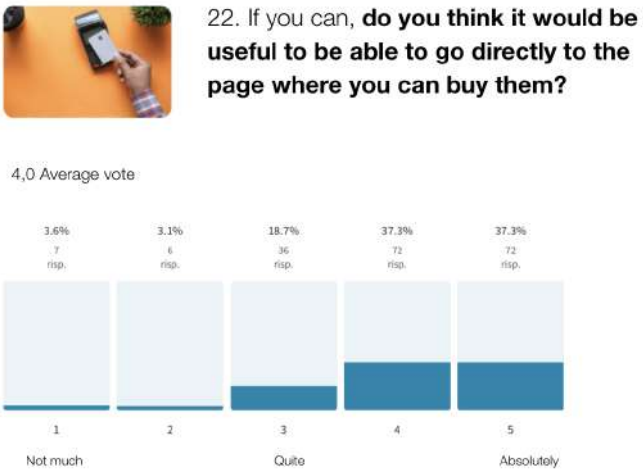
Graph 18 - Traveler's perceived importance regarding the information provided by the Totem

21. In the project locations there will be some digital totems to find information in real time. Among the information available at the totems, **which do you think will be the most useful for you when you arrive at your destination or at the intermediate stop?**

	Not much	On average	Very much
Travel planning with ferry, train, bus and flight	9.8%	26.9%	63.2%
Rules and regulations for travelling	17.6%	43.5%	38.9%
Traffic and road communications	14.5%	46.1%	39.4%
Exploration and suggestions for sustainable activities	10.4%	48.2%	41.5%
Local events and activities	10.4%	42%	47.7%
Local weather	22.8%	44.6%	32.6%
Emergency numbers	25.9%	39.9%	34.2%
Map of the area	16.6%	37.8%	45.6%
Parking in the area	10.4%	39.9%	49.7%
Bike and scooter rental points	20.7%	44%	35.2%
Electric charging stations	46.1%	38.9%	15%
Bus and local transport timetables	9.3%	37.3%	53.4%

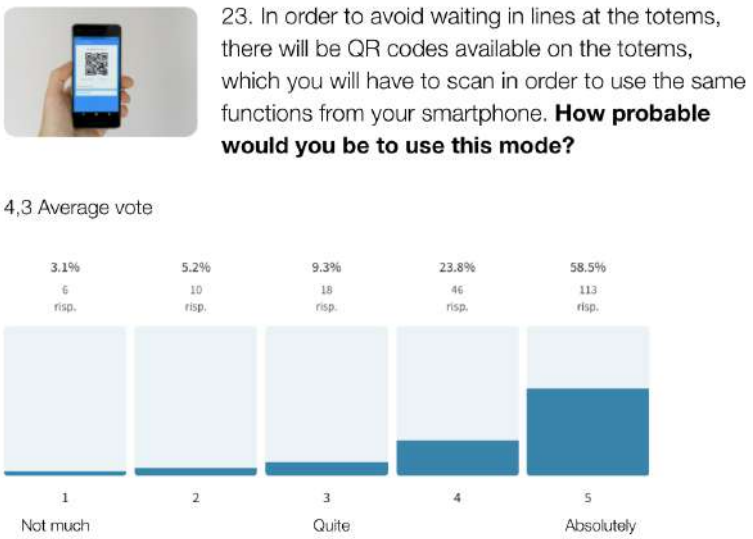
Then, respondents expressed their willingness to purchase the events and activities, if possible, directly from the totems through a payment page: 74,6% of respondents said they were absolutely willing (Graph 19).

Graph 19 - Traveler's intentions regarding the possibility of purchasing experiences from the E-CHAIN platform.



Finally, it is useful for users who participated in the simulation survey to be able to use the QR code located on the totems to access information directly from their smartphones, skipping possible queues in the areas where the totems are located. In fact, 82.3% of them say they are absolutely willing to scan the QR code and use it (Graph 20).

Graph 20 - Traveler's intentions on using the QR codes feature available on Totems



Therefore, through those questions it has been verified that travelers would like to use the totems to discover activities and events nearby, eventually buying them directly from the totems.

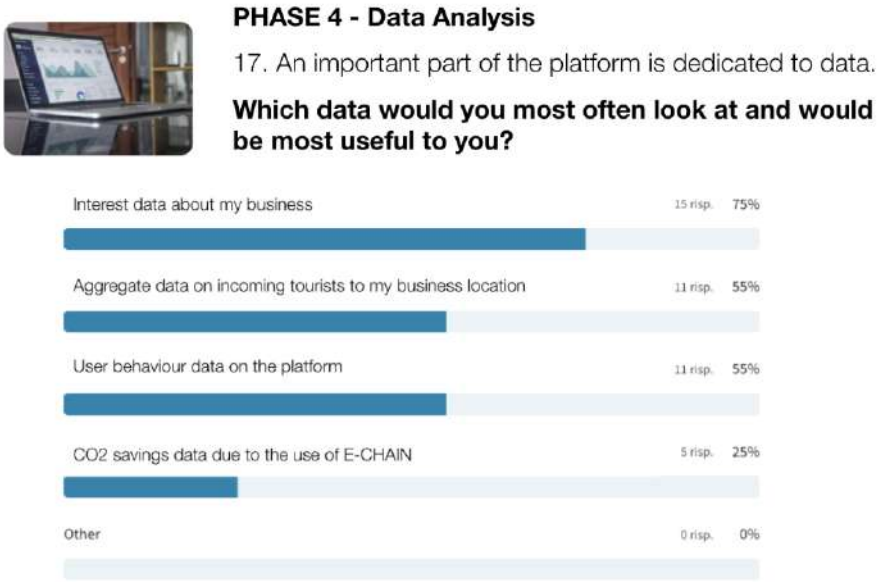
4.4. Interest for the Data

Another important feature of the E-CHAIN project regards the data generated by the tourists through the usage of the platform and then made available to the stakeholders.

4.4.1. To read the Data, are the Stakeholders interested in entering a Dashboard?

In the Simulation Survey, when asked about the perceived importance of data, the stakeholders affirmed to be more interested in data about their own business (75% of respondents expressed this preference) and about the flow of tourists coming in their location (55% of respondents). Besides, users' behavior within the platform is particularly relevant (55%) to potential partners who responded to the simulation survey. However, only 25 % are interested in receiving data regarding CO2 levels saved as a result of using the platform (Graph 21).

Graph 21 - Types of data in which stakeholders are interested



The survey responses indicate that stakeholders need help in collecting data both internal and external, therefore organizing training sessions about data collection and analysis could be an opportunity to increase their knowledge.

4.5 Factors to join the project

Lastly, to understand the usage of the E-CHAIN platform it is important to verify which could be the reasons for the potential users to start using the platform. The main reason that is stressed in most marketing materials is sustainability, so some questions of the Assessment and Simulation Surveys have been conceived to better comprehend the importance of this factor.

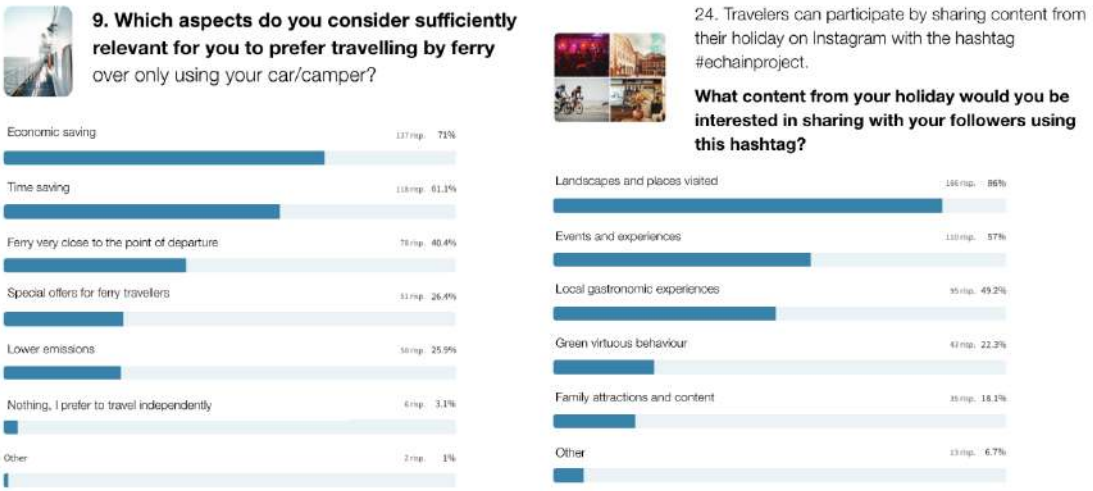
4.5.1. Is sustainability a key driving factor for both travelers and Partners to join the project?

As emerges from many answers, sustainability cannot be the only factor that moves to join the project, both from the tourists' and the stakeholders' point of view.

In fact, it emerged that the tourists prefer to save money and time when choosing the most suitable means of transport for their trip (Graph 22 - left side). Moreover, in other questions where explicit reference is made to green activities to be enjoyed, tourists do not express this preference.

In the same way, also in sharing content on social media with the hashtag #echainproject, they do not express that they would like to share with their followers green actions taken during their trip (Graph 22 - right side).

Graph 22 - Traveler's opinion on importance of sustainability during the trip



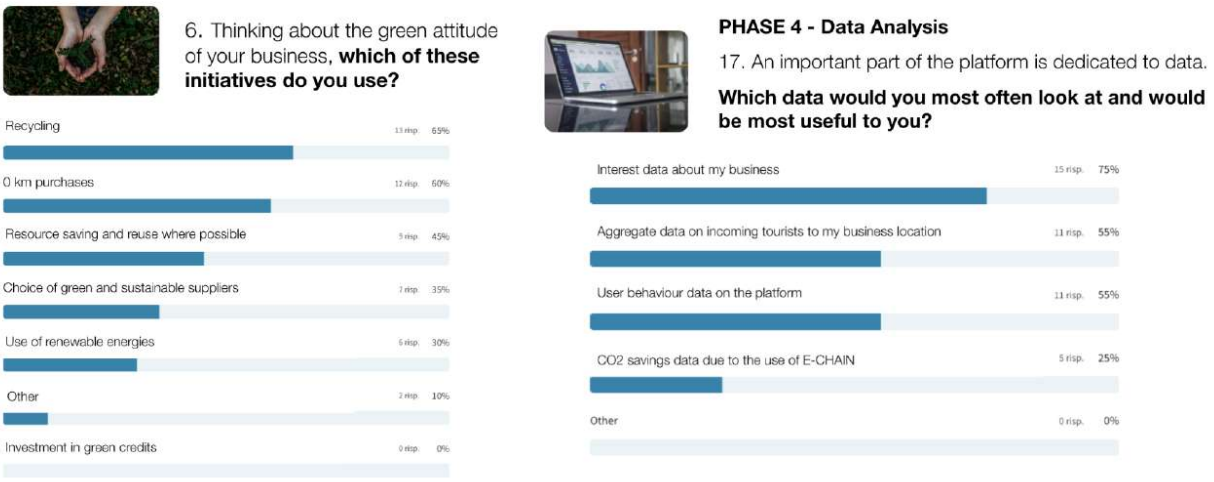
From the perspective of local businesses and transport companies, it emerges that not all of them adopt sustainable behaviors: in fact, most respondents declared that they are just

recycling (13 respondents out of 20) and buying km 0 products (60%), while other green initiatives are not taken into account (Graph 23 on the left).

In addition, when asking about the social strategies they would adopt, most stakeholders do not seem interested in offering rewards to users sharing sustainable actions (for 41.2% of respondents it is not relevant at all).

Finally, among the data obtained from the platform that they consider most relevant, those related to the levels of CO2 saved thanks to E-CHAIN result in the last place (Graph 23 on the right).

Graph 23 - Stakeholder's sustainable initiatives and importance of different types of data



Therefore, the sustainability mission of E-CHAIN could be a way to interest the potential users and to show a different approach from the other marketing platforms, but then other triggers, more solid and specific, should be added to make them really join the project.

5. IMPROVEMENT & POSITIVE IMPACT

Since E-CHAIN is a public project, in defining the Business Model the success of the initiative has been defined through some Impact Metrics (Awareness Metrics, Sustainability Metrics, Economic Metrics) that measure the real effectiveness of the project on the local areas. Therefore, after the Simulation it is necessary to find evidence to validate that the E-CHAIN platform could be really able to improve those metrics thanks to its usage by tourists and stakeholders.

Not all the Impact Metrics defined in the Business Model could be validated at this stage, since some of them regarding the pollution and the actual number of incoming tourists could not be tested; anyway, it is possible to understand the dynamics that could be started by E-CHAIN and then have a positive impact.

5.1. Impact on the Environment

5.1.1. Using the CO2 calculator will really help changing travel behavior (traveling by ship instead of just car)?

According to UNWTO data, on average only 5% of tourists travel to their destination in Europe by ship/ferry, while 54% by plane, 39% by car, 2% by train (source: European Parliament, Sustainable Tourism, 2015).

Anyway, traveling through ferry reduces the impact on the environment: according to the UK BEIS data, traveling via ferry the emissions are: 18g of CO2 per passenger/kilometer for a foot passenger (which is less than a coach) or 128g for one driver and car (which is more like a long-haul flight.) As a reference, a car with one passenger produces 171g/km (source: Defra GHG Emissions Factors, 2019).

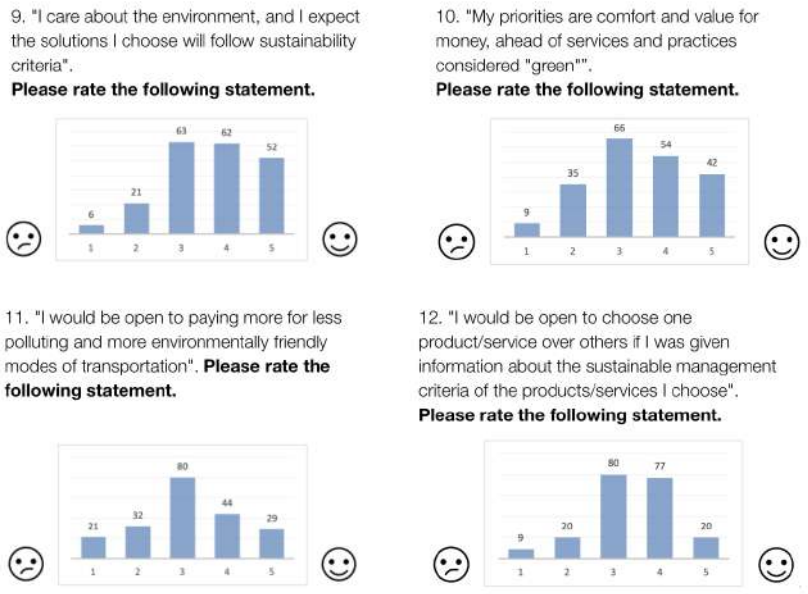
Therefore, promoting ferry's travel could have a positive impact on the environment, while at the same time improving the economies of the port cities. The E-CHAIN Trip Calculator has been conceived exactly with this goal, to show that the ferry's option is more competitive in terms of emissions, kms, time and costs than the trip by car.

Then, to understand the potential effectiveness of the platform and its CO2 calculator feature in reaching this goal, some questions have been asked both in the Assessment Survey and in the Simulation Survey for tourists. The results of these questions are sometimes misaligned, since when asked about the importance of reducing the trips'

emissions most respondents do agree, but when asked about their decision to travel by ferry, their answers differ.

Indeed, in Graph 24 the answers are mostly positive towards an environment-friendly travel approach (questions 9), but in question 10 they state that comfort and economic savings are very important for them. Moreover, in question 11, when confronted with a question about their willingness to pay a higher amount of money to reduce pollution and take advantage of more sustainable modes of transportation, the majority of respondents rank indifferent, with the tail end of the distribution slightly more prominent to the right, in the positive willingness zone.

Graph 24 - Traveler's opinion on the most important factors for choosing a means of transport



Further confirmation comes from the question in the Simulation Survey regarding the factors of greatest importance when choosing between purchasing a ferry's ticket or travel only by their personal vehicle. In fact, in Graph 22 analyzed above, only 25,9% of respondents select that generating lower emissions would be a factor of choice, while most respondents select elements such as savings of money and time (Graph 22, pg. 30).

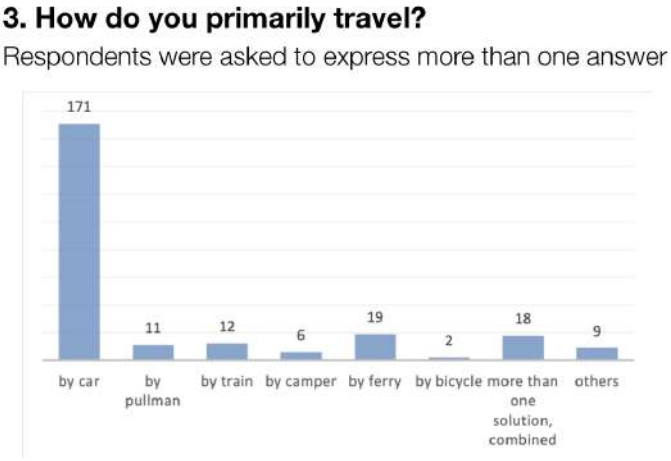
Therefore, the E-CHAIN Calculator could actually help move the tourists to choose the ferry's alternative, since it improves the awareness of the potential travelers by showing the possible routes and timetables. Anyway, the "green" comparison would not be enough: it's necessary also to present the other advantages of ferry's traveling, such as reduced costs (compared to the expenses for highways and oil), reduced time (compared to the car's route time, the likely highway traffic, the queue at the borders, ecc.) and increased comfort

(possibility to enjoy the trip through on-board activities or relaxing). All those factors should be displayed in the Calculator results, showing the benefits of the ferry transit in comparison with the car's route.

5.1.2. Are users really clicking to the Transport Companies' website to book a ferry/bus, or do they still travel by car?

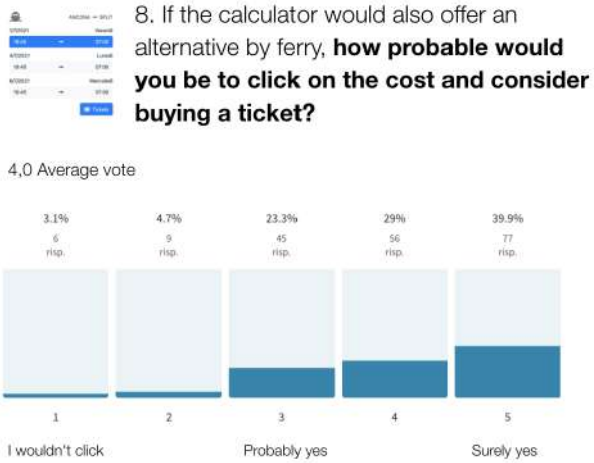
It is crystal clear and has already been hypothesized how the strong majority of tourists and respondents of the Assessment Survey consider the car as their trusted means of transportation for such trips (Graph 25), normally not considering the alternatives.

Graph 25 - Travelers' usual means of transportation



Despite this, when in the Simulation Survey the tourists simulate the usage of the CO2 Calculator, most of them would evaluate discovering more about the ferry's tickets. Indeed, 40% of respondents would be absolutely willing to click on the "tickets button" to know the price and eventually to buy, while the other 42,3% would probably or very probably do so (Graph 26).

Graph 26 - Travelers' intentions regarding obtaining more information about the ferry trip



This means that in general the awareness of ferry's travel is very low and tourists do not evaluate it as an alternative. Anyway, when this alternative is actually proposed, most of them would actively consider it. This evidence shows the importance of increasing the marketing and communication efforts to promote ferry's traveling to people who live in the areas that could actually use this type of transport.

5.2. Economic Impact on the Port Areas

5.2.1. Can E-CHAIN really improve the travel experience of tourists and reduce the problems of port areas?

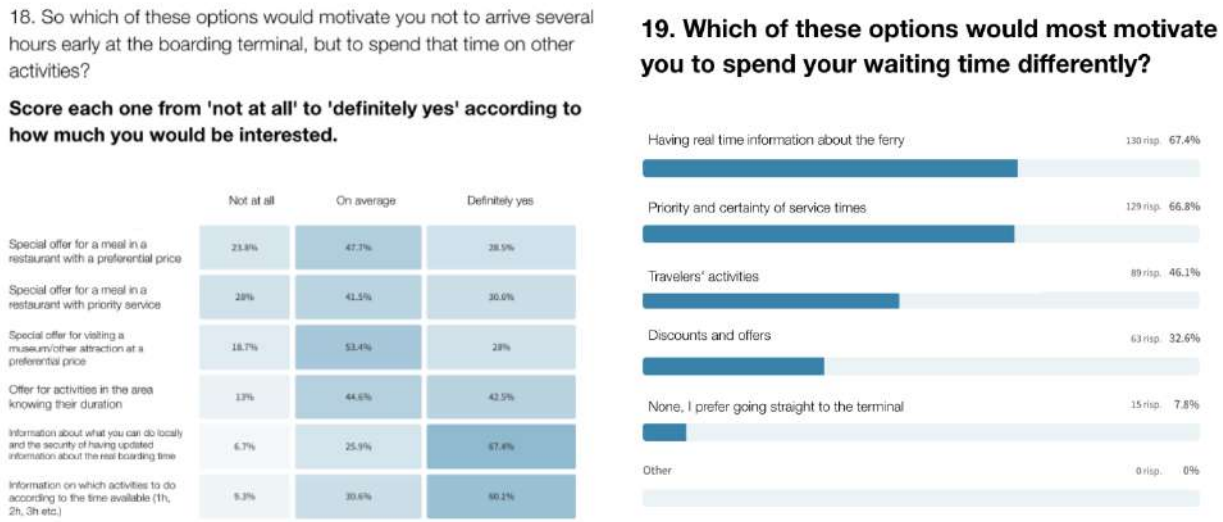
As already seen above in chapter 3.2.1, traffic and acoustic pollution are severe problems in the port areas, caused by passengers who arrive all together from the highways around, most of them 2-4 hours before the embarking and only 2% arriving one day before (Graph 5). Besides, tourists do not spend much time and money in the location, causing on the contrary traffic jams and CO2 emissions.

In this situation, the hypothesis is that E-CHAIN could help by proposing alternative behaviors to tourists. In fact, if tourists who arrive early at the port would use this time differently, by visiting the cities, purchasing in the local shops and eating in the local restaurants, some of the traffic problems near the ports would decrease. Even better, if they arrive one day in advance, traffic at the highway exits would decrease and the local areas would benefit even more from the tourists' transit. The question is then: how could E-CHAIN really obtain this goal?

From the Simulation Survey, it emerged that tourists could actually be motivated to spend their waiting time doing other activities. The main trigger to do so is having real-time information about ferry departure times (for 67,4% of respondents), followed by knowing what to do according to their real availability of time (for 66,8% of respondents), showing that they would like to minimize the risk of missing the ferry (Graph 27 - right side).

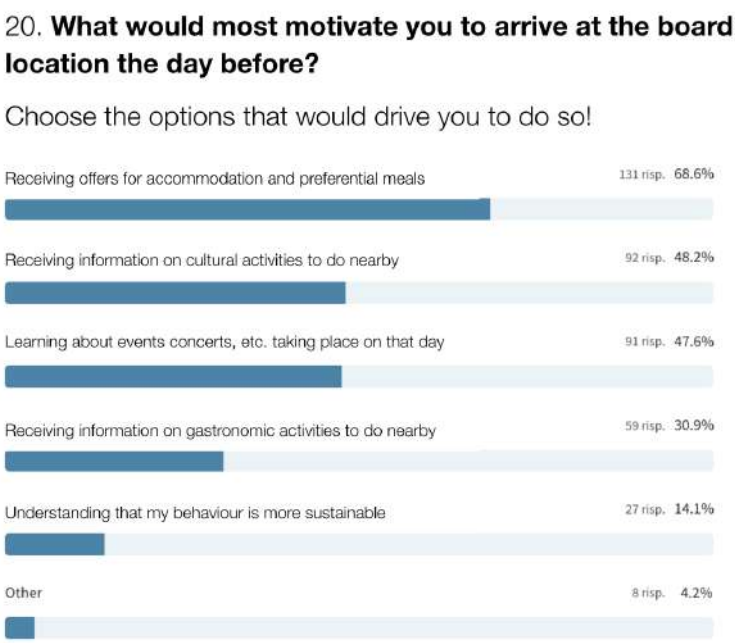
Even when compared with special offers for meals and special offers for visiting museums, the availability of information about what to do locally according to the available time are the options with higher importance (Graph 27 - left side). Besides, it is appropriate to note that the possibility of having priority of service is considered "definitely important" by a higher number of respondents than the possibility of receiving a discount.

Graph 27 - Information and options that would motivate travelers to arrive the day before



Regarding the triggers to move the tourists to arrive one day in advance, nearly 70% of the respondents to the Simulation Survey answered that receiving offers for accommodation and meals could actually motivate them. As a second trigger, the information about cultural activities could motivate nearly half of the tourists: this evidence shows that providing better information to travelers who already purchased their tickets could then improve their route planning and so reduce their impact on the environment.

Graph 28 - Triggers to arrive one day in advance in the port area



As a confirmation, the Assessment Survey conducted by the University of Trieste revealed a general expression of confidence in the positive impact of multiple features of the platform on the territory, its citizens and tourists.

Indeed, the availability of real-time information on traffic, the possibility of renting sustainable means of transportation (e.g., bicycles), and the presence and location of activities and experiences in the area are all considered to have a positive impact by the majority of respondents (Graph 29).

Graph 29 - Opinions on the positive impact of the platform on the territory and tourism

Concluding, offering information both on the real time state of the ferry and on the available activities, events and experiences nearby could be a trigger to enhance the positive impact of ferry's passengers. Therefore, since these types of information are provided by the E-CHAIN's totems' application (which is accessible also from mobile devices thanks to QR codes), it could be possible to propose it to passengers arriving in the ports areas.

6. ECONOMIC SUSTAINABILITY OF THE E-CHAIN PLATFORM

Another important part of the validation is to understand if the Business Model would be sustainable, in the event that the project would need to cover the future costs by generating revenues. In fact, in the Business Plan document several Revenue Models have been described as possible choices to translate the value created by E-CHAIN into revenues to sustain the platforms' costs. The most important models that have been identified are:

- Pay per Click: since the CO2 Calculator and the Totems promote the purchase of tickets for transportation routes and activities, for each user who clicks from E-CHAIN and arrives on the business's website it could be possible to require a small fee.
- Subscription model: to be present on the Totems and the CO2 Calculator, the stakeholders should pay an yearly subscription.
- Purchase fee model, generating revenue from the actual purchase of tickets, services and activities.

Therefore, the next step is to validate with the potential Suppliers, both Transport Companies and Local Businesses, their willingness to pay according to each Revenue Model.

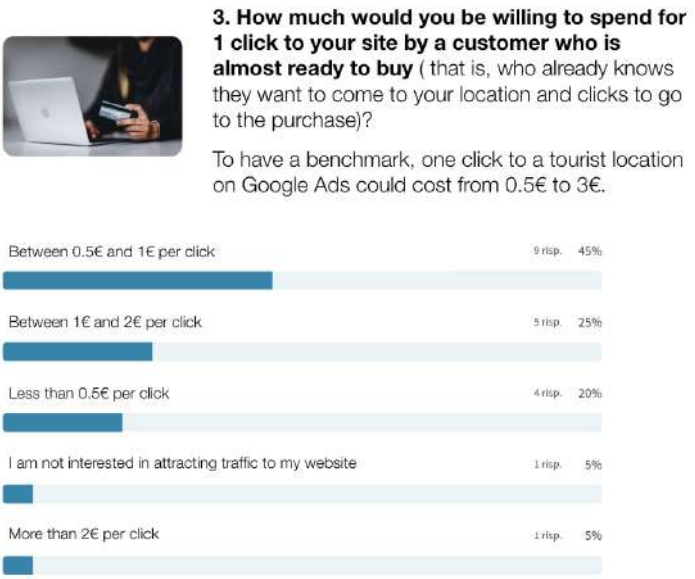
6.1. Main Revenue Models

6.1.1. Would the stakeholders be interested in paying a CPC fee?

To understand this point, in the Simulation Survey for stakeholders the respondents have been asked if they would be willing to pay for leads arriving at their websites to purchase their services. Almost all respondents express an intention to pay a CPC fee, while only 1 out of 20 answered not to be interested in attracting leads in this way (Graph 30).

The diversity in the responses is then determined by the different spending intentions expressed. In this regard, considering that the cost of a click on a Google Ads for a tourist location is within the 0,5-3€ range, the majority of respondents (65%) would position themselves at the beginning of this range with a spend of up to 1 euro per click.

Graph 30 - Spending intentions of stakeholders to get a click to their website



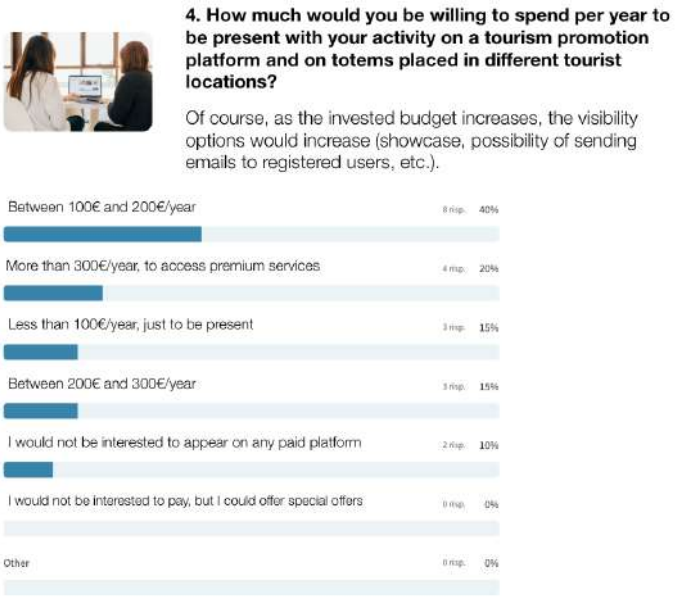
This is of course just preliminary information, but it shows that a PPC service could be evaluated as a possible revenue model.

6.1.2. Would the stakeholders be interested in paying a fixed subscription fee to appear on the E-CHAIN platform/Totems?

According to the second possible revenue model based on subscription fees, in the Simulation Survey most of the stakeholders responded that they would be interested in investing some money to be featured on E-CHAIN assets. In fact, almost all respondents (90%) would be willing to invest in order to obtain more visibility through an online platform (Graph 31). Most of them (40%) would spend between 100€ and 200€ per year, while 20% would be spending more than 300€/year, since a higher investment would be linked to obtaining additional, premium services than those normally provided by the platform.

On the other hand, 15% of the respondents show a lower degree of interest, stating that they would invest less than 100€ just with the purpose of being present on the platform.

Graph 30 - Spending intentions of stakeholders to be present within the platform with their activities and experiences offered



This positive answer suggests that a revenue model based on subscription fees could be of interest for local businesses, who are used to investing for their visibility. In particular, the Totems could be an important starting point to prove E-CHAIN's ability to promote the stakeholders, analyzing the number of real interactions made by tourists and clicks to discover the nearby activities.

6.1.3. Would the stakeholders be interested in selling their activities/experiences directly from E-CHAIN?

Based on the answers given within the Simulation Survey and already analyzed in paragraph 4.3, most stakeholders would be willing to sell their services/activities on E-CHAIN.

In fact, as evident from Graph 15 analyzed above, only 10% of respondents are against the use of the E-CHAIN platform for the promotion of their activities and experiences, while 20% of respondents are at least willing to consider this possibility, showing uncertainty but not opposition. As many as 70% of respondents, on the other hand, demonstrate a positive inclination to promote activities/experiences (Graph 15 - Stakeholder intentions regarding uploading information about activities and events, p. 25).

6.2. Other Revenue Models

Other possible ways to generate revenue in the future that have been identified in the Business Model can be further analyzed and validated. One of the hypotheses for the future of the platform, indeed, has been to offer B2B services to the stakeholders to help them reach more tourists.

6.2.1. Would suppliers be willing to pay for more personalized service?

It is clear from the analysis of the responses to the simulation survey that tour operators, local transport companies and potential partners are looking for new opportunities and platforms to improve their visibility (Graph 6 - Stakeholders' intentions for promoting their business, p.17). Most of them, in particular, are working through marketing agencies, therefore if E-CHAIN could offer marketing services they could be willing to evaluate the opportunities.

Moreover, half of the stakeholders answered that they do not have any ticketing or e-commerce platform where their clients can finalize the purchases. Therefore they could be interested in receiving support to implement ticketing areas on E-CHAIN or on other platforms.

6.2.2. Would suppliers pay for Data?

This question is strictly related to the insights that could be retrieved from data and the real critical mass of information that would be available thanks to E-CHAIN.

According to the interest for data, as seen above in Graph 21, nearly all the respondents (75%) declare that they are interested in data related to their business. Consequently, it emerges that the stakeholders need to understand their actual level of their visibility in the market in order to be able to improve their activities and reach more tourists.

The interest for other types of data (about their locations and the platform usage in general) appear to be less strong, showing that most stakeholders do not understand completely the importance that data could have to improve their results.

Therefore, probably most stakeholders in the project's local areas would not be ready to pay for data. Their awareness should be increased thanks to more training sessions and events (online and in the cities involved in the project), explaining with examples what they could achieve thanks to a better knowledge of their potential customers and through the digital assets that today are available to them.

7. PROJECTS INTERNAL QUESTIONS

The E-CHAIN Business Plan is based also on other elements that regards the project's team and Partners, therefore some internal assumptions should be validated as well. Those hypotheses could not be validated through simulations or surveys, since they depend on the future decisions that the Partners will make after the end of the PILOT project. Therefore, the key questions will be summarized in this chapter as a reminder for the future phases of the project.

7.1. Channels

The channels to reach the potential users, such as the stakeholders and the tourists, need to be better validated through the Marketing Plan after the PILOT phase.

In fact, the only channels that are active for now are the Totems and the E-CHAIN web application, while the other channels (i.e. SEO activities, social media, public relations, ecc.) should be activated according to the future Marketing Plan.

For instance, the E-CHAIN website should be optimized for Search Engines (SEO) and a content marketing strategy should be evaluated to improve the positioning on Google.

Then, after the conclusion of the PILOT project and the installation of all the Totems, the local newspapers should be contacted to validate their willingness to promote the project, explaining to their readers the E-CHAIN goals. The assumption is that being an European project with a sustainable goal, most newspapers will be willing to write about it.

At the same time, social media should be used to promote the usage of the different features of the platform, involving the different stakeholders thanks to the sustainability approach.

The key questions for the Channel are then about:

- who is going to undertake those activities and
- what could the results be without a marketing budget.

7.2. Key Activities & Costs

The same approach can be applied to the Key Activities, such as the most important activities that the Partners should undertake, and the Costs that should be paid for each of them.

In particular, the questions still to validate are:

- **Who is going to manage the platform and the whole project** after the PILOT phase and therefore undertake the Key Activities? This question is of course related to the one about the costs that will be connected to the activities.
- **How difficult is it to involve new partners, Local Businesses and Transport Companies?** To this question, some partial answers could be found in the Simulation Survey, since from Graph 15 it is clear that tour operators and local transport companies are interested in really using the platform and its services. In fact, 50% of them declare that they are interested in registering on the platform, complete all the fields and enter their offered experiences (Graph 15 - Stakeholder intentions regarding uploading information about activities and events, pg. 25).
- **How much time does it take to maintain and update the platform technically, and therefore how much would it cost?** This question is still not answerable since the users have not started yet to navigate the platform.
- **How much time does it take to maintain and update the content so that it is always consistent, updated and useful?** This question is still not answerable, since the update will start after the first tests. One piece of information that could be useful, anyway, is that in the Simulation Survey the stakeholders demonstrated their willingness to add and keep updated their own information. Specifically, 65% of respondents declared that they are willing to update their experiences or that someone from the team will update them, and 15% of respondents said they would be inclined to integrate the management system they are using so that they can automatically upload and update experiences (Graph 17, Stakeholders' intentions on updating the experiences information, pg. 26). Anyway, the question remains for the other types of data that cannot be managed directly by the stakeholders.
- **How much effort and costs is the Customer Care for the in-platform purchases going to require** to help the different users to take advantage of it? This question is still not answerable, since at the moment there has been no need for customer care.

7.3. Key Resources & Partners

The main Resources for E-CHAIN are the different digital properties and software, such as the CO2 Calculator, the web application, the back-office for the stakeholders and the Institutions and the totems. These Resources are strictly connected to the Partners of the project, who detect the ownership of them and therefore will collaborate in the future to maintain the project active.

At the actual project state, that is at the end of the PILOT phase, most of the Resources are under control of the Lead Partners, such as the Comune of Ancona, who is going to undertake the main activities in the next months. Anyway, at the end of the project the future roles of the other Key Partners should be better defined by the parties themselves, to ensure that the Totems and the online web application will keep working over time.

8. CONCLUSIONS AND IMPROVEMENT SUGGESTIONS

Concluding this Business Plan Review, all the areas of the Business Model have been analyzed to validate the assumptions or to find improvement insights.

In this last chapter the most important insights are going to be summarized to determine the sustainability of the E-CHAIN platform, proposing some recommendations and improvements ideas that can be implemented in the future.

8.1 Suggestions and improvements regarding Tourists experiences in ports and terminals

From the perspective of tourist flows in the areas involved in the project, **tourists arriving at the ports/terminal could really benefit from E-CHAIN's to improve their travel experience and adopt more sustainable behaviors.**

This statement is particularly derived from the evidence in paragraphs 3.1.2 and 4.2.2. of this document; in fact, providing the right information to the tourists could trigger different embarking behaviors both in arriving one day in advance and in spending the waiting time in the nearby areas.

To help gain these results, anyway, it is important to increase the visibility of E-CHAIN's information on the location, which at the moment are visible only through the physical Totems' interfaces (located in the city center of Ancona and Split).

Since the same interface could be reached through QR codes and visualized on the mobile devices of the tourists, a suggestion could be installing at the port terminals some banners with QR codes, or distribute postcards with QR codes, inviting incoming travelers to check the E-CHAIN web application, to read information about what to do in the nearby area and to know the exact real time departure of the ferry.

This could effectively help the role played by the Totems, without restricting the platform's reach to only the city center where they are placed but reminding tourists the presence of the web application even in other areas.

This way, the use of the platform would be adhering to a logic whereby totems are one of multiple touchpoints useful in reaching a critical mass of users (the importance of this point had been mentioned in paragraph 3.2.3). Having multiple physical entry points would definitely increase the usage of the platform, both for travelers and for stakeholders.

Moreover, since totems are an additional touchpoint to attract tourists to the locations where they are placed, it is possible to use the QR codes present in order to monitor the flow of tourists. In fact, by scanning the QR codes, it is possible to understand how many tourists stop and use the platform, even on their smartphones, thus demonstrating real interest.

8.2 Suggestions and improvements regarding Stakeholders' opportunities

E-CHAIN could be an important player to connect tourists' demand and stakeholders' supply, offering concrete opportunities to the stakeholders and helping them improve their marketing capabilities.

In fact, the Simulation demonstrated that the tourists would like to purchase ferry tickets and activities directly from the E-CHAIN platform and totems, while only 50% of the stakeholders have an online ticketing system. This means that E-CHAIN could really be the missing piece for smaller businesses to have a booking system for their activities.

Thus, the E-CHAIN platform can be a useful tool to lead many local businesses toward a marketing development phase, characterized by a clearer and more widespread digital presentation of their offerings, taking more advantage of the digital opportunities.

Besides, E-CHAIN could also be a direct revenue-generating tool. From this perspective a suggestion is to enable payments on E-CHAIN (as a future update) or to improve the connection with external systems. These improvements could be an opportunity to create more value: allowing a complete purchasing process within E-CHAIN could be a customer experience advantage, as well as a reinforcing element of the relevancy of the platform. The latter would, in fact, be seen by tourists not only as a provider of information but as a fully working ticketing platform. This can help consolidate the platform's positioning in the consumer's mind and could lead them to use E-CHAIN again.

Then, the opportunity of increasing the stakeholders' marketing capacity is linked directly to the education and training of the local businesses. To pursue this objective, another improvement suggestion could be to involve the stakeholders more generally, by organizing events online or locally, helping them to understand that they should promote themselves and then making them perceive the value of joining E-CHAIN to do so.

In conclusion, working to increase the involvement of the highest number of stakeholders as possible is very important for the success of the project, since their information, activities and experiences are the main asset of information to offer to the tourists.

Besides, through a deeper involvement the stakeholders could also start offering coupons and special discounts to E-CHAIN users, creating even more value for the parties involved.

To attract more stakeholders even without marketing budget and activities, a suggestion could be using the same Totems, adding call to actions also for them. For example, a text saying: “Are you a local business? Would you like to be featured in this Totem? Scan this QR code and register your business” could be a trigger to intercept more local businesses. In fact the managers/employees would discover the presence of the Totems in their city and then find how to join to benefit from it.

8.3 Suggestions and improvements regarding the impact in Port Cities

Port cities could benefit from campaigns aimed to attract the ferry’s passengers one day before their departure.

This can be done through special promotions and more information about what to do in the areas. In fact, the ability to attract travelers for other purposes besides those concerning the use of marine mobility would in fact have as direct externalities the change in the essence of these tourist flows, no longer exclusively passing through but also interested in discovering the activities and experiences offered locally. This could lead to benefits for local businesses and communities.

This point is particularly important, since the problems and the critical issues that emerged during this validation are not limited to the port cities of the E-CHAIN project (i.e Ancona, Split and Venice), but afflict all the port cities in the Adriatic area and beyond. This leads us to suggest that the E-CHAIN business model and the use of the online web application can be applied in other local areas showing similar characteristics.

Besides, other suggestions regarding these points are strictly related to the involvement of the stakeholders. First, to be more effective and move the tourists to arrive in advance in the location, the local businesses should be involved in co-marketing activities, offering special coupons and discounts to ferry’s passengers. Second, the local tourist operators should organize and promote activities and events, to increase the attractiveness of the port location. For this reason, it is very important that the local tour operators and transport companies are strongly involved in the project, in order to collaborate in this direction.

8.4 Suggestions and improvements regarding E-CHAIN revenue-generating capabilities

E-CHAIN could actually generate revenue to sustain its costs by creating value for the stakeholders, who are willing to find effective ways to promote their businesses.

As validated in this document, the Value Propositions of E-CHAIN is grounded on solid pillars and has the opportunity to improve the situation for tourists, for local stakeholders and in general for port areas.

Therefore, this creation of value could actually be remunerated in order to keep it active and cover the necessary costs.

The actors that could be willing to pay are the local stakeholders, such as small companies working with tourists (hotels, restaurants, artisans, small shops, tour operators, etc), which could benefit the most from a virtuous circle that increases the areas' attractiveness and sustainability, while increasing the tourists' satisfaction. If the value is clearly presented, they could be willing to participate in the expense as a percentage of the increased earnings obtained thanks to the platform.

Besides, local Institutions could decide to sponsor the E-CHAIN project to keep it going and increase the attractiveness of their locations.

Concluding, the Business Plan of E-CHAIN could be sustainable both in terms of impact on the local territory and in terms of value creation, assuming that:

- **local stakeholders are really involved in the project** and start participating actively, adding their information, activities and experiences in the web application;
- **tourists are reached through the Totems and other physical touchpoints inviting to use the web application in the port areas** (i.e. other banners in the port areas with the QR Code, brochures, cardboards, ecc.), to increase the number of people who could discover about E-CHAIN's web application and gain more users who purchase the activities;
- **local Institutions provide initial support,** mostly in communicating the advantages of the project to their stakeholders.

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