

Enhancing entrepreneurial ecosystems for education

FEEDBACK COLLECTION FINAL RELEASE

13/09/2024





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Abstract	This deliverable presents the feedback collection for three ENTREPRENEDU Hackathon in Rimini, Italy, Athens, Greece and Sofia, Bulgaria. It outlines the survey creation structure, application, results, and derived actions. The survey and questionnaire, completed by participants and consortium partners, highlighted positive aspects. From the merged feedback, various actions have been derived, including expanding referral networks, providing additional learning materials, communicating the hackathon topic clearly and providing pre hackathon mentoring sessions.
Keywords	Hackathon, Feedback Collection, Survey, Actions,





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EXECUTIVE SUMMARY

This report outlines the creation, structure, application, results and derived actions of a feedback collection for the three ENTREPRENEDU Hackathons in Rimini, Italy, Athens, Greece and Sofia, Bulgaria. Several assessments were carried out and documented in this report. These assessments consist of a survey aimed at the teams, start-ups, potential customers and end-users participating at the Hackathons and a questionnaire, completed by the consortium partners, entailing their feedback. In total, all teams and start-ups filled out the survey at the Hackathon in Rimini either individually or as a representative for their team, leading to a respondent's number of nine. At the Hackathon in Athens, 42 respondents answered the survey. Further, three potential customers or end-users, which are individuals that are potentially interested in forming a partnership with the teams, completed the survey. Lastly, the survey executed in Sofia was filled out by 17 participants.

The results of the **survey** for the Hackathon in Rimini show that numerous respondents got to know the ENTREPRENEDU project via recommendations of colleagues/partners and social media. Further, most deemed the ENTREPRENEDU very or highly useful. The application process was evaluated as easy by all respondents and no hurdles were encountered. The results also show that the main reason for applying to the Hackathon was the possibility to participate in the business acceleration and mentoring. A large majority of the respondents found the challenges at the Hackathon to be relevant and valued the provided workshop topics. Moreover, the respondents were satisfied with support and assistance provided by mentors and their developed concepts/prototype. All respondents agreed that pitching is a good way of promoting their business idea. Further, a larger majority of respondents indicated that they had good networking possibilities at the hackathon and were satisfied with the overall experience of the event.

Additionally, the **consortium partners** provided positive feedback for the hackathon event in Rimini, praising the overall experience, which included workshops, mentoring, and a social media campaign. Participants found the opportunity valuable for professional growth and networking. However, recommendations for improvement included early planning and preparation to keep participants engaged. Mentorship satisfaction was high, but some teams showed less responsiveness to mentoring, suggesting the need for a more structured process and interactive exercises. The well-organized event received praise for its logistics, but some partners suggested shortening the programme. Feedback also highlighted the importance of clearer guidelines for start-up stages to ensure project homogeneity. Future events could focus on attracting early-stage start-ups, and targeted promotion and educational aspects can expand the user base. Winning teams were recognized, and the need to adapt the programme for smaller institutions was acknowledged.

The feedback from the **consortium partners** and **survey respondents** was merged, and various actions were derived, after the first Hackathon including: expanding referral networks, increasing communication outreach, focusing on relevant workshop topics, enhancing collaboration and mentorship, providing clearer guidelines for start-ups, attracting





early-stage start-ups, improving targeted promotion, considering a flexible programme structure, initiating the planning process earlier, organizing peer exchange sessions, and implementing final mentor feedback to ensure a well-rounded experience for participants.

For the Hackathon in Athens, the background of registrants for the F6S platform and of the actual **competitors** was overwhelmingly placed in the field of engineering. Further, the large majority of competitors were male. The results of the survey also show that numerous F6S platform registrants and competitors got to know the ENTREPRENEDU project via referrals and e-mail. Further, most respondents described their experience of the warm-up events prior to the Hackathon as very good. Additionally, the duration of the local competition was deemed exactly right by most respondents. The online support and workshops that the respondents received were considered very helpful by a majority. Moreover, the staff behavior of the local organizer Corallia was regarded as very or extremely helpful by almost all respondents. The on-site and online mentoring by Corallia was deemed very helpful by a majority of respondents. Further, an overall Net Promoter Score (NPS) of 34% was achieved, which is a pleasing score. Lastly, the majority of respondents considered that their knowledge level extension, through the participation in the Hackathon, took place on a great level.

The feedback of the **customers** and **potential end-users** was overwhelmingly positive. The results highlight their satisfaction with the quality and relevance of the solutions presented by the teams at the Hackathon. It can be derived that the pitches exceeded their expectations and that they consider potential partnerships with teams present at the Hackathon.

Additionally, the **consortium partners** provided positive feedback for the Hackathon event, praising the overall experience, which included workshops, structure and a social media campaign. The partners valued the university involvement in participant recruitment and the resulting quality of ideas. Mentor satisfaction was generally high, although some expressed interest in more direct engagement with teams was expressed. Suggestions for improvement included using online tools for scoring and refining mentorship processes. The event organization received praise for its efficiency, scheduling, and quality of presentations, with the two-stage approach being highlighted for its success. Lastly, the partners valued the effective promotion and communication strategies which led to diverse university participation and media coverage, contributing to overall success.

The feedback from the **consortium partners, customers** and **potential end-users** and **survey respondents** was merged, and various actions derived, including: Target a female audience via social media posts, replicate the use of warm-up events, continue to provide mentoring before the final pitches and intensify the relationship between the mentors and mentees and scoring the pitches on an online tool.

For the Hackathon in Sofia, most of the **participants** heard about ENTREPRENEDU through recommendation by colleagues or partners. Further, their main reason to apply for the Hackathon was to participate in the business acceleration and mentoring programme, and most deemed the ENTREPRENEDU Hackathon very or highly useful. The application process was evaluated as easy by all respondents and no hurdles were encountered. A large majority of the respondents found the challenges at the Hackathon to be relevant and valued the





provided workshop topics. Moreover, most of the respondents were satisfied with support and assistance provided by mentors and their developed concepts. About ²/₃ of the respondents agreed that pitching is a good way of promoting their business idea. Further, a large majority of respondents indicated that they had good networking possibilities at the hackathon and were satisfied with the overall experience of the event.

Additionally, the **consortium partners** provided mainly positive feedback for the hackathon event in Sofia, praising the overall experience. Besides, the consortium partners mentioned the organization and logistics as well as efficient speeches, workshops and hacking. Further, they praised the collaborative approach and utilization of different types of marketing material. Further, the mentors were very satisfied and praised the provided resources and location of the Hackathon. However, recommendations for improvement included that the start of some sessions should be moved to a slot more accommodating of the participant's schedule and that the integration of Hackathon topic sustainability into the pitch presentations was not fully understood by all teams.

The feedback from the **consortium partners** and **survey respondents** was merged, and various actions derived, including: Holding pre-Hackathon workshops to prepare the teams and highlight the importance of including the Hackathon topic into the pitches, encourage mentors even more to actively engage with the teams at the Hackathon, adjust the scheduling of the sessions and improve the internet presences of the ENTREPRENEDU webpage.





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1 INTRODUCTION TO THE FEEDBACK COLLECTION

This section introduces the ENTREPRENEDU Project and its objectives. Further, the feedback collection and its purpose are highlighted.

The concept of ENTREPRENEDU is focused on closing the innovation and educational gap between different regions of the EU. One important tool to do so is the creation of a highly replicable and scalable Venture Building Programme, an educational model for the European entrepreneurial ecosystems that will be validated at the end of the project in 3 different educational entities.

The foundation for the Venture Building Programme will be laid by a mentoring programme that takes in the 12 teams and start-ups selected during three Hackathons in low to medium innovation countries of Greece, Italy and Bulgaria. At each Hackathon, different teams and start-ups compete to deliver solutions for pressing issues in the European Union. The four most promising ideas at each Hackathon will be selected and take part in the ENTREPRENEDU mentoring programme as a cohort.

To ensure a continuous improvement of the Hackathons it was decided by the consortium to collect feedback from teams, start-ups, potential end users and project partners that attended the Hackathon. Hence, this report aims to enable the organizers to assess the success of the Hackathon, identify areas that need improvement, understand their audience better and ultimately create more successful and enjoyable experiences for future participants. The first Hackathon in Rimini took place on the 16th and 17th of June 2023 and focused on the topics of space technology, sustainable food systems and climate change. Before the second Hackathon in Athens, Corallia collaborated with four Greek universities namely the university of Thessaly, the Democritus University of Thrace, the Aristotle university of Thessaloniki and the university of Athens to promote the Hackathon. Subsequently, on the 18th and 25th of October as well as on the 1st of November, Corallia facilitated warm-up events to prepare interested teams for the Hackathon. During these sessions, the consortium partners held online workshops to share their knowledge with interested teams. From the 3rd to 5th November, local competitions were held to determine the teams that would go onto the Hackathon in Athens. Following the local competitions, the selected winners received some initial mentoring to prepare for the Hackathon taking place on the 25th of November in Athens, focusing on the topics of space and technology. This report entails feedback regarding the warm-up sessions, the local competitions and the Hackathon in Athens. The third Hackathon took place in Sofia on the 26th and 27th of March 2024 and focused on the topic sustainability. This report is structured as follows: Subsequently to this introduction, chapter 2 provides an overview on the structure and execution of the feedback collection. In chapter 3 the results of the Rimini Hackathon survey, consortium partner feedback and actions and improvements derived from the feedback collection are presented. In chapter 4 the results of the Athens Hackathon survey, consortium partner feedback and actions and improvements derived from the feedback collection are presented. In chapter 5 the results of the Sofia Hackathon survey, consortium partner feedback and actions and improvements derived from the feedback collection are presented. Lastly, chapter 6 concludes this report.





2 STRUCTURE OF THE FEEDBACK COLLECTION

This section describes the nature and structure of the feedback collections and delivers insights into the reasoning behind the asked questions.

To conduct the feedback collection for the Hackathons in Rimini and Sofia, a survey was generated by Fraunhofer IPK using the application LimeSurvey. For the feedback collection during the Hackathon in Athens, a survey was generated by Corallia using a "Microsoft Form" for the participant's questionnaire. These tools are suitable as they allow the user to structure the survey in various ways, generate conditional questions, answer anonymously and are easy to use for participants. The aim of the surveys is to capture the whole Hackathon experience of the participants from application to pitch. Therefore, for the Hackathons in Rimini and Sofia, 28 questions in total were asked with 19 being specifically targeted at teams and start-ups participating, 8 designed for potential customers and end-users and one question to determine the identity of the respondents. The questions were designed in multiple ways including Likert scale questions, open text questions and predefined answer questions. The Likert scale was utilized to measure usefulness, agreement, relevancy and satisfaction. Usefulness was measured in (1) not useful at all, (2) less useful, (3) moderately useful, (4) very useful and (5) highly useful. Regarding this question type, the objective is to achieve a maximum development of (4) very useful and (5) highly useful assessments. Agreement was scaled in (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree and (5) fully agree. The objective for this question type is to achieve a maximum development of (4) agree and (5) fully agree assessments. Relevance was scaled in (1) not relevant at all, (2) slightly relevant, (3) moderately relevant, (4) very relevant and (5) highly relevant. In the frame of this scale, the objective is to achieve a maximum development of (4) very relevant and (5) highly relevant assessments. Furthermore, **Satisfaction** was measured in (1) very dissatisfied, (2) dissatisfied, (3) somewhat satisfied, (4) satisfied and (5) very satisfied. The objective of questions with this scale is to achieve a maximum development of (4) very good and (5) excellent assessments.

In total, there were **7 sets of questions** covering different aspects of the Hackathon experience.

Section A was concerned with the process that made the teams and start-ups aware of the ENTREPRENEDU project. **Section B** focused on the application process and potential hurdles. **Section C** fixated on the Hackathon itself, the experience and structure of it. **Section D** entailed questions about the pitching of the ideas. Further, **section E** was concerned with networking opportunities at the Hackathon. **Section F** marked the end for questions directed at teams and start-ups, where they were asked to provide overall feedback for the Hackathon. Finally, **section G** addressed the potential customers and end-users and customers. The question related to their motivation for attending the Hackathon, their experience and evaluation of the pitched ideas by the teams and start-ups. A detailed overview of the asked questions and survey can be found in appendix A. To also capture the feedback from the partners attending the Hackathon. There they indicated their feedback regarding the event





organization, team projects, promotion and communication, overall event experience and if applicable other topics.

For the Hackathon in Athens, 34 questions in total were answered by the participants, 26 of these questions were directly related to the Hackathon. The questions were designed in multiple ways including Likert scale questions, open text questions and predefined answer questions. **The Likert scale was utilized to measure duration, helpfulness, knowledge extension and satisfaction. Duration** was measured in (1) too short, (2) short, (3) just right, (4) long and (5) too long. Regarding this question type, the objective is to achieve a duration that is just right (3). **Helpfulness** was scaled in (1) very unhelpful, (2) somewhat unhelpful, (3) neither helpful nor unhelpful, (4) somewhat helpful and (5) very helpful. The objective for this question type is to achieve a maximum in helpfulness (5). **Knowledge extension** was scaled in (1) not at all, (2) incrementally, (3) considerably, (4) great level. In the frame of this scale, the objective is to achieve a maximum development of (3) considerably and (5) great level assessments. Furthermore, **Satisfaction** was measured from a scale of 1 to 10 where 1 indicates a very low satisfaction and 10 a very high satisfaction. This scaling was applied to extract the NPS for the event.

Further, for the Hackathon in Athens, feedback from customers and potential end-users was collected via a survey generated by the application LimeSurvey. Here, five questions related to their motivation for attending the Hackathon, their overall experience of the event and evaluation of the pitched ideas by the teams and start-ups.

2.1 EXECUTION OF THE FEEDBACK COLLECTION

In this section, the rollout of the feedback collections will be discussed.

The survey to collect feedback was created before the Hackathons in Rimini, Athens and Sofia and shared with the consortium partners for their feedback. After integrating the feedback, QR-Codes linking to the survey webpage were created. After the teams held their pitches at the Hackathons, the team of Corallia invited all participants to scan the QR-codes and fill out the survey. For the Hackathons in Rimini and Sofia, the teams and start-ups could either select one member to fill out the survey or let each member fill it out separately. For the Hackathon in Athens there was no group option and the questionnaire was filled out individually. In the following subsections, the results of these feedback collections will be discussed in detail.

3 RESULTS OF THE FEEDBACK COLLECTION (HACKATHON RIMINI)

In this section, the results of the feedback collection for the Hackathon in Rimini will be described in detail. Further, the feedback of the consortium partners will be discussed and derived from the results, potential improvements of future Hackathons will be provided. The survey was completely answered by nine teams and start-ups, (n=9) and thus entails feedback





from all Hackathon participants. No potential customer or end-user completed the survey. Hence, the first six of the seven overall sections will be discussed.

3.1 GETTING TO KNOW THE ENTREPRENEDU PROJECT

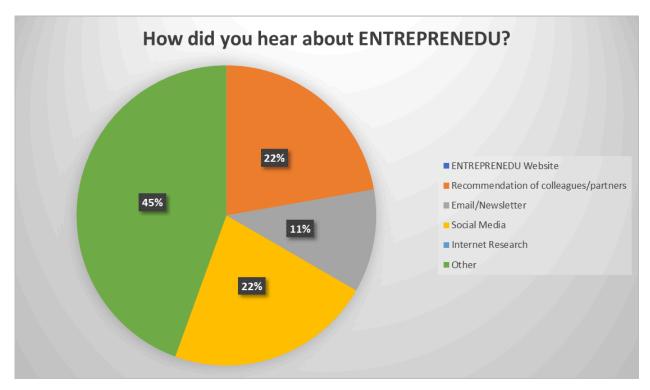


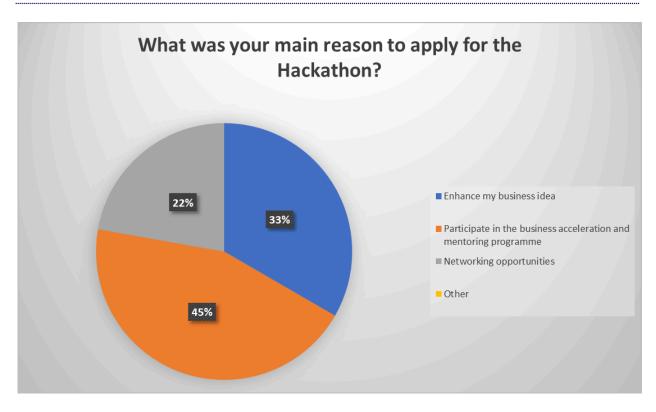
FIGURE 1: SOURCE OF INFORMATION

The first question "How did you hear about ENTREPRENEDU?" aims at revealing which communication channels work well and should be focused. Figure 1 shows that 45% named others as their answer but did not specify which channel they used, 22% named the recommendations of colleagues/partners and another 22% named social media. Further, 11% stated that they were informed by e-mails as well as newsletters and no participant stated that they found the ENTREPRENDEU project via internet research or through the project's website. None of the respondents came to know ENTREPRENEDU over the project website or internet research. Regarding the usefulness of the information on the ENTREPRENEDU website (https://entreprenedu.eu/), 11% assessed it as less useful, 22% as moderately useful, 45% as very useful and 22% as highly useful. Additionally, regarding missing topics or information on the ENTREPRENDEU website, one respondent stated that the website was not displayed as adjusted to the Google search engine optimization. The results show that recommendations of colleagues/partners, posts on social media and other forms of communication are relevant channels to reach start-ups.





Based on the assessment of the feedback **ENTREPRENEDU proposes the following measures** for the next Hackathon's editions: Start-ups, investors and industry representatives who have already participated in the ENTREPRENEDU project or are part of the personal network of the consortium could be contacted with the request to recommend the ENTREPRENEDU project to their colleagues/partners. Furthermore, the number of e-mails, social media posts and newsletters could be further increased in order to reach more start-ups.



3.2 **APPLICATION**

FIGURE 2: REASON FOR APPLICATION

In response to the question "what was the main reason the start-ups applied for the Hackathon in Rimini", figure 2 shows that 45% selected the possibility to participate in the business acceleration and mentoring programme. Moreover, 38% named the enhancement of their business idea as the main reason. For the remaining 22%, the crucial factor for the application was the possibility to network. No respondent chose the option "other".

To the statement "I found it easy to apply to the ENTREPRENEDU Hackathon" 56% agreed while 44% strongly agreed.

As far as the open question about which hurdles they encountered in their application, the respondents did not state any answer indicating that no hurdles were present.



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The results show that the opportunity to enhance their business idea and the possibility to enter a business acceleration and mentoring programme are particularly important for the application decision of start-ups. In addition, it is shown that the application process for the Hackathon worked very well and all respondents found the process easy to comply with. This is supported by the fact that no respondent encounters hurdles during the application process.

3.3 HACKATHON



FIGURE 3: RELEVANCE OF THE HACKATHON CHALLENGE

Regarding the relevancy of the challenges offered at the Hackathon in Rimini, figure 3 shows that 67% found the challenges to be very relevant. While 22% of respondents assessed them as highly relevant and 11% as moderately relevant.

These results indicate that the topics of innovative space technology, sustainable food systems and climate change are very relevant for young entrepreneurs within the European Union.





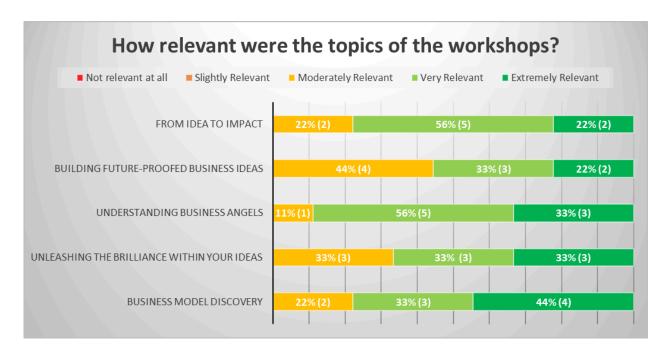


FIGURE 4: RELEVANCE OF WORKSHOP TOPICS

Further, figure 4 depicts that the workshop topic of *understanding business angels* achieved the highest results, since the workshop topic was assessed as very relevant or higher by 89% of the respondents. The workshop *topic from idea to impact* was assessed by 78% as very relevant or higher. The workshop *business model discovery* reached with 77% deeming the topic very relevant to higher similar results. Furthermore, the workshop topic *unleashing the brilliance of your ideas* was assessed by 66% as very relevant or higher and 55% found the topic of *building future-proofed business ideas* to be very relevant or higher. No workshop topics were assessed as not relevant at all or only slightly relevant.

The results show that the workshop topics were received very well by the Hackathon participants, and that the chosen topics were deemed very relevant by a majority of attendants. However, it needs to be pointed out that the topics of *unleashing the brilliance of your ideas* and *building future-proofed business ideas* were rated only moderately relevant by 33% and 44% respectively. This could indicate that the participants were over saturated with topics that relate to the idea process and would deem more advanced topics more valuable.

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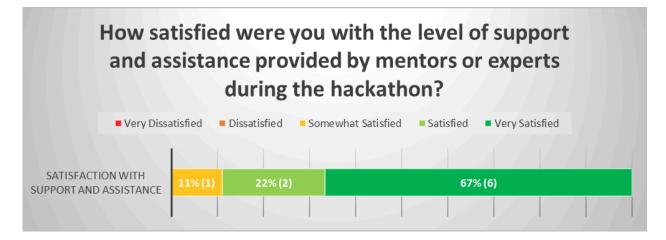


FIGURE 5: SATISFACTION WITH MENTOR AND EXPERT SUPPORT

Regarding the collaboration between the participants of the Hackathon. Figure 5 shows that 56% indicated that they were very satisfied with the collaboration, while 22% were satisfied and another 22% somewhat satisfied. Moreover, 67% showed in their assessment that they were very satisfied with the support and assistance provided by mentors or experts during the Hackathon. 22% were satisfied by these actions and 11% somewhat satisfied.

The results indicate that, overall, there was collaboration happening on a satisfactory level happening between different Hackathon participants. However, through encouragement by mentors, this collaboration could be enhanced. Further, the knowledge, support and assistance from mentors or experts was received well by the participants.

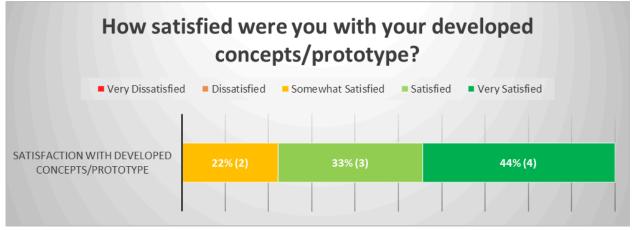


FIGURE 6: SATISFACTION WITH DEVELOPED CONCEPTS OR PROTOTYPE

Regarding the satisfaction of the Hackathon participants with their developed concept/ prototype, figure 6 illustrates that 44% specified that they were very satisfied, 33% were satisfied and 22% somewhat satisfied.





The results indicate that the high percentage of participants who reported being satisfied with their work indicates a generally positive outcome of the Hackathon. Participants seem to have felt accomplished and content with the results they achieved during the event. However, it should be taken into consideration the feedback from those who expressed lower levels of satisfaction, and a recommendation would be to integrate a final feedback process from mentors in the Hackathon structure to address remaining insecurities.

3.4 PITCHING

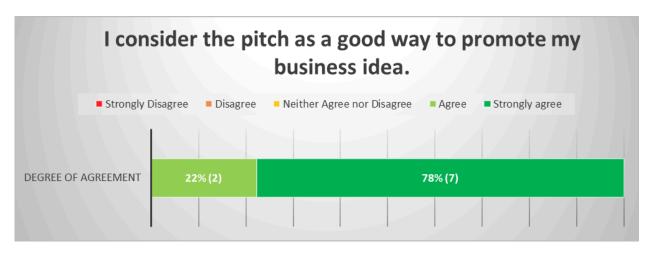


FIGURE 7: PROMOTING OWN BUSINESS IDEA

Figure 7 shows that 78% of respondents replied to the question "if they consider pitching a good way to promote my business idea" with strongly agree and 22% with agree.

These results show that the pitching format at the Hackathon in Rimini was perceived very well, and it is seen as an effective and beneficial strategy for promoting business ideas among the surveyed group. These results also imply that the respondents are likely to be enthusiastic and confident about using pitching to attract interest, investment, or support for their business ventures. They may consider pitching as an opportunity to showcase the unique aspects and potential of their ideas to potential investors, partners, customers, or stakeholders.





3.5 **N**ETWORKING

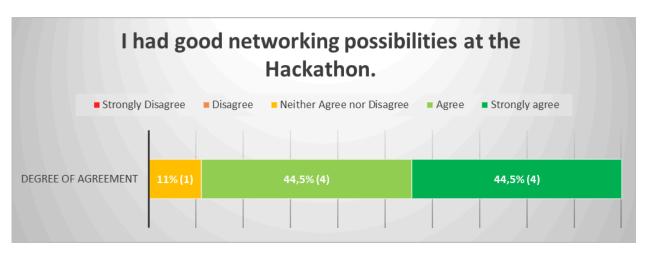


FIGURE 8: NETWORKING POSSIBILITIES

The next construct of the survey focused on the networking possibilities provided in the frame of the Hackathon. In this context, it is shown in figure 8 that 89% agreed or strongly agreed or mostly agreed with the statement "I had good networking possibilities at Hackathon". Additionally, 11% neither agreed nor disagreed with the statement.

These results indicate that the Hackathon successfully facilitated networking opportunities for the participants. These networking possibilities likely allowed participants to connect with each other, mentors, experts, sponsors, or other stakeholders, enabling them to expand their professional networks, build relationships, and explore potential collaborations. The 11% of respondents who neither agreed nor disagreed might indicate that they might not have actively been engaged in networking activities during the Hackathon or had a neutral perception of the networking opportunities offered.







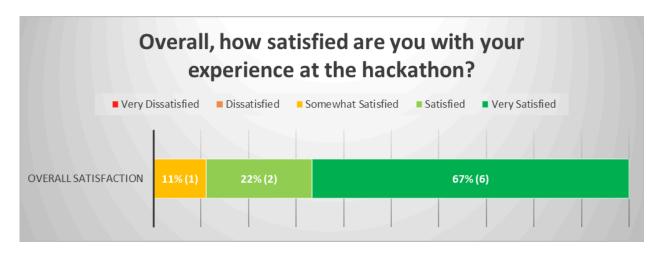


FIGURE 9: OVERALL SATISFACTION

The last question of the survey that was specifically designed for Hackathon participants relates to their overall satisfaction with the event. Figure 9 illustrates that 67% were very satisfied with their experience, 22% were satisfied and 11% were somewhat satisfied. Again, no respondent was dissatisfied or very dissatisfied.

The results demonstrate that the Hackathon, as a whole, was well-received by its participants. The absence of negative responses suggests that the event likely met or exceeded the expectations of the majority of participants. The high percentage of "very satisfied" responses (67%) indicates that the event likely had a strong positive impact on the attendees, leaving them enthusiastic and fulfilled with their overall experience. It is important to identify the main success factors for these results, which should be maintained and enhanced in future Hackathons to ensure continued success.

3.7 FEEDBACK FROM THE CONSORTIUM PARTNERS

In this section, the joined feedback provided by the consortium partners will be processed and discussed. The feedback was collected using a questionnaire that was sent to the partners after the Hackathon and covered the topics of mentorship experience, event organization, team projects, promotion and communication, overall event experience and general feedback.

Overall, the experience was positive, with participants enjoying workshops, one-on-one mentoring, and the social media campaign. The partners also stated that it was a good opportunity for students and young professionals to improve their network and to grow professionally. However, improvements could be made to keep participants engaged



throughout the event. Earlier planning and starting the preparation process sooner were recommended to enhance the experience for mentors and participants. Further, it was suggested to in advance share more information with the participants of the Hackathon regarding the challenges and expectations.

Regarding the mentorship experience, mentors were generally satisfied with the support and resources provided. Most teams were receptive to mentorship and made progress during the event, while, on the other hand, there were also teams that remained fixed on their initial ideas and pitches, showing less responsiveness to the mentoring provided. Some suggestions included making the mentorship process more structured, via pre-arranged meetings and to consider incorporating small exercises during the hackathon to enhance interactivity and engagement, and organizing peer exchange sessions among participants, especially if they all work in the same technology space or sector. Further, the mentoring time during the event should be increased.

In terms of event organization, the logistics and structure of the hackathon were well-organized and efficient. The scheduling and time allocation for activities were considered appropriate, although some partners suggested shortening the programme slightly into two days, instead of three.

The quality of the projects presented by the teams was rated positively overall. Having said that, some partners proposed setting clearer guidelines on the stages of start-ups eligible for the hackathon to make the projects more homogeneous. Some projects were more advanced and developed, while others were in the early stages. To make the quality of the projects more uniform and homogeneous, the suggestion is to establish clearer guidelines or criteria on what stage of development start-ups must be in to participate in the hackathon. In this way, the event could attract more aligned start-ups in terms of level of progress, facilitating the evaluation and comparison of the projects presented.

Based on the feedback, the hackathon should focus on attracting more early-stage start-ups at the ideation phase, who have not yet been involved in acceleration or mentoring programmes. For start-ups at later stages, the hackathon may be less effective as they require more connections and sponsorship rather than generic mentoring. That said, teams were able to address real-world challenges effectively, although some projects were not directly related to the event challenges.

With regard to promotion and communication, the event had positive feedback for its effective promotion on social media and direct communication with universities and other academic and educational partners, leading to the participation of diverse formations and institutions. However, there were suggestions that this could be further improved in order to expand the event's user base and reach through targeted promotion. A campaign more focused on User Generated Content, with complementary educational aspects, was also something that some partners missed.

Overall, the winning teams were praised, and it is believed that there will be commitment to the Business & Acceleration Programme. There was also recognition that smaller universities



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and technical schools in Italy have limited access to entrepreneurial training and resources, suggesting a need to adapt the venture-building programme accordingly.

Finally, the feedback provided valuable insights for future hackathon events, focusing on enhancing the experience for mentors and participants, improving mentorship processes, promoting events in collaboration with educational institutions, and addressing real-world challenges effectively.

3.8 SUMMARY OF DERIVED MEASURES AT RIMINI

Based on the feedback from both the survey respondents and the consortium partners, the following suggestions for improvement can be derived for future Hackathons:

Promotion & Website Information		
Survey	 Contact start-ups, investors, and industry representatives who have participated in previous projects or are part of the personal network of the consortium to request them to recommend the Hackathon to their colleagues and partners. This can help attract more potential participants and increase the event's visibility. Increase the number of emails, social media posts, and newsletters to reach a broader audience and attract more start-ups to participate. 	
Consortium Partners	 Improve promotional efforts by targeting specific audiences, collaborating with educational institutions, and incorporating user-generated content in campaigns. 	
Application		
Consortium Partners	• While Set clearer guidelines or criteria for the stage of development that start-ups must be in to participate in the Hackathon to ensure more homogeneous projects and evaluations.	
	 Focus on attracting more early-stage start-ups in the ideation phase who have not yet been involved in acceleration or mentoring programs 	
Workshop topics		
Survey	• While the workshop topics were generally well-received, consider exploring more advanced and specific topics to	





	cater to participants who may already be familiar with idea-related processes.			
Mentoring & Collaboration				
Survey	• Integrate a final feedback process from mentors in the Hackathon structure to address any remaining insecurities and ensure a well-rounded experience for participants.			
Consortium Partners	 Encourage and facilitate collaboration among participants, and offer more structured support from mentors to enhance their engagement and progress during the Hackathon. Organize peer exchange sessions among participants, especially if they work in similar technology spaces or sectors, to foster knowledge sharing and collaboration Increase the mentoring time at the Hackathon. 			
Hackathon Structure & Planning				
Consortium Partners	• Consider adjusting the programme structure based on feedback, such as shortening the event to two days instead of three, to keep participants engaged throughout the event.			
	• The enhancement of the experience for mentors and participants could be achieved by initiating the planning process earlier and commencing preparations well in advance.			

TABLE 1: OVERVIEW OF MEASURES AND IMPROVEMENTS

By implementing these measures and addressing the areas for improvement, future Hackathons can be even more successful in engaging participants, fostering collaboration, and achieving positive outcomes for all stakeholders involved.

RESULTS OF THE FEEDBACK COLLECTION (HACKATHON ATHENS) 4

In this section, the results of the feedback collection from the Hackathon in Athens will be described in detail. Further, derived from the results, potential improvements of future Hackathons will be provided. In total 67 individuals participated during the local competitions. The survey targeting the participating teams and start-ups at the event in Athens was completely answered by 42 individuals, (n=42) hereby 36 respondents were





finalists and 6 were non-finalists. Furthermore, three potential customer or end-user completed the survey.

4.1 PARTICIPANTS BACKGROUND AND GENDER

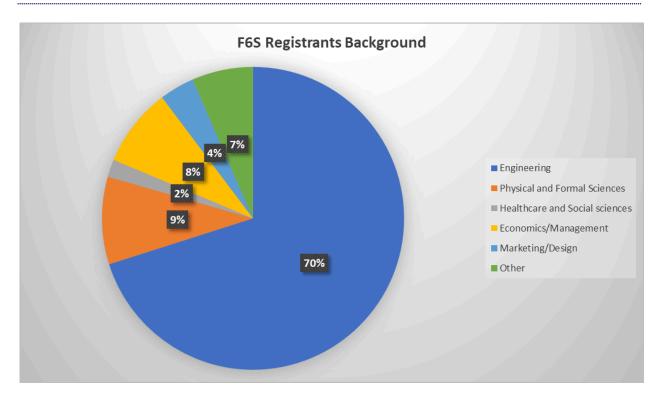


FIGURE 10: FGS REGISTRANTS BACKGROUND

Figure 10 represents the background of F6S platform registrants for the event by percent. The figure shows that 70 % of F6S registrants had an Engineering background. Following that, registrants making up the 2nd most popular background were those with a background in physical and formal sciences at 9%. Figure 1 also displays that registrants with an Economics/Management background consisted of 8% of all F6S platform registrants. Further, registrants with a background of "Other" made-up 7% of all F6S platform registrants. Moreover, 4% of all F6S registrants had a background in marketing or design and 2% in health care and social sciences. The results show a diverse background of F6S platform registrants with a strong surplus of engineers.

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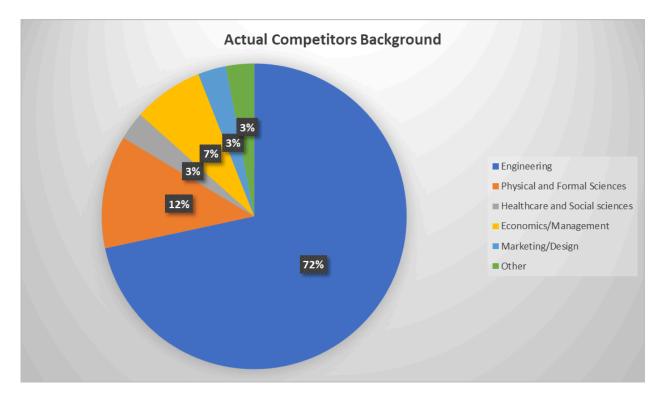


FIGURE 11: ACTUAL COMPETITORS BACKGROUND

Figure 11 represents the background of the 42 respondents by percent. The figure shows that 72% of actual competitors had an Engineering background. Following that, competitors making up the 2nd most popular background were competitors with a background in physical and formal sciences at 12%. Figure 2 illustrates that competitors with an Economics/Management background accounted for 7% of all participants, while those with a background categorized as "Other" comprised 3%. Additionally, competitors with backgrounds in marketing or design constituted 3% of all participants, and those from health care and social sciences also made up 3%. These results are in line with the findings presented in Figure 1.





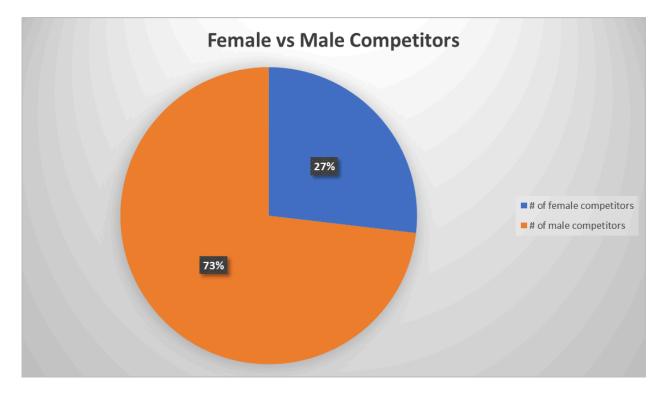


FIGURE 12: GENDER OF COMPETITORS

Figure 12 represents the split between female and male competitors. Figure 3 shows that 73% of the competitors were male and 27% of competitors were female. The results show that the majority of the competitors were male. This could be due to the fact that women in Greece are underrepresented in the fields of Science, Technology, Engineering and Maths (STEM) with only 20% present in this field. This fact combined with the layout of the Hackathon which was focused on space and technology provides a possible explanation for these results. However, based on the assessment of the feedback, ENTREPRENEDU proposes the following measures: Target a female audience through social media posts and in the overall communication.





4.2 Awareness Channels

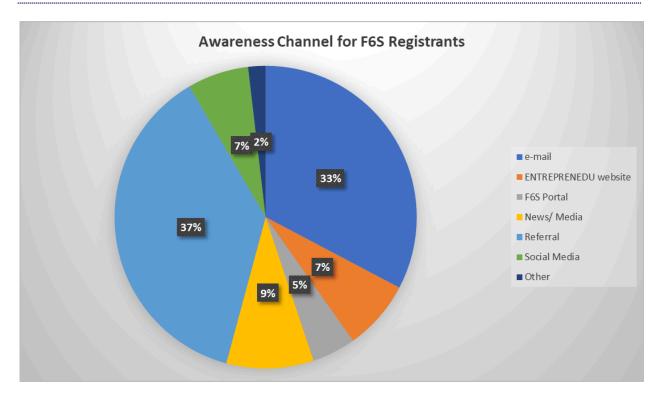


FIGURE 13: AWARENESS CHANNEL FOR F6S REGISTRANTS

In response to the question "How did you hear about ENTREPRENEDU?" answered by F6S registrants, figure 13 shows that 37% of F6S registrants were made aware of ENTREPRENEDU via Referral. Moreover, 33% of F6S registrants were made aware of ENTREPRENEDU via e-mail, 9% of F6S registrants were made aware of ENTREPRENEDU via news or media, 7% of F6S registrants were made aware of ENTREPRENEDU via the ENTREPRENEDU website, 7% of F6S registrants were made aware of ENTREPRENEDU via social media, 5% of F6S registrants were made aware of ENTREPRENEDU via social media, 5% of F6S registrants were made aware of ENTREPRENEDU via social media, 5% of F6S registrants were made aware of ENTREPRENEDU via the F6S Portal, and 2% of F6S registrants were made aware of ENTREPRENEDU via "other" mediums. The results show that referral, e-mail, and news are relevant channels to reach teams. Further, these results also highlight the efforts the consortium made to increase the referral of the project, which was a derived measure of the feedback survey from the first Hackathon in Rimini.



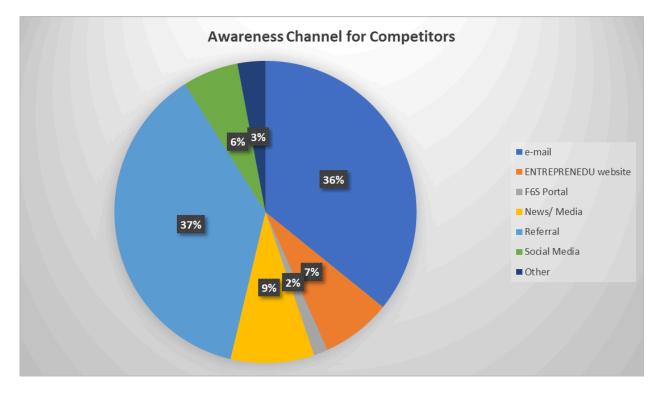


FIGURE 14: AWARENESS CHANNEL FOR COMPETITORS

In response to the question "How did you hear about ENTREPRENEDU?" answered by the competitors, figure 14 shows that 37% of competitors were made aware of ENTREPRENEDU via Referral. Moreover, 36% of the competitors, were made aware of ENTREPRENEDU via e-mail, 9% of competitors, were made aware of ENTREPRENEDU via news or media, 7% of competitors, were made aware of ENTREPRENEDU via the ENTREPRENEDU website, 6% of competitors, were made aware of ENTREPRENEDU via social media, 2% of competitors, were made aware of ENTREPRENEDU via social media, 2% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 3% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 5% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, and 5% of competitors, were made aware of ENTREPRENEDU via the F6S Portal, a





4.3 WARM UP EVENTS - PARTICIPANTS



FIGURE 15: WARM-UPS-LEVEL

Regarding the quality of the warm-up events and information sessions before the 4 local competitions, figure 15 shows that 29% of respondents found the warm-up events and information sessions to be excellent, while 59% of respondents found the warm-up events and information sessions to be very good, and 12% of respondents found the warm-up events and information sessions to be fair.

These results indicate that the majority of respondents were pleased by the warm-up events and found the information sessions to be well-structured and helpful. This also indicates that the overall approach of conducting warm-up for events before the actual Hackathon is helpful for participants and should be replicated.

4.4 LOCAL COMPETITION

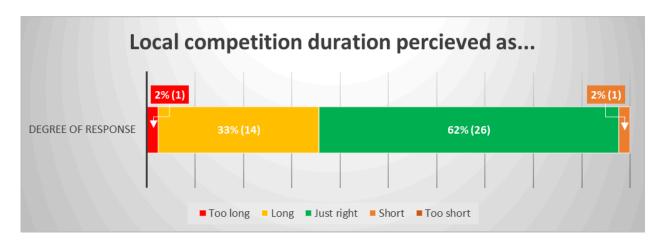






FIGURE 16: DURATION OF THE LOCAL COMPETITION

Further, figure 16 depicts the perceived duration of the local competitions by the competitors. 2% of respondents shared that the local competition was short, and another 2% of respondents shared that the local competition was too long. While 34% of respondents shared that they perceived that the duration of the competition was long, 62% of respondents shared that the duration of the local competition was just right.

The results indicate that the majority of respondents were pleased with the duration of the local competitions, however it is significant to point out that a slight reduction in the duration of future competitions could beneficially impact the reception of future competitions by competitors.

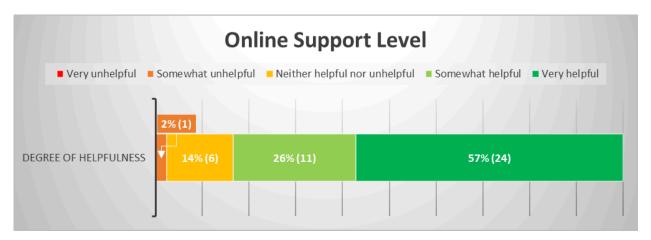


FIGURE 17: ONLINE SUPPORT LEVEL

Regarding the degree of helpfulness that the online support provided, figure 17 shows that 57% of respondents indicated that the online support was very helpful and 26% of respondents indicated that the online support was somewhat helpful. 14% of respondents indicated that the online support was neither helpful nor unhelpful, while 2% shared that the online support was somewhat unhelpful. The results indicate that the majority of respondents were pleased with the online support that they received.







FIGURE 18: LOCAL ORGANIZERS' STAFF BEHAVIOR

Regarding the degree of friendliness of the local organizers' staff, which in this case were the universities that facilitated these events, behavior, figure 18 shows that 52% of respondents indicated that the local organizers' staff's behavior was extremely friendly and 43% of respondents indicate that local organizer's staff's behavior was very friendly. However, it is important to note that 5% of the respondents found the local organizer's staff's behavior to be not friendly at all. The results indicate that while a few participants might have found the local organizers' staff behavior to be unfriendly, the majority of respondents were pleased by the friendliness of the local organizer's staff's behavior. While the results are overwhelmingly positive, reflection and analysis as to why some respondents responded negatively to the local organizer's staff's behavior should be conducted.



FIGURE 19: CORALLIAS' STAFF BEHAVIOR

Regarding the degree of friendliness of Corallias' staff at the final, the results show that 61% of respondents indicated that the Corallias' staff's behavior was extremely friendly and 33% of respondents indicate that the local organizer's staff's behavior was very friendly. 3% of the respondents indicated that Corallias' staff's behavior was somewhat friendly as well as not so friendly. However, none of the respondents indicated that the behavior was not friendly at all.





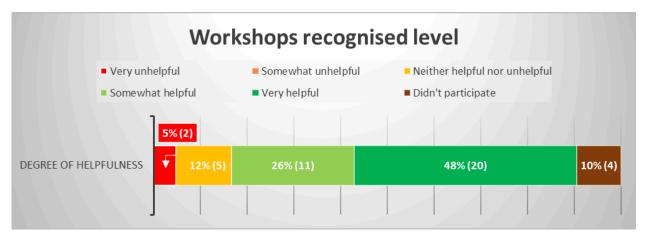


FIGURE 20: WORKSHOP RECOGNITION

Regarding the degree of helpfulness of the virtual workshops during the local competitions, figure 20 shows that 48% of respondents found the virtual workshops to be very helpful and 26% of respondents found the virtual workshops to be somewhat helpful. While 12% of respondents found the workshops to be neither helpful nor unhelpful, 5% of respondents found the workshops to be very unhelpful. Additionally, 10% of respondents did not participate in the workshops.

The results indicate that the majority of respondents were pleased by the degree of helpfulness of the virtual workshops during the local competition weekend. While the results are mostly positive, reflection as to why some respondents found the virtual workshops to be very unhelpful should be conducted.

4.5 Online and On-Site Mentoring

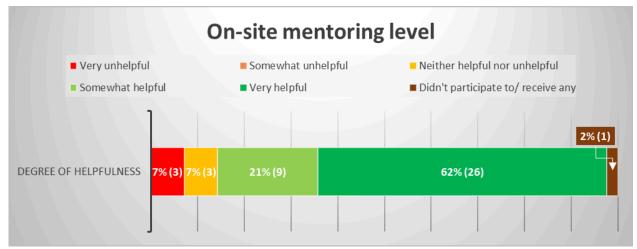


FIGURE 21: ON-SITE MENTORING LEVEL



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Regarding the degree of helpfulness of the personalized mentoring from the Local Organisers during the local competitions weekend, figure 21 shows that 62% of respondents found the on-site mentoring to be very helpful and 21% of respondents found the on-site mentoring to be somewhat helpful. Only 7% of respondents found the on-site mentoring to be neither helpful nor unhelpful. However, 7% indicated that the on-site mentoring was very unhelpful. The results indicate that respondents were very pleased by the helpfulness of the on-site mentoring the local competition weekend.

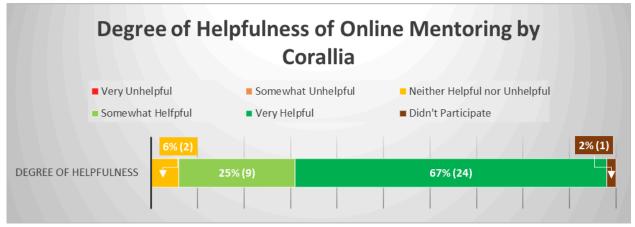


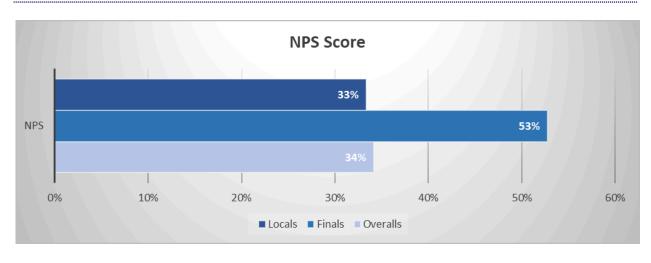
FIGURE 22: HELPFULNESS OF ONLINE MENTORING BY CORALLIA

Regarding the degree of helpfulness of the personalized mentoring from Corallia during the two-week span before the finals, figure 22 shows that 67% of respondents found the personalized mentoring from Corallia to be very helpful and 25% of respondents found the personalized mentoring from Corallia to be somewhat helpful. Only 5% of respondents found the personalized mentoring from Corallia to be neither helpful nor unhelpful.

The results indicate that respondents were very pleased by the helpfulness of the personalized mentoring from Corallia during the two-week span before the finals. Based on the assessment of the feedback, ENTREPRENEDU proposes the following measures: Provide either online or on-side mentoring for the finalists of future Hackathons to ensure the quality of their pitches.







4.6 NPS Score and Knowledge Extension

FIGURE 23: NPS SCORE

The Net Promoter Score (NPS) reflects the likelihood that a respondent from the competition would promote this Hackathon to others. Respondents were asked on a scale from 1 to 10 on how likely it is they would recommend or promote this Hackathon to others. If respondents answered 1 through 6 on the scale, they would be considered "detractors". If respondents answered 7 or 8 on the scale, they were considered neither "detractors" nor "promoters" and instead were deemed as "passives". And finally, respondents that answered 9 or 10 on the scale were considered to be "promoters".

The Net Promoter Score (NPS) is calculated by subtracting the percentage of detractors (those who rated 0-6) from the percentage of promoters (those who rated 9-10) and dividing the difference by the total number of respondents. An NPS score from 0 to 30 is considered good, an NPS over 30 is great, and an NPS above 70 reflects an excellent level of satisfaction.

Figure 23 shows that the NPS for the competition at the local level was 33%. This does not mean that only 33% of respondents were promoters; rather, it reflects the balance between promoters and detractors. The figure also indicates that the NPS for the final competition was 53%, while the overall NPS for the Hackathon and its pre-events was 34%. These scores suggest a strong degree of promotion and positive sentiment towards the Hackathon.

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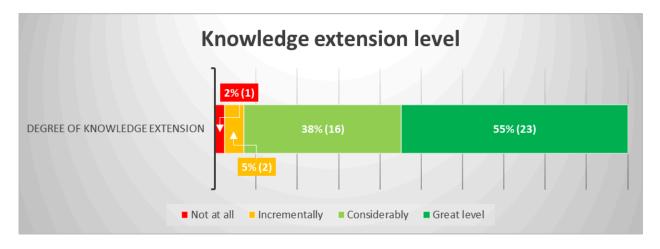


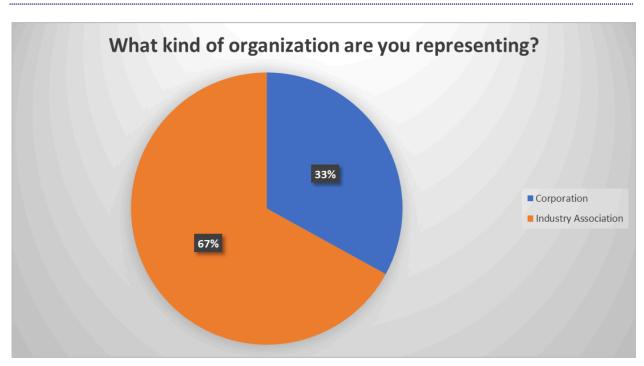
FIGURE 24: EXTENSION OF KNOWLEDGE

Further, figure 24 depicts the knowledge extension of respondents from the Hackathon. The figure shows that 55% of respondents greatly increased their knowledge for future projects and that 38% of respondents considerably increased their knowledge for future projects. While 5% of respondents incrementally increased their knowledge for future projects, only 2% of respondents did not increase or expand their knowledge for future projects through the Hackathon.

The results show that the majority of respondents, at some degree, increased their knowledge for future projects. It is crucial to reflect on the possibilities as to why respondents would have not increased their knowledge at all after the Hackathon, but the overall results are very satisfying.







4.7 FEEDBACK FROM CUSTOMERS & POTENTIAL END-USERS

FIGURE 25: TYPE OF ORGANIZATION

When customers and potential end-users were surveyed about the type of organization they were representing at the Hackathon, 33% of customers and potential end-users responded that they represented a corporation. On the other hand, 67% of customers and potential end-users responded that they represented an Industry Association.







FIGURE 26: REASON FOR PARTICIPATION

When customers and potential end-users were surveyed about their reasoning for participating in the event, 33% of customers and potential end-users responded that they attended the Hackathon for networking reasons. In comparison, 67% of the customers and potential end-users responded that they attended the Hackathon for reasons pertaining to talent acquisition. This highlights the interest of the industry in the teams participating in the Hackathon.

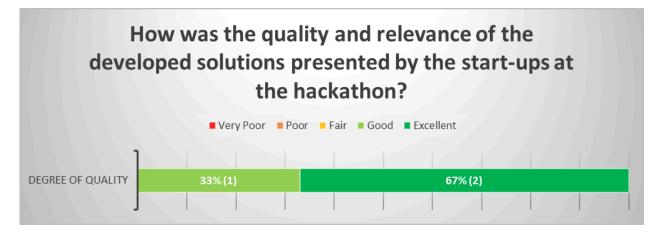


FIGURE 27: QUALITY AND RELEVANCE OF SOLUTIONS PRESENTED BY START-UPS





Furthermore, when customers and potential end-users were asked about the quality and relevance of the developed solutions presented by the start-ups at the Hackathon, 33% of respondents surveyed that the quality and relevance of the developed solutions were good. In comparison, 67% of customers and potential end-users surveyed that the quality and the relevance of the developed solutions were excellent. Additionally, they mentioned that the ideas that have been presented were quite unexpected and that it would be interesting to follow their progress. Overall, the results indicate that the customers and potential end-users were quite pleased with the quality and relevance of the developed solutions presented by the start-ups at the Hackathon.

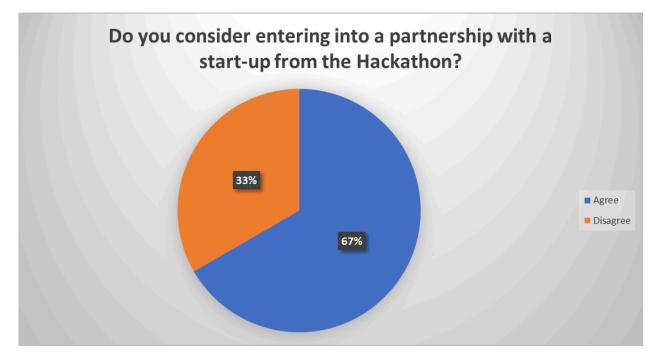


FIGURE 28: WILLINGNESS TO ENTER INTO A PARTNERSHIP WITH A START-UP FROM THE HACKATHON

When customers and potential end-users were asked if they considered entering into a partnership with a start-up from the Hackathon, 100% of customers and potential end-users replied that they would agree to consider entering a partnership with a start-up from the Hackathon. This result shows that start-ups at the Hackathon intrigued customers and potential end-users into a potential partnership with them, and highlights the quality of the presented pitches.

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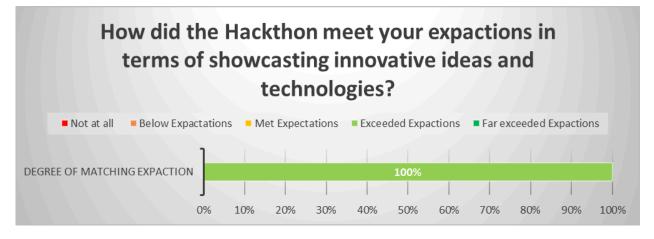


FIGURE 29: HACKATHON'S ALIGNMENT WITH INNOVATION EXPECTATIONS

Lastly, when customers and potential end-users were asked if the Hackathon met their expectations in terms of showcasing innovative ideas and technologies, 100% of customers and potential end-users surveyed that the Hackathon exceeded their expectations in terms of showcasing innovative ideas and technologies. This highlights the overall success of the Hackathon. Furthermore, one respondent provided the written feedback that it would be interesting to offer the opportunity for one-to-one sessions with the teams and customers and potential end-users after the pitching session.

4.8 FEEDBACK FROM THE CONSORTIUM PARTNERS

In this section, the joined feedback provided by the consortium partners will be processed and discussed. The feedback was collected using a questionnaire that was sent to the partners after the Hackathon and covered the topics of mentorship experience, event organisation, team projects, promotion and communication, overall event experience and general feedback.

Overall, the experience was very positive, with the consortium partners enjoying the pitches, online workshops and the promotion. In particular, including universities in the recruiting process of participants was deemed helpful and resulted in motivated teams and high-level business ideas.

Regarding the mentorship experience, mentors were generally satisfied with the support and resources provided. For this Hackathon, the mentorship was provided online before the event. Most teams were receptive to the mentorship. Further, the partners noted that the participants seemed willing to point out their challenges openly. However, some partners expressed their interest in participating with the teams in a more direct and continuous way. Further, it was suggested to score the pitches of the participants directly via an Excel spreadsheet and not on a physical scoring sheet. Based on the feedback, the scoring in future





events should take place on an online tool to increase the efficiency of the process, and efforts should be made to intensify the mentoring relationship between the partners and mentees.

In terms of event organization, the logistics and structure of the Hackathon were well-organized and efficient. The scheduling and time allocation for activities were considered appropriate.

The quality of the projects presented by the teams was rated as very positive. In particular, it was pointed out that the two-stage approach for the Hackathon resulted in high quality pitches and should be repeated in future events.

With regard to promotion and communication, the event had positive feedback for its effective promotion on social media and direct communication with universities, leading to the participation of teams from an array of universities. Moreover, the partners also pointed out that the event was highlighted in several publications in local media and magazines, which speaks for its success.

Overall, the partners provided mostly positive feedback and in particular praised the two-step organization and the involvement of the universities from the early stages. Which proved to be successful for the overall organization of the Hackathon.

Finally, the feedback provided valuable insights for future Hackathon events, focusing on increasing the mentorship engagement, improving the scoring method and maintaining strong promotion through social media and media publications.

4.9 SUMMARY OF DERIVED MEASUREMENTS IN ATHENS

Based on the feedback from both the survey respondents and the consortium partners, the following suggestions for improvement can be derived for future Hackathons:

Hackathon Duration & Process	
Survey	 Consider slightly reducing the duration of the local competition to enhance participant satisfaction. Offer better time management resources or checkpoints during the competition.
Staff Behaviour	
Survey	• Initiate an anonymous feedback process where participants can provide more detailed insights on their experiences to address the concerns of participants who found the staff behavior unfriendly.





Helpfulness, Support, & Quality			
 Revise Virtual Workshop content by conducting a thorough review of the virtual workshop content and delivery to better align with participants' needs. 			
 Consider implementing an online scoring tool, such as a real-time Excel or specialized scoring platform, to streamline and standardize the evaluation process Consider facilitating more direct and continuous engagement by completing regular check-ins and collaborative sessions to deepen the mentoring relationship and provide participants with more comprehensive support. 			
Knowledge Extension			
 Provide participants with access to additional learning resources after the Hackathon, even if they did not qualify for the mentoring programme, such as presentations. 			
Partnerships			
• Provide time slots after the pitching session for interested customers and potential end-user to interact with the teams.			

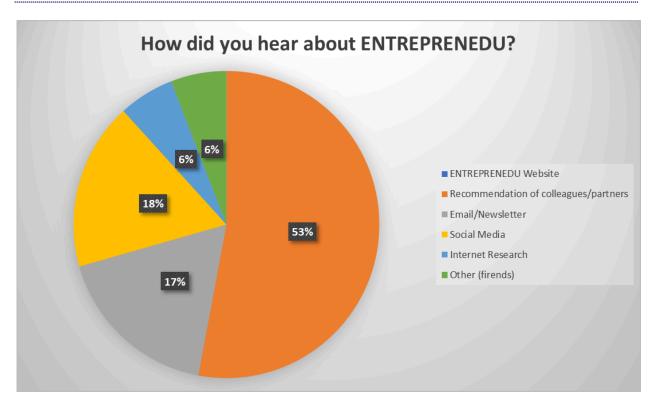
By implementing these measures and addressing the areas for improvement, future Hackathons can be even more successful in engaging participants, fostering collaboration, and achieving positive outcomes for all stakeholders involved.

5 **RESULTS OF THE FEEDBACK COLLECTION (HACKATHON SOFIA)**

In this section, the results of the feedback collection for the Hackathon in Sofia will be described in detail. Further, the feedback of the consortium partners will be discussed and derived from the results, potential improvements of future Hackathons will be provided. The survey was completely answered by 17 teams and start-ups, (n=17). No potential customer or end-user completed the survey. Hence, the first six of the seven overall sections will be discussed.







5.1 GETTING TO KNOW THE ENTREPRENEDU PROJECT

FIGURE 30: SOURCE OF INFORMATION

The first question "How did you hear about ENTREPRENEDU?" aims at revealing which communication channels work well and should be focused. Figure 30 shows that 53% named the recommendation of colleagues as their answer, 18 % named social media and 17% stated that they were informed by e-mails as well as newsletters. Further, 6% stated that they were informed by friends (Other) and 6% stated that they found the ENTREPRENEDU project via internet research. Regarding the usefulness of the information on the ENTREPRENEDU website (https://entreprenedu.eu/), 12% assessed it as moderately useful, 18% as highly useful, 71% as very useful. The results show that recommendations of colleagues/partners, posts on social media and other forms of communication and E-mails/newsletters are relevant channels to reach teams.

Based on the assessment of the feedback ENTREPRENEDU proposes the following measures for future Hackathons: Especially the internet presence of ENTREPRENEDU should be increased for example by using the right keywords on the website in order to achieve a better google ranking. Furthermore, the number of e-mails, social media posts and newsletters could be further increased in order to reach more start-ups.





5.2 **APPLICATION**

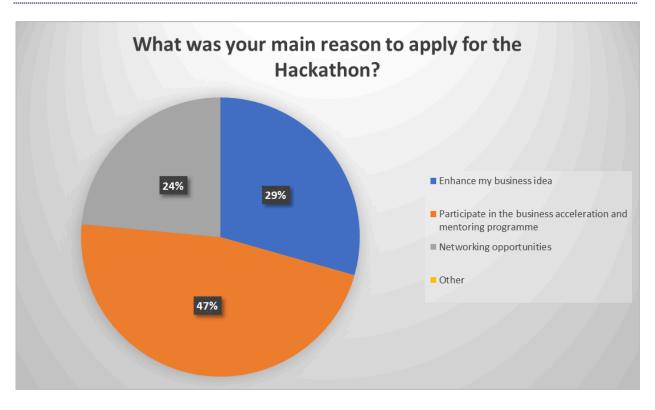


FIGURE 31: REASON FOR APPLICATION

In response to the question "what main reason the start-ups applied for the Hackathon in Sofia", figure 31 shows that 47% selected the possibility to participate in the business acceleration and mentoring programme. Moreover, 29% named the enhancement of their business idea as the main reason. For the remaining 24%, the crucial factor for the application was the possibility to network.

To the statement "I found it easy to apply to the ENTREPRENEDU Hackathon" 41% agreed while 47% strongly agreed while 12% neither agree nor disagree.

As far as the open question about which hurdles they encountered in their application, the respondents did not state any answer indicating that no hurdles were present.

The results show that the opportunity to enhance their business idea and the possibility to enter a business acceleration and mentoring programme are particularly important for the application decision of start-ups. In addition, it is shown that the application process for the Hackathon worked very well and all respondents found the process easy to comply with.





5.3 HACKATHON

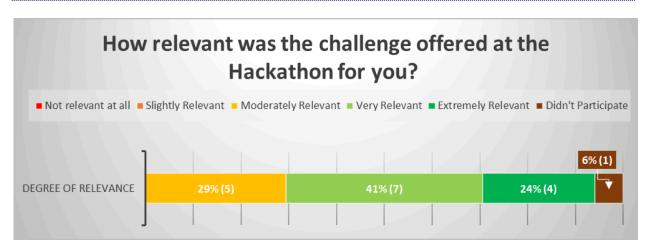


FIGURE 32: RELEVANCE OF HACKATHON CHALLENGE

Regarding the relevancy of the challenges offered at the Hackathon in Sofia, figure 32 shows that 41% found the challenges to be very relevant. While 24% of respondents assessed them as extremely relevant and 29% as moderately relevant.

These results indicate that the topic of sustainability is very relevant for young entrepreneurs within the European Union.

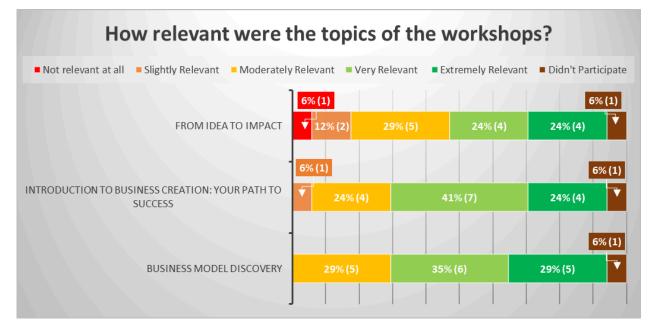


FIGURE 33: RELEVANCE OF WORKSHOP TOPICS





Further, figure 33 depicts that the workshop topic of *business model discovery* and *introduction to business creation: Your Path to success* achieved the highest results, since the workshop topics were deemed very relevant by 35% and 41% and extremely relevant by 24% and 29% respectively. However, 24% indicated that the workshop *Introduction to business creation: Your path to success* was only slightly relevant, and 29% found the workshop *business model discovery* only slightly relevant as well. The workshop topic *from idea to impact* was not relevant at all for 6% of the participants and slightly relevant or higher.

The results show that the workshop topics were received well by the Hackathon participants, and that the chosen topics were deemed very relevant by a majority of attendants. However, it needs to be pointed out that the workshop *from idea to impact* was rated least relevant.

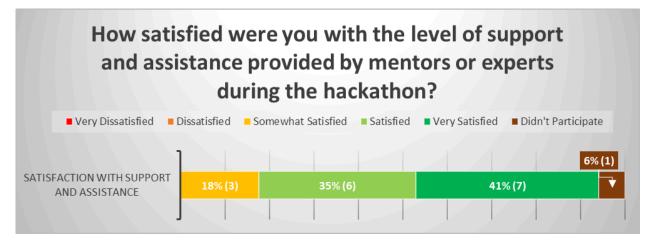


FIGURE 34: SATISFACTION WITH MENTOR AND EXPERT SUPPORT

Regarding the collaboration between the participants of the Hackathon, Figure 34 shows that 56% indicated that they were very satisfied with the collaboration, while 22% were satisfied and another 22% somewhat satisfied. Moreover, 67% showed in their assessment that they were very satisfied with the support and assistance provided by mentors or experts during the Hackathon. 22% were satisfied by these actions and 11% somewhat satisfied.

The results indicate that, overall, there was collaboration happening on a satisfactory level between different Hackathon participants. However, through encouragement by mentors, this collaboration could be enhanced. Further, the knowledge, support and assistance from mentors or experts was received well by the participants.





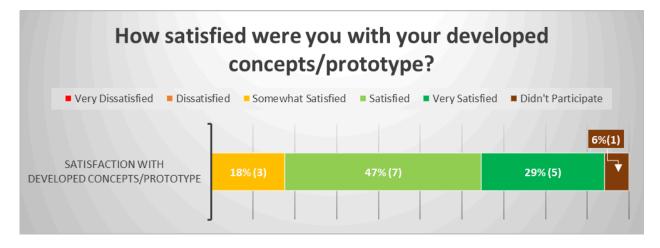


FIGURE 35: SATISFACTION WITH DEVELOPED CONCEPTS OR PROTOTYPE

Regarding the satisfaction of the Hackathon shown in figure 35 participants with their developed concept/ prototype, figure 6 illustrates that 29% specified that they were very satisfied, 47% were satisfied and 18% somewhat satisfied.

The results indicate that the high percentage of participants who reported being satisfied with their work indicates a generally positive outcome of the Hackathon. Participants seem to have felt accomplished and content with the results they achieved during the event. However, it should be taken into consideration the feedback from those who expressed lower levels of satisfaction, and a recommendation would be to integrate a final feedback process from mentors in the Hackathon structure to address remaining insecurities.

5.4 PITCHING

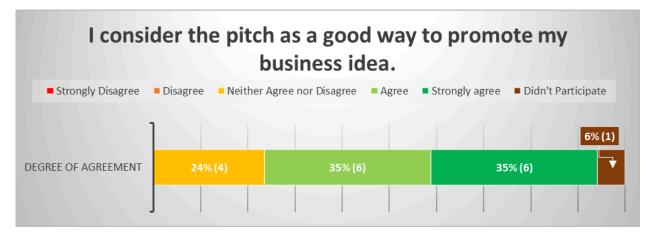


FIGURE 36: PROMOTING OWN BUSINESS IDEA



Figure 36 shows that 35% of respondents replied to the question "if they consider pitching a good way to promote my business idea" with strongly agree and 35% with agree. Further, 24% neither agreed nor disagreed.

These results show that the pitching format at the Hackathon in Sofia was perceived well, and it is seen as an effective and beneficial strategy for promoting business ideas among the surveyed group. These results also imply that most of the respondents are likely to be enthusiastic and confident about using pitching to attract interest, investment, or support for their business ventures. However, some of the participants did not agree with the idea of a pitch. Therefore, investigating these results and potentially offering pitch training before the Hackathon are potential measures to improve these numbers.

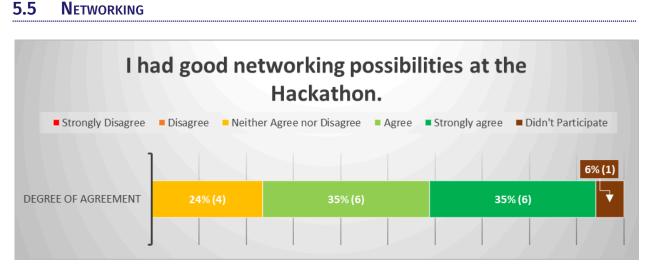


FIGURE 37: NETWORKING POSSIBILITIES

The next construct of the survey focused on the networking possibilities provided in the frame of the Hackathon. In this context, it is shown in Figure 37 that 70% agreed or strongly agreed or mostly agreed with the statement "I had good networking possibilities at Hackathon". Additionally, 24% neither agreed nor disagreed with the statement.

These results indicate that the Hackathon successfully facilitated networking opportunities for the participants. These networking possibilities likely allowed participants to connect with each other, mentors, experts, sponsors, or other stakeholders, enabling them to expand their professional networks, build relationships, and explore potential collaborations. The 24% of respondents who neither agreed nor disagreed might indicate that they might not have actively been engaged in networking activities during the Hackathon or had a neutral perception of the networking opportunities offered. Hence, offering dedicated time-slots for networking or inviting even more individuals from the start-up community could be beneficial.





5.6 **OVERALL EXPERIENCE**

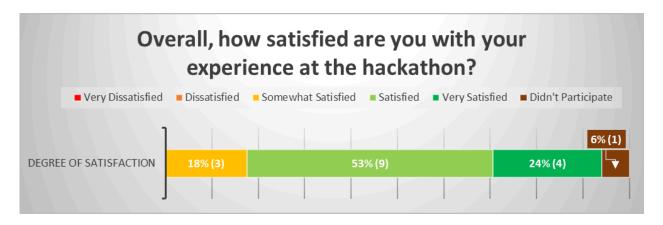


FIGURE 38: OVERALL SATISFACTION

The last question of the survey that was specifically designed for Hackathon participants relates to their overall satisfaction with the event. Figure 38 illustrates that 24% were very satisfied with their experience, 53% were satisfied and 18% were somewhat satisfied. Again, no respondent was dissatisfied or very dissatisfied.

The results demonstrate that the Hackathon, as a whole, was well-received by its participants. The absence of negative responses suggests that the event likely met or exceeded the expectations of the majority of participants. The high percentage of "very satisfied" responses (24%) indicates that the event likely had a positive impact on the attendees, leaving them enthusiastic and satisfied with their overall experience. It is important to identify the main success factors for these results, which should be maintained and enhanced in future Hackathons to ensure continued success.

5.7 FEEDBACK FROM THE CONSORTIUM PARTNERS

In this section, the joined feedback provided by the consortium partners will be processed and discussed. The feedback was collected using a questionnaire that was sent to the partners after the Hackathon and covered the topics of mentorship experience, event organization, team projects, promotion and communication, overall event experience and general feedback.

Overall, the experience was positive. In particular the organization and logistics were highlighted positively with the time being distributed efficiently to allow time for speeches, workshops and hacking.



Regarding the mentorship experience, the mentors were very satisfied, particularly noting that the layout of the venue and provided resources such as paper, pens, and other materials, facilitated effective mentoring. Further, the motivation of the teams was positively noted.

In terms of event organization, the logistics and structure of the hackathon were praised. Further, the ability to be flexible and adjust on the spot were highlighted. However, the start of some sessions could be moved to a later slot to better accommodate the schedule of participating students.

The quality of the projects presented by the teams was rated very positively overall. However, using the format of the Hackathon in Athens with Pre-Hackathon workshops was suggested. Further, the concept of integrating the Hackathon topic sustainability into the presentation was not understood by all teams.

With regard to promotion and communication, the event was praised by the partners for the collaborative approach and utilizing different types of marketing material such as posters, social media ads, posts and networks. This approach contributed to the wide reach of the hackathons. Additionally, the clear communication significantly helped streamline the subsequent phases of the project.

Finally, the feedback provided valuable insights for future hackathon events, continuing the use of different marketing material, focusing on enhancing the experience for mentors and pitch quality through Pre-Hackathon workshops and providing strong logistical support.

5.8 SUMMARY OF DERIVED MEASUREMENTS IN SOFIA

Based on the feedback from both the survey respondents and the consortium partners, the following suggestions for improvement can be derived for future Hackathons:

Promotion & Website Information		
Survey	• Increase the number of emails, social media posts, and internet presence to reach a broader audience and attract more teams to participate	
Consortium Partners	• Continue to utilize different types of marketing material such as posters, social media ads, posts and networks	
Pitches		
Consortium Partners	• The topic of the Hackathon should be communicated even more strongly to the participating teams to ensure its inclusion in the pitch.	
Mentoring & Collaboration		





• Encourage the mentors even more to actively engage with the teams and providing their expertise.				
• Adjust the sessions to the schedule of the Hackathon participants if possible.				
Hackathon Structure & Planning				
• Hold Pre-Hackathon workshops to prepare the participants.				

By implementing these measures and addressing the areas for improvement, future Hackathons can be even more successful in engaging participants, fostering collaboration, and achieving positive outcomes for all stakeholders involved.

6 CONCLUSION

This deliverable presents the comprehensive feedback collection for the three ENTREPRENEDU hackathons in Rimini, Athens and Sofia. It outlines the structure and application of the feedback collections, describing in detail the utilized assessment style. The feedback collections, including a survey for participating teams, potential customers and end-users and feedback from consortium partners, which shed light on various aspects of the events. Overall, respondents found the ENTREPRENEDU Hackathons valuable.

The Hackathon in Rimini was well-received, offering relevant challenges and valuable workshops. The consortium partners also provided positive feedback, recognizing the event's success and suggesting enhancements for the future. Mentorship support was praised, though improvements were suggested for participant engagement.

The feedback, regarding the Hackathon in Athens, from both competitors and consortium partners was overwhelmingly positive, highlighting satisfaction with the event's organization, workshops, and quality of ideas. The event also achieved a strong Net Promoter Score of 34%, reflecting the high level of knowledge gained and the positive reception of the solutions presented.

The Hackathon in Sofia, was well-received and feedback from participants and consortium partners was largely positive, praising the organization, workshops, and collaborative approach. Most found the event highly useful, the application process easy, and the challenges relevant.

To build on this success and enhance future Hackathons, several derived actions have been identified for each Hackathon. For the Hackathon in Rimini, these actions include expanding referral networks to attract more participants, increasing communication outreach to reach a broader audience, fostering collaboration to ensure an enriching experience for all participants in subsequent Hackathons. The importance of structured mentorship has been



emphasized, as well as the need for clearer guidelines to ensure project homogeneity. To further improve the experience, the programme structure can be made more flexible based on participant feedback, and early planning should be initiated to keep participants engaged throughout the event. Organizing peer exchange sessions and incorporating final mentor feedback can foster knowledge sharing and ensure a well-rounded experience for all participants.

For the Hackathon in Athens, these actions include targeting a more diverse, particularly female, audience through focused social media campaigns will be a priority. The effective use of warm-up events should be replicated to better prepare participants. To ensure a more effective evaluation process, an online tool will be used for scoring pitches in future events. These actions aim to enhance the overall experience and outcomes for all participants.

For the Hackathon in Sofia, these actions include encouraging mentors to engage more actively with teams during the event to foster deeper collaboration. The scheduling of sessions should be adjusted to better accommodate participants' needs, and efforts will be made to improve the online presence of the ENTREPRENEDU webpage to increase visibility and accessibility. These steps aim to further elevate the quality and impact of the Hackathon experience.

Building on these suggested actions, future Hackathons can continue to be successful, fostering innovation, professional growth, and valuable networking opportunities for all involved.





APPENDIX **A**

The appendix of this report provides the survey, used for Hackathon 1 and in a similar design 3, entailing Likert scale questions, open text questions and predefined answer questions that are structured for teams, start-ups, potential customers and end-users that attended the Hackathons in Rimini and Sofia.



Dear Participant,				
we	would like to thank you for taking the time to participate in this	short survey.		
	Your participation will help us to evaluate the ENTREPRENEDU Hackathon and to identify areas for future improvement. The survey should take 5 –10 minutes to be completed.			
	Thank you for giving us the opportunity to serve you bett	er.		
Secti	Section A: Getting to know the ENTREPRENEDU project			
A1.	Are you among the start-ups and teams that participated in the Hackathon?			
	Yes No			
A2.	How did you hear about ENTREPRENEDU?			
	ENTREPRENEDU Website Email/Newsletter			
	Internet Research			
	Social Media			
	Recommendation of colleagues/partners			
	Other			
	Other			
A3.	How useful do you assess the information on the ENTREPRENEDU website?	Highly		
	useful at Less _{Moderately} Very all useful useful useful	Highly useful		

CLime	Survey
A4.	Which information or topics were missing from the ENTREPRENEDU website?
Secti	on B: Application
B1.	What was your main reason to apply for the Hackathon? Enhance my business idea Participate in the business acceleration and mentoring programme Networking opportunities Other Other
B2.	I found it easy to apply for the ENTREPRENEDU Hackathon. Strongly Disagree Disagree Disagree Agree agree
B3.	What hurdles did you encounter in your application process?
Secti	on C: Hackathon
C1.	How relevant was the challenge offered at the Hackathon for you?

Lim	neSurvey		
C2.	Please specify.		
C3.	How relevant were the topics of the workshop	os?	
		Not relevant at Slightly Moderately Very Extremely all Relevant Relevant Relevant Relevant	
	Business Model Discovery		
	Unleashing the Brilliance within your ideas		
	Understanding Business Angels		
	Building FUTERPROOFED business ideas		
	From Idea to Impact		
C 4.	How satisfied were you with the collaboration participants?	n with the other	
		Very Somewhat Very Dissatisfied Dissatisfied Satisfied Satisfied Satisfied	
C5.	Please specify.		
C 6.	How satisfied were you with the level of support and assistance provided by mentors or experts during the hackathon?		
		Very Somewhat Very Dissatisfied Dissatisfied Satisfied Satisfied	

Č Lime	eSurvey				
C7.	Please specify.				
C8.	How satisfied were you with your developed concepts/prototype?				
C9.	Please specify.				
Secti	ion D: Pitching				
D1.	I consider the pitch as a good way to promote my business idea. Strongly Neither Disagree Disagree Disagree Agree				
D2.	Please specify.				
Secti	Section E: Networking				
E1.	I had good networking possibilities at the Hackathon.				

LimeSurvey

E2.

	Section	F:	Overall
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Please specify.

F1. Overall, how satisfied are you with your experience at the hackathon?

Very Dissatisfied	Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied
·····				

F2. Do you have any suggestions or feedback for improving future hackathons?

Section G: End-users & Potential Customers

G1. What kind of organisation are you representing?

Corporation	
SME	
Industry Association	
Government Agency	
Investor / Venture Capital Firm	
Academic Institution	\Box
Other	

Other

ČLim	neSurvey			
G2.	What was your main reason for participatin	g in the event?		
		Access to Innovation		
		Business Development		
		Networking		
		Talent Acquisition		
		Market Insights and Trends		
		Other		
	Other		•	
G3.	How was the quality and relevance of the developed solutions			
	presented by the start-ups at the hackathon?	Below		
			Excellent	
G4.	Please specify.			
G5.	G5. I consider entering into a partnership with a start-up from the			
	Hackathon.			
		Neither Strongly Agree nor Disagree Disagree Agree	Strongly agree	
G6.	How did the hackathon meet your expectations in terms of			
	showcasing innovative ideas and technologie	Below Met Exceeded	Far	
			exceeded	

ČLim			
G7.	Please specify.		
G8.	Do you have any suggestions or feedback for improving future hackathons or the experience for potential end-users and customers?		

Thank you for the participation!