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Join Us to Optimize Health Through Cohort Research

Deliverable 6.7 Evaluation report on communication and dissemination strategy

Version 1.0

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1. Background

Evaluation aims to identify areas that need improvement, as well as to identify possible improvements that will contribute to better communication and dissemination results. This document recognizes the objectives, methods and steps for conducting an effective evaluation, as well as proposed actions to improve both elements: communication and dissemination, contributing to the long-term success of the project.

This document summarizes the activities related to the communication and dissemination process undertaken by the consortium during the course of the project and is an evaluation of the strategy presented in the Deliverable 6.4 Communication and dissemination strategy. Within this document, the theoretical framework of the evaluation process is presented in order to properly embed the activities performed in the project.

Next, the methodological approach used in the evaluation process is presented. First, a synthetic analysis of the Key Performed Indicators that were adopted prior to the project's realization is presented. Secondly, the methodological approach of the ex-post evaluation in the form of a marketing survey conducted in December 2023 to evaluate the JoinUs4Helath platform and brand image on key indicators is included.

2. Key findings and recommendations

- During the implementation of the communication and dissemination strategy, most of the pre-project KPIs were achieved.
- The biggest problems with meeting targets were in the number of new users of the online platform, where at the time of writing the report there were 977 instead of the planned 1,200, and users engaged through, for example, sharing comments, who numbered 102 instead of 300. There were also 6 working groups registered instead of the planned 60. The reasons for the failure to achieve the indicators are explained in more detail in Chapter 5, and are not simply a product of marketing and communication efforts, but are nevertheless due to the delay in launching the platform and the inability to implement the basic marketing strategy in terms of customizing and modifying content to meet the needs of defined segments as a result of analyzing conversions from social media to the platform's website. The inability to use user traffic tracking tools, as a result of the platform administrator's legal restrictions, has significantly limited the ability to effectively recruit and build user engagement, allowing only generic

brand awareness building. As a result, the possibilities for ongoing evaluation of marketing activities were significantly reduced.

- An analysis of Internet Usage & Attitude reveals that among citizens, smartphones are the most popular method of Internet use. Therefore, it is important that JoinUs4Health's online platform is also developed in a mobile version, and not just a version tailored for desktops and laptops, as at the moment. This will increase its attractiveness.
- The earlier conjecture that interest in the JoinUs4Health platform among segments of the target group is heterogeneous is confirmed. Among residents, the JoinUs4Health platform does not generate as much expectation on key indicators as it does among students and NGO representatives. While this assumption was based on observations of consortium members during the offline events implemented, it was confirmed by expost marketing research. It turns out that both students and NGO representatives rated the JoinUs4Health platform significantly better on all key indicators (Chapter 5).
- The JoinUs4Health brand image created by the consortium is in line with the objectives and properly perceived by the various user segments: residents, students, NGO representatives. This proves that the visual communication has fulfilled its purpose and consistent marketing activities during the project have brought the expected results.
- An important fact of marketing efforts is the familiarity with the JoinUs4Healt platform if only by hearsay. 17% of citizens said they were familiar with the project. What's more, 50% of those aware of the JoinUs4Health brand came across it on social media, where campaigns aimed at building brand awareness were intensively conducted. However, due to the lack of tracking tools, we cannot assess what actions people redirected from Facebook to the JoinUs4Health platform, for example, have taken on the platform. Unfortunately, we do not know what interested them, how much time they spent on the platform's website. Such knowledge would allow us to significantly improve content tailored to the needs of relevant audiences, increasing the realization of KPIs.
- A final important finding is that people who have come into contact with the JoinUs4Health project even if only by hearsay rate the JoinUs4Health platform significantly better on key indicators achieving the set standards for action standards (see Chapter 5). This means, therefore, that increased awareness and exposure to the project and its results significantly contributes to a change in attitude and inclination to use the online platform, for example. It is therefore worthwhile to continue efforts aimed at increasing brand awareness, especially in segments that show above-normal interest in the brand, i.e. students and NGO representatives.

3. Theoretical part introducing the evaluation process

3.1. Objectives of the evaluation

Evaluation of the communication and dissemination strategy is an important step in the project implementation process. Its main purpose is to evaluate the effectiveness of the communication and dissemination activities to find out whether the project is achieving its objectives and positively influencing the target groups, and to adjust the activities if necessary. Here are the main objectives of evaluating the communication and dissemination strategy:

- To evaluate the achievement of project goals: evaluation allows to determine whether the project has achieved its main objectives related to communication and dissemination. For example, whether it succeeded in raising awareness of platform, promoting cohort studies, or increasing access to platform.
- Measuring impact on target groups: evaluation assesses what specific communication activities have affected the project's target groups. Did their knowledge about increase? Did they benefit from the services offered?
- Identify the strengths and weaknesses of the communication strategy: evaluation helps to understand which elements of the communication strategy were particularly effective and which need improvement. This can include an analysis of the type of communication tools used, message content, distribution channels, etc.
- Evaluation of the effectiveness of communication tools: evaluation allows you to assess which communication tools were most effective. Did the flyers campaign yield better results than social media efforts? Did the informational meetings and off-line meetings produce the expected results?
- Strategy adjustment: based on the results of the evaluation, the communication and dissemination strategy can be adjusted to make it more effective. This could mean changing the content, tailoring messages to the needs of the target audience, changing communication channels or planning additional activities.
- Ensuring project sustainability: evaluation can help determine what steps need to be taken to make the project sustainable after funding ends. This may include developing a continuity plan for communication activities or seeking funding sources for the future.

- Informing stakeholders: the results of a communications evaluation and dissemination strategy can be used to inform project stakeholders, sponsors, partners and other interested parties about the project's progress and achievements.
- Evaluation is a dynamic process and should be conducted on an ongoing basis to allow activities to adapt to changing needs and situations. As a result, the project can become more effective and contribute to positive changes in public health or other areas.

3.2. Application of evaluation

Used to estimate the value and quality of a given endeavor, as well as to explain the reasons for the accompanying successes and failures, evaluation is a universal management tool in "learning organizations".

Scope of the evaluation	The way to understand
Subject	The part of the project evaluated ("how much" we evaluate)
Territorial	The area in which it will be carried out
Temporary	The period to which it will apply
Subjective	Persons/institutions that will be covered by the evaluation

Table 1. Scope of the evaluation

Table 2. Types of evaluation

Location of the entity implementing it:		The	timing of its conduct:
•	External	•	ex-ante (preliminary)
•	Internal	•	intermittent (mid-term)
•	Self-evaluation	•	ex-post (final)
		•	running (on-going)

No one type of evaluation **is better than another** - each is applied to a different situation, has different objectives, and has its pros and cons. Therefore, we used different varieties of evaluation.

When it comes to its location we can characterize:

• **External evaluation** is conducted by an independent entity, external to the implementer of the project being evaluated / the organization commissioning the evaluation.

- Internal evaluation, which is carried out by an entity that is within the structures of the implementer of the project being evaluated/the organization commissioning the evaluation, but remains independent of it (e.g., is carried out by an evaluation specialist employed by the project)
- Self-evaluation is performed independently by the members of the team implementing the project. We use it when there is no need or possibility to hire an evaluator, we are able to conduct the evaluation with our own efforts and we are aware of significant subjectivity, e.g. evaluation of the project element that causes the most problems.

3.3. Evaluation criteria and questions

Any evaluation should include standardized indicators that can be compared both over time, but also between projects. What role do evaluation criteria play?

- They indicate the selected aspects of the project that will be subject to estimation/evaluation as part of the evaluation (they define the way it is valued)
- They are the prism through which the evaluator views the project by estimating/evaluating it in terms of the degree of fulfillment of a particular criterion.
- A given undertaking may be evaluated quite differently using different evaluation criteria (e.g., it may be very useful to the recipients, but ineffective, i.e., resourceintensive)

The most commonly used evaluation criteria:

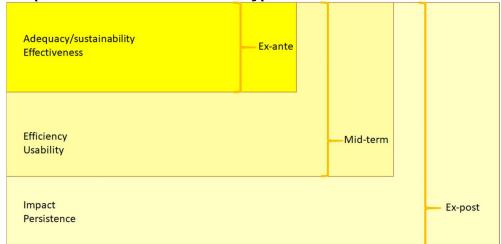
- Adequacy/relevance the degree to which marketing content is aligned with audience needs/identified problems
- Efficiency the degree to which the assumed goals and results are achieved
- Effectiveness the ratio of the expenditures made (financial resources, human resources, time, etc.) to the results obtained, i.e. the level of "economy" of the venture
- **Impact** the broader, generalized impact of the project (e.g., on a given sector/region/country) beyond its immediate recipients (e.g., the extent to which the project has contributed to solving local community problems)
- **Sustainability** the persistence of a project's effects over time, after its funding ends
- Utility the degree to which the project is useful to its recipients
- **Other** e.g. satisfaction with participation in the project, consistency of its individual elements (e.g. goals, activities, results), complementarity of the activities undertaken.

	External evaluation	Internal evaluation	Self-evaluation
Strengths	 independence, objectivity professionalism 	 competences good knowledge of the organization, the specifics of its area of operation and the project being carried out Strong motivation to implement recommendations 	 In-depth knowledge of the organization, its area of operation and the business being conducted focus on the most important issues, difficulties, failures, weaknesses greatest opportunity to use evaluation results
Weaknesses	 Lack of in-depth knowledge about the organization implementing the project, its activities, the specifics of the recipients, etc Risk of useless recommendations 	 Possibility of lack of objectivity Risks of conflict of interest and loss of independence 	 he highest degree of subjectivity Insufficient competence in conducting evaluations Simultaneous implementation of the project (scarcity of time and human resources)

Table 3. strengths and weaknesses of evaluation types

Table 4. Types of evaluation by time and objectives

Type of evaluation	The timing of implementation	Goals
Ex-ante	Before the start of the project (after its design)	 Assessment of the adaptation of the project to the diagnosed needs (recipients of the region) Verification of the consistency of the project (objectives, results, activities) Analysis of the conditions (e.g. social, economic, legal) under which the activities will be carried out Identification of potential difficulties in the implementation of the project and development of a plan to counteract these risks
Mid-term	During the course of the project (e.g., in the middle of its implementation)	 Preliminary assessment of the process / quality of the conducted project Demonstration of the results obtained at a given stage of project implementation Evaluation and, if necessary, verification/updating of assumptions introducing modifications
Ex-post	After the completion of activities (including after a certain period of time, e.g. 2-3 years)	 Evaluation of the usefulness and relevance of the project to the needs (audience, local community) Evaluation of the degree of realization of planned objectives and results Evaluation of the effectiveness of the project (ratio of inputs to obtained results) Examination of the sustainability of results and deferred effects achieved Obtaining useful information for planning future projects
On-going	Continuous, for the duration of the project	 Focus on the process of project implementation Ongoing evaluation of its quality and value, taking into account the objectives and results achieved at a given stage Verification and, if necessary, adjustment of the initial assumptions to the current conditions of carrying out activities Diagnosing and solving ad hoc problems Improving the implementation of the project (including improving the quality of their management)



Graph 1. Evaluation criteria vs. type of evaluation

4. Methodological part

The evaluation focused on the part of the project mainly related to WP6 with regard to communication and dissemination activities. Territorially, it covered all countries in the consortium in the case of online activities, i.e. estimation of awareness, outreach, engagement as well as the scale of dissemination. Due to the large number of offline activities carried out only in Poland (in Bialystok) and budget constraints, it was possible to conduct professional marketing research to ex-post measure the key indicators of the JoinUs4Health brand i.e.: awareness, general opinion, willingness to use, image and others. The period of continuous evaluation dedicated to online data collection covers the time from the launch of the project website and is conducted continuously according to the designated Key Performance Indicators (KPIs). In addition, most of the offline events were evaluated in the form of surveys that users filled out at the end of the meeting. Finally, a marketing survey was conducted in December 2023 in Bialystok to ex-post evaluate the JoinUs4Health project. During the evaluation process, a very large amount of data related to communication and dissemination was collected. This version of the report will only cover selected aspects, showing the status of implementation of the assumed KPIs, and will present the results of the marketing survey in order not to overextend the document.

Scope of the evaluation	Coverage		
Subject	Communication and dissemination strategy		
TerritorialConsortium partners in terms of online activities, Bialy (Poland) int terms of offline events			
Temporary	From launching the strategy (March 2022)		
Subjective	Consortium's communication and dissemination activities		

Table 6. Types of evaluation implemented

Location of the entity implementing it:	The timing of its conduct:
• Self-evaluation when assessing KPIs	 running (on-going) from the beginning of the project website and platform existence
• External for marketing research to evaluate awareness, brand image (conducted in Poland)	• ex-post (final) in December 2023.

a. Key Performance Indicators

For evaluation purposes, from the beginning of the launch of communication activities aimed at building brand awareness, an on-going evaluation was conducted to measure the effectiveness of the marketing activities undertaken. With the launch of the JoinUs4Health online platform, social media campaigns were intensified and supported significantly in Poland (Bialystok) with numerous offline events aimed at familiarizing the local community with the project and the online platform.

Presented below is a table with KPIs defined at the application level, where three levels of marketing activities are distinguished: those aimed at brand awareness, those building engagement, and finally those aimed at dissemination, understood, for example, as the number of downloads of the content created within the project.

Category	Indicator	Description	Goals (annual numbers)		
_		-	Year 1	Year 2	Year 3
Awareness	Reach	Number of people who viewed content at least once	10,000	25,000	100,000
Awareness	Impressions	Number of instances when content is displayed	20,000	50,000	200,000
Awareness	Frequency	Calculated as impressions/reach monthly	2	2	2
Engagement /	Mentions	A researched connected term (e.g. name) is used in	20	30	35
Dissemination		a text published on the internet			
Engagement	Engagements	Monthly number of reactions (likes), comments or	100	150	180
	(social media)	shares			
Awareness	Website visits	Number of visitors	2,000	5,000	7,000
Engagement	Online platform	Newly registered platform users	-	600	600
		Users who engage on platform via low-level	-	300	400
		interactions (e.g. sharing questions or comments)			
		Active working groups (high-level interactions)		60	60
Engagement /	Downloads	Number of downloaded contents from the online	-	100	150
Dissemination		platform (data sheets, infographics, reports, etc.)			

Due to delays resulting from the implementation and launch of the project's online platform, the goals set for 2021 were impossible to meet. For a detailed discussion of the status of each KPI, see Chapter 5.

4.1. Purpose of the marketing research evaluation

Marketing research was implemented due to the impossibility of carrying out previously planned evaluation activities, i.e. a thorough study of user conversions from social media to the platform in terms of the type of user, membership in a specific segment and the impulse that caused the switch to the platform (type and content of information). The lack of tracing tools resulting from the platform administrator's legal restrictions necessitated the implementation of ex-post marketing research to examine selected user segments in terms of evaluation of the platform and the JoinUs4Healt brand.

The marketing research should lead to the following research objectives:

- diagnostic: by evaluating the characterized main target groups of project recipients: residents; high school students, representatives of NGO's (see Deliverable 6.4 Communication and dissemination strategy)
- 2. **predictive and evaluative**: what percentage of people from the defined target groups would be interested in using the JoinUs4Health online platform;

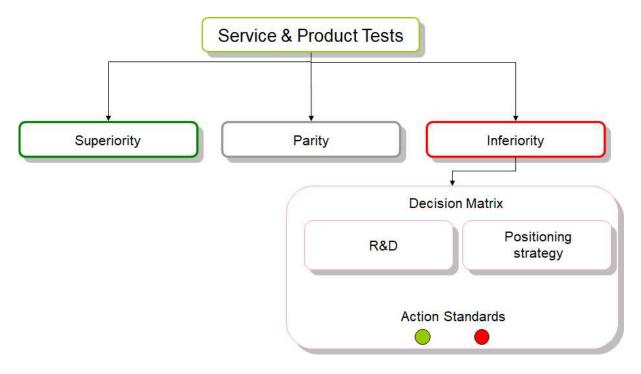
The research objectives will be achieved through measurement in selected target groups:

- implementation of an Internet survey among the population of residents of Bialystok on a quota and random sample of 300 citizens of Bialystok with the use of certified Internet panel in the CAWI technique.
- implementation of a survey questionnaire using the CAWI technique among high school students in Bialystok (sample N=200).

 implementation of a survey questionnaire using the CAWI technique among representatives of NGOs in Bialystok (sample N=40).

The primary purpose of conducting marketing research is to provide marketing-useful information that will contribute to building a competitive advantage.





The tests always assume three possible scenarios for the behavior of the concept/product.

- The studied products/services may be significantly higher rated than the competition (*superiority*). This is the most desirable scenario, as it gives the Employer the opportunity to locate the product/service in a segment such as premium. In addition, it allows to maintain higher prices, and users are characterized by greater loyalty;
- 2. On the other side of the universe is the scenario in which the product/service is perceived worse than the competition (*inferiority*). Then, the Procurer must decide which of the two available action strategies it will follow. First, it can lower the price, treating it as the main factor in competing with better perceived products/services. Second, it can also direct the product/service to R&D (research & development) to refine sensory attributes, image attributes, etc., in order to eliminate the shortcomings pointed out in the test by users and achieve a state of balance against the competition (*parity*).

3. The state of equilibrium (*parity*) is a situation in which our product/service is not distinguishable from the competition on key attributes.

Statistical tests and predefined indicators called '*action standards'* help in deciding which scenario to implement. To use a metaphor, action standards are the equivalent of a traffic light that turns on red stopping us from proceeding (proceeding with the product/service for further work) or emits a green light giving permission to continue the journey (implementing the product/service into the market). Secondly, action standards are otherwise a certain threshold that the product/service under study must reach on the indicator scale in order for the signaling to light up a certain color.

4.2. Research objectives and research technique

A quantitative method and CAWI survey technique were used to achieve the stated goals. Full documentation of the developed tools can be found in the methodological appendix. Table 7 shows the characteristics of the methods and techniques used in relation to achieving the specific research objectives.

No.	Research objectives	Research technique and study group		
1)	Demographic analysis of people familiar with the JoinUs4Healt project	I. Survey of residents of Bialystok (N=300)		
2)	Demographic analysis of those accepting the JoinUs4Health project			
3)	Overall opinion about JoinUs4Helath platform			
4)	JoinUs4Healtj brand awareness	I. Survey of residents of		
5)	What is the declarative intention to use the JoinUs4Health platform?	Bialystok (N=300). II. Survey of high school		
6)	How strong is the need for the tested platform among representatives of the target groups?	students from Bialystok (N=200)		
7)	How much of a competitive advantage does the JoinUs4Helath platform have in the opinion of respondents	III. Survey of representatives of NGOs		
8)	To what extent does the tested service seem reliable to the respondents?	(N=40)		
9)	What is the propensity to recommend the JoinUs4Health platform?			

Table 7. Research objectives and dedicated research samples to achieve them

Computer-Assisted Web Interview (CAWI) - carried out on the largest panel of Internet users in Poland, Opinie.pl. This was another stage of the project involving a quantitative survey using the CAWI technique. CAWI is a technique used in quantitative research, using the Internet to conduct surveys with respondents. Advantages of this technique include: ease of reaching specific target groups (in this case, people with certain demographic characteristics) and relatively low cost compared to traditional quantitative techniques requiring face-to-face interaction. The survey was experimental in nature and served to test the JoinUs4Health online platform and to gather consumer experience with the methodologies on which the online platform was developed, i.e. RRI, crowdsourcing, cohort studies. The sampling for the survey was quota and random in the case of Bialystok residents and purposive in the case of high school students and NGO representatives. The advantage of implementing the survey using the CAWI technique is that the panelists are Internet users, which eliminates the barrier to entry aspect of the JoinUs4Health platform. We are left with the pure effect of the attractiveness of the platform and the willingness to use it, without the need to implement a recruitment questionnaire with regard to internet ownership and usage.

5. Diagnostic and analytical part

5.1. Achievement of key performance indicators

During the preparation of the grant application, key performance indicators (KPIs) were submitted, which we as a consortium declared that we would try to meet. Table 8 shows goals versus results for 2022 and 2023.

The KPIs addressed three dimensions regarding communication and were: awareness. engagement and dissemination. They referred to both visits to the project website, activities on the online platform, the number of downloads of the content prepared during the project, and social media activity (Table 8)

Category	Indicator	Description	GOAL 2022	RESULT 2022	GOAL 2023	RESULT 2023	TOTAL
	Reach	Number of people who viewed content at least once	25 000	62 316	100 000	820 325	882 641
Awareness	Impressions	Number of instances when content is displayed	50 000	341 962	200 000	5 671 560	6 013 522
	Frequency	Calculated as impressions/reach monthly	2	5,49	2	6,91	12
Engagement / Dissemination	Mentions	A researched connected term (e.g. name) is used in a text published on the internet	30	6 *	35	35 *	41
Engagement	Engagements (social media)	Monthly number of reactions (likes), comments or shares	150	210 (total 2530)	180	3070 (total 36 842)	3280
Awareness	Website visits	Number of visitors	5 000	1968	7 000	31 023	32 991
		Newly registered platform users	600	Х*	600	Х*	977*
Engagement	Online platform	Users who engage on platform via low-level interactions (e.g. sharing questions or comments)	300	X*	400	X*	102*
		Active working groups (high-level interactions)	60	Х*	60	X*	6*
Engagement / Dissemination	Downloads	Number of downloaded contents from the online platform (data sheets, infographics, reports, etc.)	100	2321	150	3227	882 641

 Table 8. Targets of key performance indicators vs results.

* to be confirmed

The final evaluation of the KPIs shows that a significant majority of them have been achieved. Of the 10 indicators, one "website visits" was not achieved in 2022. However, this criterion was more than fulfilled in the following year. Such a result in 2022 was mainly influenced by the delay with the implementation of the web platform, and thus the significantly lower-than-expected intensity geared towards building awareness of the project among the audience and target groups. After the launch of the online platform, the targeted goals were successfully achieved. A similar situation applies to the indicator "A researched connected term (e.g. name) is used in a text published on the internet," which, although not achieved in 2022, was fulfilled the following year with a significant surplus.

Achieving indicators related to engagement on the JoinUs4Health online platform proved most problematic. The data is presented overall in the "Total" column in Table XX. No indicator was achieved, although it should be emphasized that the final data may change, due to the fact that many events and activities were organized in Bialystok in December and their effects are not yet included in this report. Nonetheless, we will certainly not meet our goals in the categories of "Users who engage on platform via lowlevel interactions (e.g. sharing questions or comments)" and "Active working groups (high-level interactions)." Among the reasons for not meeting targets are the following:

- a significant delay in the launch of the JoinUs4Health online platform (from an assumed start of 2022, it took place in the middle of the year).
- complicated data protection legal procedures on the part of the platform administrator, affecting the inability to make changes in a quick and efficient manner, e.g., the required provision of a strong password at registration caused people trying to create an account on the platform to abandon registration. Reported requests to relax the registration criteria were granted after several months.
- extremely strict procedures for protecting user data did not allow the implementation of plug-ins to track visitor and platform user traffic and conversion from social media to the project website and platform. This prevented the implementation of evaluation objectives to continuously monitor the outreach activities undertaken and to adjust and improve content tailored to defined segments, and meant that we could not assess who, in effect, registered after being redirected to the platform and under what stimulus.
- Besides, the reasons for not achieving engagement indicators on the platform go beyond marketing activities and are not the purpose of the analyses of this

document, but it is worth noting only that they relate to the novelty of the activities undertaken in its creation and the failure of the consortium to anticipate many aspects that are difficult to detect at the level of proposal construction and budget formulation. The main issue here is the lack of a sufficient number of people and resources to facilitate activities on the platform.

In summary, we can say that it is apparent that we did relatively well in the "Newly registered platform users" category, despite a complete lack of access to traction tools that would have allowed us to modify our marketing strategy and evaluate it over time, adapting it to the audience and "boosting" those messages that enhanced conversion. It is also important to be aware that due to the lack of access to tools whose use seemed obvious at the application level, we had to activate and use offline activities much more strongly, especially heavily in Bialystok, to encourage people to create accounts on the platform during direct activities with the local community. However, as can be seen from the data, the lack of adequate facilitation and moderation of the working groups, if only because of the personal and financial resources not provided for this purpose, resulted in a lack of further conversion from user to engaged user status.

5.2. Evaluation of communication strategies through marketing research.

Although the legal procedures on the part of the platform administrator related to user data protection did not allow us to realize the full potential of the evaluation activities we initially envisioned in order to determine the health of the JoinUs4Healt brand, we decided to use a post-hoc approach and implemented a marketing surveys to evaluate the basic marketing criteria, i.e:

- brand awareness (of the JoinUs4Health project) in the local community and selected defined target groups
- brand potential as expressed by key indicators used in marketing research agencies to evaluate service and product concepts and their images.

Due to budget constraints, resulting from the lack of knowledge of the impossibility of using communication strategies and dissemination tracking tools in the evaluation process, we were able to implement the research in Bialystok. On the other hand, only here, the consortium implemented extensive offline activities including: research cafes, health festival, science week, quadruple helix workshop, "Hackathon for Health" high school competitions (https://hackathondlazdrowia.pl/), workshop lessons in high schools called "Citizen Power by JoinUs4Health" (<u>https://citizenpower.pl/</u>), podcast editorial. Therefore, the implementation of the measurement among Bialystok residents and selected target groups was aimed at determining the effectiveness of communication and dissemination activities.

5.3. JoinUs4Health platform concept test

5.3.1. Information on research samples

The platform test study was conducted by IQS Group on users of Poland's largest online panel opinie.pl on: a quota random sample of n=300 citizens with predefined demographic characteristics that reflected the population of Bialystok residents in terms of gender, age and education. The targeted sample was to include 300 consecutively completed interviews, but the "statistical mass" increased by 7 questionnaires, due to the simultaneous time of their return. Hence, it was decided to use all the results for analysis without arbitrarily removing the excess surveys.

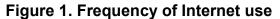
According to the information obtained in the individual measurements: the survey of the population of Bialystok, the survey of high school students and NGO representatives, the CAWI samples were divided into two equal cells:

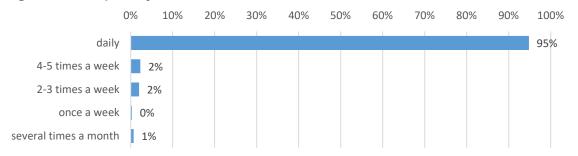
- 1. sample 'Residents of Bialystok' N=300, people over 15 years old
- sample 'Students' N=200, high school students aged 15-18 (101 aged 15-16 and 99 aged 17-18).
- 3. Sample 'NGOs' consists of individuals representing NGOs in Bialystok.

5.3.2. Analysis of chosen aspects from the sample of Bialystok residents

The condition for participation in the survey was living in Bialystok and meeting the assumptions of the sample in terms of gender, age and education distribution.

Selected aspects of Internet use are presented below, in order to show the habits of Bialystok residents, which can help understand issues relating to communication and dissemination issues. Almost all survey participants (95%) use the Internet daily, which is beneficial for the evaluated service that is the JoinUs4Health online platform (Fig 1).





Source: CAWI research, (A) Sample of residents N=307

Due to budget constraints, the JoinUs4Helath platform was developed in desktop and laptop versions and is not adequately responsive in the mobile version. When asked how they use the Internet, respondents answered that they most often use a smartphone (94%), although desktop and laptop computers are also very popular (86%). The tablet received the fewest indications (24%) (Fig. 2).

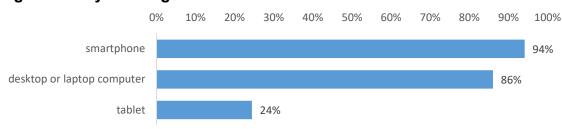


Figure 2. Way of using the internet

Source: CAWI research, (A) Sample of residents N=307

Creating a ranking of devices for Internet use (Fig 3), one can see an increasing disparity in favor of the smartphone, with 53% of respondents considering it the first way to surf the Internet. A desktop computer is the first choice for 38% of respondents. This finding leads to two conclusions:

- it is necessary to create a mobile version of the JoinUs4Health platform, since the version for desktops and laptops, which was created in prototype form, may not meet the needs of a significant part of the population for whom this may be a deterrent to use.
- the structure of Internet usage clearly indicates the popularity of smartphones, and it is worth taking this aspect into account when further developing the JoinUs4Health online platform.

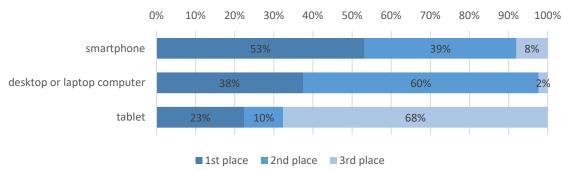
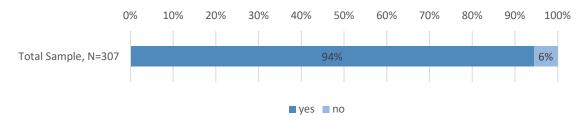


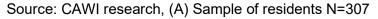
Figure 3. Ranking of devices for internet use

Source: CAWI research, (A) Sample of residents N=307

Because awareness of the JoinUs4Healt project was built on social media, respondents were asked if they had a social media profile. It turns out that 94% of respondents use social media. (Fig. 4)

Figure 4. Use of social media





Among the most popular is Facebook (95%), more than 65% also indicated YouTube, and more than half of respondents mentioned Instagram (56%). The entire list is shown in Figure 5.

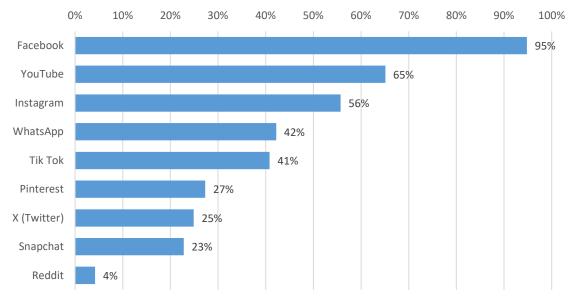


Figure 5. Use of social networks

Source: CAWI research, (A) Sample of residents N=307

With regard to aided awareness, respondents were asked if they knew even by hearsay the JoinUs4Helath project, where the brand logo was also displayed. Among residents of Bialystok, 17% of people declared familiarity with the brand (Fig 8).

This is an unexpectedly high result, considering that this is a young brand that is being built from scratch within an international consortium. This result is probably slightly inflated due to the specifics of the surveyed sample. Internet panelists are those who are proficient in using the Internet and use it statistically more than the general population (especially with regard to the elderly over 60). Therefore, it can be concluded that in the target group, i.e. residents who regularly use the Internet, additionally having accounts on social profiles, where extensive brand awareness campaigns were conducted, the goal was achieved, as nearly one in five people associate JoinUs4Healt, if only by hearsay.

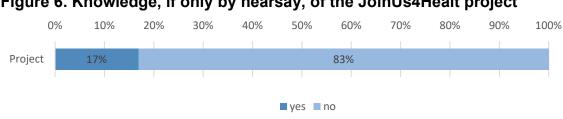


Figure 6. Knowledge, if only by hearsay, of the JoinUs4Healt project

Source: CAWI research, (A) Sample of residents N=307

When asked how they knew about JoinUs4Health, respondents mostly just pointed to social media profiles, with nearly one in three respondents mentioning regional television, where the project was mentioned several times, e.g., coverage of the Hackathon for Health and the most recent one in December of the Quadruple Helix Workshop. Nearly one in five had heard about the project from family/friends.

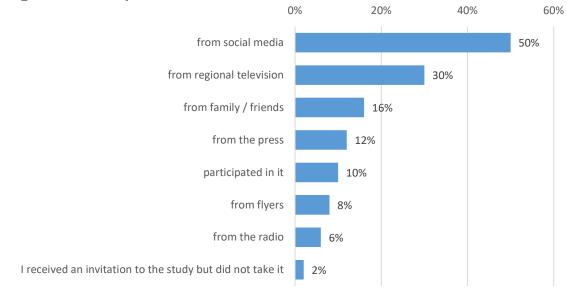


Figure 7. Touchpoints with JoinUs4Health

Source: CAWI research, (A) Sample of residents N=307

5.3.3. Analysis of the concept test on key indicators

Later in the survey, when respondents talked about their social media usage habits, they were given a verbal description of the JoinUs4Health online platform concept and methodological terms.



"JoinUs4Health is an international consortium working to promote <u>citizen</u> science, crowdsourcing through <u>responsible research and innovation</u>.

Through **JoinUs4Health**, each of us has the opportunity to co-create research projects with others, including scientists, such as the **Bialystok Plus cohort study**, ask questions of scientists, and suggest topics we are curious about and would like to learn about and explore with scientists.

Using the **JoinUs4Health online platform**, you can now communicate and join research groups, create your own research suggestions, develop projects and co-create science with scientists!

Anyone can work with researchers and as a researcher. **JoinUs4Health**, through its **online platform**, allows you to get involved in co-creating research by:

- proposing research questions, topics or tasks;
- influencing the selection of research questions in the scientific projects you create;

• deepening your knowledge on health-related topics through specially prepared educational materials;

- connecting with other volunteers to jointly create scientific solutions;
- belonging to a community interested in advancing knowledge and changing the health of the local community for the better.

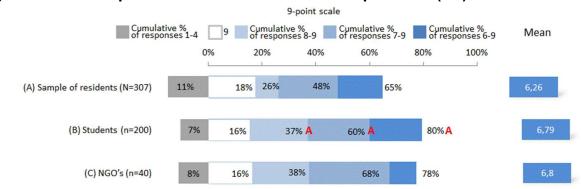
Register on the JoinUs4Health online platform

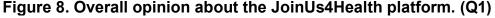
(<u>https://platform.joinus4health.eu/</u>) and become a social scientist, get involved and change your community's health for the better!"

Then, using a list of standardized indicators, a methodical evaluation of the JoinUs4Health platform concept was carried out based on the opinions of the potential audience of the service. First, as is customary in this type of testing, respondents were asked about the overall evaluation of the idea, i.e. how much the idea of such a service, given the submitted description, appealed to respondents.

In this section, the results are presented in a combined manner, that is, the results of Bialystok residents, high school students and NGO representatives are juxtaposed.

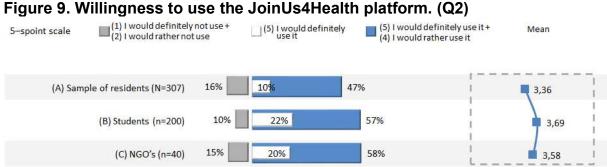
Figure 10 shows the percentage distributions of responses on the main indicators: top box (highest response on the scale; 9 - I definitely like it), Top2, Top3 and Top 4 boxes, Bottom 4 boxes, arithmetic mean. Starting with the average value, which was 6.26, it should be considered that the expectation generated by the concept translates into a moderate overall evaluation of the online platform among the general population of Bialystok. The top 4 boxes reached a value of 65%, which means that the majority of the population indicated positive values on a 9-point scale. Nearly one in ten Bialystok residents surveyed declared that they did not like the idea of the platform. The platform service achieved significantly higher indications in the student group, where the Top2, Top3 and Top4 boxes were significantly higher than in the general population.





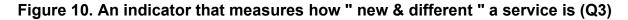
Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

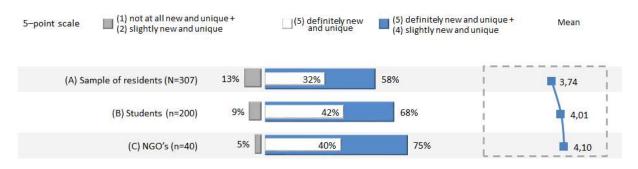
The next indicator assessed was the <u>willingness to use the platform tested</u>. Figure 9 shows the percentage distributions of responses in the total sample and two cells. The indicator is presented on a five-point scale. Taking into account the uniqueness and novelty of the tested platform, it does not achieve high results, although there are significant differences between the surveyed groups. Among residents of Bialystok, the Top box reaches 10%, and Top 2 boxes do not exceed 47%. In the group of students and representatives of NGOs, these indications are twice as high for Top box (22% and 20% respectively). This indicates, the different segments see different potential in the proposed service and manifest heterogeneous inclination to use the JoinUs4Health platform.



Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

An important indicator from the perspective of assessing the competitiveness of the tested service is the validation of its novelty and differentiation from other services of this type available on the market, based on the knowledge that respondents have on the subject. Figure 10 reveals the percentage distributions of the answers given. Residents of Bialystok rated the innovative service highly, as the top box reaches indications of 32%, although the arithmetic average does not exceed the value of 4.00. Again, both students and NGO representatives significantly higher validate the platform on both Top box and Top 2 boxes, and considering the averages that exceed the value of 4.00.

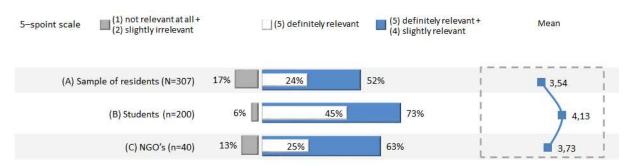




Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

To measure whether the concept is important to respondents, the <u>relevance</u> indicator was used. It is designed to evaluate respondents' attitudes about the importance of this type of service for taking care of their own health. Here, too, the main indicators score moderately in the overall sample on Top box ra Top 2 boxes and significantly higher for students with Top Box exceeding 45% and Top 2 boxes reaching over 70%. The average is equally high (4.13). In the case of NGO representatives, Top Box reaches 25% and is almost identical to the result of residents of Bialystok, but for Top 2 Boxes it is higher by almost 10% (Fig. 11).

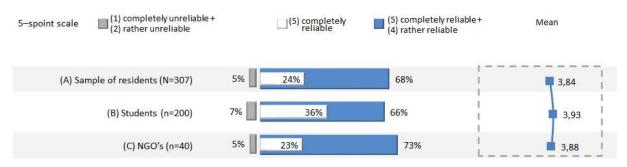
Figure 11. An indicator measuring how relevant the platform is to respondents. (Q4)



Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

Another indicator submitted for evaluation by respondents was the beavibility of the description. Sometimes, although the concept seems very attractive, we would gladly take possession of the service described in it, but it is difficult to believe that it could exist on the market in the form presented. Therefore, the criterion of beavibility helps to assess its "truthfulness" in the eyes of the target group. In the case of the innovative service that was tested, the indicators are in correct. Top 2 boxes achieve nearly 70% of indications, and Top box nearly 25%, but the average does not break the value of 4.00. A significantly higher Top box is observed in the group of students (Fig. 12).

Figure 12. An indicator measuring the extent to which statements about the description of the JoinUs4Health platform are believable to respondents. (Q5)



Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

Multidimensional analysis allows the concept to be evaluated from different perspectives, thus completing the picture of an innovative service. Through the use of various indicators, evaluation is able to provide an accurate business decision, or even after the service is implemented in the market, to assess how well it fits the needs of the target group. Therefore, the next indicator, almost always duplicated in marketing studies, is the estimation of the propensity to recommend, that is, as it were, the willingness to proclaim "good news", i.e. to share information about a new product on the market with others - relatives, friends, etc. High scores on this criterion allow us to assume that, on a declarative level, the tested concept is liked by respondents. In this case, the evaluations are varied, although moderate for each group. Key indicators are evaluated quite low for residents of Bialystok. Top Box reaches 12%, and Top 2 boxes 47%. The average again does not exceed the value of 4. Willingness to recommend the platform to others is relatively higher in the other two groups. (Fig. 13)

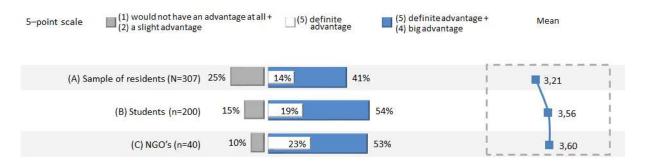
Figure 13. An indicator measuring the propensity to recommend the JoinUs4Health platform. (Q7)

5–point scale	 (1) definitely not willing + (2) rather not willing 		(5) definitely willing (5) definitely w (4) rather willing			
(A) Sa	mple of resi <mark>dents (N=</mark> 307)	15%	12%	47%	3,37	
	(B) Students (n=200)	11%	21%	54%	3,63	
	(C) NGO's (n=40)	15%	20%	60%	3,55	

Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

Then, once respondents had evaluated the platform, they were asked to consider the dilemma of what advantage the platform would have over other services if they were to access it in a convenient form. As with most of the outcome indicators for Bialystok residents, they are rather moderate and significantly lower than for the student and NGO representative groups. The Top box has the highest value in the group of NGO representatives - 23%, slightly lower among students - 19%. More than half of the students and NGO representatives consider the platform to have an advantage (Fig. 14).

Figure 14. An indicator measuring the advantage, as perceived by respondents, of the JoinUs4Health platform over other such services. (Q8)



Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

5.3.4. JoinUs4Healt image evaluation

In creating the brand and its image, all consortium members were involved, presenting their views on what JoinUs4Health should be. In response to a series of expert workshops where, using the BrandSprint methodology, a preliminary concept was developed, which was reflected in the logotype and mark book, along with a list of fonts, colors, etc. Throughout the duration of the project, the JoinUs4Health brand was promoted in a consistent manner with the established concept.

As part of the marketing research, we decided to check to what extent the created image and expectation of the JoinUs4Health brand found understanding in the eyes of the audience and whether they perceive the brand in the way the creators wanted it to be perceived.

To assess brand perceptions, respondents were presented with 10 statements asking how much they agreed with each one. Figure 15 shows the distributions of responses for each statement and group, which are sorted by Bialystok residents and Top 2 boxes indicator.

The vast majority of respondents in each group, especially among students and NGO representatives, are of the opinion that JoinUs4Health is a modern brand, young and innovative, which fits the modern lifestyle. In addition, a significant number of respondents agree that it is a brand for a specific audience, which creates some inclusivity, but is true because by design, the platform was intended to target people with relevant social skills in the context of cooperating with others and engaging in scientific

exploration,

It should be noted that respondents are least in agreement regarding the statement that it is a traditional brand. In order not to interpret each statement separately, it should be emphasized that JoinUs4Health's image in the eyes of the audience is fully in line with the creators' goals to create a young, modern, fresh brand that, despite its playful attitude, smuggles important content and is trusted when it comes to health.

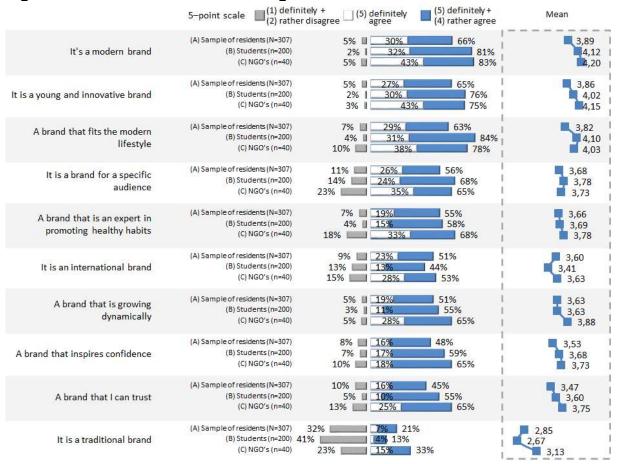


Figure 15. JoinUs4Health brand image

Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

5.3.5. Concept test results. Norms vs. action standards.

Table 9 shows the aggregate results of all key indicators used in the test to evaluate the innovative service. The norms were established based on the experience of the members of the research team and in consultation with the research agency, and the basis for their determination was the benchmark base for consumer tests in various product categories, carried out between 2007 and 2021. Admittedly, in the service market, slightly lower measures of central tendency are used for 9- and 5-degree scales, but nevertheless, the assumption was to establish criteria rigorous enough to revise whether

the platform will have a strong case, mapped in the evaluations of potential users, for the rightness of its future development.

As a result of the test, it turns out that:

- in the sample of Bialystok residents, none of the eight key indicators of action standards reached the norms from the benchmarks.
- in the case of the sample of students, two indicators exceeded the norm (new & different and relevance), and two more were very close to the threshold (beavibility and understanding).
- in the sample of NGO representatives, also two indicators met the action standards (new & different and understanding), close to the threshold was beavibility)

The results of the platform concept test in the three study groups are not optimistic at first glance, and seem far from the expected norms. This may be due to several aspects, among others:

- insufficient brand awareness
- excessive innovativeness of the studied service
- a real lack of interest in the service.

It is worth noting, however, that the methodology of the JoinUs4health project combines an innovative approach that does not necessarily target a mass audience and requires a more narrow segmentation. A good reflection is the segment of students and NGO representatives, who have a slightly better perception of the tested platform. Therefore, it is useful to take a closer look at a specific part of the respondents namely, those who at least by hearsay knew the JoinUs4Helath brand and see how the main indicators behave in this group of respondents (Table 9).

Table 9. Norms versus action standards in general populations of surveyedsegments

			Action standard met		Action standard not met	
Action Standards for key indicators	Scale	Norm	Citizens of Bialystok (N=300)	Students (N=200)	NGO representatives (N=40)	
Overall opinion (overall liking)	9 point	7.00	6,26	6,79	6,80	
Understanding	5 point	4.00	3,83	3,94	4,13	
Intent of use	5 point	4.00	3,36	3,69	3,58	
New & different	5 point	4.00	3,74	4,01	4,10	
Relevance	5 point	4.00	3,54	4,13	3,73	
Beavibility	5 point	4.00	3,84	3,93	3,88	
Need satisfaction	5 point	4.00	2,92	3,34	2,83	
Recommendation	5 point	4.00	3,37	3,63	3,55	
Advantage	5 point	4.00	3,21	3,56	3,60	

Source: CAWI research, (A) Sample of residents N=307, (B) Students N=200, (C) NGO's N=40

Only any contact with the project causes the attitude towards the idea of an online platform to change. It turns out that in the samples analyzed. Bialystok residents meet the standards for four indicators: overall liking, understanding, intent from use, relevance, and in several others the results are close to the standard. Among students, six of the nine norms were met, and among NGO representatives, only one indicator failed to meet the expected level.

Table 10. Norms versus action standards in groups knowing the JoinUs4Health project if only by hearsay Action standard Action standard

			met		not met	
Action Standards for key indicators	Scale	Norm	Citizens of Bialystok (N=102)	Students (N=39)	NGO representatives (N=11)	
Overall opinion (overall liking)	9 point	7.00	7,15	7,05	7,36	
Understanding	5 point	4.00	4,22	4,13	4,55	
Intent of use	5 point	4.00	4,05	4,15	4,27	
New & different	5 point	4.00	3,74	4,13	4,18	
Relevance	5 point	4.00	4,07	4,28	4,00	
Beavibility	5 point	4.00	3,86	4,18	4,09	
Need satisfaction	5 point	4.00	3,5	3,59	3,45	
Recommendation	5 point	4.00	3,77	3,64	4	
Advantage	5 point	4.00	3,89	3,9	4,09	

Source: CAWI research, (A) Sample of residents N=102, (B) Students N=39, (C) NGO's N=11

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