



# HelpXpress

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## EIT Digital Summer School I&E students project report

EIT Digital e-Health Summer School

Tallinn - 25/07 to 05/08

**The EIT Digital – European entrepreneurs driving digital innovation & education**

EIT Digital

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# 1. Executive Summary

Recently, the world has had to face numerous **major crises**: in every emergency, many **volunteers** offer their help and work tirelessly to help those in need. Such volunteers are usually contacted and gathered by **local governments** and **NGOs**, but research shows that the way their activities are managed presently is severely lacking.

The problem that plagues governments, small municipalities, and non-profit organizations, is not money or lack of resources, but **poor management**. The use of old or non-digital tools makes deploying the right volunteers for the right task extremely difficult and inefficient, especially at times when crises require immediate action.

**HelpXpress** offers a unique solution for governments and NGOs to manage their volunteers and projects. Our **platform** makes it possible to create and manage tasks dynamically, automating the assignment of volunteers as appropriate to the situation thanks to the profiling of the volunteer during registration. Organizations can then contact volunteers quickly and easily through many built-in channels. The support for tracking physical resources and the possibility for different organizations to collaborate by sharing volunteers and resources are also aspects that help distinguish HelpXpress in the market.

The target customer is made up of local governments and NGOs in need of more structured volunteer management. The market of volunteering CRMs is in **expansion**, and its global market value is estimated to reach 927 million euros by 2028.

The offer is that of a “**software as a service**” solution, with a fixed monthly plan with all basic features for volunteer management: these can be expanded with additional features so that customers can customize the platform according to their needs., making the business model scalable.

The initial development of the platform will be conducted while participating in pitching competitions, and the application to a startup incubator would allow to gain extra funding and onboard **new team members**. Once a viable product is ready, the team plans to first approach the **Estonian market**, where some municipalities have already expressed interest in adopting the platform in order to solve their management problems.

Expansion to other **European markets** is a goal to be reached within two years, at which point the project should have reached **profitability**. At the end of the fifth year, monthly profits are estimated to be around 300k€ with a positive cash balance of around 5M €.

## 2. Problem and Solution

### 2.1 The Problem

In Estonia, volunteers are often managed in a way that is not digitalized and is generally inefficient. The case study from which we started to identify the problem we intend to solve is that of the municipality of Põltsamaa, a town of 9,667 inhabitants (as of 01.01.2020) located in the central part of Estonia, between Tartu and Tallinn. With the public health crisis caused by Covid-19 first, and the Ukrainian refugee crisis later, the municipality has had to face increasing problems concerning the management of volunteers, their deployment in the field, and improving the interaction between the city and non-profit organizations. The data of all volunteers are managed by the municipality through an Excel sheet and Facebook group. This methodology is already inefficient when dealing with a limited number of volunteers for small projects, but especially when a major crisis occurs it becomes incredibly complicated to keep track of which volunteers were contacted, their availability, where they were deployed, and which is their task. Furthermore, another problem that arises from this kind of poor management is the inefficient exploitation of the skills in the volunteer pool, thus also creating dissatisfaction and low motivation in the type of work to be performed.

The example presented to us by the mayor of Põltsamaa to better describe the case to be dealt with relates to the recent and dramatic situation of the crisis in Ukraine; groups of refugees have been arriving in the small municipality since January and the city has had to take action at very short or almost non-existent notice. Therefore, the first impact of this new and sudden crisis resulted in a disorganized response: it was difficult to create groups of volunteers, plan where they would be stationed, and have a complete picture of the situation minute by minute. This is because with the current system it is not possible to clearly order volunteers based on availability or particular skills (such as in this case being able to speak Ukrainian or Russian), moreover, volunteers are contacted manually via a Facebook group, by phone or even by word of mouth. This makes it difficult for volunteers to confirm their availability and it happens that possible available volunteers who did not receive the message are lost. At the same time,, the organizers have to spend unnecessary resources, time, and energy on volunteer management work.

This kind of problem also affects other Estonian municipalities. According to our research on the aforementioned crisis alone, the flow of refugees from Ukraine to Estonia has reached 47,310 people since the beginning of the conflict and it is expected to continue

rising at a steady pace. Of course, these numbers are much smaller than in Poland (1,256,568), Russia (1,857,122), or Germany (915,000), but they are still quite high relative to the country's population. In fact, the current refugees are still around 3.57% of the Estonian population, and the impact they have on municipalities such as Põltsamaa is significant. Often, municipalities and small towns also get help from non-profit organizations, not all of which are large enough that they can afford to buy or learn complex employee management software to manage their volunteers. For the Estonian state, 15,000 associations, 800 foundations, and around 700 religious organizations that engage volunteers are officially registered. We know that these numbers are optimistic: part of these organizations will be inactive also due to the bureaucratic ease of opening a non-profit in the country. Still, the validation that was carried out allows us to say that these organizations can be included in the group that is affected by the problem presented above.

But the problem is by no means limited to the Ukraine crisis; in fact, we were presented with other examples of cases where volunteer management was crucial. For example, during the first week of the Summer School, a municipality suffered from a case of pollution of a water stream, and the volunteerism of that town was put to the test due to the required timeliness of intervention. Similar cases happen constantly in regards to public health, pollution, help for the elderly, poverty alleviation, sustainability for flora and fauna, and more, and they all require the ability to organize and manage volunteers.

Getting to the bottom of the problem through meetings with the various stakeholders involved we settled on the following main pain points, which are caused by the currently implemented systems:

- organizing volunteers based on their skills, preferences, and availability is complex and convoluted
- when there is an immediate need for the deployment of resources and/or volunteers, contacting the right people is a slow and cumbersome process
- using social media groups often does not allow to reach the entire pool of available volunteers
- there are volunteers who can only be recruited by word of mouth because they are reluctant or unable to use more digital means
- it is not easy to keep track of which volunteers have been deployed, for which tasks, and what resources organizations have available.

## 2.2 The Solution

We concluded that the solution to this problem is a management platform for volunteers. Non-profit organizations and municipalities can open an account, enter their already registered volunteers or register new ones via an invitation link to be sent to interested parties: this link will lead to a registration form that allows a person to register as a volunteer with the issuing organization, which will be able to customize the form to contain all relevant questions but will always require the name, skills and contact information of the volunteer to be inserted. The platform will allow organizers to create new projects with various tasks, to which volunteers can be assigned automatically (based on the skills required for that task for example), or manually via a drag-and-drop interface.

Our solution helps those who have to organize volunteers thanks to the automatic volunteer profiling algorithm: the questions in the form make it clear what interests the volunteer has, what types of work he or she is most suited to, and whether he or she is able to travel, on what days he or she is available, etc. In this way, volunteers are organized according to their interests, they are motivated, and the result is as qualitative as possible. When a new need arises, the organizer will create the project with the relevant volunteers for the various tasks; a customizable automatic notification is used to notify the volunteer, explain the details of the task, and allow them to confirm or deny their participation. The channels that may be used to deliver this notification are email and SMS, which refer to a link for confirmation/denial or accept a direct response (e.g. a “YES” by SMS), or a notification via our mobile application for the volunteer. This allows the NGO or municipality to get the most immediate response possible and the assurance of reaching the entire volunteer pool. Our system is able to check users’ responses and automatically mark who has refused the assignment and who has accepted it, automating a laborious process that would burden the employee and take away resources that could be used for more important tasks.

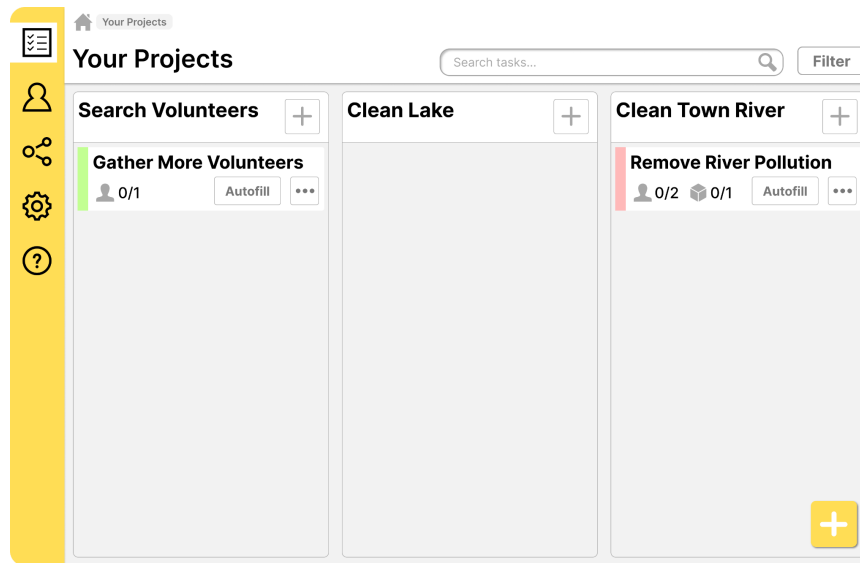


Figure 1 - Project Management Dashboard (mockup)

An additional feature that our service offers is the ability to also keep track of materials and goods donated by companies or individuals. This necessity became apparent from our interviews with stakeholders, which revealed that often local governments and NGOs receive donations in the form of physical resources, which they must be able to manage. In our solution, these resources are associated to a person responsible of their handling/storage, which can be contacted when they are needed.

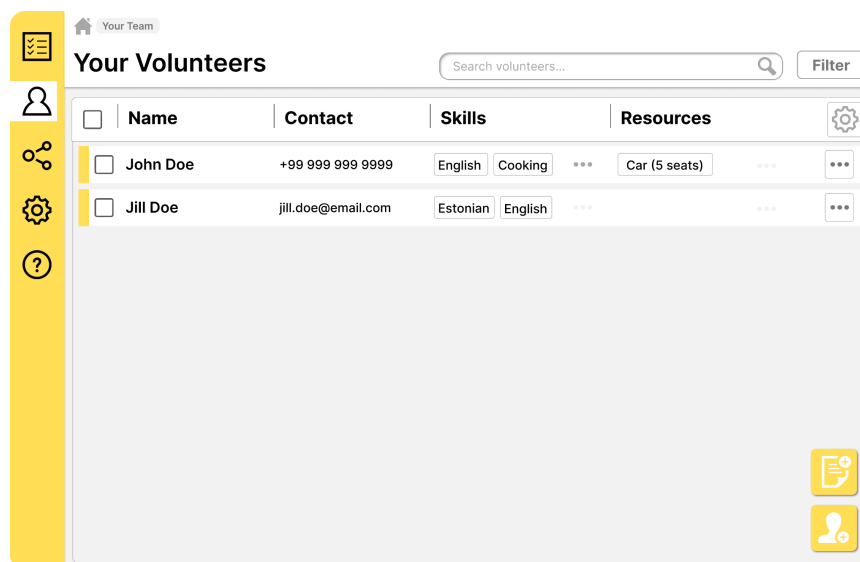
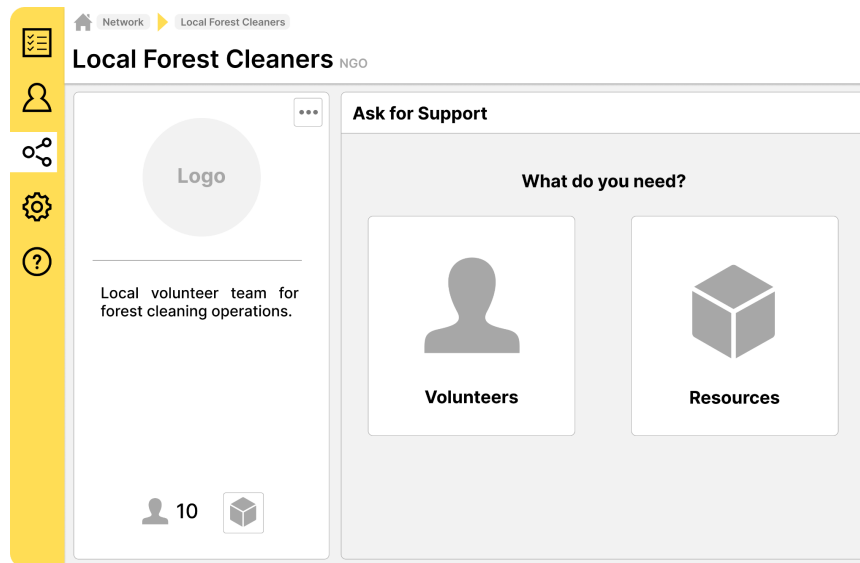


Figure 2 - Volunteer and Resources Management (mockup)

Finally , in order to provide organizations with a way to quickly expand their volunteer pool in times of crisis, our platforms offers the ability to network with other registered organizations by temporarily requesting specific volunteers or resources. This can also be done automatically by signaling to the system that more volunteers than available are needed for a certain task, at which point nearby organizations that possess those resources will receive the request automatically, allowing fast, exponential scalability during emergencies.



*Figure 3 - Organizations Networking (mockup)*



# 3. Business Modelling & Planning

## 3.1 Business Modelling

### 3.1.1 Business Model

After gaining a detailed understanding of the problem and defining the nature of our solution, we endeavored to make it a reality by modeling in greater detail several aspects of our business. The first step in the modeling process was to specify the main components of the business.

The decision was made to target local governments and NGOs directly, specifically focusing on those segments that are in need of organizing volunteers with specific skills or resources. Such segments would most probably be involved in activities such as emergency response, environment clean-up operations, poverty and hunger alleviation, collection of resources and goods for charity purposes, medical aid, people rescue operations, etc. Organizations that cannot afford, or do not have the personnel required to learn and manage more complex management systems are preferred.

From the conversation with representatives from Estonian municipalities, it was decided that the best channel to approach our potential customers is through personal selling. For this, we plan to include in the team a salesperson that can contact them directly and better deliver our value proposition by establishing a straight relationship with the interested parties.

In delivering the solution, the key activities could certainly be considered the development and maintenance of a platform that is intuitive for the end user, capable of organizing efficiently volunteers and resources based on various parameters to solve specific tasks, and that also provides simple ways for these organizations to register and contact their volunteers, as well as request additional resources from other organizations.

The cost structure mostly consists of the cost of hosting the platform. After the first 6 months of bootstrapping, the cost of salaries also becomes relevant. Marketing and consultancy for financial and legal matters are also to be considered.

The main revenue stream is the monthly subscription offered to both B2B and B2G customers, supplemented by the potential to purchase “premium” features at an additional cost.

### 3.1.2 Value Proposition

The value proposition of our solution is presented in the Value Proposition Canvas below:

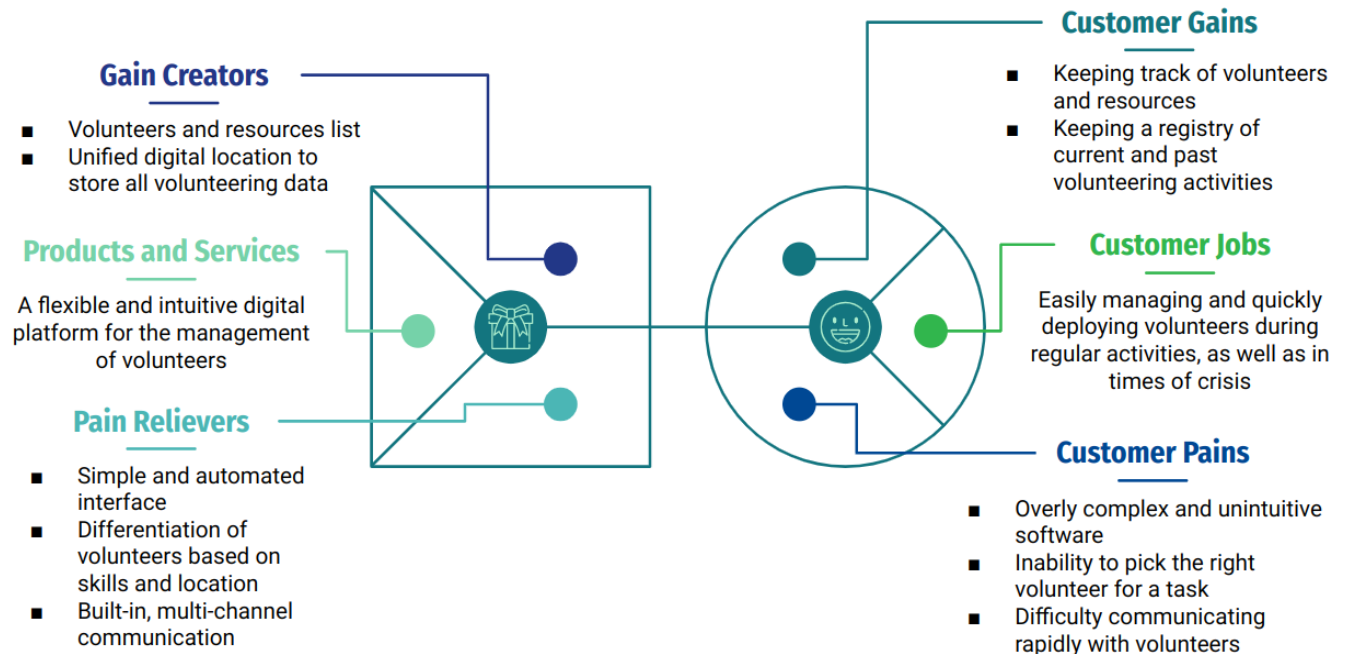


Figure 4 - Value Proposition Canvas

### 3.1.3 Market Segments

For the proposed solution, we can identify two major market segments, namely local municipalities and non-profit organizations/NGOs.

To be more specific, in terms of local governments we aim to target people working in the internal affairs department/ministry as well as directly the mayors as was the case during the Summer School experience. Such people are the ones responsible for emergency management and in particular for humanitarian emergency response. In times of such emergencies, they rely extensively on volunteering activities and on donations of resources from third parties, thus our service would allow them to act strategically and have an easy infrastructure to manage efficiently a “ready-to-use” network of volunteers.

Regarding the NGO segment, we believe our service would prove its value both in times of crisis and on a daily basis to manage the organizations’ primary activities. As previously

mentioned, we target organizations that are in need of organizing volunteers with specific skills or resources for activities related to emergency response and interventions for public health, help for the elderly, pollution, sustainability for flora and fauna, medical aid, people rescue.

Often, to handle emergencies, local municipalities ask for help from such NGOs and their volunteers and our solution would allow both parties to team up and organize clear activities quickly.

### 3.1.4 Competition

Our competitors range from EMSs and other volunteer management services, to Facebook groups and Excel sheets.

While the two latter tools can represent an easy solution for small and not highly active organizations, we have already presented their drawbacks when they are used by our target customers (e.g. by Põltsamaa municipality). Among others, we can remark again the inefficient organization capability, the inability to track volunteers and their availability, and the latency in contacting and gathering the needed volunteers and resources.

When it comes to ERMs and CRMs, we started by analyzing big players such as Pipedrive and Microsoft Dynamics. We believe such tools to be excellent when used by big teams and enterprises, but less suitable for our target customers. This is because they are more focused on the business aspects like the handling of sales and revenues, or on the management of long-term projects, and they require expertise to be operated efficiently. The organizations we aim to reach are instead more involved short-term activities and emergency response, and rarely employ people who could easily operate such software. Still, from both tools, we need to inherit the excellent user interface, good scalability, and an easy process of team and people registration.

Regarding other software dedicated to volunteering activities, we analyzed Vabatahtlikud, Help.ee, Vaab, Helpific, EveryAction, Bloomerang, Rosterfy, and Zelos. Some of them are not automated at all and only work as a matchmaking platform where people willing to volunteer can search for activities they care about. While employing such a service can be a good way to gain new volunteers that can be highly motivated in the specific activity, it does not provide tools for the management of such people. Only Vaab and Zelos mention plans to provide aid in case of crises, but Vaab is focused only on medical support. All solutions are project-based. Rosterfy and Zelos are the most complete services providing management tools for volunteers like integrated channels of communication, activities tracking, volunteers profiling, reward/gamification functionality, easy onboarding process. To better understand what competitors can offer, we also registered on Zelos and tried the

service ourselves. From the experience, we could state that it is an easy-to-use solution that allows managing the activities of volunteers assigning them specific tasks based on their skills, and has good scalability properties; we still felt, however, like it did not answer needs of our customers, such as the ability to manage resources, communicate with volunteers that cannot use web or app platforms, and help when dealing with crises.

From all competitors, especially from the most similar services, we took home the best practices and understood the value provided to their customers, in order to be able to provide our own with at least the same quality of service. As better analyzed later, in addition to common features already implemented in competitors' software, we distinguish ourselves by providing automatic profiling of volunteers based on skills and location, multi-channel communication, a means to manage also physical resources, the possibility for organizations to network and collaborate to exploit a greater number of volunteers in case of emergencies and crises.

### **3.1.5 Market Potential**

Our analysis started from the value of the global market of Customer Relationship Management (CRM) software for volunteer management, which reached €726 million in 2020 and is expected to hit €927.3 million by 2028.

In the European market alone, without taking into account municipalities or governmental bodies, there are 129,000 active NGOs operating in and outside Europe.

Our intention is to start with the Estonian market in order to take advantage of the great trust it places in technological innovation and the policy the country has adopted in recent years of researching, renewing, and implementing innovative digital technologies. There are 79 municipalities in total, most of them engaged in voluntary activities to deal with various daily projects other than bigger crises. The country has officially registered 15,000 associations, just under 800 foundations, and around 700 religious organizations that employ volunteers; while we are aware that not all of these non-profit associations are currently working or engaged actively in daily activities, our interviews with contacts in the sector lead us to believe that a significant part of this group is facing the very same problems we described above, and could potentially be interested in our solution.

The potential of this market is of course not only limited to Estonia: taking the Ukrainian refugee crisis as an example, even if such country is one of the most impacted ones and is currently hosting around 47,310 people (until 02/07/2022), the total amount of refugees that fled from Ukraine is 6.177.257, impacting mainly the Russian Federation (1.857.122), Poland (1.256.568), Germany (915.000) and Czech Republic (400.559). This shows how our

solution could also be particularly attractive for other countries to deal with this specific crisis.

The solution is not limited in terms of location, but neither in terms of activities for which good management of volunteers is needed. Indeed, we are not tied to the Ukraine crisis specifically, and our solution can be applied to several kinds of volunteering-related projects, specifically to the ones mentioned earlier in sections 2.1 and 3.1.1. Such activities are always in place in every country and the organizations that are carrying them out, often have to mobilize people and physical resources in an organized manner.

### 3.1.6 Competitive Advantage

When compared to competing solutions, the proposed platform shines because of its specialized nature. Other software, such as more traditional Employee Management Systems, are viable alternatives for the human resources and tasks management aspects of the platform, but they fail to provide features to address some of the main concerns of stakeholders, such as the ability to also keep track of material resources, built-in communication with volunteers and the option to “partner” with other organizations to expand the available volunteer pool rapidly in times of need.

Furthermore, many such competitors provide numerous features that are not useful for our customers, but which make many competing platforms much more difficult and time-consuming to understand, learn, and utilize.

Because local governments and NGOs often lack the workforce and skillsets required to operate such complex systems, our solution is specifically engineered to answer their needs while providing an intuitive interface, that can automate activities such as the selection and contact of volunteers for specific tasks, saving invaluable time and effort for the organizations that adopt it.

Below we provide a table that compares our solution with other analyzed competitors, to show both common features and differences that let us gain an advantage in the market.

	HELPX PRESS	Helpific	rosterfy	pipedrive	zelos
Skill-Based Profiling	✓	✓	✓	✗	✓
Easy Volunteer Registration	✓	✓	✗	✓	✓
Scalable Teams	✓	✗	✓	✓	✓
Organization Network	✓	✗	✗	✗	✗
Management of Resources	✓	✗	✗	✗	✗

Figure 5 - Value Proposition Comparison

### 3.1.7 Sustainability & Impact

As explained above, the platform would provide customers with significant benefits both in terms of the efficiency and efficacy of efforts spent managing volunteering-related activities, saving plenty of time and resources for these organizations (for example, by making volunteer allocation and communication fast and effortless, or by ensuring that the right amount of resources is available and allocated for specific tasks). By presenting customers with a simple and automated interface, developed with their advice and tailored to specifically solve their management problems, they would be able to quickly adopt the platform and optimize their workflow, resulting in immediate improvements.

Especially in times of sudden crises, the platform would provide invaluable help for organizations to be able to quickly gather and organize volunteers from among the population, with the process continuously improving as more organizations and volunteers adopt and become familiar with the platform: this would lead to faster and more precise responses to dramatic events. Thanks to the platform, our customers would be able to better manage their workforce, moving it dynamically based on skills or the amount of work needed for a given task. Volunteering thus becomes much easier to

manage in chaotic moments, and our organized system helps our customers to keep a “cool head” even in very stressful situations.

Through continued development, numerous quality-of-life improvements could be added in the form of premium features, making the work of customers even easier and better automated. Our offer of customized features gives customers the possibility of having a platform “of their own”, which is adapted to their specific needs. The impact on the customer is therefore an adaptable and polymorphous solution, capable of helping the customer even on the basis of unique requests.

On an ethical level, our solution may be most required in times of serious humanitarian crises, which could cause image damage to our company given the fact that we increase our income flow on tragic events. In these cases, we could implement marketing strategies for the use of our software at advantageous prices for the most affected realities, in order to expand our market and at the same time have a more ethical feel in these types of situations.

## **3.2 Business Planning**

### **3.2.1 Global Market Trends**

CRMs and management systems for employees are widely spread all over the world and are constantly being updated and implemented in new businesses. Lean thinking is certainly driving the adoption of such software both in the private and public sectors. When talking about volunteering, the global market of Customer Relationship Management (CRM) software for volunteer management reached €726 million in 2020 and is expected to hit €927.3 million by 2028.

Even if in some European countries it is difficult to volunteer or to find volunteers, volunteering itself as a phenomenon, is gaining more traction in recent years, also among young groups of people.

In Estonia, volunteering is growing and it is a topic that touches a large part of the population, indeed data from a 2007/2008 survey on volunteer development in Estonia indicated that 27% of the population aged 15-74 had engaged in voluntary activities over the preceding 12 month period. This translates to over 250,000 individuals and has a growing trend (for example volunteering activities in sports events and recreation clubs duplicated from 2002 to 2008).

The number of people and companies involved in volunteering activities is also growing because of the trends of corporate social responsibility and employer branding. Often, initiatives organized by the companies in such a framework lie in letting the employees volunteer for a cause they care about.

Micro-volunteering, which can roughly be described as a chance for a volunteer to donate small chunks of time to a charitable project, often through a web-enabled device or for short dingle activities, is another growing trend. Effective management of micro-volunteering efforts is needed to ensure that these small opportunities still have maximum impact, and is often made possible by digital platforms.

### **3.2.2 Go-To-Market Approach**

The development of the platform with all of its main basic features was estimated to take around six months. During this time, the team intends to join a startup incubator in order to increase its network, expand its team by onboarding a UX/UI designer and a salesperson, and possibly obtain funding.

After the initial product is ready, the platform would be launched in a few Estonian municipalities, by leveraging the contacts with local government officials and NGOs obtained during the Summer School: this would serve as a test in a real-life environment for the platform, allowing the team to analyze its performance and improve its credibility for future customers.

Once the product has been proven effective in the Estonian market and the first premium features have been developed, expansion is planned to continue abroad starting in other European countries that may be in need of similar improvements to the volunteer management infrastructure (such as Italy, in which the team would also be able to better make use of their personal networks, and whose volunteering system is severely lacking).

### **3.2.3 Intellectual Property Rights**

As the core of the solution is a new digital platform, the only IP rights that would be pertinent to acquire are those relating to the platform's name and logo.

### **3.2.4 Financial Forecast**

Prior to presenting the financial forecasts, we would like to give a brief summary of the factors determining revenues and expenses.



In the first period of development, we are bootstrapping and for an estimated period of six months, we would need a self-investment of around 18.000 € to cover expenses related to development, legal and financial consultancy, tech equipment and web hosting costs, creative assets and shared space rent (until we are accepted to an incubator, see section 3.2.6).

After this first period, we will launch the product and this will affect both revenues and expenses.

Revenues come only from the 150 € monthly subscription fee paid by our customers. Later, also the premium features will contribute to the “cash in”.

Regarding the “cash out”, part of the expenses of the first period will remain present, and for them, we have estimated a fixed yearly budget. The new expenses will come from data hosting, marketing, and customer relationship and development, both in terms of salaries. We are of course going to expand our team.

With that in mind, we planned the growth of the business starting in the first month with 2 customers, reaching around 150 in the first year and around 3000 in five years.

Such growth would result in a 2-year period of loss before reaching break-even and starting a period of increasing profits. At the end of the fifth year, monthly profits are estimated to be around 300k € and increasing, while the cumulated cash would be around 5M €.

### **3.2.5 Contingency Planning and Risk Assessment**

After only two weeks of work on the project during the Summer School, it would be difficult to state a proper long-term risk assessment and contingency plan. Nonetheless, in the following, we try to assess the major risks that could threaten the business at its beginning as well as possible solutions to make it more robust.

One risk would of course consist in not being accepted to the startup incubator “Trentino Startup Valley” (see section 3.2.6) that we have targeted and with which we already have contacts. The remedy would simply be to search for another incubator that would be focused on boosting businesses working in the field of social affairs.

A second threat stands in not achieving enough market share in the first period after a viable solution has been completed and launched. We know that the problem exists and after the research and the interviews with the stakeholders, we are pretty sure that a tool like ours could greatly impact our customers’ work. In case we won’t reach the forecasted level of expansions, we would need tighter relations with both the acquired and potential customers to better understand their further needs and to see if our service could be

adapted to such needs. After the first tests, we may also need to rethink the go-to-market strategy and business model.

Finally, it may turn out that customers would be interested in a more customized product instead of a platform that is simple, but general purpose. If such a trend is perceived, we would analyze whether enhancing customization could bring a great advantage that allows to increase the market share and produce profits. If that is the case, we could start pushing more on customization providing it in form of additional features and if some of them become popular we may think of including them in the basic plan. On the contrary, if in-house customization would only bring high expenses, we may sell the possibility to customize the service alone.

### 3.2.6 Strategy for Funding

The platform will be developed by the team over the span of six months while bootstrapping. As the solution is fully digital and marketing to local governments would likely initially take the form of personal selling, no significant funding is required upfront for the product to take off. Nevertheless, obtaining some amount of investment could result in a faster development phase, as well as make it possible to increase the marketing efforts to quickly gain notoriety and onboard more local governments and NGOs, expanding the network of organizations registered on the platform and thus making their ability to respond to sudden crises much greater.

A source for such funding would come by joining a startup incubator and participating in pitch competitions, although further development might require support from private investors. The strategy we planned would be to join an Italian incubator, Trentino Startup Valley, which is an ecosystem that offers startupper and aspiring entrepreneurs a program that accompanies them throughout their entrepreneurial journey. The choice of such an incubator mainly stands in the proximity to the team members' residence and in the familiarity with the program, but is not necessarily definitive. Moreover, it provides new shared spaces and it has an excellent offer of consultancy, networking, financial support, and contacts with various angel investors in the area. Our intention to enter the Estonian market can be a superb magnet for investment attention due to the country's high level of digitalization and digital aspirations.

Given the nature of the proposed solution, we do not exclude searching and applying for European grants that could greatly boost our business development. However, we are well aware of the intrinsic difficulties in the application process and we won't consider this as the primary strategy for searching for funding.

## 4. Business Development Process

### 4.1 Solution Development

The idea was born from a brief individual brainstorming session on the business cases provided by the Summer School followed by a one-minute pitch, and it had initially taken the form of a “mission-based approach to volunteer management, focused on optimal resource allocation”: the idea being to apply an algorithm similar to those adopted by contractor-based mobility and delivery services, such as Bolt or Uber, to the deployment of volunteers.

After an initial phase during which the team dynamics, roles, and objectives were defined, we moved to gain a deeper understanding of the problem by meeting directly with Mr. Karro Külanurm, major of the Põltsamaa municipality, and author of the specific business case being tackled.

The precious insight gleaned during this and subsequent meetings with Mr. Külanurm allowed us to identify the core root of the problem faced by the Põltsamaa municipality and similar local governments, which was also supplemented with the advice received from the CEO of a large Estonian NGO (obtained with the help of mentor Ms. Triin Lokk), and with our own personal experience when dealing with volunteering activities.

We then got engaged in a lengthy brainstorming session, during which we defined the main features of the solution: these were divided into “must-haves”, “should-haves” and “could-haves” based on their importance in solving the main problems identified by the stakeholders. Among these, the necessity for the solution to be easy to adopt and utilize, able to reach low-tech volunteers and to be of use in crisis management was identified as particularly crucial. The five main design principles of the solution were also explicitly stated, so that they could be kept in mind as further development of the idea was carried out. Specifically, our solution needed to be intuitive, specific in management, universal to join, flexible and scalable.

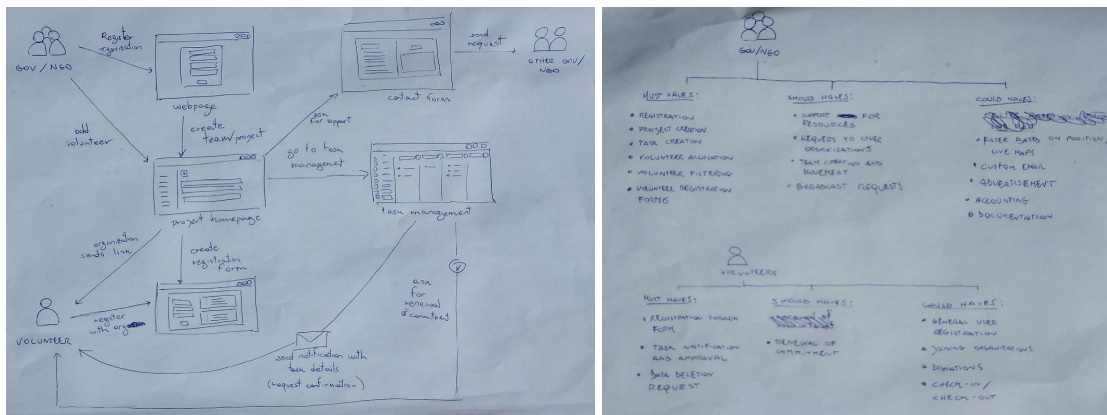


Figure 6 - Platform Design Sheets (left) and Feature List (right)

After this first phase, we were forced by time constraints to find the best way to organize our work to avoid wasting our resources and duplicating the tasks. We draw on paper a timetable reporting the two-week schedule highlighting the available time that we filled by placing sticky notes with the tasks and the person responsible for that activity. We updated our schedule day by day, marking the job done and what was left to do.

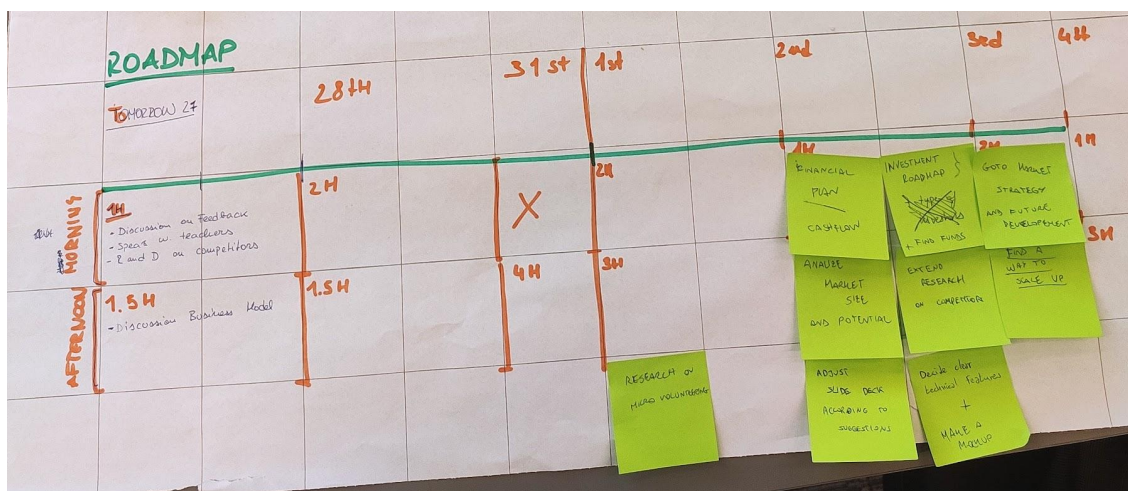


Figure 7 - Roadmap used for planning (with post-it tasks to accomplish)

Having a clear division of the tasks in mind we carried out independent research on the state and nature of the world of volunteering, including some of its recent trends and the competitors moving within the market. Although the time available was scarce we reached a good understanding of the market, being also able to try a competitor's service to compare what is actually in place with what we wanted our solution to become.

We also quickly reached a consensus in deciding that the paying customer for the platform could not be the volunteers themselves, as volunteering already presents numerous challenges for those who partake in it. After further brainstorming, research on the competition's business models, and the invaluable advice of Ms. Anu Oks, CEO of Estonian Business Angels Network, we decided that the most appropriate business model for the solution would be that of "software as a service" both in a B2B and B2G environment (in the form of NGOs and local governments, respectively). A basic price tag would be offered for the product's main features (those that were previously defined as "must" and "should-haves"), whereas any additional "quality-of-life" improvement would be offered as premium features for an additional price.

The final result of this process was the solution in its close-to-final state, which was validated by interviewing both Mr. Karro Külanurm and other personal contacts of ours in the world of NGOs, in order to ensure that they, as potential final customers, found the proposed platform to be valuable and worthy of purchase to support their work and solve the problems they face.

We then proceeded to finalize any remaining uncertainties of the idea in the short time left, ultimate the financial forecasts and deciding on the best way to proceed in developing the platform and approaching the market.

The last couple of days were mainly spent defining and refining the speech, the slide deck, and a mock-up of the platform with the aim of letting our presentation be as effective and clear as possible.

Needless to say, all the help received from the mentors throughout the development of the solution was invaluable and allowed us to see the problems from different perspectives, spot deficiencies in our work, slightly pivot on some decisions, and get to the solution as is.

## 4.2 Team Dynamics

Soon after the group formation, we successfully established a dynamic of collaboration and mutual support: quickly defining common values and goals, we reached a consensus in deciding to tackle all coming issues with honesty, reciprocal respect, and commitment.

We were forced by our team's small size to make the most of the available time from the very beginning, which resulted in the day-to-day definition of a schedule regarding which tasks had to be undertaken and how they would be split among us. We all put our full

effort into the project, supported each other in times of need, and brought our unique skills and experiences to the drawing table.

The odd number of team members ensured that any issue could be solved by voting through a simple majority, but this was virtually never required as we always managed to reach a consensus on the various decisions to be made by sharing thoughts, criticism, and explaining our reasoning to the others, allowing the whole group to organically consider and incorporate different points of view.

If some doubts or misalignments got created while working on split work, they got solved by openly discussing among us even during the breaks and meals. Also, the daily stand-ups and the preparation of the pitches preceding the official one proved to be fundamental to constantly hold and share the big picture on the project.

## 4.3 External Contributors

### 4.3.1 Karro Külanurm



Mr. Külanurm is the mayor of the Põltsamaa municipality. He presented the business case from which the idea for the proposed solution was born, and his help was instrumental in understanding the specifics of the problems his municipality (and many others) constantly face when having to manage volunteers. The team's conversations with Mr. Külanurm were invaluable in ensuring the solution was truly answering the needs of the market.

### 4.3.2 Barbara Haage



Ms. Haage is, among other things, an advisor for the Estonian Ministry of Interior and a lecturer at TalTech. Her experience working with the Estonian government was a great source of information on how to interface with such organizations, and her advice on pitching and developing a start-up allowed the team to greatly improve the business idea.



### 4.3.3 Triin Lokk



Ms. Lokk is the Chief Growth Officer for Triumf Health. Her experience in marketing and business development helped the team to identify the best way to approach the market, and her contacts in prominent Estonian NGOs provided a great insight into the shape the solution should take if it is to answer the needs of those kinds of organizations.

### 4.3.4 Anu Oks



Ms. Oks is the CEO of Estonian Business Angels Network. Her extensive knowledge of the world of startups provided the team with important insight into the world of investors, and her advice was of great help in identifying a scalable business model. Through conversation with her, it became clear which elements of the business idea needed further refinement.

### 4.3.5 Helen Staak



Ms. Staak is the community manager of the Health Digital Health master's program at TalTech. Her support and guidance throughout the duration of the project helped the group keep on track and stay motivated. Her experience with numerous brainstorming frameworks and tools helped greatly in forming a clear picture of the proposed solution, as well as in identifying the core principles guiding its design.

### 4.3.6 Mayri Tiido



Ms. Tiido is an entrepreneur, adult educator, and learning designer. The training and advice she provided on the topics of pitching and improvisation were particularly useful in improving the presentation of the business idea, from the slides to the speech itself.

## 4.4 Next Steps

To continue successfully with the project we need new members to add to our team, more specifically we need another developer focused on front-end and UX design, a salesman, and a marketing expert. To find such team members and to obtain some funding, in parallel with the bootstrapping phase, we plan to take part in pitch competitions and apply to the Trentino Startup Valley incubator. Apart from the benefits in terms of human and financial resources, both initiatives will help us to analyze the idea more thoroughly than we have done in the past two weeks. Moreover, we will have the possibility to expand our network of acquaintances through networking so as to get in touch with as many people as possible and find investors interested in our project.

After about 6 months of development, we plan to get to a minimum viable product, which we could use to gradually enter the Estonian market by targeting municipalities and NGOs that have already expressed interest in our solution. To achieve this, we will rely on the help of the already acquired customers and on the work of the marketing expert and salesperson whose knowledge of Estonian is required to communicate more easily with municipalities and non-governmental agencies.

In the first test phase, a tight customer relationship will be required so to be able to adjust and implement all the needed upgrades and functionalities to our platform.

In the time bridging and overlapping the bootstrapping and test phases, we will need to rethink again our market strategy and business model to analyze whether better strategies could be implemented other than the ones we spotted and discussed within the team and with the mentors during the Summer School. Pursuing the innovation of the business model will certainly be key throughout the whole life of our solution.

In the long term, we aim to be profitable within 2 years from the launch of the service and soon after expand our team and business abroad.



# 5. Self Evaluation

## 5.1 Cristiano Lucian



My experience in this team has been extremely positive. From the very beginning, we agreed on principles and rules to follow in order to express ourselves in the best possible way and each make a good contribution to this project. We decided together on the values of our team that accompanied us throughout the two weeks, with the aim of creating a good chemistry between all the various team members and to be clear for everyone what to expect from the Summer School. We also set the goals we intended to achieve, all of which were successfully achieved by the end of the course. We were all able to pull in the same direction, thanks to the great sense of organization we had from the beginning.

Our working days were organized beforehand into various tasks to be completed, each person choosing the task that they felt was most theirs, that interested them the most or with which they felt they could contribute the most to the team. At the middle and end of the day, we would take stock of the situation in order to organize the next day. Thanks to this excellent process of organizing the work, we were able to move the project forward to a state we would never have reached without it. We were at a disadvantage compared to other teams due to our small number of members, but if this could have been an obstacle and a point of concern at the beginning of the experience, we were able to overcome it and fully achieve our goals.

The contribution that each of us made was very varied and I found it very rewarding because it allowed me to see how from just an idea we could evolve into something more solid and structured, based on provable evidence and which could be the basis for real software development. My contribution to the project was symbiotic with the rest of the team, we were able to help each other in difficult moments and continuously give each other feedback through various brainstorming sessions. I can definitely say that everyone put a part of themselves into this project and without that it would not have come out as it is today.

My knowledge of the subject of volunteering was very poor at the beginning of the experience. I have participated in volunteer projects in the past but not enough to understand the dynamics and the problems that might exist for the various realities that

operate in this field. In these two weeks, I was able to go deeper into this topic and make a contribution to my team at the same time. Moreover, working closely with realities such as the municipality of Põltsamaa made me realize how certain crises can impact all kinds of communities, big or small, rich or poor, near or far. Furthermore, applying the knowledge gained during the I&E courses that were conducted during the academic year is definitely a strength that helped me to reinforce the concepts learned and to add new ones.

Regarding my missing skills, I think I had difficulty in creating the correct visual design for the various deliverables we had to produce. I believe that without my teammates, the result would have been of much lower quality. I also rate my material search skills, not at the level I thought they would be, as finding the right material for our type of idea was not an easy task in the research and development phase due to the limited amount of material. However, I am very satisfied with the work that was done and the personal progress I think I made during my two-week experience in Tallinn.

## 5.2 Mattia Sartori



I will start my self-evaluation part by saying that this group work has been among the best I have carried out so far and I am sure that the key to such result stays in the team itself.

We started the project with a bit of uncertainty regarding the organization of the work we were about to carry on for the following two weeks. Such feeling was most probably due to the fact that we didn't know each other, thus we were not aware of the skills, competencies, and working methods of the others as well as the personality factor. It was only a matter of a few hours that the uncertainty disappeared leaving on the table a big and clear A1 sheet listing all the members' skills, expectations, rules, and roles that served as a basis in the organization of the work throughout the whole duration of the project.

Knowing that being only in three would have brought us a considerable amount of work in the short time available, we split the tasks, thus avoiding duplicating and repeating them. We did it by arranging a timetable on paper and marking all the slots we had at our disposal to work; then we listed all the tasks on some sticky notes as well as the person responsible for each activity and we placed them on the timetable. We updated daily our schedule, organizing for the day after. I believe that this "old-fashioned" tool worked great and allowed our small team to get to the end with a satisfying result.

I personally contributed to the project in several ways. One is by actively participating in brainstorming sessions when it was time to decide on the features of the solution or on the details of the business model. I always provided constructive criticism when other team members needed advice when it was time to fit all the work we were carrying out “separately” and on the slide deck. I was directly responsible for the competitors analysis, the speech, and the pitches.

The entire project provided me with new learnings as it allowed me to increase my experience in handling teamwork and developing a business solution. What I would like to highlight is for sure the methodical organization that we could put in place: I had never been able to arrange and complete so many tasks with such a tight schedule in other previous projects and I will certainly act similarly again in the future. Moreover, I got precious insights on how to choose the type of business model and how to deal with B2G combined with a subscription-based model. Also, I received invaluable advice on my pitching skills, and I am sure I have improved a lot. The biggest learning that somehow summarizes all I have already said is that “Yes, it is possible to present a detailed solution to a business case in only two weeks”.

As already mentioned, I always try to give my opinion and contribution to every aspect and problem encountered in group work, but of course, I am not an expert in everything, and I sometimes feel less comfortable taking a side when deciding on some issues. With respect to this project, I think that one of the lacks in my competencies has been the non-solid programming experience, which I only had in an academic setting, and that at first prevented me to see the big picture on the technicalities of the solution. The other major lack consisted in not having a clear understanding of how to properly plan a successful business model. Fortunately, I could rely on the other team members’ skills and on the precious help from the mentors.

Overall, I am sure that the team dynamics established during the Summer School would have the potential to successfully lead to the implementation of the proposed solution and I am proud of what we achieved in such a short amount of time.

## 5.3 Tommaso Brumani



Since the very beginning, I believe we worked well together as a group. We fairly quickly agreed on our collective values and expectations from the project and decided that we would treat each other with honesty, respect, and mutual support, which I

believe was instrumental in ensuring a successful collaboration throughout the duration of the project.

As a direct result of the small size of the team and the short time available to develop our idea, we were forced to quickly learn how to organize ourselves and split tasks efficiently: every day we would reflect on the next steps to take and who should be in charge of what, and this allowed to make the most of the resources at our disposal.

Roles within the team frequently shifted as a consequence of our lack of manpower: tasks were assigned based on availability, skill, and personal preference or interest, and we all had a chance to contribute in a variety of ways, from the conception of the idea to the most technical aspects of its development.

I personally found myself ranging from having to participate in brainstorming and scheduling, to carrying out research and handling communication with mentors, all the way to supporting my teammates in developing the pitch presentation and slides and building a mockup for our platform.

This was certainly a learning experience, especially when having to come to terms with the limitations of the time we were given, and still having to make it work with such a small team: I learned how to organize work efficiently, how to make use of models and frameworks in a rush, and how to let go of perfectionism in the face of tight deadlines. I also learned how to trust in my team and let go of many responsibilities, which was made possible by my teammates' skill and unyielding focus, and the friendship we established during the project.

As far as my own work, I would have preferred to be more skilled in the complex art of mockup design, but I am happy to have had the chance to build up some more experience in that particular field. I was also worried about my competencies in matters of financial forecasting and pitching, but fortunately I was able to rely on my team to take care of those aspects, and I am fully satisfied with the results.

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