



# user research summary

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pa rural robotics | communitopia



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**stakeholder  
background**

# pa rural robotics

*Founded in the spring of 2018, PA Rural Robotics is a program that provides students with opportunities for furthering their STEM education through learning more about robotics, and working hand-on in this field.*

## Mission

As we develop partnerships within K-12 education, higher education, government, industry, and the non-profit community, our goal is to enhance our plans and capabilities to create that magical learning experience our children deserve. The program strives to develop sustainable world-class educational robotics programming for children of the local communities.

## Vision

We have created an educational model that when partnered with the competitive robotics platform from VEX, will not only provide a quality STEM experience, it will also teach our students the skills that employers tell us they need for entry level jobs. Employers expect students to have both the technical and soft skills to succeed in entry-level roles and PA Rural Robotics looks to deliver just that.

Our students will attend multiple student workshops and a multi-day league that will culminate into an end of year tournament day to be held at the Clarion University of Pennsylvania. One unique aspect of our model is that our programming is year long, which will allow our students to revisit the iterative design process over and over again.

## Goals

- Facilitate resource distribution to target audience, which includes technology and remote tools
- Support program outreach and engagement
- Create manageable growth of the program
- Reduce administrative workload; allow for Tim to focus on managing program rather than on the platform



Robotics Education That's Changing Lives

**25 school sites** from **5 counties** with **180 teams** and over  
**1,400 students** in Western Pennsylvania participating in activities and competitions

# communitopia

*Communitopia envisions a fossil-free energy future in a world that has minimized the effects of global warming as much as possible. To accomplish this, we want to empower everyone to help shape the conversation, learn the facts, find solutions and create energy-smart communities.*

## Mission

The purpose of Communitopia is, through the use of new media and project-based campaigns, to slow climate change and create healthier communities by identifying, researching, and advocating for individual, community, and federal solutions to reduce greenhouse gas pollution and improve community resilience.

Communitopia's three-word mission is "Making Green Mainstream".


## Goals

- Increase engagement on platforms to maximize Communitopia's reach and impact
- Facilitate resource distribution to target audience
- Create manageable growth of the program
- Reduce administrative workload; allow for Katie to focus on managing program rather than on the platform

## Vision

Communitopia envisions a fossil-free energy future in a world that has minimized the effects of global warming as much as possible.

To accomplish this, everyone will play an integral part in shaping the conversation, finding solutions and creating energy-smart communities.



...making green mainstream.

# user profiles



In order to create a better understanding of the projects, user profiles were designed. This method will help in providing deeper insights into the motives of users by looking from their perspective. This information will be useful when designing a solution as you can account for the wishes and opinions of people who it will affect. In this chapter four user profiles will be discussed. These profiles are parent, student, community partner and policy maker. These profiles were chosen for two reasons. The parent and student profiles were chosen as the expectation is that it will be difficult to contact these people for our user research interviews. By including them in the profiles and thinking from their perspective, their input can still be accounted for. The community partner and policy maker profiles were chosen in order to better understand their position so as to better prepare for the user research interviews that will be held.



# user profiles

## parent

As a **parent**, I want **subsidized fees** so that I can **enroll my child/children in climate change/STEM programs**.

### *Tasks*

- Get kid signed up and transported to the event (if applicable)
- Get kid any necessary resources for attending the event

### *Acceptance Criteria*

- Child's attendance and their ability to perform necessary tasks

The first profile describes the parents of the students enrolled in either PA Rural Robotics or Communitopia. They play an important background role. They may not directly be involved in the programs, as their children actively partake in them, but they can have a great impact on the programs. For one, they have to give permission before their children can enroll in a program. Second, they are responsible for the resources the children need to be able to participate in a program. Such resources could be transport and technical resources. Their involvement in this program can be seen as a success when their children are able to attend the meetings and have the ability to perform necessary tasks.



# user profiles

## student

As a **student**, I want **more access to technology** so that I learn more about **climate change / STEM fields**.

### *Tasks*

- Access event schedule
- Reminder to attend sessions
- Invite/share events with friends

### *Acceptance Criteria*

- Attendance at event
- Consistent engagement in sessions
- Asking questions during sessions

The second profile concerns the students interested in taking part in one of the programs. They are important as they take part in the programs and give it life. They need to be enthusiastic about the program and willing to use some of their spare time in order to participate. Students need to arrange their time and resources to be able to attend the meetings and to work on it outside of school. To be able to do this they need to have clear access to the information about meetings, events and tasks. The involvement of students can be seen as a success when they have good event attendance, consistent engagement in sessions and the need to learn more.





# user profiles

## community partner

As a **community partner**, I want **to combine efforts with / lend assistance to other organizations** so that I can **achieve a bigger impact**.

### *Tasks*

- Research and find suitable organizations
- Budget and resource planning
- Know about opportunities to work together
- Review and monitor progress
- Understand what skills are desired from future employees

### *Acceptance Criteria*

- Finance and progress reporting (data)
- End-user feedback
- Milestone achievements
- Creating a sustainable pipeline for incoming employees
- Marketing / PR opportunities

The third profile describes the community partners that the programs collaborate with. The motivation as to why the community partners offer help to the programs can differ per partner. For example, a community partner for Communitopia could offer help because they want to help spread climate change awareness. While another community partner could have chosen to collaborate with Communitopia for the good image it gives them. Whatever the motivation, the community partners have a unique input they can lend to a program. They can offer money, information, resources or a platform that can support a program. The community partners have collaborated with the programs in order to achieve a bigger impact. The involvement of the community partners can be seen as a success when the program gets a resource benefit out of it and when the community partner achieves their goal for collaborating.



# user profiles

## policy maker

As a **policy maker**, I want **comparable data** so that I can **tweak policies to serve their intended purpose and demographic**.

### *Tasks*

- Familiarize self with the current educational framework for climate resiliency / STEM
- Consult industry experts from education and industry about programming
- Canvas users / stakeholders about their wants, needs and feelings
- Conduct benchmarking

### *Acceptance Criteria*

- User interviews
- Expert interviews
- Workforce data analysis and trends

The last profile concerns the policy maker. Policy makers are responsible for evaluating their policies and finding ways to improve them. They outline the workings of their community through many means to understand the framework in which the community operates. By outlining the community, they can see where problems lie, where there's room for improvement and what parts are working efficiently at the moment. An important part of understanding their community is identifying stakeholders and seeing how they feel about the community, what they want from it and what they need to better function in the community. This information can often be achieved through holding interviews. By identifying problem areas, they can design policies to better their community. They design policies by consulting with experts and by finding case studies. The involvement of the policy maker can be seen as a success when they have transcripts of user interviews, expert interviews, and when they have workforce data analysis and trends.



# user journey mapping

To better understand the experience a user goes through when participating in one of the programs, the method of user journey mapping has been used. A user journey is made in four steps with each step forming one of the layers of a user journey map. The basis for a user journey map is a scenario. This scenario is a process that needs to be improved for the user. By breaking the scenario into different actions placed in chronological order the first layer of the user journey map can be made. This first layer is called 'steps'. The second layer, called 'doing', builds on the first layer and makes the actions more specific. The third layer is called 'thinking' and contains things the user might think while carrying out the actions described in 'doing'. The four and last layer is called 'feeling'. This layer contains emotions the user might feel in reaction to the 'feeling' layer. Once the user journey map has been made, pain points can be identified. These are negative feelings and thoughts that the users may encounter in the scenario. Identifying pain points can help in finding areas that need improvement. A user journey map has been made for each of the four user profiles.



# user journey map

## parent

The user journey map (on the following page) for parents describes the scenario of how parents participate in the program. From taking notice of the program to finding ways to be able to support their children in participating in the program.

The pain points parents can encounter while participating in the program are focussed on their resources. Firstly, parents need to find the time to take their children to the events and meetings of the programs. Secondly, they need to be able to afford the technical resources their child needs in order to participate fully in the program. Lastly, the parents need to have access to clear and full information about the program in order to plan well.

Here is the link to our Mural board, used for brainstorming:-

<https://app.mural.co/t/ipdcapstone8475/m/ipdcapstone8475/1586441094944/87ba9db3c604414109146a837b5fade353dee4a3>



# user journey map

## parent

### steps

Parents take notice of the program, either because their child tells them or another way	Parents talk with their children about their interest in the program	Parents may evaluate the program based on prestige, usefulness, costs, time and location	Parents give permission for child to join the program	Parents may have to drive to take their children to the meetings	Parents have access to information about meetings and location	Parents try to provide the resources their children need to participate in the program	Parents struggle to find resources, such as time and finances, to support their children in the program
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### doing

Parents hear about the program because of their children talk about it	Parents see advertisements for the program (social media, flyers, etc)	Evaluate feasibility of taking part in the program	Rearrange daily schedule to fit in taking child to program location	Accesses portal to look up meetings and topics of the program	Does research into the resources their child needs	Buys resources if able	Can't buy the needed resources for their child's participation in the program
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### thinking

Excited about the program	Excited that their child is exited	This program sounds very interesting, but will my child be able to participate with the resources I have?	Deciding if their child can participate in the program	How do I juggle my time to make sure I can take my child to the meeting?	How do I navigate this portal in order to find the information I want?	How do I find the best and most affordable resources my child needs?	I don't want to disappoint my child because I don't have the resources to support this program anymore
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### feeling

Excited	Doubtful	Decisive	Confused	Sad	Frustrated
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# user journey map

## student

The user journey map (on the following page) of students describes a scenario of how the students would take part in the program. From taking notice of the program to getting excited about all the new things they learn.

The pain points students may encounter in taking part in a program can be loss of interest in the program and difficulty in acquiring access to technical resources needed to participate.

Here is the link to our Mural board, used for brainstorming:-

<https://app.mural.co/t/ipdcapstone8475/m/ipdcapstone8475/1586286051309/4cf0818b6677897260d667654bfde3a6859773a0>



# user journey map

## student

### steps

Student decides they want to get into Robotics/climate activism as an extra-curricular	Student might tell their parent/guardian about their plans, ask for materials	Student routinely attends meetings, learns, makes new friends, is motivated & inspired	Student finds out they won't have the resources to do something for the program	Student reaches out for help/additional resources	Student is able to join meetings again for Robotics/Community	Student struggles to find more events to go to & locate helpful information	Student is inspired to do work in their community, learn new skills
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### doing

Hearing about workshops / events (via flyers at a school club, or email from a teacher)	Arranging a ride after school to attend meeting	Making time to meet, managing time with time for homework & friends	Making a plan to do a project and starting to figure out budget or materials list	Going through information on the website to learn about their options	Student successfully gets a hold of what they need, come prepared for the meeting	Student opens all pages of the program & looks for information	Student organizes an event, attends a competition, Student applies to University in the same field
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### thinking

I am so excited!!!! I am very passionate about this!	I'll stay at school until 5:30 so Mom can pick me up after work	I've never thought about this subject before!	I hope my parents can help me get this... Maybe I shouldn't even ask. Can anyone loan me a laptop?	I can work from the library, but only when Mom/Dad can drive me...	Does the website show meet-up dates for students to work together outside of club times?	Now that I have ___, I'm ready to work!!!	The next thing I want to do is ___!
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### feeling

Nervous but eager to plan out logistics	Hopeful	Nervous but eager to plan out logistics	Loving the new environment. Very motivated to accomplish new things.	Excited about making friends	Curious about the subject, and motivated to make things happen. Proud for not giving up.	Upset, frustrated about hitting a roadblock. Sad to miss out on some opportunities.	Gaining more hope because many problems have solutions. Passionate about this work. Motivated to set and accomplish goals.
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# user journey map

## community partner

The user journey map (on the following page) of the community partners describes a scenario in which the community partners find a program to collaborate with. From looking for different ways to provide additional learning from their students/employees to having found a way to mold environmental friendly leaders.

The pain points community partners may encounter while collaborating with a program are finding one that fits their values and helping in providing the program with the technical resources it needs to function.

Here is the link to our Mural board, used for brainstorming:-

<https://app.mural.co/t/ipdcapstone8475/m/ipdcapstone8475/1586305622561/495f82b332907f65518500e749b35c792a6d23b0>





# user journey map

## community partner

### steps

CP is looking to provide additional learning resources for their employees/students. CP is looking for PR/CSR opportunities.	CP searches for other like-minded organizations	CP is looking to make a bigger impact through collaborative efforts, and extend their outreach.	CP communicates with potential organizations, looks for resources they are lacking.	CP is looking to improve their 'image'	CP is looking to engage more diversity	CP is looking to create career opportunities / pipeline for students and potential future employees	CP is looking to mould leaders of tomorrow into environmentally conscious people
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### doing

Searching for organizations online, going through information on the website to learn more about their options	Networking with people, sending a message to program managers	Understanding why STEM / climate change is important in the near future	Arranging meetings/ teleconferences. Asking around for what the end users need (i.e. computers, tech, funding etc.)	Doing research to find deals for materials they need	Creating budgets / grants and allocating them for specific uses	Managing resources	Tracking results / outcomes
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### thinking

I hope our efforts are beneficial and useful to the end user	I hope this improves our company image	I hope this creates conscientious industry leaders and employees	I hope we can achieve our goals with limited resources	I want this to take up less time so that I can also give attention to my other job and/ or family	I want our efforts to eventually be self-sustaining	How can we engage a more diverse pool of people?	I want to use our funds in the most effective way possible
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### feeling

Nervous but eager to plan out logistics. Nervous about something new.	Hopeful that this will benefit our organization / company as well	Motivated to make things happen	Upset, frustrated about hitting a roadblock	Sad to miss out on some opportunities	Helpless because of the lack of resources vs. the effort that is needed	Proud to see the end users succeed. Peace of mind knowing that the efforts can self-sustain.	Sense of achievement knowing that we are able to give people the tools and education needed to better for our community and planet
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# user journey map

## policy maker

The user journey map (on the following page) of the policy makers describes a scenario in which the policy maker tries to understand the current situation of the community. From hosting town hall to benchmarking.

The pain points of the policy maker are based on uncertainty. They are not certain what the best approach is to solve the environmental issue, what programs are best to support and what the outcome of their actions will be.

Here is the link to our Mural board, used for brainstorming:-

<https://app.mural.co/t/ipdcapstone8475/m/ipdcapstone8475/1586400155286/0b03242bcc20aa2ca0749b8fc5a54c58f60fb887>



# user journey map

## policy maker

### steps

Familiarizing oneself with the community they are elected to represent. Continuously learning more about priorities of the community.	In touch with residents and community leaders to learn their stories	Learning that climate resiliency/STEM education is important to constituents	Learn why the issue is important to constituents	Learning that there are concrete, objective advantages to fostering climate resiliency/STEM education	Learning how the organization can help to achieve those objective advantages	identify public policy partners to work with on climate change/STEM educational issues	Consulting with experts and inviting them to be a part of the process
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### doing

Hosting Town Halls	Taking meetings with individuals and organizations	Learning about sustainability in the region	Meeting with educational leaders/teachers	Talking with industry leaders about current workforce development	Educating oneself about current systemic educational challenges	Educating oneself on current curriculum challenges	Benchmarking
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### thinking

Wanting to serve the best interests of the community. issues that constituents value	How to best manage resources (time/money)	Long term vs short term goals	Thinking of ways to accomplish goals that are sustainable	How to balance growth and sustainability	Who should be at the table for these discussions?	How to be a competitive force in the region. Other communities have shown deliverables we can do	What happens if we don't do this? What happens if we do?
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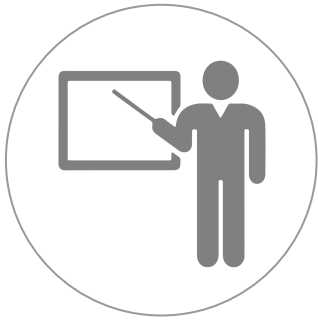
### feeling

Grateful to have the opportunity to serve	Inspired by community activists and educators who are passionate about their work	Frustrated prognosis for sustainability and/ or the economy.	The problem is much bigger than what one organization or individual can accomplish	Want a better future for the next generation. Impressed by impact.	Empowered by organizations who are doing the work	Want to provide opportunities for individuals to lead	Afraid of failure
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# user interviews

Several user interviews were conducted to obtain insights into **what users think** about their experience and interactions with both organizations, in differing capacities. Additionally, industry experts, who are not necessarily affiliated to either organization were also contacted, to provide valuable and fresh insights into how one might improve the existing resources / implement new actions to achieve their goals.



# user interviews

## educator

### strengths

#### The Network

- Encourages students to network.
- Provides opportunities for students to meet new people.
- Facilitates communication with adults while learning new subject matter.
- Builds a community for students and adults (who also benefit professionally).

#### The Programming

- Enhances the educational/teaching opportunities for schools. Educators would not have been able to locate/navigate/fund these programs/resources on their own.
- Introduces new technologies into classrooms and surrounding communities.
- On track to continue to maintain/grow. It would be great to provide this kind of programming to other sections of PA and other states (particularly ones with rural areas).

#### The Impact

- Prepares future generations with critical skills:-
  - How to analyze, represent, and present data
  - Public speaking
  - Teamwork
  - Problem-solving
- Creates awareness of issues in local communities and worldwide:-
  - Students learn to advocate for themselves
  - Fosters safe space for students to express themselves
  - Encourages students to ask questions and ask for help from other students, teammates, coaches, and adults
- Real-life application:-
  - Demonstrates how climate change impacts students, their families, and their community
  - Hands-on building, troubleshooting, and strategizing



# user interviews

## educator

## challenges

### Program Management / Staffing

- Additional staffing support is needed to be sustainable.
- The organization has grown quickly and there is an interest in expanding.
- Adults are needed to support educational efforts outside of the classroom for the organization.

### Communication / Opportunities

- Physical distance/frequency:-
  - Adults who support the programming are physically distant from one another and staying in contact is challenging at times.
  - Coaches/adults have worked to build a communication and resource sharing network for one another that includes texting groups via phone, group emails, and Zoom meetings.
- People don't realize unless they have lived in the city and then come out to rural areas how hard it is to provide opportunities for students.

### COVID-19 Impact

- School districts are working with families and community partners to provide laptops and tablets to students who need them.
- Some households have only one device with multiple users.
- Many families are struggling with food insecurity due to economic factors related to the pandemic.
- Staying connected while remaining physically distant is challenging.
- Students miss their classmates and teammates.

### Recommendations

- Address critical staffing issues to meet deliverables and scale smart
- Explore diverse funding opportunities
- Maintain connections as organization scales:-
  - Beginning of season workshop (teachers/students) helps to build the network
  - Foster networking between coaches/adults (half-day program or early evening)



# user interviews

## community partner

## recommendations

### Community Outreach (Fit / Timing)

- Look for organizations that are mission-aligned
- Timing is a crucial factor (for both organizations)
- There is a need to build the next generation of coders
- Diversity comes into play; it's right and good and helps to build the pipeline
- Encourage regional talent retention
- Relationships take time to build
- Having a respected industry partner vouch for your organization is helpful

### Managing Volunteers

- Work with collaborators to identify placements
- Recruit high school students/college interns
- Have volunteers sign up for specific projects that interest them
- Standardize the application/vetting process
- Track progress and workflow via weekly timesheets
- Provide a weekly plan and conduct daily check-ins

### Communication

- Meet your users where they are
- Lack of a centralized platform in a subject area (a clearinghouse for information/events on climate action/STEM) has stakeholders researching on their own for updates
- Partners stay in contact with various stakeholders via email for programming updates and events
- Overlapping information may be shared in these correspondences

### Align Efforts

- It's hard to manage events, there is a lot going on at once
- Set up a Google document to help track/strategize communication
- Social media implementation takes time



# user interviews

## industry expert

## recommendations

### Diversify

- It is crucial for organizations to diversify revenue streams. Many organizations fail because they are tied to just one revenue stream.
- Organizations that are the most successful balance corporate, individual, and foundation support.
- Before an organization scales, they should make sure to diversify first. The alternative is risky.
- An organization's donors should be a nimble and diverse group of donors. Leverage government as well as community partners when looking to scale.

### Be Strategic

- When approaching private organizations, be strategic. Show opportunities for potential partnerships/advertising. Do not cold call.
- Understand the priorities for the organization. Some organizations will want to be involved and have their name out there, some will be interested from a recruiting standpoint, and some will be interested in a partnership to build a potential pipeline for their community.

### Partnerships (Fit / Timing)

- Organizations should always aim to build relationships with potential funders and partners prior to making an ask.
- For some potential partners and funders, they are looking to connect with organizations that align with their mission and vision (perfect fit).
- Alternatively, potential partners and funders could find an organization at a critical time (perfect time).
- One doesn't necessarily know when the perfect fit and perfect time will occur, so it's important for organizations to engage potential partners and donors to be in their pipeline.

### Fundraising 101

- Development experts recognize that in order to reach "X" dollars, they will need "X" number of asks. The number that is typically higher to account for a percentage of people who say no because it isn't the right time/fit.
- Many organizations hire consultants to help with instituting a non-profit funding pipeline.





# user interviews

## industry expert

## recommendations

### Important Skills for the Next Generation

- Writing and communication skills. In person and remote.
- Being able to talk about technology and the science behind it to individuals who don't have a technical background.
- Resiliency. Becoming more resilient and not letting things bother you.
- Social/emotional learning. Teach kids the importance of giving the benefit of the doubt, not jumping to judgment.
- Educators/society should focus on teaching the next generation about understanding the consequences of their actions. Presenting the concept of delayed gratification.
- Don't solve around a problem, think the problem through.

### Additional Takeaways

- Outreach varies based on the situation:-
  - What is the organization doing?
  - What is the scale?
  - What is the impact?
  - How does timing play a role?
- Lay a foundation for relationships:-
  - One never knows when an opportunity will present itself.
  - Have a short-term and long-term strategy for building your brand to encourage organizations to remember who you are and what you do.

**kpi + risk analysis**

# key performance indicators

Need	Quality Driver	Performance requirement	Target
[1] Efficient Business Practices	Meet promised deliverables	Keeping to agreed upon timeline, content, and quality	Establish and maintain plan to communicate with stakeholders about expectations, collaborations, and progress
	Maximize existing resources	Identify ways to potentially delegate and look to automate repetitive tasks	Recruiting interns and volunteers; utilize productivity tool (e.g. Microsoft Power Automate)
[2] Stakeholder/Community Engagement	Relationship building with target audience	Networking; implementing feedback loop	Regularly survey stakeholders; create brand awareness with mission-aligned community and industry potential partners
	Meet your stakeholders where they are	Students (e.g. Instagram, Snapchat); Parents (e.g. Facebook, newsletter); Funders, policymakers, and community partners (org website)	Social media strategy to increase overall engagement
[3] Increase Outreach	Show potential funders how they can either maintain your established value, or achieve new value	Effective presentation of past achievements, goals that are set, and the resources needed to perform them	Be prepared to pitch your story; effectively track existing contributions and projects; forecast programming budgets to share with funders and policymakers

# risk analysis

Objective	Risk	Mitigation
Resource Management	PA Rural Robotics/ Communitopia doesn't have time to implement suggestions	Microsoft Power Automate  PA Rural Robotics/ Communitopia hires Company X to assist with strategy and/or implementation (e.g. social media plan/outreach); recruits communication intern to assist with content generation
Outreach	Spend time and effort but get nothing in return	Incorporate user feedback into the planning and execution of outreach efforts  Use tools that offer greater amounts of outreach (measured in size of audience and/or quality of relationship) for lesser effort

**resources**

## user research

Our team used open access plain language templates created by NAVA to help organize the interview process for this project. These templates can be accessed if PA Rural Robotics and Communitopia move forward with additional user research in the future.

Templates include:

- Copy of Consent Form (Google Form)
- Consent Form (Google Docs)
- Email message for requesting informed consent
- How to talk about Informed Consent with participants
- Organizing research participants
- Interview note-taking

## action think tank

One industry expert that we consulted as part of the user research process for our project suggested that PA Rural Robotics investigate/connect with the following think tank if they are not already doing so:

**Center on Rural Innovation** (based out of Vermont) – All about bringing jobs/technology to rural America (they have ~10-15 employees). They are a non-profit that several tech organizations are funding currently.

- The Center on Rural Innovation (CORI) is an action tank dedicated to addressing the challenges of rural American economies. Their work centers around three activities: building models for economic development that make sense for the 21st century, creating data and mapping tools so that rural stakeholders can do more impactful work, and directly investing in rural startups to empower communities to build wealth and jobs.

**recommendations**

# recommendations

## final thoughts

Our team set out to provide a resource management roadmap to aid PA Rural Robotics and Communitopia that addresses time management, efficient workflow, and potential scaling capacity. While we recognize both organizations may not directly apply all of the suggestions that we shared as part of this project, it is our hope that this shared information will serve as a dynamic reference manual moving forward. We are excited to share what we learned as part of the Policy Innovation Lab course (90783-A4) with respect to employing user feedback loops to inform continuous organizational improvements.

Our team asserts that additional user research with parents, students, funders, and policymakers would be helpful to better understand the opportunities and challenges of PA Rural Robotics and Communitopia through the lens of user research. Parents and students have the potential to provide direct-user feedback to positively impact organizational programming. Additionally, policy research on climate action resolutions in other communities could open up doors to new programming ideas and business partnerships that may encourage resource sharing and funding opportunities.

We appreciate the opportunity to collaborate with you and wish you continued success!

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A Carnegie Mellon University Project,  
Heinz College of Information Systems and Public Policy

For Policy Innovation Lab: Climate Resiliency Futures - Spring 2020, taught by Christopher  
Goranson, Smita Satiani & Sean Cuff (TA)

Stakeholders: Communitopia (Katie Modic) & PA Rural Robotics Initiative (Timothy  
Heffernan)

Team Members: Jennifer Sciallo, Sharleen Devjani, Anna Gipsov & Katherina Konst