

# Early Usecases.0.2

NOT UP TO DATE

These usecases have been developed in the early P4All research phase and are not up-to-date with the most recent P4All discussions.

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## Overview

The goal of this page is to create a large pool of realistic usecases to be used for investigating different aspects of the P4A platform and the services it can possibly offer.

## Structure

Usecases are developed based on the following structure:

1. The following stakeholders are identified:

- **Consumers**
- **Developers**
- **Mainstream Companies**
- **Clinicians, Educators, Professionals**
- **Schools, Libraries, Other public venues**
- **Service providers, NGOs**
- **Government**

2. The potential P4A services are defined:

- **Media and Materials:** Auto augmentation/ transformation/ Replacement
- **Assistance on Demand:** User can call up for any assistance any where
- **Consumers and Experts Connections:** Network of experts, consumers and testers to help new developers
- **Developers' Space:** Free and available commercial parts to speed development and lower cost
- **GPII Unified Listing and Marketplace:** Developers can quickly and efficiently market their products worldwide

3. Appropriate usecases are developed for the potential P4A services and organized based on their scope:

- **Small:** These usecase mostly require quick interaction between user and provider/ developer. These types of services are provided to respond to one person's urgent needs although they may become useful for other P4A members. Small usecases require little time and efforts from both sides to be completed, consequently the compensations are low.
- **Medium:** These usecases also require direct interaction between user and provider/ developer, however, more people can benefit from the outcome. Medium usecases require greater efforts and take longer to be completed, thus, the compensations are higher.

- **Large:** These usecases are initiated by an individual or group of people and they need a collaborative effort between several groups of stakeholders to be completed. As a result, their outcome can impact many people's lives. Large usecases require great deal of time and efforts and they may require funding and organizational support to be accomplished.

Note: The names that have been used for particular actions such as 'AoD', 'Call to Action', 'Challenge', 'P4A Empowerment Open Source', etc. are just for the purpose of clarifying content and are not final.

## Usecases

### For Consumers

A rich set of solutions and services that match their diverse needs.

#### Media and Materials

##### Small Usecase: \*

Marney has recently purchased an electric scooter. However, it is very difficult for her to go through its manual and figure out how to use its different features. She wants someone to simplify the manual for her. She goes to the P4A platform, logs into her account and creates a 'Call to Action' to describe her problem, indicate the type of compensation she can afford and share it to the platform. Don is an active member within the system who receives a newsletter with content that may be relevant to him. His wife uses the same kind of scooter as Marney. He finds out about Marney's request through the newsletter and contacts her. Marney and Don negotiate the terms (timing, compensation, etc.) Don uses the platform's authoring tools to create the content, uploading images as well as text descriptions. He simplifies the manual's feature descriptions and shares the result with Marney. They can continue their conversation by messaging each other directly, or through a discussion page related to her 'Call to action' to address all Marney's concerns and questions. She compensates Don and rates his response. This simplified manual also becomes available on the P4A Empowerment Open Source for others to use.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: consumer, non-member, with mobility issue, needs simplified content</li> <li>• Who is giving: consumer, active member, motivated to contribute to community because of his wife</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Final projects/services are uploaded to the resources library</li> <li>• Views and engagement with a product in the resource library can be quantified and transformed into points of some kind (points could be used for getting access to certain 'premium' features of the platform or being featured as a top contributor)</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Authoring Tools</li> <li>• Discussion Board</li> <li>• Simplifying features for: <ul style="list-style-type: none"> <li>• Payment (scan/photo of credit card to quickly import payment information)</li> <li>• Account (import information or use 3rd party accounts)</li> <li>• Project creation (voice to text, etc.)</li> </ul> </li> <li>• Tagging project with key words</li> <li>• Newsletter with suggested content (relevant discussions, projects, etc.)</li> <li>• Direct messaging between platform members</li> <li>• Recognition points</li> <li>• Uploading project content to resources (optional)</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• Marney may be able to provide part or all of the compensation as platform credit that can be redeemed by Don to use other services within the system.</li> </ul>

##### Medium Usecase:

Judith is living in an assisted living house and she is deaf blind. Different health care providers, such as physicians, specialists, dentists or oral hygienists visit her in rotation. In most of these visits, Judith is accompanied by her assistant, Sarah, who helps her effectively communicate with the care provider. However, sometimes Sarah can't be present in an appointment, which causes spending too much time and efforts to communicate just the basic information. Thus, Judith is looking for a generic and basic communication kit to help her interact with her providers in the absence of an assistant. She makes Sarah aware of her concern. Sarah gets excited about this idea as she can use this kit for some of her other clients as well. Sarah uses P4A to engage with other communications assistants and wants to share the idea with them. So, she logs into her P4A and starts a discussion around the topic. She is encouraged by the group to create a project so she creates a 'Call to Action' and describes the issue and the possible solution. A freelance developer who uses the P4A platform for supplementary income browses projects that are tagged as 'seeking developers' and finds Sarah's project. He has already developed an application with similar functionality seems interested in this call and responds to Sarah's request. They start a discussion about what the current application does and how it can be modified to meet the needs of a deaf blind user. The developer gets feedback from Sarah and other communications assistants and has the chance to test it on Judith and other deaf blind users throughout the process. After modifying the app, the developer can either add it to the P4A Empowerment Open Source or make it available for sale on the GPII marketplace.

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<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking (Sarah): consumer, member, uses P4A for networking and professional support</li> <li>• Who is giving: developer, member, uses P4A for job opportunities, wants exposure to target market</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Endorsement deals with institutions such as hospitals, clinics, etc. are possible.</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Search tool</li> <li>• Authoring Tools</li> <li>• Discussion Board</li> <li>• Group creation/interaction</li> <li>• Project Management tools (editable documents, timetables, group chat and discussions)</li> <li>• Crowd funding</li> <li>• Project Newsfeed</li> <li>• Tagging, browsing by tag</li> <li>• Flexible payment system (different options; credit card, paypal, email, etc.)</li> <li>• Enabling demo promotion (A fee is charged for premium access)</li> <li>• Enabling distribution outside of the platform through supporting partners (who can indicate support through the system)</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• Patent options/guidelines</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• Automated communication service for users with special needs such as deaf-blind. Multiple services can be combined to address user's need i.e. voice to text and text to vibration for the service provider and touch to text and text to voice for deaf-blind user.</li> </ul>

**Large Usecase:**

Edwina who has just started grade 10, realizes that Math and Physics concepts have become more difficult to understand. She has no problem with visuals and diagrams, however, formulas and large bodies of text seem incomprehensible to her. When she informs her adviser of her concern, she encourages her to check out P4A to find a solution. She browses through the platform and notices few other discussions related to her problem. She creates an account and submits a 'Challenge' to visualize grade 10-12 Math and Physics formulas. ~~After a few days, her challenge is approved, packaged and~~ broadcasted on the P4A platform. Her challenge gets a lot of votes from teachers who would like to have access to this type of visualized material, foreign learners, people with learning disabilities and every one of them can contribute something to this challenge to cover the cost of developing this visualized content. Busy with school, Edwina cannot manage the project herself, however, P4A matchers notice the great level of activity around this challenge and find an active member who is willing to manage this challenge, recruit the required producers and look for potential investors. An educational government body that is focused on addressing accessibility barriers within the education system is contacted by the challenge manager and encouraged to back the project financially. A freelance designer working in data visualization also joins the project. With the help of math and science teachers, they come up with visualizations for formulas taught in the high school curriculum. The manager also posts the challenge in different groups and discussions inside and outside of the platform and requests feedback. All participants use discussion boards to give feedback and improve the visualizations. When the formulas are ready, they are made available to the educational government body as well as the P4A resources section; Edwina receives the 'Initiator' badge and producers receive their compensation along with recognition points.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: consumer, non-member, cognitively impaired, she has a need and an idea, but is not interested or able to manage the project herself.</li> <li>• Who is giving: educational governmental body with money, non-member, focused on identifying accessibility barriers within the education system.</li> <li>• Who is giving: non-member, freelance designer, little experience with accessibility.</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• P4A platform can provide matching assistance to find project managers who can take over projects after the initial idea generation stage.</li> <li>• System supports the incremental release of funds and project outcomes</li> <li>• Funders can negotiate at different levels of the system, from platform owners to individual members</li> <li>• Projects within the system are going to be findable outside of the system.</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Browsing tool/ Suggesting relevant content based on query</li> <li>• Voting functionality</li> <li>• Project management tools (tools to submit invoices, time logging, etc.)</li> <li>• Badging</li> <li>• Sign up for project updates for non-members</li> <li>• Search tools</li> <li>• Progress indicator</li> <li>• Licensing Assistance</li> <li>• Recruitment tools for project members</li> <li>• Quality assurance</li> </ul>

<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• Live assistance when creating a project</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• Automated matching services to find collaborators, volunteers, managers and evaluators for a project</li> </ul>

## Assistance on Demand (AoD)

### Small Usecase: \*

Patrick has recently moved out of his parents' house and experiencing an independent lifestyle. To minimize the impact of his visual impairment, he has created a system around the house where every item follows a specific order. However, every time his mom visits, she rearranges Patrick's stuff without informing him. Apparently she has also rearranged all his canned soups the other day, since Patrick is not able to find a can of chicken noodle soup. He opens the P4A app on his cell phone, goes to the 'AoD' section. He takes a photo of the canned soup he is holding, tags it with a 'Flag', sets a timer that indicates the time frame within which a response would be useful (once this timer runs out, the request disappears from the feed), and asks for the image description and shares it to the platform. After a few seconds, he receives a response from another P4A user with an image description. Now, he can mark the task as complete and rate the person who has provided the description.

Patrick can either pay a monthly subscription fee for the 'AoD' service or purchase per use credit. People who reply to an instant help request can collect points, that can be cashed out any time. Patrick has used 'AoD' for reading the price tags in retail context, medication labels at home and signage at urban environments.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: member, uses only some features of P4A (Assistance on Demand, GPII Unified Listing)</li> <li>• Who is giving: member, looking for supplementary income, only uses AoD</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Members can purchase system credit or pay subscription fees</li> <li>• There is some separation between assistance on demand and the rest of the platform specially on mobile devices for quick access (e.g. Facebook messenger app is separate from Facebook app)</li> <li>• Requests are removed from AoD feed once timer runs out</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Quick and easy way to provide: <ul style="list-style-type: none"> <li>• Description</li> <li>• Upload media</li> <li>• Set a timer</li> </ul> </li> <li>• Instant broadcasting</li> <li>• Pre-approval of service provider (optional)</li> <li>• Live chat/ discussion tool</li> <li>• Feedback and rating</li> <li>• AoD Request notification sign-up</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• "Trust levels" for AoD providers- increasingly complex tasks get 'unlocked' as user successfully completes tasks (based on ratings)</li> <li>• AoD feed highlights requests that are similar to ones previously completed or match account specifications (for AoD providers)</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• An automated service for scanning and reading images and text i.e. Google Goggles.</li> </ul>

### Medium Usecase:

Steven is trying to make a Skype call to talk to his grandson in Australia. Steven's daughter has already setup his computer and Skype account, but for some reason nothing is working today and Steven does not know how to fix the problem. He opens his P4A application on his computer and goes to the 'AoD' section. He describes the problem, tags it with a 'Flag' and shares it to the platform. After a few seconds, Steven receives a message from a person who is willing to help. The message notes that there are several ways in which they can try to solve the problem, asking Steven to either share his screen, or describe the problem over the phone or chat. Once Steven agrees to share his screen, a dialog pops up for screen sharing with simple 'Yes' 'No' actions. Steven selects 'Yes' and now his screen is shared with the other person. That person tries to diagnose the problem and guide him to take the appropriate actions to solve the issue. After they are done and Steven closes the dialog, another dialog pops up that simply asks Nora to rate the service or make a comment.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: member who is computer illiterate, needs assistance running an application</li> <li>• Who is giving: member, browses projects for inspiration, actively participates in AoD.</li> </ul>

<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• System supports specific functionalities such as screen sharing</li> <li>• Providers get reimbursed for their time and effort even if they do not find a solution</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Timer set-up and notifications</li> <li>• Screen Sharing functionality</li> <li>• Secure connection (No possibility for risking the other person's privacy)</li> <li>• Ability to communicate through voice or text while screen sharing</li> <li>• sorting notifications based on urgency within the AoD feed</li> <li>• Keep completed tasks in producer and consumer accounts</li> <li>• Automatic payment process once task is completed</li> <li>• Feedback and rating</li> </ul>

**Large Use-case: \***

Jackie is running out of groceries, however, her caregiver has been very sick lately and can't help her out this week. Jackie logs into her P4A account and goes to the 'AoD' section. She describes her situation, and identifies her location and tags it with a 'Flag'. Instead of sharing it to the platform, she shares it with people who are within a certain perimeter of her location. Brad, who runs a small transportation company is signed up for notification related to transportation within his area in town, notices Jackie's request. He checks out their schedules, and finds an available seat in a group transportation close to the Jackie's house scheduled for the next morning. He contacts Jackie via P4A, discusses his terms and conditions and arranges for a pick up. Jackie makes a payment, which would not be confirmed until after receiving the service. The next day, when Jackie is dropped off at her house after the grocery shopping, she confirms the pending transaction and simply rates Brad's service through P4A.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: member with mobility issues, needs physical assistance</li> <li>• Who is giving: member (as business), participates to advertise his services</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Members agree on terms and price before the service is provided</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Authoring tools</li> <li>• Geolocation</li> <li>• Targeted broadcasting (in this case based on location)</li> <li>• Backend security check (No possibility for risking the other person's privacy)</li> <li>• Pre-approval of service provider (optional)</li> <li>• Messaging</li> <li>• Pending Payment structure</li> <li>• Feedback and rating</li> <li>• Indication of task completion from both sides to complete the service and confirm the transaction (provider and consumer)</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• An automated matching and booking system to minimize the direct interaction between the consumer with the provider</li> </ul>

## For developers

The tools and systems they need to more affordably develop, market, and support products that can address the full range of platforms and technologies their customers need to access.

## Consumers and Experts Connections

**Small Use-case:**

John is designing a multiplications/division game for kids with learning disabilities. Before publishing the game, he would like to get his target group's feedback. He has previously used P4A for testing some of his other products to get users or developers' feedback. He logs into his P4A account and creates a 'Call to Action', includes his game's API, screen captures, videos and a full description of his request, and shares his 'Call' to the platform. In a few days, he receives lots of feedback from parents, kids, developers, teachers and even other users who can benefit from this game. After making the suggested modifications, he can publish the game to his desired app store as well as making it available for sale on the GPII marketplace.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: member, developer, needs user testing and feedback and ongoing support</li> <li>• Who is giving: non-member, educator, looking for educational material and resources</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Not giving away copyrights</li> <li>• System supports downloading APIs</li> </ul>

<b>Functions</b>	<ul style="list-style-type: none"> <li>• Authoring Tools</li> <li>• Related discussions in other networks can be aggregated in the project space on P4A</li> <li>• Providing tools to collect both quantitative and qualitative feedback</li> <li>• Page watcher to notify users of any changes/upgrades</li> <li>• Exchanging points between members</li> </ul>
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**Medium Usecase: \***

To facilitate data transfer between devices, Todd has been trying to develop a software to make an AT device discoverable by any mobile device or computer in its proximity. His goal is to make this discovery Wi-Fi independent. However, he has been unable to do so. All his discussions on different blogs have been fruitless as most of those developers are not familiar with AT. In one of those blogs, he was recommended to check out P4A. He checks out the platform and decides to start a discussion around this issue. After creating an account, he goes to the 'Discussion' section and creates a new discussion describing his issue, and then tags it to target developers. All P4A members who have identified themselves as developers are informed about Todd's question. Other members can join the discussion and leave comments and feedback. They can also point Todd to use specific codes that are already available on P4A Empowerment Open Source.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: new member, developer, trying to solve a technical problem</li> <li>• Who is giving: P4A developing community</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Even if the system is not heavily populated, it has enough members to draw new members in</li> <li>• People on the GPII unified listing do not mind being contacted by P4A members</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Authoring Tools</li> <li>• Non-members can track discussions</li> <li>• Tagging discussions</li> <li>• Newsletter</li> <li>• Rating usefulness of feedback</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• Activity points to incentivize participation</li> <li>• Linking useful discussions' results to a wiki section on the P4A platform</li> </ul>

**Large Usecase:**

Marry is an inventor-developer and she often browses through P4A to find a problem to solve. Marry notices that there are several discussions on P4A around the punctuation issue during the speech to text input. She is interested in exploring this issue further and possibly coming up with a solution for it. She sends out a message to some of the other developers who had participated in the related discussions on P4A and invites them to join her to build a punctuation plug-in for Speech to Text technology. Once, she has found some collaborators, they submit their proposal as a 'Challenge' asking for funds, feedback and design input. ~~When their challenge is approved by P4A, it is packaged and~~ broadcasted on the platform. Members or any other organization that needs such product can contribute something to the development process and receive the final product as a reimbursement. When the solution is ready, the team can either make it available for all through the P4A's Empowerment Open Source or make it available for sale on the GPII marketplace.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: active member, wants to collaborate on projects</li> <li>• Who is giving: active members with common interests</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Groups are useful to members in a different way than projects</li> <li>• People are committed to their roles even without available funds or direct interaction</li> <li>• Members are able to find other members with similar interests or specific skillsets</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Group creation</li> <li>• Integration of groups into projects</li> <li>• Messaging system between members</li> <li>• Payment structure for donations and contributions</li> <li>• Project management tools for teams (dividing and tracking tasks, specifying user roles, dividing revenue, distributing pay, etc.)</li> <li>• Targeted advertising of the final outcome to the interested members/ non members</li> <li>• Matcher's help (fund, client, manufacturers, etc.)</li> <li>• Activity points</li> </ul>

	<ul style="list-style-type: none"> <li>• Final product delivery to contributors</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• An automated trending service that spots the similarities across different sections of P4A and packages them for further use</li> </ul>

## Developers' Space

### Small Usecase: \*

Jeff is a freelance web developer. Currently, he is working on a local district school board's website to make it more accessible. The site lacks personal adjustment tools for modifying text size and contrast. He logs into his P4A account and runs a search for modifying text size and contrast. In the results page, he is pointed to 10 different discussions and 3 available sources in the P4A Empowerment Open Source. He reviews all the three available sources and then downloads the one that fits his need best.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: Member, developer, needs access to open source code</li> <li>• Who is giving: Platform</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Accessibility tools such as 'Infusion' are included in the resources</li> <li>• People who use the open source platform are willing to give back</li> <li>• All code is deemed useful with controlled quality</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Search</li> <li>• Download/ Upload</li> <li>• Activity points</li> </ul>

### Medium Usecase:

Ana is developing an application that creates sign language subtitles for live stream, such as TV shows or movies. To test her product, she needs to use an expensive piece of hardware that she cannot afford at the moment. She creates a project describing her application and the equipment she needs. An accessibility lab finds her project and sends her an invitation to come to the lab and test her software there at no cost. The director also provides her with contact information of a few other labs that are closer to Ana and may have the hardware. Since it's difficult for Ana to travel to the lab she sends them her software and the director gets his graduate assistance to test it for Ana. When testing is completed, Ana gives the lab a good rating and credits them on her project page. She also collaborates with the lab to write a paper about her software.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: member, developer, needs expensive hardware</li> <li>• Who is giving: member on behalf of a group, has the expensive hardware</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Members are able to find each other even without having a concrete idea of the interaction</li> <li>• High degree of interaction</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Newsletter</li> <li>• Matching projects with people and location</li> <li>• Inter-party agreement (as a function or resource)</li> <li>• Direct messaging</li> <li>• project management tools (calendar, editable documents)</li> <li>• Giving administrative privileges to collaborators</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• Vocabulary development process to improve findability</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• Automated matching service to populate all the relevant solutions for a request</li> </ul>

### Large Usecase:

Richard is developing specialized programs for AT. Since his applications are very unique, there is not a great demand for them, and the cost of development does not match up with the revenue. One possible approach to cut cost is to remove the licensing fee of the software he uses to develop these programs. He searches P4A software library, which consists of programs that are purchased to run the P4A platform or given to P4A by different

organizations or individual developers. Unfortunately, he can't find his requested licenses there. He decides to create a group for interested developers describing this issue and asking for others to join. Many other developers join Richard's group and express their need for the same software. After assessing their requests, P4A matchers confirm that this software is an essential tool for developer who are working with AT. A matcher puts the group in contact with an appropriate company that allows P4A developers to use their software. Richard and other developers can either pay a subscription fee, donate money or contribute their time to reimburse the company.

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: member, developer/ group of developers, need software license</li> <li>Who is giving: software company, non-member, platform collaborator</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>P4A has business collaborators that are willing to assist P4A members at low/no cost</li> <li>This type of collaboration is of interest to companies</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>Ability to create, join and manage groups</li> <li>Personalized matching service available at all times (help creating clear and attractive pitches)</li> <li>Means of communication between a group and non-members</li> <li>Payment structure e.g. subscriptions</li> <li>Making all group functions and requests sustainable, allowing the groups to grow and change</li> </ul>

## GPII Unified Listing and Marketplace

### Small Usecase:

John is a freelance game designer/developer. He is specifically interested in developing games for kids with learning disabilities. He is always trying to discover a new problem that can be solved through a game. He creates an account on P4A and adds his name and his interests in the GPII unified listing. So, anyone who is interested to work with him or has a project for him to work on can easily find him there and contact him.

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: member, developer, needs visibility and work</li> <li>Who is giving: platform (P4A and GPII)</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>P4A and GPII are directly linked</li> <li>The platform is appealing to developers for advertising purposes</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>Importing links and information among different platforms</li> <li>Tagging</li> <li>Content suggestions</li> <li>Matcher and member communication</li> <li>Linking GPII listing to P4A account</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>"Footprints" in account showcases discussions and projects of interest</li> </ul>

### Medium Usecase: \*

Besides adding his name to the GPII unified listing, John would like to publish some of the games that he has already designed and developed for kids with learning disabilities on the GPII marketplace. First, he submits these games to the P4A platform. ~~Two of his games are approved, and they are~~ published on the GPII platform. Although he publishes his games in different app markets as well, they never get the same attention as they do in the GPII marketplace. In the GPII marketplace, he has a more direct access to his target users, his games are published on a global platform and he can also sell his games to larger institutions, such as schools. In other app markets, his games get mixed with thousands of other regular games and never get the required visibility.

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: member, developer, needs to market and sell his work</li> <li>Who is giving: platform (P4A and GPII)</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>There are guidelines in the marketplace to help developers improve the quality of their products (Quality assurance)</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>Secondary feedback and evaluation process (Quality control for available products in the marketplace)</li> <li>Access to metrics to improve project page (page views, traffic, where viewers have been redirected from, interesting and boring spots on the page)</li> </ul>

	<ul style="list-style-type: none"> <li>• Product management tools (invoicing, payment, resources, distribution of royalties, list of past and current clients, overdue, etc.)</li> <li>• Updates and notifications related to the product in the market place</li> <li>• Suggesting the product in relevant pages</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• An automated service to assure the published material complies with the accessibility rules and guidelines</li> </ul>

## Training and Skill Development

### Small Usecase:

Meg is a middle school teacher in rural England. Her friend Bailey loves painting but recently she has been having trouble holding her brushes because of her arthritis. For Bailey's birthday Meg wants to create a set of custom grips for her brushes and painting palette. Meg has access to a lot of different tools and supplies through her school but she needs some information about the best way to create the molds and what materials are best to use. She learned about the P4A platform through a friend and searches it for help and resources. The platform directs Meg to several videos that guide her through the process of casting a mold as well as a few articles that suggest materials that would be best suited for the task. These resources serve as a starting point for Meg's project.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: non-member, amateur</li> <li>• Who is giving: platform members</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• The platform offers a wide range of educational content</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Search (tutorials, discussions)</li> <li>• Video</li> <li>• Discussions</li> </ul>

### Medium Usecase:

Bronwyn recently graduated from high school. She has been looking for work for the past four months but hasn't been able to find anything steady. While looking for opportunities online, she finds the P4A platform. She cannot find any work that she is qualified for but she notices that the platform provides some training. She browses through the training resources and takes an open online course in accessible media creation. Throughout the learning process she can complete assignments and check her work using the available resources. After completing the course, Bronwyn receives a badge. With her badge she can respond to a wide variety of requests for converting media and materials. As she spends more time within the platform, receiving feedback and additional badges, it becomes more and more easy for her to find small jobs she can do.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: new member, unemployed youth seeking training and work</li> <li>• Who is giving: platform members, educators</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• P4A will make training material available through the platform</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Search (calls to action, challenges, training opportunities)</li> <li>• Account creation</li> <li>• Badging</li> <li>• Feedback and ratings</li> <li>• Learning material available through platform (videos, reading material, exercises)</li> </ul>

## For mainstream companies

It will provide a way for them to identify the features that they can and should build into their products as well as a means to do so affordably.

## Media and Materials

### Small Usecase: \*

A software development company that specifically develops programs for ABM (Automatic Banking Machine) is planning to integrate the Preferences Management Tool (PMT) into their existing and future products. They can simply log into the platform and download the required component from the P4A Empowerment Open Source. In return they can contribute software licenses or donate money to P4A.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: non-member, needs accessibility tools</li> <li>• Who is giving: P4A platform and accessibility tool's owners</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• High quality of available accessibility tools in the resources (Ready to be integrated)</li> <li>• Accessibility tool's authors are available for support inquiries after uploading their content in the resources</li> <li>• There will be outreach programs created to notify organizations about P4A</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Resource support</li> <li>• Discussions and comments on resource pages</li> <li>• Change and update notifications</li> <li>• Access to other users of the accessibility tool</li> <li>• Distinction between active and inactive resources</li> </ul>

**Medium Use-case: \***

A small pharmaceutical company is branching out to Australia. There is a resources section on the company's website that includes flash animations as well as PDF documentations for each medication. However, the Australian accessibility rules and guidelines do not recognize either flash animations or PDF documents as accessible documents. The Australian officials recommend this company to get assistance from P4A. The company searches the GPII unified listing and finds developers who are expert in the accessibility field and are able to transform flash videos and PDF documents to an accessible format. These developers are contacted via P4A for further discussion.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: non-member, institutions, wants to convert media to an accessible format</li> <li>• Who is giving: platform and platform developers</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• All developers on P4A will be included in GPII unified listing</li> <li>• Managing developers through P4A will be worthwhile and is more advantageous than contracting outside developers</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Project management tools (tracking progress, timelines, cost, etc.)</li> <li>• Advanced search</li> <li>• System help (matching service) to provide company with a list of appropriate candidates</li> <li>• Payment structure</li> <li>• Rating and feedback</li> <li>• Badging for company</li> <li>• Customer support</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• A combination of automated and manual services can be used for converting documents to an accessible format</li> </ul>

**Consumers and Experts Connections**

**Small Use-case: \***

(Backend Process) There are a lot of comments regarding a specific AT device in different discussions on the P4A platform. These similarities are spotted in the P4A heatmaps. P4A includes all these points in a featured project and includes a link to related discussions and projects and present it on the platform's home page. A link to the featured project is also sent to the Provider of that AT device. This would create a direct and effective communication between the consumers and the providers and hopefully leads to product improvements.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: The system (Trending)</li> <li>• Who is giving: The system (populated content by members)</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• There is enough activity around the same topic</li> <li>• System is able to find similarities across the platform</li> <li>• There is value in aggregating all that content and creating featured projects</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Ability to create featured projects</li> <li>• Heatmaps to spot similarities across the platform</li> <li>• Tagging/ Hash tagging</li> </ul>

	<ul style="list-style-type: none"> <li>• Newsletters</li> <li>• Badge for projects/ discussions included in the featured project</li> <li>• Packaging information</li> <li>• Data extraction for evaluators</li> <li>• Inviting all the members whose projects or discussions were included in the featured project to create and join a group</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• Trending function (e.g. Twitter trending)</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• An automated trending service that spots the similarities across different sections of P4A and packages them for further use</li> </ul>

**Medium Usecase:**

A local bank is trying to comply with the recent rules and guidelines regarding accessibility. Thus, they need a group of experts to go through their digital documents to make sure the information is tagged properly, images and diagrams are described clearly and videos have correct subtitles. The bank contacts P4A for assistance. In addition to recommending them a couple of people, P4A also advises them to check the GPII unified listing to find other candidates. After running a quick search, a list of people who can do the job is populated. The requirers can select their final candidate based on the available reviews and ratings on P4A.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: non-member, institution, needs expert advise to assure documents comply with accessibility rules and guidelines</li> <li>• Who is giving: platform and platform accessibility experts</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• All accessibility experts on P4A will be included in GPII unified listing</li> <li>• There is an advantage in working with P4A consultants rather than contracting outside experts</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Project management tools (tracking progress, timelines, cost, etc.)</li> <li>• Advanced search</li> <li>• System help (matching service) to provide company with a list of appropriate candidates</li> <li>• Payment structure</li> <li>• Rating and feedback</li> <li>• Badging for company</li> <li>• Customer support</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• An automated service for evaluating documents' accessibility and matching them with the right candidates in GPII</li> </ul>

**Large Usecase: \***

An insurance company is trying to create informed packages for families who have dependents with disability. This company creates a 'Call to Action' on P4A and invites people to share their stories, talk about their needs and describe their desired insurance packages. Users who give feedback receive 'Points of Recognition' from P4A. In addition, the insurance company pays a specified amount of money to P4A for each received feedback. This money is used to run and maintain the platform.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: member, institution, needs market data</li> <li>• Who is giving: platform members</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Members will provide valuable feedback</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Submitting direct feedback on the project page that is not visible to other members</li> <li>• payment structure (what exactly members be compensated for)</li> <li>• Quantitative/ Qualitative feedback methods</li> <li>• Displaying activity without showing feedback (e.g. # of participants)</li> <li>• Badging both the institution and the participants</li> <li>• Available money and time indicator</li> </ul>

## For clinicians, educators and other professionals

A better mechanism to keep track of the rapidly changing array of solutions, the devices and platforms they will work with, which solutions will work with which other solutions without conflict, and which devices, software, or services match the individual needs of each of their different patients /students/clients.

### Media and Materials

#### Medium Usecase:

Oscar is teaching Art History at a state university. Every semester, he comes to the class armed with a PowerPoint presentation loaded with images of famous works of art. However, this semester, the school has informed him there will be a blind student in his class. He has never thought about describing the images for a person who can't see them. The school recommends him to get assistance from P4A. Oscar checks out the P4A platform. Just by browsing through discussions and available projects on the site, he gets a better idea of how to modify his presentations. While browsing, he realizes that he can create a 'Call to Action' and ask for assistance. He describes his request, includes an example of his preferred image description and indicates that he has no budget for this project. A few days later, he is contacted by Eric, another Art teacher volunteering on P4A who is willing to help. At the end, all these images with their descriptions become available on the P4A Empowerment Open Source. Every time someone access those images via P4A, Oscar and Eric get 'Effort Recognition' points.

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: non-member, teacher, needs to convert media to an accessible format</li> <li>Who is giving: Active member, teacher, looking for opportunities to give back/ contribute</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>There are volunteers in P4A who can help with the projects that have no budgets</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>Resource Library- Foundation, Guidelines, Standards, etc.</li> <li>Tagging</li> <li>Including examples of desired outcome</li> <li>Option to share project only with P4A volunteers</li> <li>Email notifications</li> <li>Editable documents used by several users simultaneously (Google docs)</li> <li>Publishing the results in the project space as well as the resources library</li> <li>Receiving points for download/views of the described content</li> <li>Payment structure in form of contributions/ donations/ P4A credits</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>Automated image scanning service and providing text description</li> <li>An automated service to evaluate image descriptions and make sure they comply with accessibility guidelines</li> </ul>

#### Large Usecase:

An ultrasound lab has recently purchased a 3D printer to print tactile images for visually impaired parents who want to have a glance at the fetus. However, the ultrasound machine does not recognize the printer format and can't print 3D images. This clinic is looking for a person who is able to make these two devices work with each other and also convert the Ultrasound output to a 3D image that is conceivable by visually impaired consumers. The clinic signs in for a P4A account and consequently creates a 'Call to Action', describes the issue and shares it to the 'Developers' space. The result can be made available on the P4A Empowerment Open Source or sold on the GPII marketplace. A platform member who has worked in 3D printers before is notified of the project through a newsletter that covers content of interest. The member contacts a representative from the ultrasound lab that is managing the project. His request to join the 'Call to Action' is approved and the project members use the platform to share resources, create timelines and provide feedback. After the initial stage of the project is completed the project remains active within the system for further development, such as collaborations with materials specialist and more product testing.

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: non-member, institution, needs to make two pieces of hardware work together and convert outcome to an accessible format</li> <li>Who is giving: member, developer, subject expert</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>This type of service is better achieved within P4A</li> <li>This project can be done remotely</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>Advanced search</li> <li>Project creation and assignment of roles</li> <li>Tagging</li> <li>Assistance writing up contracts</li> </ul>

- Payment options
- Rating and feedback
- Licensing and patent help tools and resources
- Messaging
- Authoring tools
- Customized newsletter
- Targeted broadcasting
- Selling products on GPII marketplace
- Resource library- Content upload capability
- Allowing projects to grow and change throughout the process and after completion (promoting it in different spaces, adding other functionalities, sharing impact).

## Consumers and Experts Connections

### Small Usecase: \*

Christine is a grade 1-3 teacher. Over the years, she has had a lot of experience solving problems and issues related to kids with learning disabilities, and she likes to share her experiences with others. P4A is a great platform for her. She can participate in relevant discussions, check out services that are developed for these kids and give her feedback and even integrate some of those services in her classes. She has gained many 'Points of Recognition' due to her active participation and turned into a reliable source for anyone who needs feedback about teaching tools for children with learning disabilities, age between 6-9.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: platform members and professionals in related fields</li> <li>• Who is giving: active member, teacher, shares experiences and gives feedback on different projects and discussions</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• People make use of the platform even when they are not giving or receiving tangible products or services</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Browsing Tool/ Suggesting relevant content based on query</li> <li>• A system for collecting recognition points (a way of establishing credibility within the system)</li> <li>• Cashing points (for P4A premium features, access to free or discounted membership on collaborators' platforms, discounted rates for services, courses, etc.)</li> <li>• Discussion Boards</li> <li>• Feedback and ratings</li> <li>• Customized newsfeed</li> <li>• Badging</li> <li>• Uploading/downloading resources</li> </ul>

### (Move to Archive) Medium Usecase:

An assisted living home is planning to upgrade their computer system. However, they are not sure if the new computers would be compatible with all the different types of AT each resident is using. To prevent from future conflicts, they want to get an expert advise before making any purchase decision. Sherry, the purchase manager, opens up P4A and checks out the GPII unified listing for an AT adviser, however, she is not able to find any local experts. Thus, she goes to the 'AoD' section, describes her need, tags it with a 'Flag' indicates her location, and then shares it to the 'Around Me' section. She has also selected an option that requires her approval before someone addresses her request, this way she can screen candidates first. She gets contacted by several AT experts who are willing to accompany her during the purchase and give her some directions.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking:</li> <li>• Who is giving:</li> </ul>
<b>Assumptions</b>	
<b>Functions</b>	<ul style="list-style-type: none"> <li>• AoD description and timer</li> <li>• Timer setup</li> <li>• Search Tool</li> <li>• Geotagging</li> <li>• Targeted broadcasting (in this case based on location)</li> <li>• Advanced search in GPII</li> <li>• Filtering options in GPII (in this case based on location)</li> <li>• AoD request feed</li> <li>• response approval option</li> <li>• Secure internal messaging system between members</li> <li>• Payment</li> <li>• Rating and feedback</li> <li>• Adding members to preferred network</li> </ul>

<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>An automated service or a combination of services to analyze AT devices' compatibility with various digital systems.</li> </ul>
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**Large Usecase: \***

Dr. Peter Brown is working in the ER at the Toronto General Hospital. Over the years, he has noticed a significant increase in the number of limited English proficient patient visits across the Emergency Department. When a live interpreter is not available, they have to rely on the telephone interpretation line to address the language needs of their patients, which often causes miscommunication and delays in service. Thus, when receiving these patients in the ER, Dr. Brown and his staff experience lack of spontaneous interaction, inability to explain treatment plans and procedures and facilitate a clear informed consent process. He is passionate about this issue and is looking for a solution to overcome it. One of his colleagues suggests checking out the P4A platform. After browsing the site, and browsing some of the completed challenges, he decides to create an account and submits his 'Challenge' to P4A. ~~After a few days, P4A approves his challenge, creates a comprehensive package for it, and then~~ broadcasts it on the P4A platform. All members including designers and developers get an invitation to participate. Since Dr. Brown does not have a clear idea for the solution, he creates a brainstorming session on the project page where members can submit solution ideas. After reviewing the proposed solutions, Dr. Brown and his colleagues select the solution they like best and get in touch with the member. They ask the member to create a list of roles they will need to complete the project and publish the list on the project page. Because neither Dr. Brown nor the member who came up with the solution are able to invest enough time to manage the project, they find someone for the role using P4A. After the team is created they use the page to work on project components, manage their workflow, meet and create timelines).

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: new member, institution, needs innovative communication tools</li> <li>Who is giving: P4A members,</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>The final idea will go through the medical approval process</li> <li>Finding project managers/coordinators can be done quickly and easily.</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>Brainstorming tools and ability to submit solution ideas to problems</li> <li>Rating suggested solutions</li> <li>Guest pass to encourage involving members outside of the platform (especially on large teams or when an individual creates a P4A account on behalf of a group)</li> <li>Ability to share the project link on other platforms and aggregate feedback across platforms</li> <li>Messaging</li> <li>Browsing Tool/ Suggesting relevant content based on query</li> <li>Backend content curation (such as a newsletter)</li> <li>General and targeted broadcasting</li> <li>Progress notification tools</li> <li>Project section which outlines members needed for the project</li> <li>Finding and hiring a 3rd party project manager within the platform</li> <li>Project management tools (division of labour, timeline, video conferencing, etc.)</li> <li>Keeping project active after completion for further development</li> <li>Anonymous rating among project members</li> <li>Expert review panel to help commercialize products</li> </ul>
<b>Nugget</b>	<ul style="list-style-type: none"> <li>A resources library for grants and financial assistance</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>Automated communication service for consumers with special needs. Multiple services can be combined to address user's need i.e. voice to text and text to required language for both service provider and the consumer.</li> <li>Automated matching services to find collaborators, volunteers, managers and evaluators for a project</li> </ul>

## For schools, libraries, and other public venues

These venues are increasingly relying on ICT, a realistic and affordable mechanism for them to be able to ensure that their ICT will work with the full range of students/patrons of their facilities.

### Media and Materials

**Small Usecase:**

A local library has recently upgraded their central computer system. Their computers used to be equipped with the Infusion Preference Management Tool. However, this tool seems to be incompatible with the new system and does not run on the computers. The library manager logs into the P4A, goes to the Resources section and downloads a new version of the Preference Management Tool.

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: member, public institution, needs to update accessibility tool</li> <li>Who is giving: platform support, accessibility tool owners/ authors</li> </ul>
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<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Updates will be available for any application that is included in the resources library</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Resource support</li> <li>• Discussions and comments on resource pages</li> <li>• Change and update notifications</li> <li>• Access to other users of the accessibility tool</li> <li>• Distinction between active and inactive resources</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• Automatic upgrades with user permission</li> </ul>

**Medium Usecase:**

At a state university, students have to use the school's website to register for their courses. Last semester, the school received a few complaints regarding the inaccessibility of the online registration process for students with visual impairment. According to these students, insufficient or incorrect labels for different sections had led to confusion and selecting wrong courses or sections. This was a very important matter, and the university is making any efforts to fix this issue before this year's registration begins. The staff from the registration office search the GPII unified listing for developers who have worked with visually impaired users and are able to work with the existing program to fix its problems. They also send a request to P4A to introduce them to the possible matches.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: non-member, public institution, needs to make their online tools more accessible</li> <li>• Who is giving: platform members, developers</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• High level of quality is attainable without a formal quality checking process</li> <li>• These projects can be done remotely.</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Advanced Search Tool</li> <li>• Qualification summary on account page for developers</li> <li>• Rating and reviews</li> <li>• Assistance creating contracts (different levels of complexity depending on the interaction)</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• Automated matching service to populate all the relevant solutions for a request</li> </ul>

**Large Usecase:**

Sherry is a student in computer science who has vision loss. In April, she approaches the professors who will be teaching her in September asking for the titles of the textbooks she will need so that the Disability Services Office can arrange to get them digitized for screen readers. The digitization process for several textbooks can take up to a few months. Thus, Professors immediately provide the Disability Services Office with their required titles. In the office, John who is responsible for providing the accessible academic material for students logs in to the university's P4A account and runs a search for the required titles. He finds a discussion regarding one of those textbooks and finds out that the book has already been digitized for other customers and is available for sale on the GPII marketplace. He sends out a request for a copy any pays for it through P4A. A large portion of the money goes to the person who had digitized the book and some part of it goes to the consumer who had initially purchased the service. For the other titles, he creates a 'Call to Action' for digitizing those textbooks. He describes the situation, desired solution, timeline, and available budget for each textbook. His 'Call to Action' pops up on all the relevant discussions, projects, and user accounts. Upon university's agreement, the digitized books can be made available to public on the P4A Empowerment Open Source.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: member, public institution, needs to convert media to an accessible format</li> <li>• Who is giving: member, individual looking for occasional work</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• There will be some degree of quality control (unclear who is in charge of this)</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Advanced search tool (including some filter for provider's credibility, whether based on points, feedback, or qualifications)</li> <li>• Allow members to take on only a part of the project and be able to vary the degree of information sharing and work overlap between members, from entirely separate to completely collaborative.</li> </ul>

	<ul style="list-style-type: none"> <li>• Purchasing from the GPII marketplace and distributing funds appropriately among contributing members.</li> <li>• Review and feedback</li> <li>• Payment</li> <li>• Resource library- Upload content</li> <li>• Testing and Quality Checking</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>• A combination of automated and manual services can be used for converting documents to an accessible format</li> <li>• Automated service to assure the provided material complies with the accessibility rules and guidelines</li> </ul>

## For service providers and NGOs

It needs to provide the information these agencies need to be able to determine which types of solutions would be effective for the different individuals they are supporting, and to provide new models for funding access solutions.

### Media and Materials

#### Medium Usecase:

Arizona's Transportation Union is trying to make their members more aware of their rights at work place. Drivers often tend to skip long and verbose pages of information either on the website or in pamphlets. Thus, they are not fully aware of their rights and benefits. So, the union is planning to team up with a group of qualified candidates to simplify these documents and make them more comprehensible for all readers. They log into their P4A account and create a 'Call to Action' describing the issue and inviting volunteers to participate in the simplification process.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: non-member, service provider, needs to convert media to accessible format</li> <li>• Who is giving: members, experts in simplifying content</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Incremental user testing is enough for quality assurance</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Search</li> <li>• Project management tools (Progress point creation and approval)</li> <li>• Project distribution among participants</li> <li>• Payment structure</li> <li>• Rating and feedback</li> </ul>

#### Large Usecase: \*

An Indian NGO is hoping to make the voting process more accessible and enable people to participate in their municipal or national elections. They reach out to the P4A and submit a 'Challenge' for transforming the election ballot. P4A ~~approves the challenge, and~~ presents it on the platform. All members including developers, designers and regular users are invited to participate in the challenge. Members can discuss the right approaches in the P4A platform, select the best strategy, make quick prototypes for it and get feedback from the NGO.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: member, NGO, needs to make a process more inclusive</li> <li>• Who is giving: new members, students, complete project for alternative compensations such as course credit</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• Students would be willing to work for alternative compensations such as training and experience</li> <li>• NGO is motivated to provide valuable learning opportunity for participants</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Basic Authoring Tools</li> <li>• Content upload</li> <li>• Discussion and feedback</li> <li>• Concept development tools</li> <li>• Messaging</li> <li>• Badging</li> <li>• Adding providers to preferred network</li> <li>• Copyright/ authorship credit</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• Work-study internship (low cost labor for credits, learning, experience, etc)</li> </ul>

<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>Automated matching services to find collaborators, volunteers, managers and evaluators for a project</li> </ul>
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## For governments

It needs to provide more cost-effective mechanisms for the governments to ensure that the people in their countries can be maximally productive and prosperous in an increasingly digital world even if they face barriers to ICT use due to literacy, digital literacy, disability, or aging.

## Media and Materials

### Large Use-case:

One of the European countries is planning to convert all their tourism material including maps and booklets to an accessible format in order to host a wider range of visitors from across the globe. At the same time, they would like their products to be made by people who are either experts in the field of accessibility or have experienced a type of disability. The tourism department signs in to the P4A and creates a 'Call to Action' to invite designers and developers and volunteers to participate. They also announce the available resources and grants for the final project.

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: member, government institution, need to convert content to more accessible format</li> <li>Who is giving: Platform members</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>We can maintain consistency, quality, style and language across several chunks of a project</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>Browsing and search</li> <li>Access to GPII unified listing</li> <li>Geotagging</li> <li>Specification for local participants</li> <li>Payment and funds distribution</li> <li>Auto/manual chunking of a project</li> <li>User testing tools</li> <li>Feedback and rating for participation and the overall work</li> <li>Messaging</li> <li>Project management tools (timeline)</li> <li>Small chunks can also be published in AOD</li> </ul>
<b>Potential Automated Services</b>	<ul style="list-style-type: none"> <li>Automated matching services to find collaborators, volunteers, managers and evaluators for a project</li> </ul>

### Multi-Sided Use-case: \*

- Maria needs a large bag for the back of her wheelchair and she's found that although wheelchair backpacks exist there's nothing as large as what she needs. So she designs a backpack that meets her needs, but she needs someone to source the materials and make the backpack for her. She goes to P4A and initiates a call to action detailing her needs and also asking for a cost estimate. Guy responds to Maria's call for action and says it will cost about \$250 for the materials and sewing work.

- Maria is on a low income so can't afford to pay Guy for his work, and as far as she knows there are no organizations or government funding sources that will provide funding for a wheelchair backpack, especially one that's custom-made. So she goes into the financial section of P4A and initiates a request for financial assistance, detailing why she needs the money and maybe attaching a copy of Guy's price estimate. Janet sees Maria's request and can help, so she contacts Maria and suggests sending the money to Guy directly. Maria passes on Janet's suggestion to Guy and he agrees. Janet sends Guy half the cost of the bag up-front and sends him the rest when he completes the bag and gets it to Maria.

- Guy realizes there are other people who need wheelchair backpacks like Maria's and also don't have the money to pay for one. He advertises his service on the GPII Marketplace and Unified Listing, but he also sends out a call to action in the Financial section of P4A, requesting a funder who from time to time can help out people who want him to make a wheelchair bag for them but can't afford it.

- Maria has been complemented a lot on the design of her wheelchair backpack, so she creates a Unified Listing and uploads her design along with a few variations. On her listing she advertises that for a fee (e.g. \$50) she will design a bag to meet a person's individual needs. Some of the people who buy Maria's design work are in Guy's area so she also puts them in contact with Guy so he can make the bag for them.

<b>Actors</b>	<ul style="list-style-type: none"> <li>Who is asking: member, consumer with unmet need</li> <li>Who is Giving: member, producer</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>Members will maintain their collaboration through the platform</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>Copyright guidelines/ protection</li> <li>Messaging</li> <li>Financial assistance/ crowdfunding</li> </ul>

- GPII unified listing
- Browsing/ searching
- Payment distribution
- Ongoing use of project space (as a storefront)

## Automated Services:

### Small Usecase:

Ajay and his parents have recently immigrated to Quebec from Pakistan. Besides his Punjabi accent, his speech disorder has made it difficult to communicate with others. Upon arriving to Canada, he is introduced to P4A services in his welcome package. After browsing through the platform, he notices that he can sign up for a quick translation service within P4A. With his parents' assistance, he signs up for this 'AoD' service, selects the languages he is interested in, agrees to the service terms and conditions and chooses his payment options. From now on, every time he needs to use this service, he does not need to go through a setup process. He can simply open the 'AoD' service on his device and type in his desired word/phrase /sentence in Punjabi. First, the service translates the word/phrase/sentence into French text. Then, an automatic voice repeats the text with Quebecois accent. If there are no available translations for the requested word, the service provides Ajay with possible images that may represent his requested term. Upon selecting an image, a french translation is provided. If nothing is found, Ajay is asked to modify his query for better results. This service is also equipped with Geolocation. Thus, when Ajay travels to other cities with a different language or accent, the service suggests Ajay to translate his query to the local language.

Ajay won't be charged if he looks up words that he has already searched and paid for. He is charged depending on how much he uses this service. The payment is distributed between P4A and the organization that has made this service available on the platform.

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: new member, consumer with unmet need</li> <li>• Who is Giving: member, organization that provides an automated service via P4A</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• There is an advantage for the organization to host its service within P4A</li> <li>• There is some separation between assistance on demand and the rest of the platform specially on mobile devices for quick access (e.g. separation between the Facebook messenger app and the Facebook app)</li> <li>• Members can purchase system credit or pay subscription fees</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Quick and easy way to go through the initial setup</li> <li>• Autosuggestion based on user's prior query</li> <li>• Geolocation</li> <li>• Feedback and rating</li> <li>• Automatic updates</li> <li>• Payment options</li> <li>• Payment distribution</li> </ul>
<b>Nuggets</b>	<ul style="list-style-type: none"> <li>• User generated content (user or his dependents can submit content to the service to enrich its collection i.e. Wikipedia)</li> </ul>

### Medium Usecase:

An international bank needs to revise its online documents in order to comply with global accessibility standards. Prior to making any changes, the bank would like to know the scope of required work and efforts. They sign up for an automated service within P4A. A list of URLs are provided for this service and it checks out all these pages and documents for proper formatting, tagging, image description, etc. At the end, this service provides user with an estimate for the required time and efforts to revise these documents. It also populates a list of experts from the GPII Unified listing that may be helpful for this project. The bank is charged based on the number of documents submitted for estimation. (AChecker is a smaller scale of such service).

<b>Actors</b>	<ul style="list-style-type: none"> <li>• Who is asking: non member, institution needs to comply with accessibility rules.</li> <li>• Who is Giving: member, organization that provides an automated service via P4A</li> </ul>
<b>Assumptions</b>	<ul style="list-style-type: none"> <li>• There is an advantage for the organization to host its service within P4A</li> </ul>
<b>Functions</b>	<ul style="list-style-type: none"> <li>• Easy upload of documents/URLs</li> <li>• Quality control for documentation review</li> <li>• Populating results within reasonable timeframe</li> <li>• Estimate output</li> <li>• Feedback and rating</li> <li>• Payment options</li> <li>• Payment distribution</li> </ul>

### Large Usecase:

Lance is a professor at the University of British Columbia. In addition to teaching product design courses at the University he volunteers some of his time to create online open education courses. After finding out about P4A through his University, Lance becomes engaged with the P4A community, participating in discussions and contributing feedback to products in development. In addition to his engagement through discussions and groups, he contributes to the P4A community by making his online courses available through the platform. Lance likes to use a lot of videos in his teaching. He wants to make these videos accessible and create subtitles in other languages so that more people around the world can watch his courses. He creates a call to action to produce transcripts, captions, and audio descriptions of visuals for his videos, he also requests that the content be translated into French, Spanish and German because several of the platform members he has been chatting with who are interested in his courses speak those languages. Because he uploads videos regularly, he automates the service so that the format for his output, the terms and conditions as well as the payment structure are specified once in advance. After setting up the service, each time he uploads a video a request is automatically submitted and [usually] within a few days he receives the transcript, captions, visual descriptions and translations. The task is completed by several platform members, for example one member creates the transcript and captions in English, another translates the content into French, another into Spanish and so forth.

<b>Actors</b>	<ul style="list-style-type: none"><li>• Who is asking: member, instructor creating accessible open source educational content</li><li>• Who is giving: platform members trained in creating accessible media and materials</li></ul>
<b>Assumptions</b>	<ul style="list-style-type: none"><li>• Automated services have a high degree of quality control</li><li>• Requests are addressed within a reasonable time frame</li><li>• For tasks that require multiple steps or people to complete, the system is able to create a workflow and delegate task components to one or several members</li></ul>
<b>Functions</b>	<ul style="list-style-type: none"><li>• Set up of automated services for recurring requests</li><li>• Content upload/download</li><li>• Payment support</li><li>• Feedback and rating</li><li>• Discussions</li><li>• Online course content (video, notes, reading materials)</li></ul>

## Unsuccessful Usecases: Planning for Success

### For AoD Services:

When consumers use the 'AoD' services, they require a response within a specific timeframe. If they receive no response within that timeframe, the system should provide consumers with incentives to prevent them from leaving the system. For example, in Patrick's usecase, if he doesn't get a reply within 30 minutes, the system can offer him a free pass for the next time he has an image reading request.

### For Call to Actions and Challenges:

When consumers create these types of projects, they probably need people or automated services to help them solve a problem. Although these projects have a more flexible timeframe, they need other members' participation in order to get done. Thus, if the system is not populated enough or if the current members are not interested in participating the project will be left out. P4A can help these projects get more visibility through reaching out to the possible candidates on GPII listing, promoting the project in related spaces, helping consumers to slice up their project to more manageable pieces and promote them separately, connecting projects to relevant sources outside of P4A .

### For Discussions and Groups:

When users create a discussion page or a group, they are possibly looking for peer feedback, directions and user insights, etc. Thus, discussions/ groups with no participants are not desired. Discussions/ groups do not have a defined timeframe and they can grow over time. P4A can promote discussions/ groups on the relevant spaces in order to get people interested in the topic. For instance, in Richard's usecase, if no body joins his group after a week or so, the system should promote this group anywhere that Richard's desired software or relevant issues are mentioned.