

**Ghana Think Tank 2.0**

by

Taylor Niwa

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## Abstract

Ghana Think Tank 2.0 (GTT 2.0) is the concept development of a digital version of the original participatory project, Ghana Think Tank (GTT). The goal of GTT 2.0 is to create an application for digital platforms to promote cross-cultural communication between 'developed' and 'developing' countries.

Ghana Think Tank seeks to change the power dynamic between the first and third world. This is achieved by collecting problems from people who live in developed countries such as Germany or the United States. These problems are then sent to groups of people who have formed Think Tanks in developing world, for example, Ghana, Mexico, Morocco or Serbia. Once a Think Tank has agreed upon a solution, it is sent back to the original country from where it was submitted and implemented in those communities. Third world countries now have the opportunity to solve first world country problems.

This project has been running for the past six years. It has appeared in museums, galleries, and communities from around the world seeking participants from vast audiences. In person interaction is the primary mode of communication between core managers of Ghana Think Tank and participants. A digital solution can provide a platform in which global audiences can now become involved, and physical proximity becomes less relevant. However, the intervention of digital technology in the communication process also presents new challenges and context to the original Ghana Think Tank Project. GTT2.0

GTT 2.0 is divided into two documents, an insight report and a solution report as well as click-through wireframes to visually display the functionality and mock-up of the mobile and web application. The insight report provides initial research which supplemented the decisions outlined in the solution report of the application designs.

## Introduction

People are always communicating. Talking, writing, drawing, listening, viewing and body language are some of the ways human share information. Life has shifted towards reliance on Information Communication Technologies (ICTs) as a modern form of communication. Tablets, cellphones, laptops and desktops are some examples of digital tools that fall under the category of an ICT. For those who live in a culture where ICTs have become integrated activity of daily life, it may be hard to imagine these modes of communication only account for a small percentage of the world's population. Although only one third of the world currently has access to the internet, the integration of ICTs in a global context is growing. Digital tools provide faster correspondence locally and globally, and the physical location of a person is becoming less relevant when exchanging information. For example, the average distance between people who 're-tweet' is 600 miles (10). For those who are connected, ICTs allow for more opportunities for cross-cultural communication. However, there are potential disadvantages for those who do not have the means to adopt these new technologies in their communities. Countries may be left behind in the global market without ICTs, and don't have access to information.

### What is Ghana Think Tank?

Ghana Think Tank (GTT) is a participatory project that connects people from diverse cultures by sharing information between 'developed' and 'developing' countries to promote cross-cultural communication. It is a social critique examining social biases between people from different cultural backgrounds. GTT also reverses the power dynamic between 'developed' and 'developing' countries. The original Ghana Think Tank project is lead by Christopher Robbins, Jonathan Ewing and Carmen Montoya. They are the core members of

the group who are managing the project.

GTT members collect problems from people living in ‘first world’ or ‘developed’ countries through written submissions, post cards or video recordings. These problems are then sent to ‘Think Tanks’ or groups of people located in ‘third world’ countries such as Ghana, Serbia, and Morocco. Think Tanks brainstorm solutions for problems. Those solutions are then brought back to the original country where the problems were collected, and implemented into communities where the problems were submitted.

### What is GTT 2.0?

Face to face interaction is the primary form of communication for the original Ghana Think Tank Project for the past six years. Now, new methods of running the project are being explored by utilizing digital media platforms and has manifested into the concept development of Ghana Think Tank 2.0 (GTT 2.0). The concept development is the project plans designed to be handed to a developer who can create a ‘live’ and functioning application. These plans are organized in two phases, an insight report and a solution report. A web app can allow the original GTT project to take a new digital form. The process of the concept development solved some challenges as well as raised new questions about the implications of transitioning to digital platforms. The development of GTT 2.0 examines conceptual, social and logistic possibilities involved with introducing digital media and ICT platforms to the project.

### Methodology

The intent of this paper is written to fulfill multiple roles. I will discuss my process when creating 2.0, including the preliminary research that lead to the solutions and mock up of the design. This paper is also meant as a supplement towards further research for the continuing development of 2.0. A written description of the process can provide clarity and

further insight of the project's progress for core GTT members, future developers, curious readers, and to satisfy my Senior Project audience. A section is dedicated to investigating the socioeconomic effects of Information Communication Technologies (ICTs ) in the global sphere to see how target audiences can access and interact with 2.0. It is also supplemental research for the insight report.

The insight report was the initial research phase before deciding on a final digital solution. Before creating features, elements, and the structure of the final concept, I conducted a research analysis throughout the fall semester. The insight report discusses who the target audience is and who would use this application. A more in depth analysis of the demographic of both 'developed' and 'developing' countries and their utilization of ICTs are also included in this paper, providing detailed research for core members of GTT. It provides an overview of the original GTT project, goals, stakeholders, user case scenarios, and examines similar projects. Information was gathered through desk research, from scholarly articles and writers around the world. I sent interview questions to core GTT members, previous participants, TT's in Mexico, Ghana, and Serbia and peers who could be future potential users of the application. ICTs and digital platforms such as email, social media, and databases were utilized in gathering information from global audiences. ICTs potential in closing physical proximity for sharing information and communication was revealing itself. Both the insight and solution report are written for core members, those new to the project, and future application developers to provide more context for the project.

The solution report was written in the spring semester, following the research phase of the insight report. The solution discusses the functionality in the application design, recommended platforms, flowcharts and interactive wireframes / prototypes. Diagrams, photos, screenshots and written descriptions of the app's functions are included in the

solution phase.

### Personal Background

I chose to approach the development of the project following this structure because I wanted to apply my education from studying abroad into my New Media education. In spring 2013, I studied E-concept Development at KEA located in Copenhagen, Denmark. New Media is where art and technology intersect. In contrast, I learned how these same tools can be used in E-commerce, and a more business oriented structure. I also learned to identify research topics to explore for my insight in order to design a more effective application. Working on client based projects at KEA is how I learned to divide projects into a research and solution phase. By working with GTT, I wanted to experiment with the skills I learned through both educations and how they can be utilized in my Senior Project.

GTT 2.0 explores multiple social, public and personal dichotomies. GTT and 2.0 experiments with social interaction and the intervention of digital tools in the communication process. It explores how interaction in 'real life' may change through digital interaction. Countries with different cultural values and experiences meet at 2.0 where cultural power dynamics are now reversed. Here, a participatory art project meets design and 'corporate' client based work. Art and business educational experiences from two different countries intersect.

### Research Phase: Fall Semester

Christopher Robbins and I established in our initial meetings, the needs of GTT that had to be solved in 2.0. Much of the GTT process requires the core members to be in the physical location of where the project was conducted. The nature of GTT was heavily place based. The digital solution should provide a space for participants to submit their problems

and for Think Tanks to discuss and submit solutions. 2.0 should also act as an archival space that records the correspondence between participants. An online version of GTT could also become a new access point for global audiences who do not live in the direct vicinity or neighborhood of a gallery where the project is showing. 2.0 can also help spread awareness of the GTT project.

Other desired features of the site were outlined in a letter of agreement between myself and GTT core members. Some of those requirements included the option for users to discover other problems submitted around their geographical location. They should be able to search for content submitted by people who live in another part of the world. Utilizing digital tools could bridge the distance GTT core members were facing due to the place based nature of the project, as well as open up new methods of interaction between users with the integration of ICTs. During the initial research phase of the project, I investigated the influence of modern ICTs and their socioeconomic effects in the global sphere. Before designing the application, the target audience had to be established. GTT's overarching goal is to reach and connect to global diverse audiences of any age, gender, racial identity, or location.

## Identifying Target Audiences



This image was taken from a GTT project that demonstrates the diversity of participants. Since we are dealing with a vast global audience, it was important to establish a sense of how people connect to the internet. I wanted to know what platforms are used in various regions, and how they are used in their daily lives. I began research on a grand scale by establishing the correlation of the utilization of ICTs between developing and developed economies. A country's economic stability affects what types of ICTs people use in different regions. It is important to investigate different user browsing experiences in order to create a digital solution that is viable for diverse audiences. I address ICT availability to users in developed and developing countries on a macro scale, to understand how users are accessing the internet. I then look at what applications people tend to use on a micro scale.

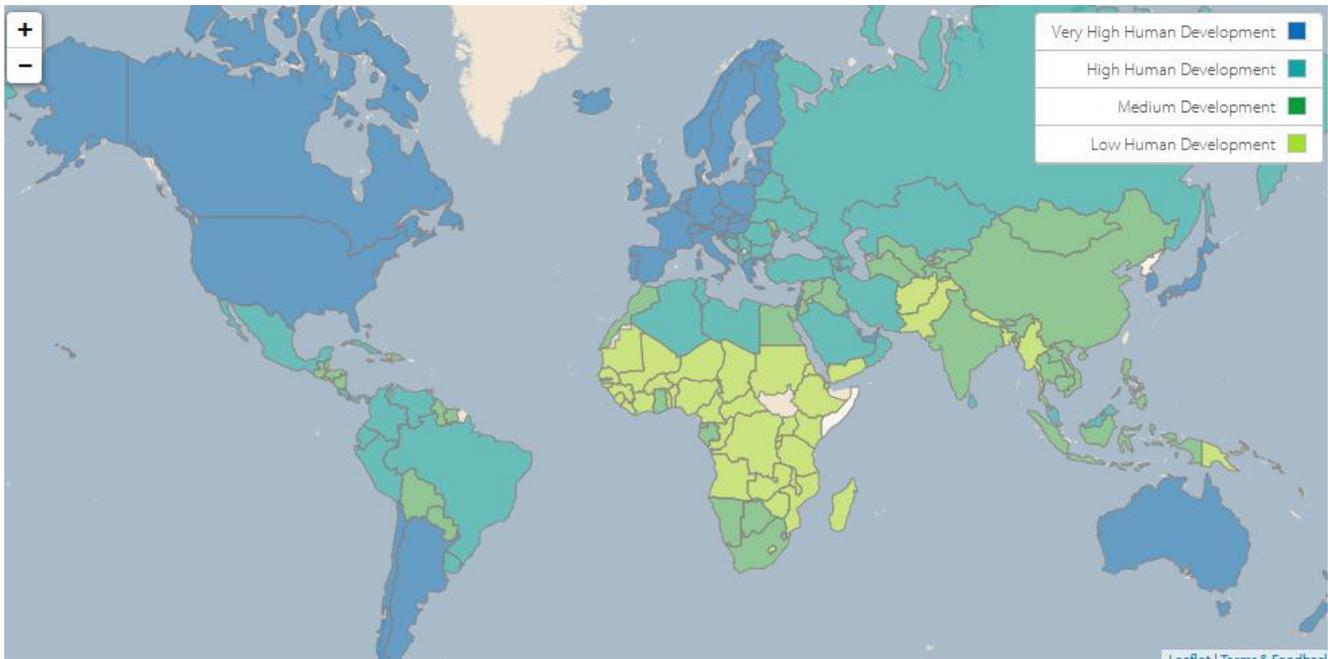
## 'Defining' 'Developed' and 'Developing' Countries

GTT's target audiences live in 'developed' and 'developing' countries. These terms have been referred to in quotations because there is no official criteria to qualify a country as developed or developing by GTT or otherwise. "Developing country is a term generally used to describe a nation with a low level of material well-being. Since no single definition of the term *developed country* is recognized internationally, the levels of development may vary widely within so-called developing countries." (3) Although there is no official definition, Ghana Think Tank uses these terms to challenge people's assumptions of how they define developed and developing countries.

The Human Development Index (HDI) was created by the United Nations that measures a country's propensity for human development based upon life expectancy, education and income. (8) For example, there are similarities between a country's ranking on the HDI and Network Readiness Index (NRI). The NRI is provided by the World Economic Forum, and ranks a country's propensity to utilize opportunities provided by ICTs. It is defined as "--- the 13th edition of the *Global Information Technology Report*, which provides a comprehensive assessment of network readiness, or how prepared an economy is to apply the benefits of information and communications technology (ICT) to promote economic growth and well-being." (6)

The map image listed on the following page, is a screen-shot of data visualization of the HDI. The top countries listed on the NRI are Finland, Singapore, Sweden, Netherlands, Norway, Switzerland, United Kingdom, Denmark, United States, and Taiwan (China). The countries on the bottom of the list are: Mauritania, Swaziland, Madagascar, Lesotho, Yemen, Guinea, Haiti, Chad, Sierra Leone and Burundi.\*

\*[http://www3.weforum.org/docs/GITR/2013/GITR\\_OverallRankings\\_2013.pdf](http://www3.weforum.org/docs/GITR/2013/GITR_OverallRankings_2013.pdf)



### Economic Investment of ICTs

I have identified ICTs and the integration of networks as consumer items, and will be addressing economic position to discuss technological feasibility within various regions. It is important to note however, that economy does not always directly determine the potential for a country to utilize these tools, nor is it the only factor that labels it as either 'developed' or 'developing'. ICTs provide more than just convenience for users to access web and mobile such as 2.0, but provides access to information that is valuable in a global dialogue and economy. The benefit of connectivity in the job sector alone provides speed and convenience of production, thus contributing to the power dynamics of a country's status. This is essentially forcing developing countries to invest in the integration of ICTs, or risk being left behind in the global market. The idea is controversial, especially when it has been argued that these resources can be put towards basic necessities such as clean running water. It also exemplifies one of the challenges GTT faces when creating a digital version of their project.

Globally, there is unequal access to ICTs and Internet and can also be referred to as the 'digital divide'.

### The Digital Divide

The 'digital divide' describes the inequality of access to information between individuals, communities and countries. Literacy, disabilities, affordability are some examples that describe the 'have nots' group. According to the Internet World Stats, that these disadvantaged groups have lower access to current and up-to-date technologies. "Researchers report that disadvantage can take such forms such as lower-performance computers, lower-quality or high price connections (i.e narrowband or dialup connection) difficulty obtaining technical assistance, and lower access to subscription-based content." (4) Rural areas are also addressed, and is stated that economy is one of the major obstacles to equal access to information. "Lower access prices are required to bridge the ICT divide" (4). A digital solution for GTT can potentially marginalize audiences in developing countries who do not have the means to afford access to ICTs. One ideal target group for GTT are from diverse demographics, such as communities from a rural village. This group is most alienated from digital platforms. Outside of GTT's hurdle, this also speaks to the global problem with the digital divide.

### Broadband Connection Speeds and Platforms

As discussed, the quality of internet access is affected by investment costs. "...fixed broadband continues to be the most expensive service of all those included in the IPB [ICT Price Bracket]" (11). Typically, developed economies can afford fast broadband connections, and it is common for households to have fixed broadband at home. "...the majority of developed countries' subscriptions are at speeds above 2 Mbit/s, while many developing countries are

limited to speeds below 2Mbit/s” (11). Place-based or fixed broadband have faster speeds, higher quality connections, and have the capacity for advanced broadband technology. In developing countries, many have turned to mobile devices and networks because they are more affordable. However, connection speeds are often inconsistent in comparison to fixed broadband. This changes user experiences with ICT devices and applications. According to the International Telecommunication Union, broadband connection speeds vary depending on the platforms used. “Speed and quality also differ between mobile and fixed technologies. So far, mobile technologies - although improving with the introduction of LTE advanced- do not replace fixed technologies for intensive, high-end users. For them, the preferred option will therefore be a high-speed fixed - broadband connection. On the other hand, the mobility requirements of users also vary.” (11)

#### ICTs for the 'Developing' World

Lower-end mobile devices and mobile networks are more affordable than fixed ICT connections and the most common access point to the internet in developing countries. According to the International Telecommunications Union, “Reflecting the strong growth in mobile Internet uptake, growth in household access to the Internet has also accelerated over the past three years, mainly in the developing world.” (11) The quality of technology is improving as well as affordability for mobile access. As technology continues to improve, quality of affordable ICTs are rising. An article from TIME states that there are currently more cellphones in the world than usable toilets (13). “Out of the world’s estimated 7 billion people, 6 billion have access to mobile phones. Far fewer - only 4.5 billion people - have access to working toilets.” A distinction must be made however, that access to a mobile phone does not mean access to the internet. 2.7 billion people use the internet, while 6.8 billion have mobile subscriptions (11). But the penetration of mobile technologies in developing countries

may open up opportunity for internet access in the future, and promote digital literacy.

Mobile data is much cheaper to establish for developing countries, as opposed to installing fixed broadband connections to every home (or running water) (5). Mobile phone companies such as Nokia and Blackberry have already developed products specifically designed for the developing world. Although the use of lower-end cell phones are rapidly growing, not all subscriptions include web access. Basic mobile technologies provide simple Short Messaging Service (SMS) and voice capabilities. SMS and voice have already provided access to information and projects are being launched by major companies to accommodate this audience (2).

## Related Projects

### Facebook for Every Phone

Based on this research, I found it was important to consider designing for mobile platforms for 2.0 to reach global audiences. I looked at how similar projects were approaching the same issues. Facebook for instance, has already created a simplified application featuring the main components of their services so it is compatible with lower end phones. In an effort to be more available to developing economies, Facebook for Every Phone also offers their services for free or very low costs by working with specific service providers. Often, it is the preferred messaging system, as opposed to SMS because it is less expensive. 'The zero-rating of Facebook was the most significant tech story in Africa in 2010,' says Erik Hersman, who has two influential blogs, White African and Afrigadget. So while text messages are cheap, sitting on Facebook is even cheaper." (9) Currently, this service is offered in India, Bangladesh, Russia, Philippines, Egypt, Nigeria, Germany, UK, Portugal, Brazil and Pakistan.

## Wikipedia Zero

Wikipedia has also created a project called Wikipedia Zero to expand their services globally. Access to the internet and information has been deemed as a basic human right by the United Nations. Wikipedia Zero shares the same sentiments, as their information page states, “We want to enable access to free knowledge for every single person on the planet. For many readers in developing countries, their primary (and often only) access to the internet is via mobile.” (14) They are lowering barrier access for those in developing countries who often cannot afford a data plan to access Wikipedia through an internet connection. By designing for mobile, users can access this online encyclopedia through SMS. Like Facebook for Every Phone, Wikipedia Zero also works with select phone companies to relieve costs because financial resources are one of the largest barriers hindering users to access content on Wikipedia. Since their launch, Wikipedia has seen over 400% increase in visitor traffic from regions the project has been launched in. Some of the countries include Uganda, Thailand, Russia and India.

## Ushahidi

Ushahidi is also a related project that utilizes crowd sourcing and maps user information that logs current events in real time. “The original website was used to map incidents of violence and peace efforts throughout the country based on reports submitted via the web and mobile phones.” (1) It utilizes free and open source applications to collect information and also has an interactive mapping feature. Ushahidi uses available digital tools to democratize information. Their ‘Crowdmap’ allows users to tell a story and upload media content by using a map visualization and then share it with other users.

## Learning to Love you More

The Internet has the potential to provide a space for users to utilize as an outlet for self-expression, and the desire to stay connected. 'Learning to Love you More' (LTLYM) is a crowd sourced project where people from around the world participated in simple daily assignments. These assignments ranged from 'record a sound that is keeping you awake', or more involved, 'climb to the top of a tree and photograph the view'. Users submitted the process and results of their version of the assignments onto the website. The results show a wide range of different solutions and interpretations to the daily prompts provided. 5,000 have contributed over the seven-year life span of the piece.

LTLYM helped to identify one of the design challenges for 2.0. GTT 2.0 also requests actions from users in 'Real Life' (RL) outside of the digital space. Currently, GTT heavily relies on social pressure to complete the project. Core members are directly involved in the process in RL by collecting problems, communicating with TT's, and implementing solutions in communities. LTLYM was successful in requesting RL participation from people, and submission photos became documentation of their process as an online archive.

## Surveys

To add more perspective and dimension to my research, I wanted to reach out to past participants of GTT. I emailed survey questions to Think Tank members from Ghana, Serbia and Mexico and participants from developed countries. The response helped to provide insight to what they would like to see in 2.0, based upon their previous experiences with GTT.

## Think Tank Participants Interviews

Regina Cantu had been a part of a Think Tank in Mexico, and I had asked her what features she would like to see on GTT 2.0. Her response was that it would be good to have a map and to be able to upload media. “A map of the connections made would be awesome[sic]. And if it had an interactive feature to see photos of the solutions implemented within the connections created...even more awesome[sic].” She had also mentioned that one of the challenges that she had faced when previously working with GTT was trying to recruit members into a TT. I had also found out that she had originally heard of GTT online through ourgoods.org, a bartering network that trades skills, spaces and objects for creative endeavors. Ivica Mihajlovic from Serbia said in his response that there are many people who are asking him about GTT, and how they can join. “but groups and people around groups are very interesting in what we are doing , how we are solving problems.people are always asking us whats going on , can they join ect. i think we should have more infos about solutions and more photos about them.” Other Think Tank responses similarly wanted to see more media and information available on 2.0 of the solutions submitted.

## 'Developed' Country Participant Interviews

I had also reached out to previous participants from developed countries. Elyse Mallouk from New York, NY had documented and archived GTT in her online exhibition, *Little Paper Planes*, "The Eagle, Bull, and Bear". I asked from her experience, what she would like to see on 2.0. “I would like to see documentation of past projects that visually (and perhaps interactively) demonstrates the exchanges that took place as part of each. Any new exchanges the site enables should make use of social media, where some of the richest conversations are already taking place.” Again the importance of documenting the

correspondence between people is addressed. Catherine McTague, also from NY, had worked with GTT in Corona, Queens. Her suggestion was to bring back the Spanish version of GTT to invite more readers. Deciding how to deal with language barriers was also a recurring problem when designing 2.0.

## Solution Phase: Spring Semester

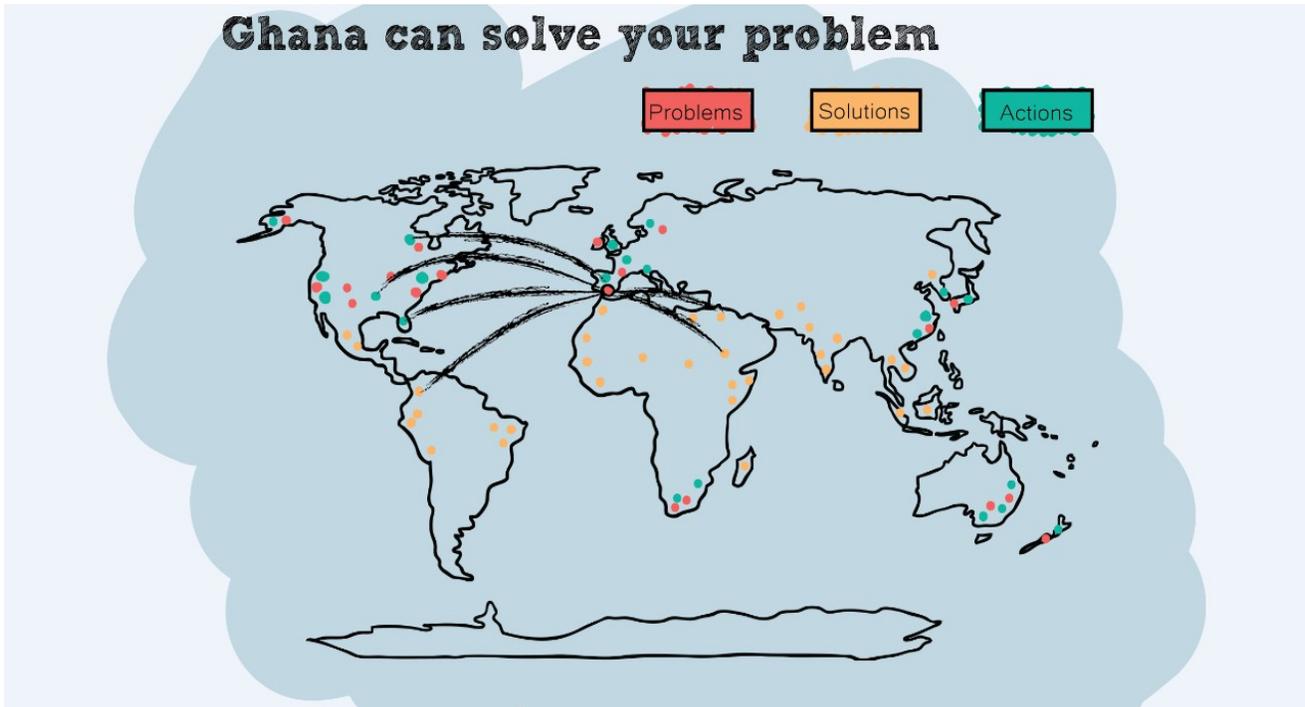
The compilation of all information gathered in the research phase was included in the insight report and presented to Christopher Robbins and my Senior Project Advisor, Nontsikelelo Mutiti at the end of the fall semester. We met as a group to review and confirm these findings and how they can be applied into the design solutions. At this time we discussed ideas including utilizing an information section about the project. We brainstormed ideas of incorporating social media Application Programming Interface (API's) and an interactive map. Much of the results carried from this research and discussion can be found in the following solution phase.

### Solution Terminology

When developing the solution, I coined terms for different features and help to communicate concepts. One of the most common terms are 'P.S.A', and stands for *Problem*, *Solution*, and *Action*. P.S.A describes the process of flow of information. First a problem is submitted, followed by a solution from Think Tanks, and action is the third step when solutions are implemented in communities.

New terminology was also created when designing the interactive map for the website. 'Bubbles' are the circles on the map that indicate the location of a user's activity. Problems are represented in red, solutions are yellow and actions are green. This is a recurring theme throughout the application. 'Vectors' are the lines that appear when hovering over a bubble that visually connects the communication correspondence between users. The following

image is a mock-up of functionality.



### Problemers and Think Tanks

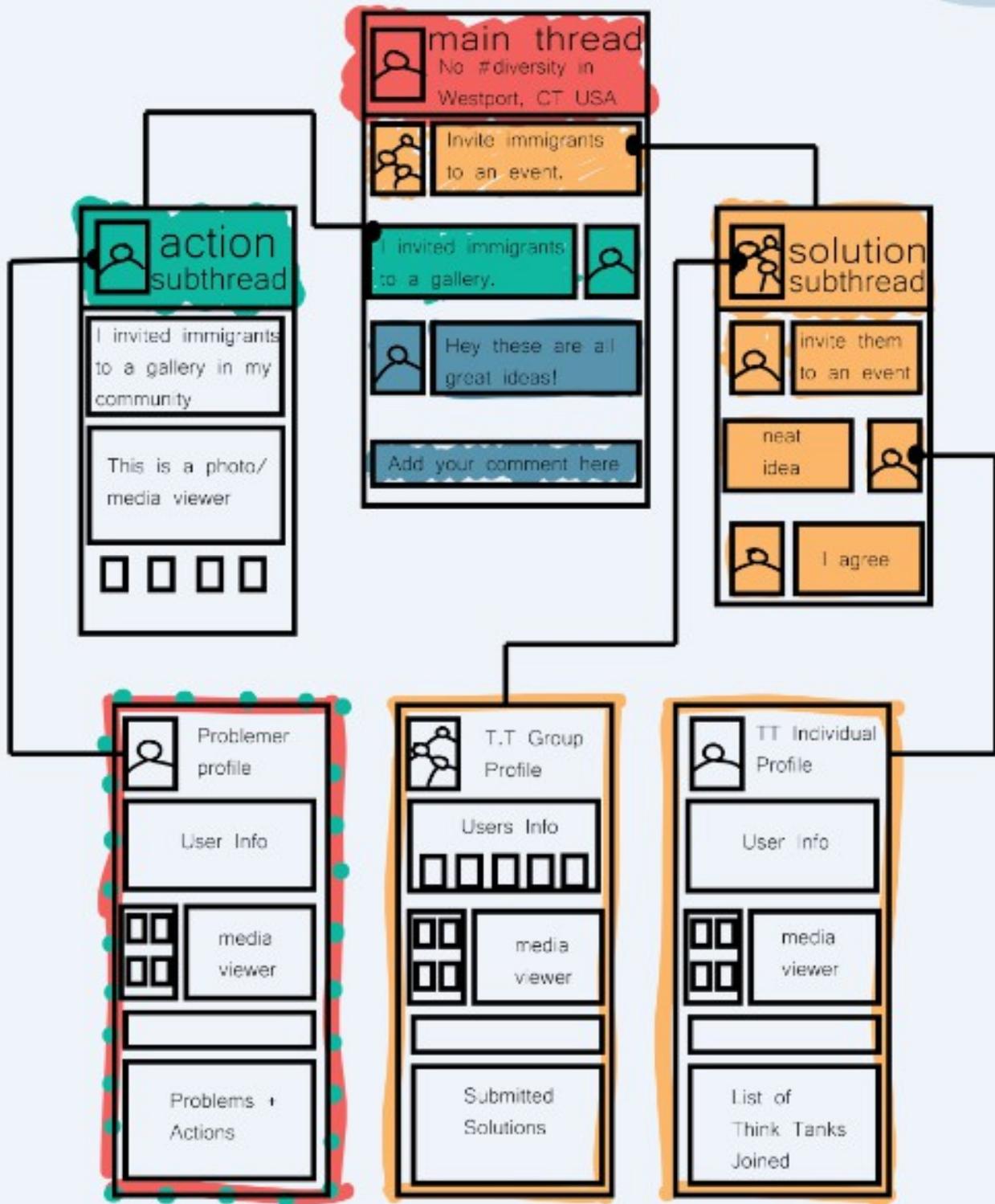
There are also category names for the different type of users. The way in which a user interacts with the website depends on their geographical location. One of the major requirements of GTT is that problems must be submitted from developed countries, and solutions must come from developing countries. This means people will have a different user experience depending on their location in the world. Upon visiting the site, the user's IP address will be detected and they will be one of two types of users. A 'Problemer' (for lack of a better term) is a person who submits problems. A Think Tank (individual) is a person who can join or create a new group with other Think Tank users to brainstorm solutions. Problemers and Think Tanks will have different features available to them in 2.0. Both are able to browse

the page, search, and add comments.

A list needs to be created to determine which countries fall under the developing category and developed category. This will determine if a user is a Problemer or TT. Currently, there are strict guidelines in the design for categorization. For example, not all communities in the United States fit the criteria of a developed country. A user will still be deemed as a Problemer. It will be difficult to sort every user on an individual basis. Also forcefully grouping a participant as a Problemer or Think Tank may put them in a position to face their own definitions of developed and developing communities.

### Threads

The major difference is when a Problemer submits a problem, it starts a new 'Main Thread'. This is the space where user dialogue takes place. Anyone can reply with comments for a general conversation. If a solution or action is submitted, this will create a 'sub-thread'. Within the 'Main Thread', a sub-thread can be selected, and will direct the user to a new space that will provide further details. The details of an 'Action Subthread' will include a title, text description and media such as photos, video and / or audio recording of the actions being implemented in communities. Someone browsing can also see a user's avatar and view profile information and other recent activity. A 'Solution Sub-Thread' displays brainstorming conversation between individual Think Tank members who belong to a specific group. This conversation is public for people who are browsing 2.0, even if the group has not agreed on a final solution yet. This way the user can still be engaged with participant activity, regardless of how quickly a consensus between Think Tank members can be reached. The 'Solution Sub-Thread' will also direct users to view individual profile pages, as well as the group's page.



User Profiles

## Profiles

Every user has their own profile page, as a Problemer or Think Tank. Each user can navigate the 2.0 site as an individual, and leave their own comments in the threads. 'Think Tank Group Profile' is a profile page only available to Think Tank users when they have created a group. This can be related to creating a new group function on Facebook. A Think Tank group is comprised of multiple Think Tank individual members, and their profile pages can be accessed through the group profile. The group profile is the space where they can create a group name, such as 'Mexico Think Tank' or 'South American T.T'. They can upload a group avatar, media and establish a group identity through this type of profile. Here they can invite other members to join.

## Creating Think Tank Groups

This method of communication is one way digital technologies affects the social landscape of GTT. Because physical location has become less relevant, Think Tank participants no longer need to live in close proximity of each other. With 2.0, a TT group can be made up of people from different regions, which may be within the same country or another developing country. When a TT individual user creates an account, they are automatically places into a pre-existing TT group from the country the user's IP address indicates. For example, if a user creates an account from Bombay, India, they will be placed into a TT group comprised of other new Indian TT members. Countries that have diverse societies within a single country, such as India, may produce interesting TT user dynamics. The user however, can choose not to stay in that group and join or create another.

## Flow of Communication

By utilizing social media API's, users can share their activity on GTT 2.0 to their other

networks. This can help to spread awareness about the project, and may increase chances of reaching attention of those without access to ICTs through word of mouth. Since time is limited and distance between GTT core members may be a challenge, 2.0 allows for direct communication between users submitting problems and Think Tanks. Core members do not need to be heavily involved with the digital process and can result in faster communication between participants. In the past, response times for submitted problems have been inconsistent. Although faster responses from TT's are not guaranteed in 2.0, there are other activities and avenues of discussion available in the application that can fulfill the need for immediate gratification that is generally sought and expected by users when using digital applications. For example, users can view their submitted problems being discussed within TTs and the brainstorming process. They may also browse the site for other activity, media, problems, solutions and actions. Anyone is able to browse the site and view correspondence between participants. Photos, video and audio submission are available to upload into conversation or profile updates at any time. This feature also fulfills a need of GTT as a way to archive the GTT process, that can be available for past and future participants.

### Info Section and Language Options

A forum space has been incorporated under the "Info" section where all users can discuss GTT 2.0. The info section will outline the guidelines and concept of the project and created the structure to direct the forum dialogue. Although there are design challenges when switching GTT to a digital platform, new opportunities for interaction have been developed. An interactive map on the website is a visual representation of where problems, solutions and actions have been submitted in the world. Because of language barriers, the map is a visual representation that can transcend written language. Also due to language barriers,

participation from users are predominantly text based so online translation tools can be utilized. Language options can also be set through the user's settings of the interface and content.

## Gallery Installation

For the final segment of the Senior Project requirements, I needed to display my work in the Passage Gallery at SUNY Purchase for the New Media Senior Show. This portion of the process had helped me articulate all of the work and information I have collected thus far and to present to an entirely new audience. However, the nature of this client-based work was not ideally suited for a gallery setting and the completion of the project was not determined by the deadline of the show. It allowed me to explore ways in which I can communicate complex and detailed information. I created a poster illustrating the map feature of the website, vector lines, and the color codes for Problems, Solutions and Actions. Another poster displayed a smartphone with a mock-up of GTT 2.0 that asked, 'What's Your Problem?'. Here, gallery-goers could write their problems and participate with the project. Red, Orange, and Green markers were available to support the theme correlating to the PSA process. Finally, a desktop was set up where users could view the website, outlining the key development documents of the process including an intro video to GTT, a PDF of the Insight and Solution report, demo videos and click-through wireframes to show a mock-up of how the site will function.\*

### Review of GTT 2.0 Development

The process of creating this project also uncovered the discrepancy of what defines a work of design or fine art. The intent of this was was not to fulfill either of the criteria, but to

\*<http://students.purchase.edu/taylor.niwa/gtt-online/gttindex.html>

fulfill particular goals, personally and that of Senior Project requirements. Challenges presented themselves in the production of GTT 2.0. In the beginning of the process I had created a structure for myself, which I had not realized until later was rigid. One of the problems, was that I had established my design tools as the end result as proof of my work. For example, I had prioritized flow charts and wire frames as a deliverable. However, wire frames and flow charts should not be the end goal, but used when needed in the design process to communicate design plans. I learned InDesign to create reports, Axure to make wireframes, and Illustrator to make a poster to be printed large format. I had set out to learn more about digital media's role in global communications. Throughout the research process, it also dug up the question of how communication between people may change with the intervention of a digital tool. The development of GTT 2.0 identified questions throughout the design process. The digital divide problem did not reveal itself until I was already in the research phase, as I was identifying the target audiences by studying the socioeconomic affects of ICTS in the global sphere.

## Conclusion

The intent of this concept design is to create a space where the Ghana Think Tank project exists online. The platform can allow for greater participation from users around the world. Anyone with access to Internet can be a part of the project. Although there are benefits to utilizing digital tools to reach a wider audience, there are also drawbacks. For example, those who live in rural villages are the people GTT want to hear from and digital technology is not as available in their culture as it is in cities. But, a digital tool can be more flexible access point for participants instead of having to be at the physical location of GTT. Email is already used for core members of GTT to keep in contact with current Think Tanks. The integration of

APIs can help users share their activity on GTT 2.0 and bring more awareness to the project. The structure of 2.0 is a hybrid of blog and social media features. Its interface is more familiar to users and contributes to a lower barrier of entry, and more opportunity to promote cross-cultural communication through digital platforms.

The development of a web application is always in production. This digital space will provide a framework to promote live discussions amongst users from around the world. GTT 2.0 has yet to be tested with live participation, and will most likely see adjustments based upon feedback from user testing. However, the current drafts of these concept designs build a solid foundation and provides flexibility for the opportunity to add or take away features as needed throughout its production.

The concept of GTT 2.0 is experimental in nature and at times contradicting and controversial. For example, 2.0 draws attention to the digital divide. In an attempt to reach a wider range of audiences through digital technologies, it also marginalizes those without it. The current designs also categorizes users as Problemers or Think Tanks, strictly based upon their IP address, and what country they are accessing from. This form of data discrimination influences the way people can interact with the application. One of the biggest changes is that Problemers and Think Tanks have direct communication through this model. Core GTT members have been the liaison between participants. Direct communication also means faster communication, as well as access to larger audiences. This application is available to the public, and every individual case cannot be monitored. Structure is integrated into the design to guide users into their role in the project. But these rules are also flexible to amendments as 2.0 is socially experimental.

The concept development thus far has built the foundation to open discussion amongst collaborators. Social and technical topics are addressed and may raise more

questions than answers. The digital divide for example, has been an on-going problem when utilizing ICTS in any community. Some processes of GTT will change when adopting digital platforms. The outlines of problems and benefits of an application for GTT in this project can drive discussions and give context for future endeavors.

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