

Project Milestone 1

Delta Marshallars

Nia Dicks, Ward Eldred III, Clare Rizzo, Aaron Slaven

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## **The Problem Domain**

For our problem domain, our team will explore how user interface technology can be used to encourage people in surrounding areas to attend local events. We chose this problem domain because studies have shown that participating in physical activities provides opportunities for socialization and the development of beneficial communication and cooperation skills.<sup>1</sup> Additionally, it is said that engagement serves as a vehicle for bringing about environmental and behavioral changes that will improve the health of the community and its members.<sup>2</sup>

Since acquiring this information, our plan is to examine the present methods that motivate community engagement and find technological ways to expand on said present methods to advance involvement further; in doing so, we express our hopes of fostering a community feeling amongst local members. On top of this, we plan to examine why people do and do not like to become involved in their local community. We plan to question those who are actively involved on what keeps them motivated to stay involved. For those who are not active, we will dive into the differences between those who simply choose to stay out of the public light and those who cannot become active in the community. To expand on these categories, for individuals who choose not to be active members, we plan to discuss their frame of mind and attempt to understand why they make these choices.

Furthermore, within this domain, we plan to explore the current technological and non-technological solutions to this overarching question and inspect why or why not those platforms work for or against certain community individuals. To do this, we will test said platforms and determine portions/aspects that we find helpful or unhelpful to the users at hand. In doing so, we hope to find and create a user interface with a balance of aspects that are more likely to improve local community engagement. Overall, the team is treading toward a solution for our overall problem - how do we get people to be more involved in their local community?

## **Existing Solutions and Previous Research**

There are currently several existing solutions, both analog and digital, that provide services to encourage local residents to participate in ongoing community events. Below, we have listed the platforms that exist as well as the information we were able to acquire about them.

Facebook is a social media platform that utilizes online profiles to keep up with friends, family, coworkers, etc. While this is the main purpose of the social media app, Facebook also has a feature that allows you to browse ongoing local events and mark them as interesting if you are considering attending. You can also see friends who have marked that event as interesting so that you may be aware if anyone you know may also attend. According to our collected data, a large percentage of users, 59%, find this tool to be helpful and are currently

using it to find local events. However, as stated above, the sole purpose of this app isn't to connect people with the local events in their community, but rather to communicate with those people via photos, comments, etc. Furthermore, the "Events" section of the app that does show potential local attractions is hidden behind a menu option that is not accessible (not easy to find) without the knowledge of how to do so. Thus limiting a user's ability/willingness to search for local events shown through Facebook.

Meetup is a social media platform that advocates as a user-friendly site for hosting/organizing events, gatherings, etc, for people with similar interests in the community. Meetup allows users to browse ongoing events in an area and RSVP to interesting events. Moreover, Meetup has a connections/messaging feature that allows individuals who attend events to stay connected. All this to say that while Meetup presents a current solution to our problem domain, users have found many flaws within the system and are not satisfied with the functionality provided. One of the most publicly voiced issues pertains to the frustrating purchasing problems. Meetup is a free application for browsers, but to host and organize group events, Meetup requires a monthly subscription. It offers one of two options: Meetup Standard and Meetup Pro. According to current users, although Meetup offers a free version of their platform, the features not provided with the free version seem to have become a handicap for individuals actively using it<sup>3</sup>, thus limiting the capabilities that users have when exploring the site.

The mobile application "Clemson Tigers" is a way for students and faculty to view live sport scores, rosters, and stay up to date with information regarding Clemson University athletics. The app has further functionality such as providing links to important Clemson University Athletics web pages, showing the rosters for the D1 sports teams, and even acting as a ticket manager for some sporting events. While this seems like a viable solution to Clemson University attendees, it helps to solve our problem at a very narrow scope. Additionally, the app is relatively unknown on Clemson's campus and does not have a real use to students other than the sports schedules. As mobile student tickets are only needed for football games, the mobile application feels very obsolete with Clemson's advanced technology. Our system will not only strive to broaden the user base, but also aim to improve the functionality and user interface that this application utilizes.

Hearing about organizations and events through friends and family is the most common and most preferred way as seen by our survey results. This is primarily due to the idea that people are influenced by those around them and are more inclined to be interested in activities that their peers are into. Friends and family are usually a reliable source of information when it comes to recommending events and activities to people they are close to as they know what they like and what they would be interested in attending. Additionally, when people tell others about events, they usually will be in attendance or are involved in the event itself; as we found in our survey we conducted, many people are interested in attending events with people they know or in support of them as well. In order to increase community engagement, it would be pertinent to encourage social interaction.

Posting promotional materials on bulletin boards is a resourceful way to provide information to the local community about organizations or upcoming events in the area. There are many ways that people can hang things up around their community without permission, but many bulletin boards have specific requirements and protocols that one must follow before posting anything. As per the Clemson University Library website “All postings must meet the requirements outlined in the University’s Facility Use Policy”<sup>4</sup> which outlines regulations on the size of the posted material, an expiration date on the posting, and the types of messages included in the posting that are prohibited<sup>5</sup>. While these regulations are specific to Clemson University, there are many other areas that have similar policies and may not approve an organization’s post. While it may be somewhat harder to utilize than other solutions outlined to gain community engagement because of the approval process, it includes very little technology, if any, and, if done properly, can gain attention of passersby very easily.

### **Potential Stakeholder**

This problem domain has the potential to have a large variety of stakeholders with some overlap. Our primary stakeholders based on our research may be targeted to young individuals enrolled in an educational institution. This bias is due to being the domain that every member of the group falls into. Students can be separated into multiple groups including high school students and college students. Students in high school and college can be further divided into members of school-related clubs and organizations. These stakeholders would be interested in the system for a variety of reasons, but mostly to engage in their community more directly, as well as escape the stress of higher education.

Diving into the different types of students involved with extracurricular activities, students on sports teams would want to increase their average attendance at each sporting event. They would utilize our system to spread awareness regarding their home and away games. Meanwhile, students in artistic clubs desire to have an audience at their performances or exhibits. In order for this to happen, they would need to advertise their concerts or shows. Yet, students involved with volunteer-based organizations would use our application to increase the number of classmates who show up to aid in acts of self service to their local community. This could increase their impact on their community. Furthermore, many of these clubs desire to increase attendance at their meetings and public events to increase their scholastic funding.

Aside from students, there is still a plethora of citizens who are potential primary stakeholders in our application. Another category of potential primary stakeholders is families. The most engaged families would either have young children or grandparents that desire to be entertained. Their lack of weekly scheduled activities allows for more opportunities to be involved in their local community. However, it is good to recognize that couples may still attend these events alone to create memories with their significant other.

A third type of potential primary stakeholders is community organizations. Community organizations can also be broken down into musical clubs, theatrical clubs, religious groups, and recreational leagues. Musical and theatrical clubs could advertise their shows. Religious

groups could advertise their weekly worship sessions. Recreational leagues could display their weekly games. These organizations could also utilize our application for promoting community outreach opportunities and fundraising events.

Social media managers would be a fourth potential primary stakeholder group. Their employers desire to spread awareness of public events relating to their company. When using our application, they could advertise their future events in an attempt to increase community participation. It would also allow companies to increase their social presence in the community and possibly grow their network of customers.

One secondary stakeholder may be tourists. They may pass through your town on the way to a destination, and they would have a quick opportunity to attend a local event occurring around their time of arrival.

Another secondary stakeholder is competitors of our system. These stakeholders are impacted by our system's growth, outreach, and ultimately, its success. Competitors may look like any of the previous solutions, digital and analog, we have listed above and also new systems that arise in response to ours.

The system's tertiary stakeholders include social media businesses and local advertising agencies. Social media businesses will be affected by our application, because the interactions on their applications will decrease as our application conflicts with theirs. Local advertising agencies will most likely lose money as more companies and organizations switch to advertising their events on our application.

## **Users**

The user base for our system that will attempt to get people involved in their local community consists of a wide range of individuals. Anyone who lives in the vicinity of our proposed system can be a potential user. This includes people from all age groups and demographics, but specific to the area. Based on our data findings, it will most likely be beneficial to target more localized individuals when creating the system.

A large user demographic that was surveyed was students age 18-25. The nature of this survey bias is due to the group's connection to this demographic, with all members of the team falling in this category. These potential users showed that they are the most involved in their community, with over 80% reporting that they consider themselves actively involved in their community. Of those who reported they do not believe they are active in their community, 60% play on a local sports team or participate in a community organization. This not only shows how involved this demographic is, but also points out that younger people may be selling themselves short when it comes to community involvement. Further dissecting this group, the majority of them are college students, pushing the narrative of most colleges and universities that they want their students to be involved on campus and thus their community. Students that are engaged, or are unseemingly engaged in their community are a viable user for a system.

All students also stated that they would be much more inclined to attend local events if they were free or lower cost. This was not the case with the older demographics surveyed. This creates another main user for our system; students on a budget. College students are notoriously known for being on low budgets and pinching pennies where they can as the cost for school and other living expenses add up. The evidence in our data fully supports this and creates a need for student community involvement that is at little to no cost. Most college students cannot afford to spend excess money on events that are not mandatory and our system can potentially cover this demographic by providing information on events that fall into this category.

Furthermore, the wide majority of students stated that they would preferably not travel more than 10 miles for an event. This may be due to some students not having access to a car, wanting to save on gas money, having limited time due to classwork and other commitments, or any combination of these reasons. This creates a new group of student users that needs to be close to local events that require little or no transportation at all for the best engagement. Our group must now factor in distance to events from each user when we try to get them more involved in their community. A system that not only shows distance to events, but also that can filter event distances, would best benefit this user group.

On the contrary, another group of users that was identified through the survey was those who are in older age groups (44-65+) that do not mind if local events have a cost associated with them. This creates a user group that is indifferent about the cost associated with an event and will attend an event if they deem it suitable. The reasoning behind this group is that everyone surveyed in this group stated they were working either part or full time, or retired. Money may not be as much of an issue to these users. This group needs more specific, targeted events that may incur a cost to the user, but will still get them involved in the community.

Of those surveyed, those who self-identified as retired did not mind about the cost incurred, nor about the distance traveled. This is most likely due to the free time these users have compared to those working jobs or students, who most of the time preferred the closer distances for events. This older demographic user base may want to be informed of all local events, no matter the distance nor cost.

Another group that was not necessarily surveyed are those who are visiting from out of the community. This may include friends and family members of those involved in the community or those just visiting the area for shorter periods of time. For this group, it is important to promote a wide array of events at a wide range of prices and distances to them to not only get them involved while they are in the area, but also to gain insight on preferred event statistics overall. These people may fall into any of the previous categories, but being nonlocal, it is important to inform them well on the event and the area that it is in. This is important to take into consideration for our system; the interaction of temporary, short-term users.

Users who must also be considered are those who own/run the local community events. This group of users, while not directly surveyed, will more than likely be of a diverse demographic. They play a unique role in the system as they need to be able to promote or post their community events for others to be informed about. They will want to be able to disclose information on dates, locations and a general overview of the event. Many times, these users will likely be more inclined to further their engagement through other events too, so the system needs to be able to continue their engagement and promote to them as well. This plays a larger role in the UI and development of the system more than anything else.

While no one surveyed said they would be directly uninterested in local community events, those users will very much exist. The system's job to promote engagement by these users will likely be done through its well designed UI. The worst thing the system can do is be overly complicated, only leading to those already uninterested to now be completely uninterested in our system.

## **Task Analysis**

### **Task Environment**

Our system would thrive best in an environment that has a dense, diverse population that has a good existing community engagement and current infrastructure for hosting events. This infrastructure may look like sports parks, auditoriums, stages, and general spaces available for use by the local community. Existing framework for events would only increase the viability of our proposed system and potentially increase the involvement of locals in their community. In an area without decent prior infrastructure, it would be even more important for the community to get together often on common grounds, in hope to push the local officials to dedicate spaces for recreational activities.

### **Important Task Performed**

While various platforms encourage community members to improve their engagement with local events, here is a short collection of some important tasks that our team has found (based on the data we collected) to be the most important to host a productive and user-friendly system for users.

1. View local events happening within a certain distance
2. Read information on the events
  - a. Read descriptions of event details
  - b. See listed time for event(s)
  - c. View the location and distance to the event
3. Be targeted for specific events
4. Connect with attendees who are also attending the same event
5. Make note of events they are interested in
  - a. Access events users have marked as interested
  - b. Add interested events to an online calendar
  - c. Be able to access events that users have not marked
6. Send notifications to users as reminders

- a. If users have acknowledged that they would like to receive notifications
  - b. Notifications about schedule updates
  - c. Notifications about live updates during the event
  - d. Notifications after the events about the next upcoming event
7. View live updates about ongoing events
  8. Search for events in the area with criteria/filters
  9. Chat with other interested attendees
  10. Share event/event details with others

### Specific Example Solution

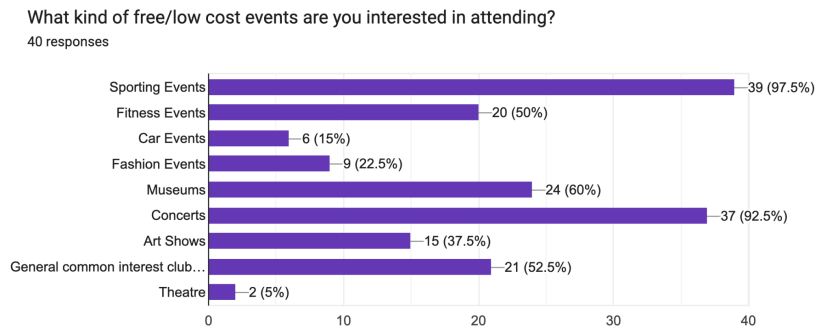
As mentioned in the Existing Solution section above, Meetup, a social media platform, serves as an online hosting/organizing forum for people with similar interests to come together and connect within their community. An example of a particular group that benefits from this application is a group named “Just Travel - Singles Travel Group” stationed in Greenville. This group currently hosts around 4,000 members who identify as single and travel to different bars and restaurants, go on cruises together, spend holidays together, etc.<sup>6</sup> Through this group, attendees have broadened their ability to connect with other single people whilst enjoying the festivities of the Greenville area.

### Data Analysis and Techniques

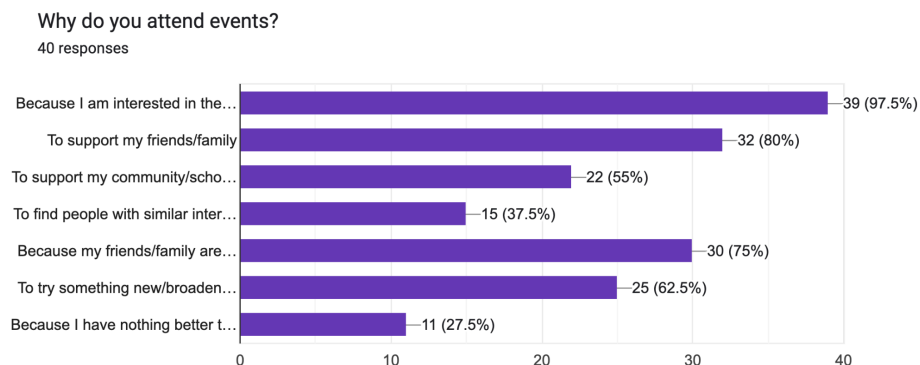
The majority of our data was conducted through an online survey done with google forms that consisted of 11 questions to gain information about each person and how inclined they are to attend local events to support their communities. The rest of our information was gathered from small interviews with peers about their opinions on local events and how they engage with the community. We surveyed a multitude of people from various backgrounds and different levels of initial community engagement. The team decided that a google form was a quick and efficient way to retrieve data from a various amount of people from different areas in a short span of time.

From the 40 responses we received on our online survey, 31 people were in the range of 18-25, 1 person was in the 26-34, 2 people were in the 44-54 range, 3 people in the 55-64 range, and 3 people 65 and over. 45% identified as being an active part of their local community in which they already attend local events or are interested in supporting their community in other ways (and 32.5% identified as maybe being an active member of their local community). When asked if they are more inclined to attend events that are of low cost to them, 85% of the people surveyed said that they are more inclined to attend events if they are low cost, and 67.5% of those people would be more inclined to attend said events if they were advertised better. When given a multiple option select for the kind of free/low cost events people are interested in attending, 97.5% of the people surveyed are interested in attending sports events, 92.5% are interested in attending concerts, and 52.5% are interested in attending general common interest club events.





Additionally, when asked about the preferred way to hear about local events, the majority of responses preferred hearing about them through word of mouth from friends and family, email, or through social media. Furthermore, the majority of people surveyed are at most willing to travel 20 miles to attend an event. Lastly, we found that the majority of the responders attend events because they are interested in the event (97.5%), to support friends and/or family (80%), or because their friends and/or family members are also attending (74.4%).



## Analysis

The majority of people surveyed are between the ages 18-25 and are currently students. All but one of the respondents in this category is most interested in attending sporting events, which is most likely due to the culture of sports surrounding colleges and universities; additionally, many sporting events take place on the college campus itself (encouraging people to attend because of proximity) and are free/low cost for students. Additionally, with the fact that many of the people surveyed are an active member of an organization, club, or sports team can contribute to the inclination for them to attend events; when people are apart of an organization that holds events, they understand the difference that is made when there is a large number of

people in attendance versus nobody being there to support them. Additionally, the fact that people mostly attend events to support their friends/family or to attend the events with them, we can find that social interaction promotes community involvement.

### **Feedback and Response**

The group's first form of feedback during this milestone has been through the professor, Dr. Plaue. He greatly aided our team in preventing us from narrowing the scope down too much. Initially, our team thought to maybe design an app specifically to hone in on college sports at every level. Since the recent closure of the Clemson "All In" mobile app, we believed the need for this arose once more. Additionally, many scholarly articles we researched below, found that college and adolescent sports participation lead to better mental health and overall future stability in young adults. However, we did not realize that the question of community involvement expanded far past this idea. Our system will now aim to play a larger role and incorporate a larger user base from the local community by being a place where local events can be published and seen.

After receiving feedback from around 40 individuals via survey, our initial scope was once again confirmed to be too small. We now realized that users from all demographics would be interested in a more personalized and engaging way to view local and community events. In turn, the system users would become more involved in their communities. The group's question now was: how do we get these individuals more involved?

### **Moving forward/Summary**

For our group, the future will mainly revolve around diving deeper into the existing solutions for our overarching problem and seeing what makes them work or not work as intended. A large part of our system is user interaction, so we plan on getting a good grasp on how and why certain user interfaces work better in different scenarios. In particular, we try out many of these current solutions for ourselves and have our friends and family do so as well. This would serve as further data collection on user interaction and design for our future system. Continuing to attend Dr. Plaue's class will aid alongside our group's own research. We then plan to synthesize this information and push the system into a more solidified area in the future milestone(s). A large part of this feedback will be from our in class studio sessions, getting feedback from other students who are faced with the same task as we are.

In summary, during milestone 1, our team, the Delta Marshallers, narrowed down our systems scope to ultimately try and answer the question: how do we get individuals to be more involved in their local communities? With this idea in mind, we surveyed a diverse group of individuals which led us to find that there was in fact a need for more personalized local event information. Additionally, we came to discover unique demographics that could be categorized into future users of our system. These include students, those who do not like to travel far, and retired people, among many other groups we accounted for. We are continuously looking into

existing digital and analog solutions that may already solve our problem, but have only found apps and websites that lack functionality in key areas.

Future success for our team will be determined by our depicted target users, as well as other new users who may have not been initially accounted for. Continual use and integration of our system will ultimately lead to a more involved and interactive local community.

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