Research Report

A Digital Bulletin Board App

March 2020

Madison Horton, Alyssa DiTomasso, & Ana Ortega

Contents

Introduction

This report consists of our research process of a mobile application within the process of Goal-Directed Design. This report is for an Interactive Design class project, and it describes our process and thoughts behind creating our digital bulletin board application. Our goal is to create a mobile application that will allow users to digitally discover, connect, and learn about social opportunities in their communities and school campuses.

First, we begin with collaberating to discover what the overall purpose, goals, and potential problems will be. From there, we can get more specific with our research, interviews, and user goals. The purpose of the Goal-DIrected Design process is to help our group succeed by focuing on the user and their goals.

We need to acknowledge the user and their needs through a process known as Goal-Directed Design process (GDD). The GDD process was created by Alan Cooper and consists of six steps, but for the purpose of this report, we will only focus on the first step: Research.

The Reseach phase has six steps:
1. Kickoff Meeting
2. Literature Review
3. Competitive Audit
4. Stakeholder Interviews
5. Subject Matter Expert Interviews
6. User Interviews

Kickoff Meeting

Due to the nature of our class and its restrictions, there is one step of GDD that we were not able to do. This step is known as the kickoff meeting and is usually hosted in order to discuss possible issues, questions, or concerns that a stakeholder or client may have before the research or prototyping phase. Because this project is meant to be completed in roughly 2 months and we do not have a client, we were not able to host a traditional kickoff meeting. To replace the traditional meeting, we filled out a worksheet separately before meeting together as a group.

During this worksheet we discussed who we believed our app would be for and what our target demographics would be. The three of us all reached the consensus that we wanted to design our app for college-age people in their 20's or 30's as well as individuals looking to find social opportunities or create their own communities. The goal of our app is to give people a reliable platform to both share event details and discover events within their community or nearby. We imagine our app to be used primarily during the user's free time outside of class or work so that they may discover things to do within their free time. Our users would be acquired through word

of mouth, advertisements, social media ads, influencers, ads on actual boards, and school-approved posters on campus. Once we discussed who would use our app and how, we moved on to brainstorming possible looks and aesthetics of the app. By getting a feel of what our app will look like, we will be able to organize our features and interface more easily as the design process goes on. We knew we wanted to

use a non-traditional grid layout that has an organized yet semi-chaotic feel to it. It is important that our app makes it easy and intuitive to access and use the features we wanted to implement, such as: create an event, create a flyer, ask the event host a question, report an event, and many more.

The goal of the kickoff meeting is to collect as much information as possible. We use

the information to create an outline of what we hope to accomplish as a group throughout the remainder of our time and to create a timeline in order to order to reach our deadline.
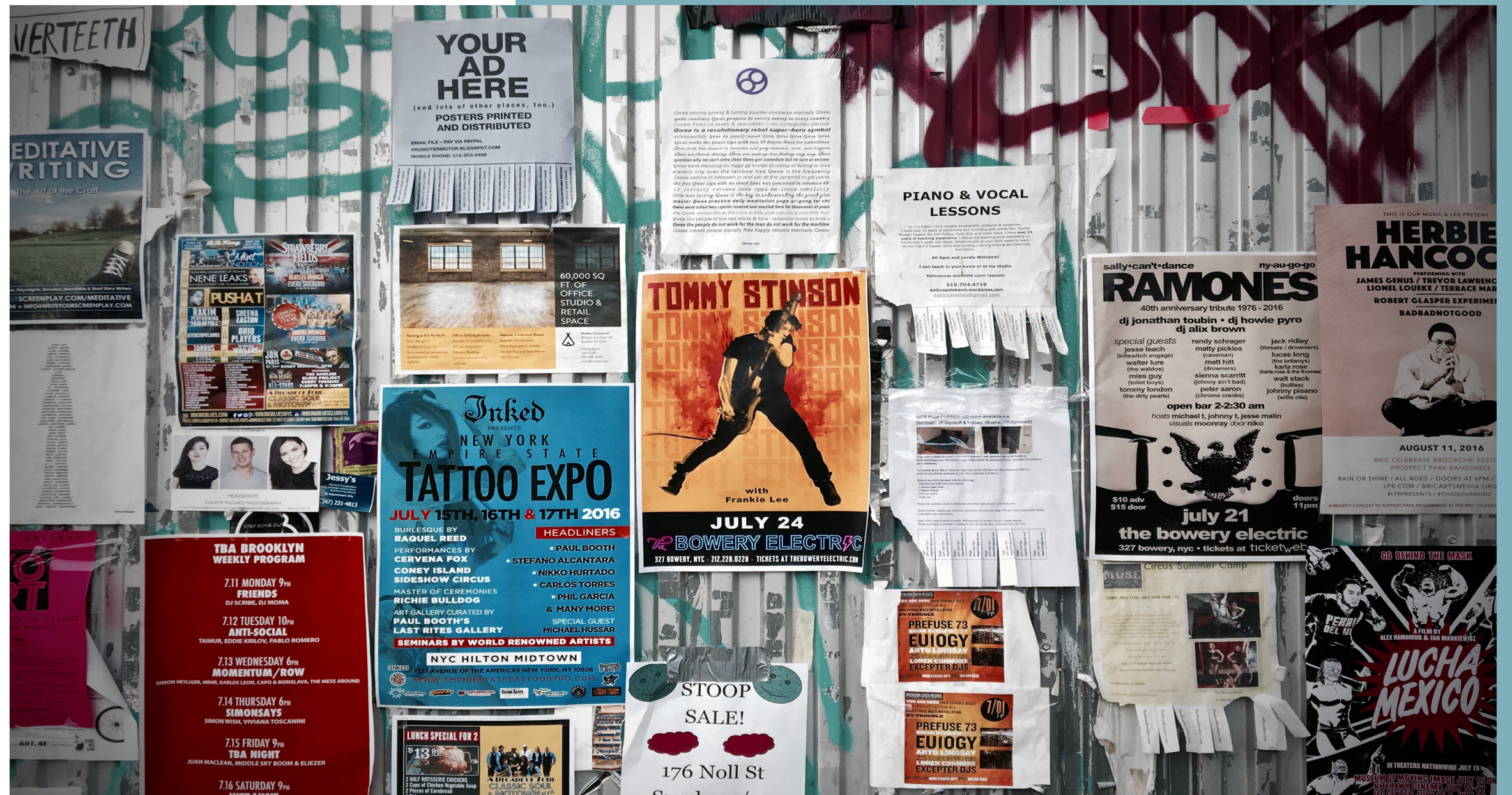
Literature Review

In order to make educated decisions for our product and its design, we must first research related materials. We began by researching bulletin board's and their history. Since our app idea was originally based on the concept of a digital bulletin board, it seemed appropriate to research how a bulletin board has developed and evolved over time. Through our research, we will be able to use the new information to build strategies for our potential app.

Bulletins were news hubs created in the 17th century that were no more than 100 words (Simplified, Learning). As time went on these small news memo stations grew to be communication hubs, discussing news and other events. The most modern and common use for them was in educational institution and other professional office settings. Education professionals utilize this form of communication to give students the chance to view new or old material, while office settings use them for the original intended purpose of spreading news and communication. It is important to mention these two settings because our app will be potentially incorporating both onto one screen. According to Magnatag.com,

whether a bulletin board is in an office or a classroom it promotes a "collective approach that promotes concepts vital to a successful community" (Shaw, May 2014). This means that when used successfully, bulletin boards can effectively communicate with large groups of people to educate them on a current goal or task at hand and potentially create a temporary or long term feeling of the community depending on the goal or task at hand. With much of the world having a digital presence this is one form of communication that doesn't seem to have a digital identity, while there are apps that might incorporate certain elements

"This app started through a passion and a vision to solve a problem."

bulletin boards offer, they don't provide the full scope of a physical bulletin board. Magnatag.com said it best when it comes to printed and visual communication on bulletin boards, "When used correctly, bulletin boards help promote communication between members, foster community awareness and development, and enhance learning" (Shaw, May 2014). According to FinancesOnline.com, they conducted a study on graphic design and it was proven that 32% of all digital marketers claim visual images are the most important type vof content (Chang Mar.

2020). Additionally, the study showed that on average people who hear messages only retain about 10% of the message three days after hearing it; however, on average people exposed to visual graphics could remember 65% of the information three days later. This shows that more people are able to recall and hold onto more information when there is a visual element present.

The best bulletin ads take advantage of graphics and strategic placing of colors, graphics, logos, and pictures. FinancialOnline.com stated that utilizing these strategies can improve readership by 40% and comprehension by 73% whereas just using black and white elements in a visual graphic will only hold a viewer for 2 seconds. This means that in order to have a successful point of communication, NV needs to make it easy for its users to take advantage of using colors, photos and other graphics strategically and even offer a suggestion tool for design.

These communication hubs foster community and seek to inform and educate. Most people are visual learners and seeing an advert on a bulletin can stick with them for a long time. Shiftelearning. com states that on average 65% of people are visual learners, so utilizing images and graphics is very important with eLearning settings (Gutierrez). They go on to state that visuals transmit faster to the brain. Shiftelearning.com goes on to quote direct study results from the Visual Teaching Alliance, "The brain can see images that last for just 13 milliseconds. Our eyes can register 36,000 visual messages per hour (Gutierrez). We can get the sense of a visual scene in less than 1/10 of a second. 90% of information transmitted to the brain is visual. Visuals are processed 60,000 times faster in the brain than text" (Gutierrez).
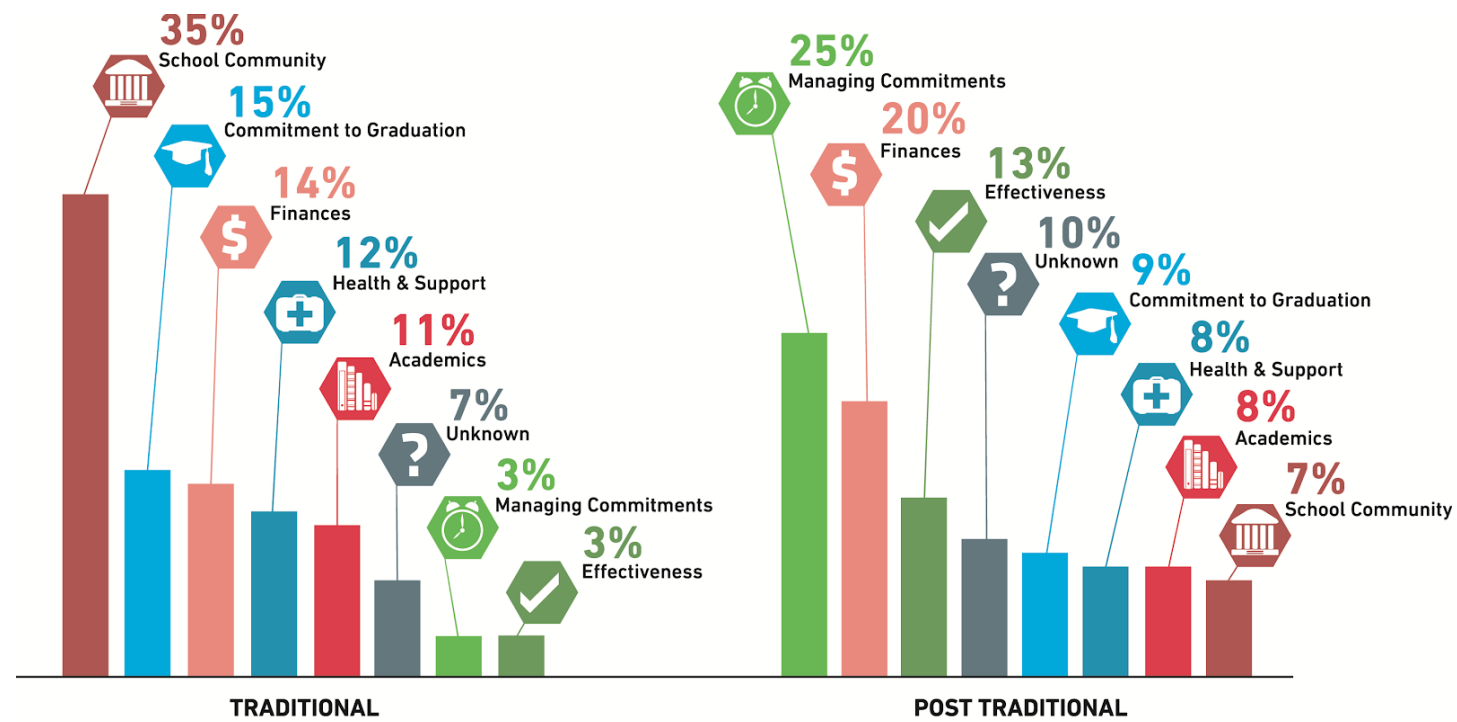
People are turning away from communicating through messaging apps, calls, and texts when it comes to events, and while there are similar apps that are attempting to bridge community into the digital space none have seemed to catch the general public's interest or make them feel comfortable online. One of the most important parts of this research is user safety, we are fully aware any social app can always draw in people and potential users with sinister intentions, that is why we are dedicated to making sure safety is a top feature for our users. While we are aware that there are plenty of events and group platforms as discovered through an article listed on hongkiat. com we are confident that during our competitive audit we will weed them out as competition (Jamaluddin Nov 10). We will try to successfully create a digital space and identity for the bulletin board in the digital age to create and foster community.

Lastly, we need to address how student involvement can lead to success in college. In a scholarly article, written by Bergen-Cico and Viscomi, they conducted a study that "examines the relationship between college student attendance at co-curricular programs and GPA." The study consisted of 3,000+ students and monitored their participation levels at university-sponsored events. They concluded that the "analysis of GPA by attendance rate clusters revealed that students attending 5-14 events over

the 4-year period had significantly higher (p < 0.001) GPA's than students attending fewer or more events" (Viscomi 2012). Another scholarly article focused on the retention factors of minority students at predominantly white universities says, "what makes this study relevant is that it not only confirms research about minority student involvement on White campuses, but also provides insight and stimulates further discussion.

For example, this study has confirmed evidence about the importance of minority organizations helping minority students become involved on campus. Second, this study underlined the fact that some participants would like campus officials to be more proactive in promoting cross cultural engagement in organizations" (Palmer, Maramba Holmes 2011) For 15 years, InsideTrack has coached over 1 million students and recorded their data on why they don't graduate. Their graphic breaks the students into two groups: Traditional first-year freshman and post-traditional working adults. Both groups failed to make it to their second year in college (Wheelan 2015). The graphic below shows the reasons:

TRADITIONAL

- 35% School Community
- 15% Commitment to Graduation
- 14% Finances
- 12% Health & Support
- 11% Academics
- 7% Unknown
- 3% Managing Commitments
- 3% Effectiveness

POST TRADITIONAL

- 25% Managing Commitments
- 20% Finances
- 13% Effectiveness
- 10% Unknown
- 9% Commitment to Graduation
- 8% Health & Support
- 8% Academics
- 7% School Community

Our focus is on the 35% of traditional students that drop out due to lack of school community.

Competitive Audit

In order to better understand what kind of features and functions our potential users might look for in our app, it is important to research and compare our app to products and apps which already exist. The process of researching other products is known as a competitive audit and it allows us to create an amalgamation of features that these apps may not all have at once. We can also use a competitive audit to find features that are useful but perhaps not implemented in the best way and improve on them to further strengthen our own design. This also works in the opposite way as we can pinpoint features that a user might not need or want in other apps and remove it to make our own more streamlined and less overbearing.

For our app, we could not find an exact match in terms of a preexisting service. There is currently nothing exactly like what we hope to achieve with our app out in the market. That means that we had to rely on similar apps with concepts that set to achieve goals like ours. Our goal is to create a community and give people a place where they can find social opportunities. Apps that have similar goals are messaging apps and meetup apps. One app that stood out as being different from those two but still relevant was Bumble BFF, which is a dating-style app but for creating new friendships.

After looking through possible competitive apps, we were able to gather the main elements and features from their layouts that we would want to include in our own design. We were told during our interviewing process that the interface of this app would be far more vital than any feature due to its complexity and we kept that in mind as we created our "shopping list" of elements for the app.

As we looked at messaging apps like Facebook Messenger, GroupMe, or WhatsApp, we liked the ability to have multiple people be able to communicate in a single thread. Users are able to reach out to either an individual or create a group and start conversations within those chats. Users can also add users at their own pace but are still able to converse with those they are not friends within most messenger apps. Elements which we wanted to improve on from the messenger app was the inability to create information pages, pin messages or alerts, and create invitations.

Next, we viewed event planning services such as MeetUp and EventBrite. These services allow individuals or groups to create an event and publicize it so others can find it. Users are able to search for events by keywords, organization or group, and even distance. Some event planning websites, such as MeetUp also allow users to RSVP and leave comments on the event post. One last important feature we will make sure to include is the ability to add events to a smart phone calendar. We wanted to keep all of these elements at the core of our features. It's important that users are given the ability to search for and create events.

APP	Posting	Commenting	Sharing	Organization Based	Ease of Use
NV	✓	✓	✓	✓	✓
Bumble BFF	~	✗	✗	✗	✓
Facebook	✓	✓	✓	✓	✗
MeetUp	✓	✓	✓	✓	✗
Attending	✓	✓	✓	~	✗
Event Brite	✓	✗	✓	✓	✗
Messenger Apps	✗	✗	✗	~	~
OwlLife	✗	✗	✗	✓	✗
Corq	✗	✗	✓	✓	✗

Competitive Audit Continued

We also want to provide the user with the ability to ask the event organizer specific questions which can then be listed on the event page in an FAQ style. We also want the user to be able to share the event through social media buttons to either their friends or even their own private friend group's feed within the app. Most event organization apps allow for large groups, clubs, or organizations to create public events but we want to give individuals the ability to create private events for their personalized group of friends. Instead of creating an opportunity for networking in downtown, an individual can create a movie night at their house and host the invitation through the app.

We use a competitive audit in the research phase in order to ensure that our user is not only receiving all the available features, but that we are also providing more features for them to use. It is vital to use a competitive audit as a baseline for what users expect as well as what they need from a service or app so that we may provide that same service in our app.

Interviews

Stakeholder Interviews

Since this is a class project, we did not have any stakeholders because there were no real clients, but the process was still treated as if it were a real product with a client/designer relationship. The stakeholder meetings would consist of talking with a stakeholder, or a person who would have a stake in the business, and interviewing them so they can provide requirements and constraints that will be vital when developing the scope of the product.

Instead of meeting with stakeholders, we filled out a Kick-off Meeting worksheet that consisted of questions dealing with information pertaining to stakeholders. This helped us discover our primary target audience is college students around the ages of 18 to 30.

We determined that the user will be looking for a place to find social opportunities or create their own communities. Our app would give the user the ability to create and join hangouts with new or current friends and their surrounding communities. Our app would primarily be used outside of school/work and focus mostly on the user's free time. The users would use the app to access possible social events or create hangouts.

Our app is meant to be used anywhere to look up or create events when the user has free time to spare and is searching for something to do.

We will acquire the majority of our users through advertisements, word of mouth, social media ads, influencers, ads on actual boards, school approved posters on campus. On top of this, we will make money from paid tiers for larger groups, ad-style event abilities, and from paid sponsor tier appearance levels.

We have learned that there are currently no competitors with the same goals as our app. There are companies with similar features, like Bumble Friends, Facebook, meetUp, Attending, OwlLife, Corq, and other messenger apps. We think we have the ability to be successful due to the gap in the market. With the ability to aesthetically create and learn about campus events, we think this is what the market is in need of. We know that any problems we are faced with can be solved through Goal-Directed Design and other qualitative research processes. We will know we are successful when we see the level of community engagement on campus rise. Overall, we think our app has the potential to become very successful if it were given the opportunity to be sold on the market for public use.

Subject Matter Expert (SME) Interviews

In order to get a full understanding of student life and how it works on the administration side of it, we interviewed the Director of Student Activities at Kennesaw State University, Drew Harvill. Drew has been working at Kennesaw for five years and started off by assisting the Greek Life Organizations, once Kennesaw State and Southern Polytechnic merged he became the director of student activities on the Marietta campus. Drew explained how student organizations work, what procedures students have to go through with organization and event creation, the administrative side to student life and what the university can offer to the events and organizations.

Drew shared that according to OwlLife there are 20,000 people involved in campus events. This includes, staff, students and members. About 5-6 thousand of that number are club members such as club leaders, treasurers, etc. Drew did mention that about 20% of the groups active on campus do not use OwlLife and that about 50% of the groups on campus use it irregularly. So this means that this number isn't accurately reflecting how many people are involved. Drew stated that OwlLife is really good for club management, but it ultimately it falls down to each groups' management style and organizations. If a group or an event is very well managed

then their OwlLife page is most likely well managed. When a club or a group is not well managed then the club suffers. He went on to say that most clubs on campus have management overturn every year so it's hard for clubs to really stand out to the rest of the student body because the leadership team can't effectively market themselves.

Drew stated that clubs and events that are successful utilize as many marketing strategies as possible: chalkings, fliers, campus info tables, email blasts, etc. He stated that in addition to marketing, groups can turn to the department of student life for assistance with finding funding for an event or club or for help booking space and figuring out cost per head of an event. Drew went on to talk about requirements for students to create a club or an event. He stated that not all "clubs" are disclosed to the department of student life. For example; if a group of students get together in the game room to play Super Smash Bros., it's technically considered a school group, but that it's an undisclosed school group. Groups like this have every right to go up to a bulletin board on campus and put up a flier or paper saying a group of people are meeting in the game room to play video games, anyone is welcome to come. Registered school groups go through about a two week approval process and must have five members before they can get approval.

From there the clubs can work with the department of student life to assist them further with finding meeting spaces and financial opportunities.

Drew talked about problems the university is having with student life right now. He stated that while OwlLife is a great website for club management, it is very hard to use if you are a student looking for a club to join and that unfortunately the mobile app is from a different company entirely so getting students to download the app is very hard. He went on to talk about one of the biggest problems most universities face with trying to increase student involvement by apps and websites is that the university's IT department typically isn't interested in student life and vice versa, so the people who could make it a robust app aren't interested or concerned with campus events, clubs and social activities and if one exists it isn't their top priority to maintain it. Lastly he said, "If an app isn't perfect, it's in the way of the students."

So what we are hearing is that the current online space Kennesaw State uses for connecting to students for student life activities is lacking sufficiently. When asked what are some features he would want in an app for student life he stated he would want something that is intuitive for the students, like letting them know the wait times for the lines inside the student center or the dining hall. He would also

want a feature that alerted students about their laundry being done, or a feature to let students know about opportunities for free food on campus. He said what is most important about student life is getting the students in the area of the club or event and allowing that small tip about the wait time or the laundry being done to guide them to the club and socializing with others.
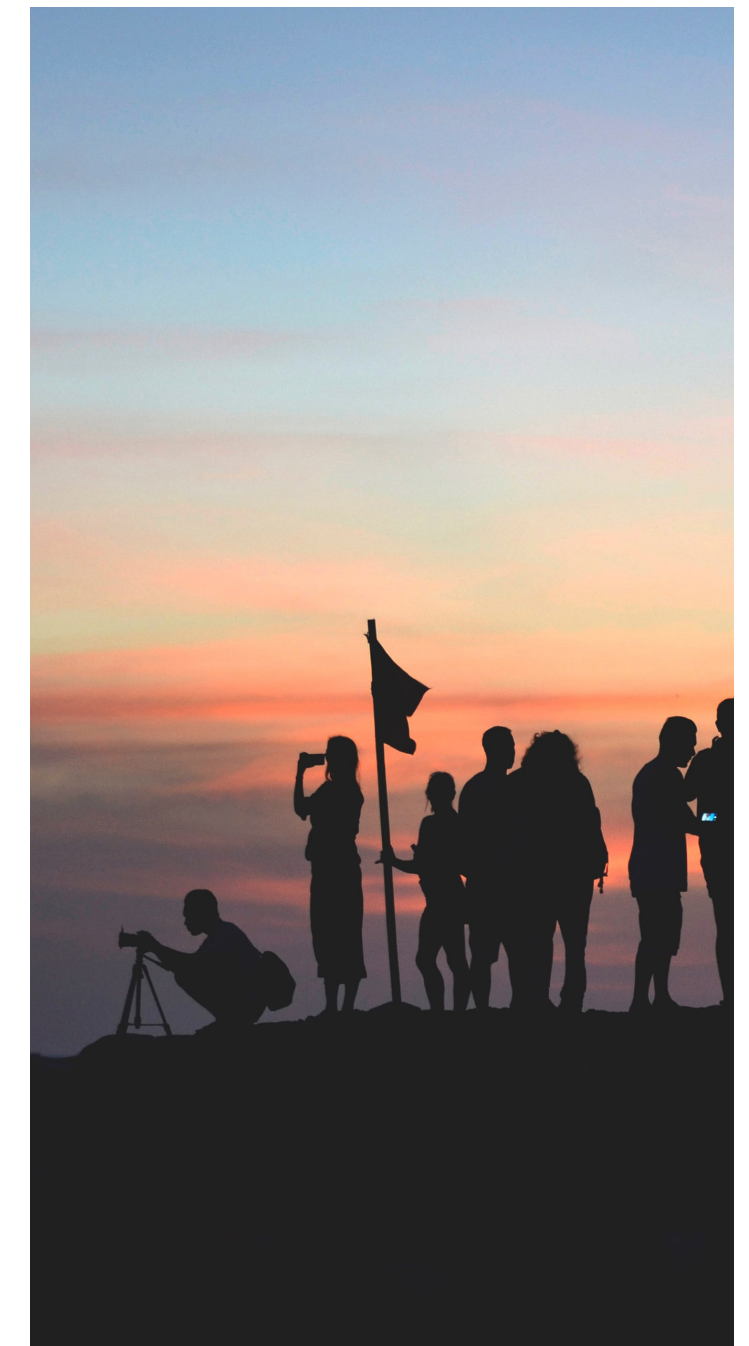
User Interviews

User Interview #1

Participant One, who we will call Sam, spends his free time with friends for dinner, movies, poker, or drinks. He is a very social guy, but he isn't a fan of the campus. At his previous school, he was actively involved. Sam frequently sees event fliers on bulletin boards in school buildings and emails. He shares social information through Snapchat. He uses Snapchat because it is easy to post and his friends would be able to see it. He thinks a good way to communicate campus events is through professors, word of mouth, or friends already being in the club, but he does not suggest email.

User Interview #2

Participant Two, who we will call Frank, spends his free time socializing, studying, or with his clubs. He is a member of the Autonomous Underwater Vehicle Team (AUV) and the Treasurer of the Society of Physics. He learned about campus activities through word of mouth or through the clubs fair on campus. Frank is focusing on his career. He feels OwlLife and emails are the most effective and convenient. He thinks bulletin boards can make people aware of events but he does not think this is a great way to recruit because of limited accessibility. He wishes a campus groups/events app can eliminate googling events to check resources.

User Interview #3

Participant Three, who we will call Michael, is a Mechanical Engineer major. He spends most of his free time doing homework, reading books, and with the Formula 1 team. Michael is wanting to be more active on campus but isn't going to actively search for it. He typically hears about new clubs through word of mouth from his roommate or his classmates. He thinks a good way to make people aware of active clubs is through the KSU website or sending emails. He said he would expect an app like this to show him the day, time, directions, see who is interested, and how big of an event it is.

User Interview #4

Participant Four, who we will call Sarah, spends her free time watching Netflix when she isn't studying. She would consider being more social if she found something she enjoyed. She doesn't participate in campus activities because she feels that campus events are for young students. She would like events catered towards people her age and in her major. She feels OwlLife is inefficient and overwhelming. Sarah hasn't seen event fliers on campus, she thinks sharing events via email or KSU website would be beneficial. She wishes for a campus events/group app to allow the user to filter through categories, ages, and interests.

Overall

There was a wide variety of backgrounds and participation levels from the 4 participants, but they all had similar stories about finding campus activities. The main source of event information came from word of mouth by their peers, followed by checking the university website, like OwlLife, or by receiving an email from the university about upcoming events. They all knew there was probably a bulletin board with event fliers located somewhere on campus, but didn't bother to search for a board or actually get information from it if they did come across one. Three of the participants wanted to be more active on campus but haven't found enough information about an activity they would be interested in, while the fourth participant is already involved in multiple clubs do not want to partake in more activities. In conclusion, by focusing on the user's goals of having easier access to information about campus events there would be a higher participation level and more campus involvement.

Affinity Mapping

In order to have a solid idea of the app and who to interview, we met online to create a digital affinity map. This is the process in which each member of the group has a pad of sticky-notes and individually writes down all of the problems, features, potential users, etc. they can think of. When all of the members are finished brainstorming, the sticky-notes are combined and then organized into groups, or affinities. Through this process we discovered we have a lot of different users that could potentially use our app, and a ton of features we can provide to our users. We had trouble thinking of problems that might occur because we have many features. that would eliminate those risks before they become a problem.

Persona Hypothesis

A persona hypothesis is the design team's ideas and assumptions about who the user is and how they can utilize the design. For our project we assume the user will be a traditional, full-time college student around the age of 20 who is wanting to become more social around campus. They have been wanting to attend a campus event, but are not successful due to a lack of communication resources between the students, school and student life. They use the app every day or every other day to find new events that have been posted and to see what upcoming events they have saved. The app would be used mostly in the users free time, or when finding something to do. They are able to add events to the calendar, and share the event on social media or send directly to their friends.

Conclusion

As a team, we hope to create a solution for individuals that search for a form of accessible communication on a larger scale in order to find, create, or attend social events around them. While similar apps and products already exist, none properly address the problem and have holes within their features which we hope to fill with NV. We will stand out by providing a comprehensive product which has not yet been created.

We began our research process through a mock kickoff meeting as a team. During this meeting we were able to discover our target demographics. We also discussed what our goals would be and what problems the user's have that we hoped to solve with the creation of our app, NV. Through the literature review we were able to research data and information surrounding the history of bulletin boards as well as discover more in depth issues related to lack of on campus involvement. It was at this point that we continued on to our competitive audit. We used this part of the research phase to discover what features users looked for and what features user's needed but were not being provided. It is important to note that during this process we found similar apps which attempted to create a space similar to our potential app, but none that have

been able to successfully capture the space that we are looking to create

After our base research, we moved on to interviews. While we were not able to perform an actual stakeholder interview, we did still go through the process of one in order to simulate a "real" design experience with a client. In a hypothetical meeting with our stakeholders we would go over our current findings including the information found in our literature review and competitive audit. We also would discuss with our stakeholders how we plan on addressing the similarities to our competition and how we are a stronger app than what is currently on the market. We will be sure to include our Goal Directed Design Process and make sure to address any questions and concerns the stakeholders have by continuing our research

We used both user interviews and a subject matter expert (SME) interview in order to gather the data we would need to create and design the elements of our app. Through our user interviews we were able to discover how users found events on campus, their level of interest towards on campus events, and their opinions of the current system in place. Our SME interview was also extremely helpful as it gave us the

perspective of a person who was in a place of authority over the current campus event system. From the five people we were able to interview, we gained a lot of useful data as our interviewees were very diverse in opinions and situations.

Finally, through the use of affinity mapping, we were able to collect our ideas and thoughts as a team in order to pool together our potential features and design elements of the app. The affinity map allows us to turn our research data into usable information which can be applied towards the app. As a team, we

hope to create an app which serves the same purpose as a bulletin board but to a much stronger degree. We hope to solve the issue of event awareness on campuses and create a greater sense of community for everyone involved. Our next step will be to create a prototype and receive feedback from users through what is called user testing research. We thank you greatly for your time and look forward to continuing to work with you.

Worked Cited

"20 Graphic Design Stats & Facts - Infographic." Red Website Design Blog, 1 June 2018, blog.red-
website-design.co.uk/2018/06/04/graphic-design-stats-infographic/.

Bergen-Cico, Dessa, and Joe Viscomi. "Exploring the Association between Campus Co-Curricular
Involvement and Academic Achievement - Dessa Bergen-Cico, Joe Viscomi, 2012." SAGE Journals,
journals.sagepub.com/doi/abs/10.2190/CS.14.3.c.

Chang, Jenny. "From Corporate Branding and Promotional Items to Web Design and Print Production,
There Is Always an Element o." Financesonlinecom 60 Graphic Design Statistics You Cant Ignore
2020 Industry Data Analysis Comments, FinancesOnline.com, 6 Mar. 2020, financesonline.com/
graphic-design-statistics/.

Gutierrez, Karla. "Studies Confirm the Power of Visuals in ELearning." Studies Confirm the Power of Visuals
in ELearning, www.shiftelearning.com/blog/bid/350326/studies-confirm-the-power-of-visuals-in-
elearning.

Jamaluddin, Azwan, et al. "10 Mobile Apps To Find Upcoming Events & New Places of Interest."
Hongkiat, 19 Nov. 2017, www.hongkiat.com/blog/apps-events-activities-around-you/.

Jennings-Edquist, Grace. "The Social Apps Teenagers Are Using - and Keeping Him or Her Safe Online." ABC
Life, ABC Life, 1 Sept. 2019, www.abc.net.au/life/apps-that-parents-of-teens-should-know-
about/10901680.

Khoja, Nadya, et al. "14 Visual Content Marketing Statistics to Know for 2019 [Infographic]." Venngage, 6 Feb.
2020, venngage.com/blog/visual-content-marketing-statistics/.

Kimbarovsky, Arielle. "20 Statistics About Branding Every Entrepreneur and Marketer Should Know."
Crowdspring Blog, 9 Feb. 2020, www.crowdspring.com/blog/successful-branding-for-entrepreneurs-
statistics/.

Krauss, Jon. "Vision: Brain Rules |." Vision | Brain Rules |, www.brainrules.net/vision.
Novoseltseva, Ekaterina. "Key Statistics on How Colors Affect Sales." Apiumtech, 5 Aug. 2016, apiumtech.
com/blog/key-statistics-colors-affect-sales-consciously-unconsciously/.

Palmer, Robert T. "Research Affiliate, Center for Minority Serving Institutions at the University of
Pennsylvania." 2011, http://citeseerx.ist.psu.edu/viewdoc/
download?doi=10.1.1.972.7676&rep=rep1&type=pdf.

Shaw, Tom. "How to Create Effective Bulletin Board Displays for Businesses and Classrooms." Magnetic Dry-
Erase Whiteboards, Printed Whiteboards, Magnatag, 9 May 2014, www.magnatag.com/blog/post/
how-to-create-effective-bulletin-board-displays-for-businesses-and-classrooms.

Shaw, Tom. "How to Create Effective Bulletin Board Displays for Businesses and Classrooms." Magnetic Dry-
Erase Whiteboards, Printed Whiteboards, Magnatag, 9 May 2014, www.magnatag.com/blog/post/
how-to-create-effective-bulletin-board-displays-for-businesses-and-classrooms.

Shaw, Tom. "How to Create Effective Bulletin Board Displays for Businesses and Classrooms." Magnetic Dry-
Erase Whiteboards, Printed Whiteboards, Magnatag, 9 May 2014, www.magnatag.com/blog/post/
how-to-create-effective-bulletin-board-displays-for-businesses-and-classrooms.

Simplified, Learning. "News Bulletin." World's Fastest Growing Educational Portal, www.kullabs.com/classes/
subjects/units/lessons/notes/note-detail/7257.

Werner, Olga. "Home." Creatives Branding, Advertising Agency India, cmptl.com/blog/index.php/308-what-
is-the-importance-of-graphics-in-advertising.