

The responsibility of planning for and navigating between destinations is something that everyone will eventually do in life. In considering these activities, our group considered personal experiences and initially surmised that these processes are simple, easy and unburdened by intense feelings. Efforts to dig a little deeper into these experiences, with specific focus on developing empathy for other's perspectives revealed that the processes are not as straightforward as initially thought and can be a driver of significant stress and anxiety. In this paper, we will provide an overview of the means by which we explored planning and navigation activities from an empathetic approach and identify the problem on which we will focus for the design project.

### **Activities Performed**

The first aspect taken into consideration for this assignment was choosing who should participate. While we were able to quickly agree on a target participant group containing those with responsibility for planning for and navigating between destinations, we also noted the need to overlap this choice with social distancing requirements that have been put forth due to the coronavirus epidemic. As such, our target audience was further restricted to individuals with which Group 4 team members have some pre-existing relationship – personal, professional, or familial. Based on these factors, the final participant group included men and women between the ages of 19-75 years of age with varied educational levels, personal and professional experiences, ethnicities, and geographical locations. We recognized that this mix would be deficient of other key perspectives including, but not limited to those of younger travelers, those with professions focused on travel planning (e.g. travel agent, administrative assistance), or those with professions that require increased familiarity with navigation tools (e.g. transportation employee, Uber driver).

To obtain qualitative insight into and understanding of the processes and perceptions related to planning for and navigating between destinations, Group 4 chose team experimentation and leveraged the ethnographic research methods of participant interview and observation. Team experimentation was done so that we could identify and understand our own thoughts on and feelings about planning for and navigating between destinations prior to engaging with the participants. Our decision to use the interview and observation methods on the participants was primarily based on an understanding that eliciting information during loosely planned and unscripted interactions in personable environments will help to yield sincere and revealing information about one's experience.

Team experimentation related to planning for and navigating between destinations was performed over a period of two days. The activities included preparation for trips in local geographic areas and use of mobile planning and navigation planning tools such as, but not limited to checklists and Google Maps, respectively. Each team member reflected on and recorded notes about their own experience.

The participant interview and observation sessions were conducted over a period of two days, with each being limited to a maximum of 30 minutes. Group 4 team members facilitated the sessions using video conferences. The video conference sessions were conducted through use of tools such as Zoom and Google Duo with the interviewers and interviewees located at their respective home residences. Steps to complete the interview and observation activities included the following:

- Each participant was invited to be interviewed about the topic of planning for and navigating between destinations and advised that the exchange would be recorded in a written, video or audible manner - inclusive of any participant demonstrations - and analyzed for research purposes. Researchers also requested and confirmed participant consent to the interview and recording of responses.
- To build rapport and identify potential conversational talking points, participants were asked to share basic information such as name, age, and profession at the beginning of the interview and/or observation session.
- Throughout the interviews and observations, interviewers did their best to use open-ended questions and rephrasing to obtain as much detail about the interviewees experience. "Why...?" questions were also used

to get the interviewee to think deeper and explain the actions they took, the drivers for those actions and how they felt in certain moments.

- Interviewers leveraged their own relationships with and knowledge of the participants to put them at ease and tailor the interviews. For example, group members interviewing familial members used the same cadence in speech that they would when talking to them on any other occasion. Group members that interviewed their colleagues leverage use of business terminology to help with orientation of the subject matter.

Notes for the team experimentation, interview and observation activities were recorded via pen and paper, a word processing program, or were automatically transcribed and re-recorded into a word processing program.

### **Insights, Surprises and Problems**

The interview and observation activities resulted in a myriad of insightful and unique responses. As our team sorted through this information, recurring themes became visible and aided in the identification of the below summarized key insights, surprises and problems.

- **Planning for and navigating between destinations causes anxiety and stress.** All participants revealed a deep concern with “things going wrong” during their trip and a strong desire to do as much possible to decrease the likelihood that discomfort during travel will arise due to materialized disruptions. Participants that described their planning processes conveyed that there was a lot more work that goes into planning for a trip that involves multiple people or children, and the responsibility for others led to longer and more structured preparation. Parents specifically ask themselves, “Well, do we want them [kids] napping at home or in the car? Do we need to pack anything we might need along the way?” Users of mobile navigation applications indicated that they continually toggled between the user interface of their phone and listening to the voice announce directions to ensure that they were on the right path and have enough notice to change course if necessary. The idea of getting off track or not being able to readily avoid traffic were significant causes for concern. Instead of concentrating on a positive outcome, it appeared that the overall process was more focused on avoiding potential problems.
- **Mobile planning and navigation tools are considered reliable and trusted.** It was surprising to find that even though mobile navigation applications such as Google Maps and Waze are not always consistent in providing the most accurate results - most of the interviewees see them as reliable, trustworthy and providing a good sense of security. Even when faced with the imperfections of satellite connections “catching up” to where a person was on the road, public transportation schedules being inaccurate, or sending the traveler to the wrong place - participants still claimed, “It just works, it is reliable...” and “it will not take me to ‘unsafe’ places...”.
- **Enhanced personalization options will create added value to planning and navigation tools.** While the need to get somewhere is not unique, the way individuals choose to plan how and then maneuver to get there can include tons of variation. While our interviews and observations showed that participants are leveraging the personalization already built into mobile tools, we also saw that they desired more options to personalize and the improved ability to better control the personalization. For example, the mother planning a trip for her family indicated that she was at lost for determining how to streamline the preparation process. Navigation app users shared stronger desires to personalize and control their experiences noting things like controlling the type and frequency of notifications, more notifications to ensure accuracy of user selections, increased variety in map layouts, and an ability to suppress information that they deem irrelevant to them (e.g. suggested stops). They also expressed a desire to enable or improve integration with other apps on their phone. For example, a user participant with an iPhone advised that he desired for

Google Maps to be able to reference the calendar app on his phone and provide reminders and/or travel advisories for upcoming appointments.

### **Problem Statement**

Through self-experimentation and the interview and observation sessions performed with our participants, the members of Group 4 obtained multiple insights into the thoughts, feelings, and actions that occur when planning for and navigating between destinations. We were especially intrigued that the realization planning for and then navigating between destinations caused some sort of stress and anxiety for participants regardless of how extensive or abbreviated the event may be. As such, we have chosen to focus on this aspect for the design project and have defined our problem statement as follows:

*People are overwhelmed by the variables that can affect their travels.*