

## **D3:Data Analysis and Problem Identification**

**Topic area: Transportation**

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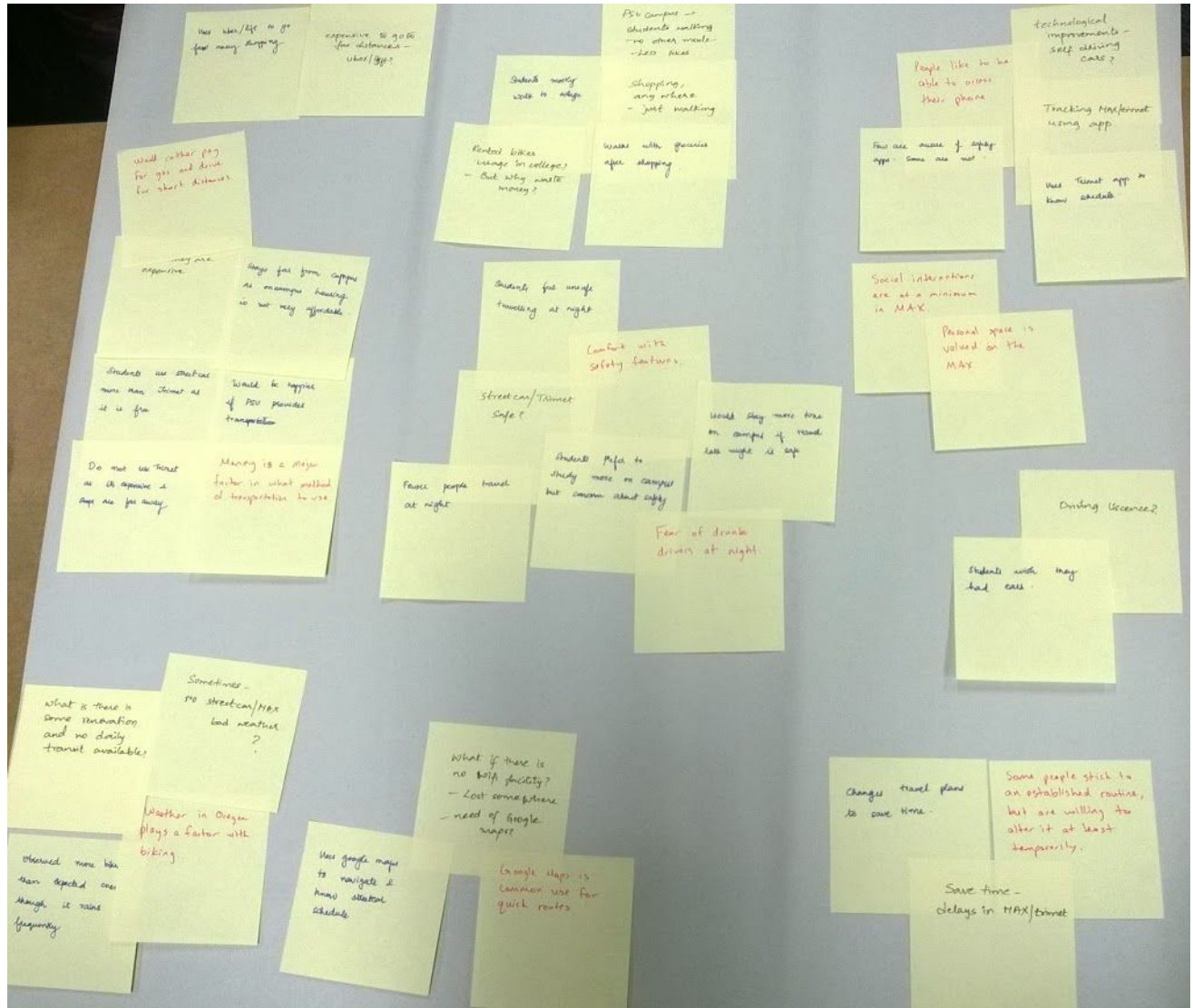
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## Part 1 : Data Analysis Diagrams

**Diagram 1 : Affinity Diagram**



*Diagram 2 : Thematic Networks*



## *Reflection*

For our team's second diagram, we decided on the Thematic Network Analysis technique. We all chose it and worked on it together. We chose this particular diagram because it helped us organize our individual findings from our interviews and observations. We started out with the basic themes, then grouped them together into organizing themes. From there we decided on a global theme that encompasses the whole network. This helped us form a problem statement and provide a flexible and quick approach to learn about our problem domain.

This activity in forming our second diagram was pretty similar to the affinity diagram, but involved a wider scope of thinking. We organized themes rather than just grouping together findings into categories, and summarized key features of our collection of data.

These diagrams and the activity involved with creating them was useful. It helped us to know about the data obtained in each member's interviews and observations. It was through the diagramming activities that we were able to find the similarities between the data we collected and grouping them. If we were to do this again, we would try to implement more diagrams.

## Part 2 : Problem Statement

Travel is an integral part of daily life. Throughout the years, transportation has evolved well from animal driven carts to supersonic jets. Socio-economic and technological aspects contributed for the betterment of transportation. With our design project, we would like to emphasize the issues that people face during their daily commute. From the interviews conducted and observations made, we came across the major issues that still exist in current transportation system.

People seemed to be skeptic about the safety in public areas. They tend to refrain from travelling alone at night due to this reason. Although there are decent means of transportation in city areas, they are not competent for use at nights. The safer and faster means of transportation such as cars are not affordable by everyone. Also certain factors like weather and other delays affect the public transportation and are not reliable always.

Moreover, students constitute the major share of population and from the canvass conducted, it is found that they have to walk long distances to universities/colleges, in the campus and for their regular needs as public transport is expensive for daily use. Driven the world towards automation, they are enthusiastic and are in need of solutions that reduce their regular muscular stress. Our design project is aimed at handling the above mentioned issues of day-to-day conveyance.

## Part 3 : Personas

### Life at PSU: Finding time, saving money



I am Alex, a student at PSU and also works at Wilsonville, Oregon. I stay at Goose Hollow, Portland. Daily I spend around 4 hours travelling. After my 8-4 work, I attend my classes in the evening. I have heard about few issues that occurred in MAX in the past and so I am concerned about my safety on MAX. In rush hours it is really frustrating to travel in MAX. I got a Trimet pass starting from this year as that was the only means of transport for me. I think the university is not providing a very good concession rate for quarterly trimet pass. If I had a car it would take me less than half the time I take now to travel. I am glad that there is public transportation which I can rely on most of the time. But sometimes there are delays which is very difficult. I bought a bike during last summer and used it to commute to college. But now it is of no much use to me, mainly due to the weather and also it takes more time. Also, I would like to stay on campus as it would save me lot of time, but it is more expensive. Even after I get down in these train or bus stations I still have to walk to my apartment. I wish there was some way I could save more time. I am glad that there are trimet apps which helps me to know the schedule. I also use google maps very frequently to know the routes and schedules.

## DHS: Navigating in the unknown hometown

I am Sam, an Oregon DHS worker at Washington County. I live in the Beaverton area, and spend a small amount of time commuting to the workplace, but I often spend multiple hours of travel during the workday to make visits to clients. I use Google Maps on a daily basis to find addresses of the clients I visit. I use it not only to find places, but to find quicker routes to avoid traffic. I not only use my personal cell phone and work phone to use Google Maps, but to listen to music in order to help pass the time on a long drive. It is very convenient to use a work car that has Bluetooth compatibility since with some of the older cars it isn't possible to connect my phone to the sound system. I enjoy being able to use my phone hands-free as much as possible for navigating to different places around Washington County. During work-related travel and personal travel I enjoy the solitude of being alone sometimes as well as the company of other passengers so that I can have conversations during other times. Whether I am in my car, a work car, or on the MAX, I have great comfort with the safety features of the vehicle I am in, such as automatic locking systems, airbags, and security cameras.

