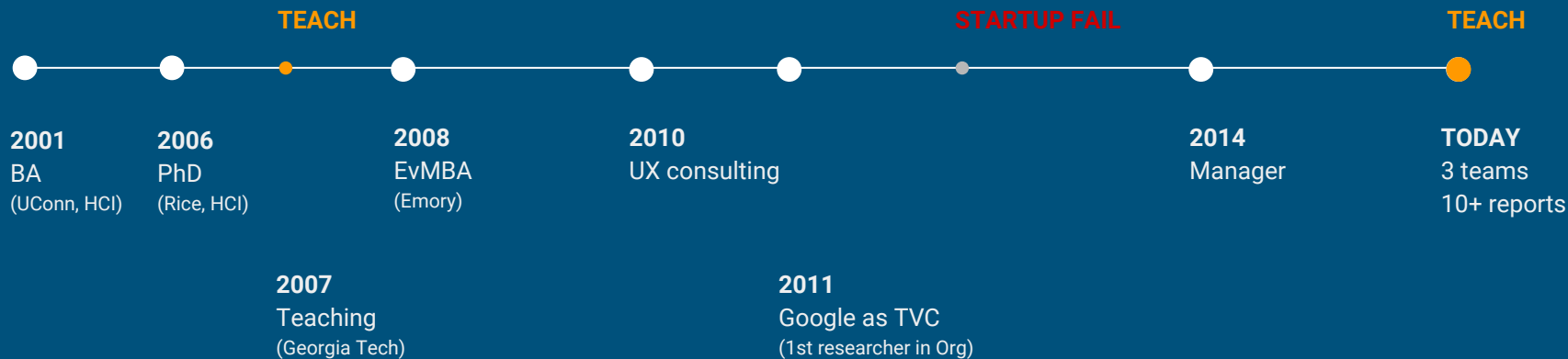


# From user research to user journeys

Phil Chung

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# About Phil



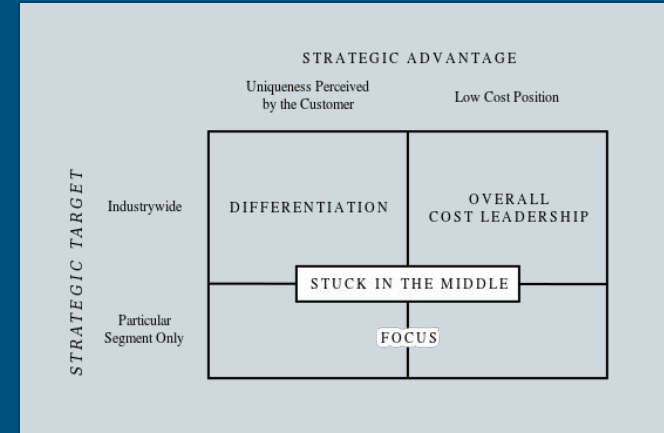
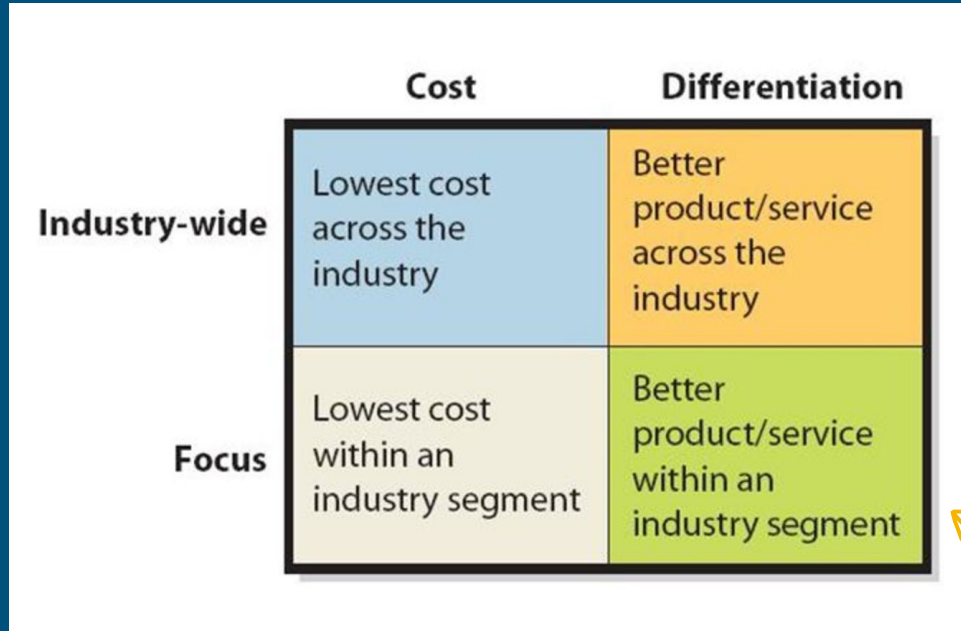
What's your earliest memory?

Subjects were asked to report the earliest memories of their lives. Where possible, the memory protocols were submitted to adults present at the time of the original episode for possible confirmation. **The majority of memories were characterized by distinct emotion, with a higher count of negative than of positive emotion.** The majority of memories proved accurate, with confirmation operating at as high a level in the case of positive or emotionally neutral memories as of negative memories. General memory content showed no differential patterns across negative and positive memories. Thus claims that infantile memories are powered uniquely by trauma, and/or routinely include distortions, were not supported.

Early childhood memories: accuracy and affect. (Howes et al., 1993)

Focused differentiation





Most digital products

[https://en.wikipedia.org/wiki/Porter's\\_generic\\_strategies](https://en.wikipedia.org/wiki/Porter's_generic_strategies)

UX is not UI  
(good news for the non-designers)



1 Material Metaphor

## Material is the metaphor

A material metaphor is the unifying theory of a rationalized space and a system of motion. Our material is grounded in tactile reality, inspired by the study of paper and ink, yet open to imagination and magic.

2 Tangible Surfaces



## HOW UX WANTS TO BE SEEN

- Field research
- Face to face interviewing
- Creation of user tests
- Gathering and organizing statistics
- Creating personas
- Product design
- Feature writing
- Requirement writing
- Graphic arts
- Interaction design
- Information architecture
- Usability
- Prototyping
- Interface layout
- Interface design
- Visual design
- Taxonomy creation
- Terminology creation
- Copywriting
- Presenting and speaking
- Working tightly with programmers
- Brainstorm coordination
- Design culture evangelism

## HOW UX IS TYPICALLY SEEN

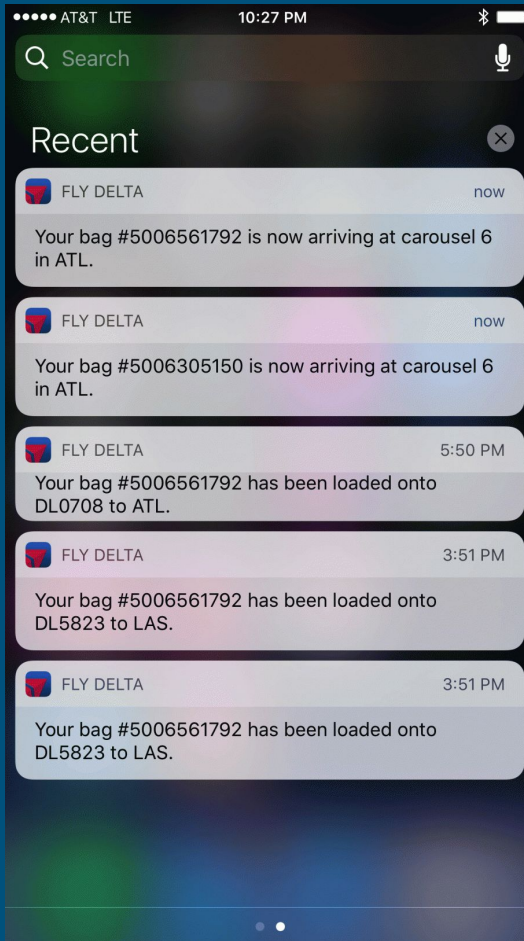
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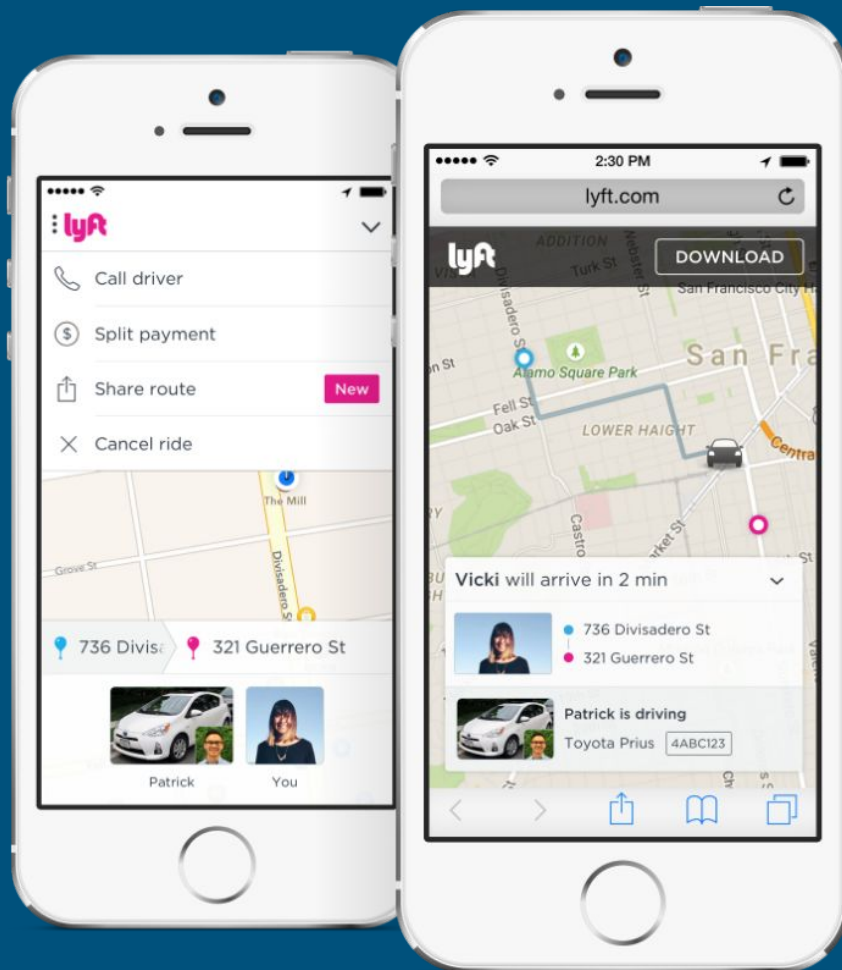
*“UX is the intangible design of a strategy that brings us to a solution.”*

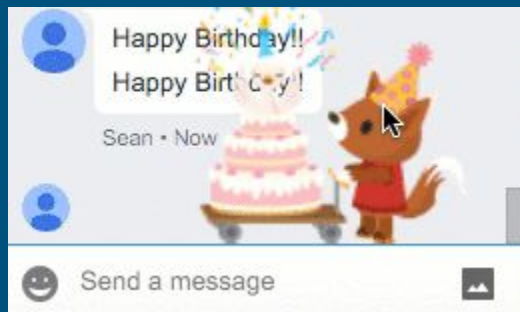
‘Forget about mobile, agile, responsive Web, etc. It’s still hard to find really solid designers, period. By solid designers I mean those that are true creative problem solvers. I still come across many who are more artists than designers, some who are more technology oriented, and some who are more production than anything else. Few designers I come across possess **the ability to understand and articulate the strategic business objectives and primary user needs, and have the ability to create elegant design solutions that solve for both.**’

<https://www.wired.com/insights/2013/10/why-your-ux-designer-wont-be-the-next-steve-jobs/>

Let's solve real needs (focus)







What about these?





**celeste** 4:52 PM

hey @officebot, please add espresso beans to the grocery list



**officebot** BOT 4:52 PM

Done! There are 4 items on the grocery list.



**celeste** 5:07 PM

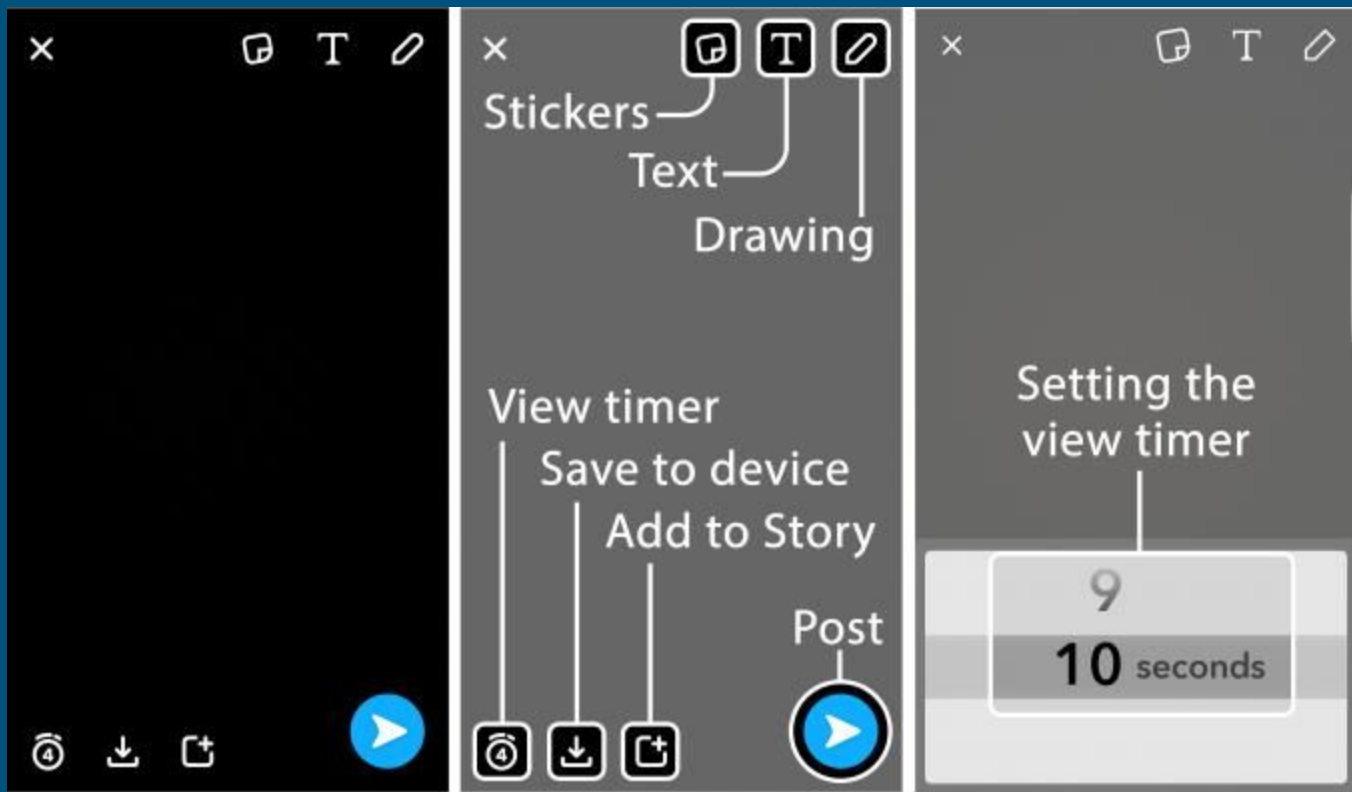
oh! also add ice cream!



**officebot** BOT 5:07 PM

You got it! There are 5 items on the grocery list.





<https://recombu.com/mobile/article/what-is-snapchat>

# Some context

[HCI] A discipline concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them.

Ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to **optimize human well-being and overall system performance.**

↖ This is the goal

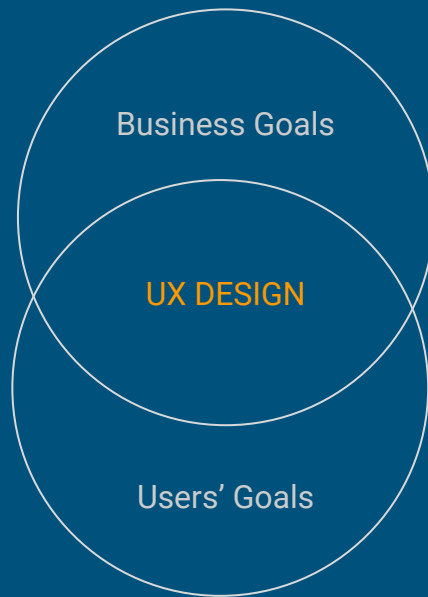
Designing for goals (*and tasks*)

# Goal-Directed Design

Goals motivate people to perform activities.

Understanding them allows you to understand users' expectations and aspirations, which in turn can help you decide which activities are truly relevant to your design.

- Cooper article (expanded [Dubberly version](#))
- [About Face](#)



# When do we focus on goals?

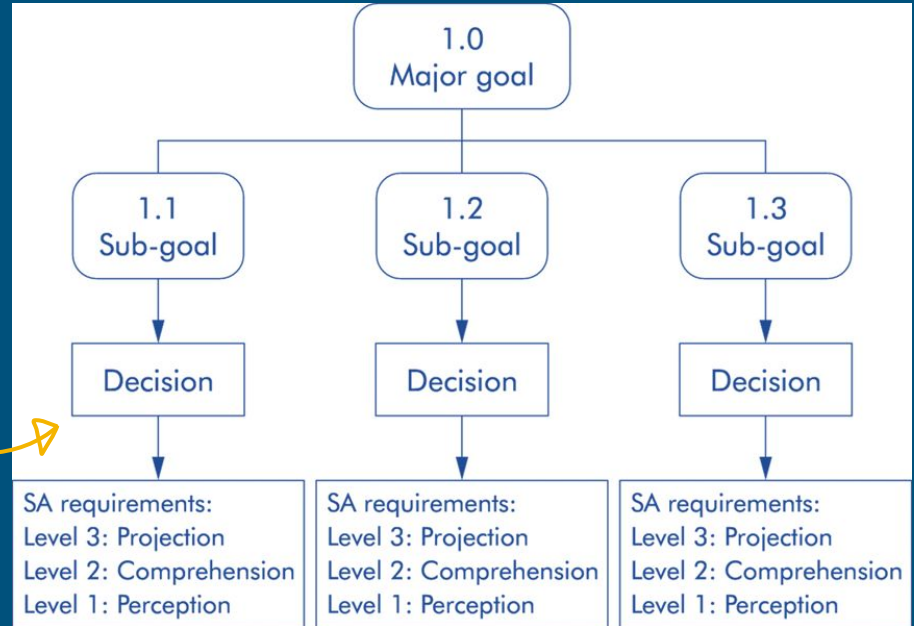


# Design for 'situational awareness'

## Goal-Directed Task Analysis (GDTA)

Situational awareness or situation awareness (SA) is the perception of environmental elements and events with respect to time or space, the comprehension of their meaning, and the projection of their status after some variable has changed, such as time, or some other variable, such as a predetermined event.

Screens →





Goals	Steps
<i>1st Subgoal</i>	<ol style="list-style-type: none"> <li>1. Power Connected</li> <li>2. Charge</li> <li>3. Stop Charging</li> <li>4. Power Connected</li> </ol>
<i>2nd Subgoal</i>	<ol style="list-style-type: none"> <li>5. Settings</li> <li>6. &lt;Slider&gt;</li> <li>7. Focus Set</li> </ol>
<i>3rd Subgoal</i>	<ol style="list-style-type: none"> <li>8. Firing</li> <li>9. Tracking</li> <li>10. &lt;Tracking Task&gt;</li> <li>10. Shoot (Spacebar)</li> </ol>
<i>4th Subgoal</i>	<ol style="list-style-type: none"> <li>11. Tracking</li> <li>12. Main Control</li> </ol>

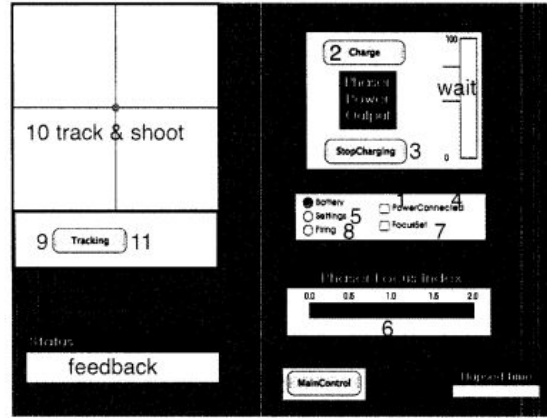
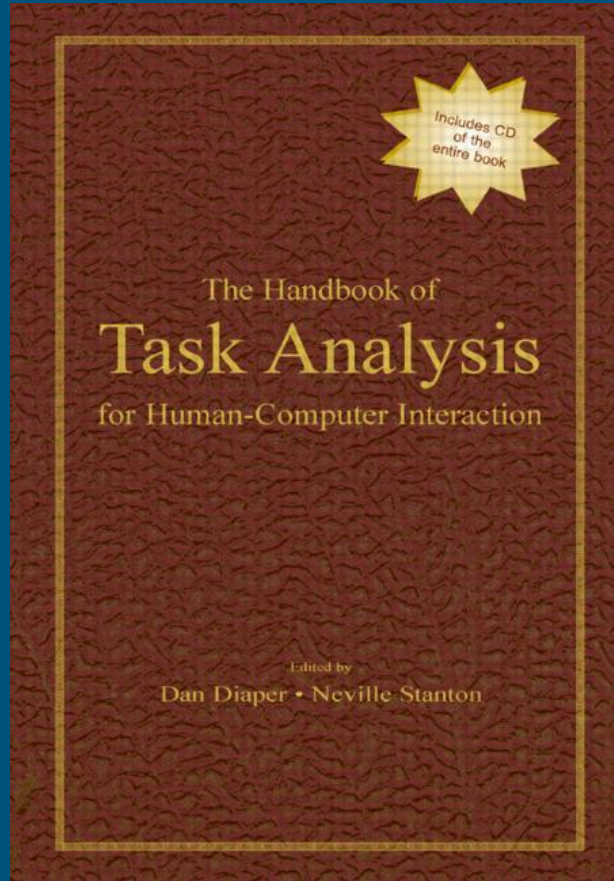


Figure 1. Task goal hierarchy and screenshot of the standard version of the Phaser task. The numbers and labels ("feedback," "wait," and "track & shoot") shown by the controls are not visible on the interface during the task.



[Handbook of Task Analysis for Human Computer Interaction](#)

# Journey mapping



## User goals (single user)

Hierarchical, system agnostic

## User journeys

Can be cross-feature, products

visualize



## User epics

High-level features of a single system

## User stories

Buildable definitions for a single system

# Journey mapping

Create journey maps as a means of team communication and collaboration not as a design artifact in itself.



# Class exercise

## **The blind man that convinced Google to launch a self driving car firm: Steve Mahan revealed as first person to ride without a Google engineer on board (and he says it was 'like driving with a very good driver')**

- Firm says its cars have now driven three million miles on public roads
- Legally blind Steve Mahan was the person person allowed to drive solo
- Car ferried him around Austin in October 2015
- Mahan said it was 'like driving we a very good driver'
- Google today launched its car firm, to be called Waymo



# GDTA for driverless transportation

1. Work in pairs: generator and synthesizer (take turns)
2. Focus on goals not tasks
3. Pick a segment:

Assumption: some research has been done

**NYC resident commuter** - as 'focused' as you want!

4. Validate your draft task analysis with another team
5. Create a simple journey map

**Optional:** think about how you might design a screen(s) for each subgoal



# NYC COMMUTER - YOUNG ENTREPRENEUR

- Very time sensitive
- Moderately price-sensitive
- Tech-savvy (mobile)
- Socially and environmentally conscious

Marketing / ux  
data + 'art'



## GET FROM POINT A TO POINT B

Save time	Save money	Least effort	Be safe	Be happy
<p>D: When do I need to leave?</p> <p>Projected travel time</p> <p>Speed</p> <ul style="list-style-type: none"><li>- Departure time</li><li>- Arrival time</li></ul> <p>Projected delays</p> <ul style="list-style-type: none"><li>- Transportation updates</li><li>- Traffic</li></ul> <p>....</p>	<p>D: How much will it cost me?</p> <p>Projected travel cost</p> <ul style="list-style-type: none"><li>- Fare</li><li>- Fuel</li></ul>	<p>D: Is it easy to use?</p> <p>Projected availability</p> <p>Projected ease of use</p> <p>...</p>	<p>D: Is it safe?</p> <p>Projected safety/risks</p> <ul style="list-style-type: none"><li>- Police reports</li><li>- Transportation updates</li></ul> <p>Perceived safety</p> <ul style="list-style-type: none"><li>- Media portrayal</li><li>- Environment (e.g. graffiti)</li></ul> <p>...</p>	<p>D: Am I happy with it?</p> <p>Projected environmental impact</p> <p>Social perception</p> <ul style="list-style-type: none"><li>- Friends/peers</li><li>- Social media</li></ul> <p>Media perception</p> <ul style="list-style-type: none"><li>- News (e.g. Susan Fowler)</li></ul> <p>...</p>

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Save time	Save money	Least effort	Be safe	Be happy
D: When do I need to leave?  Projected travel time Speed - Departure time - Arrival time Projected delays - Transportation updates - Traffic ....	<i>write journey(s) in a spreadsheet</i> D: How much will it cost me?  Projected travel cost - Fare - Fuel	D: Is it easy to use?  Projected availability Projected ease of use ...	D: Is it safe?  Projected safety/risks - Police reports - Transportation updates Perceived safety - Media portrayal - Environment (e.g. graffiti) ...	D: Am I happy with it?  Projected environmental impact Social perception - Friends/peers - Social media Media perception - News (e.g. Susan Fowler) ...