



Service Design

Matt Franks

Professor, Austin Center for Design

ac4d

High-level overview of IDSE 202

Course Description:

This class focuses on the tools and methodologies of service design. Students will learn methods to evaluate and analyze services, and ways to document services, in order to improve the quality of interactions that evolve over time.

How this class fits

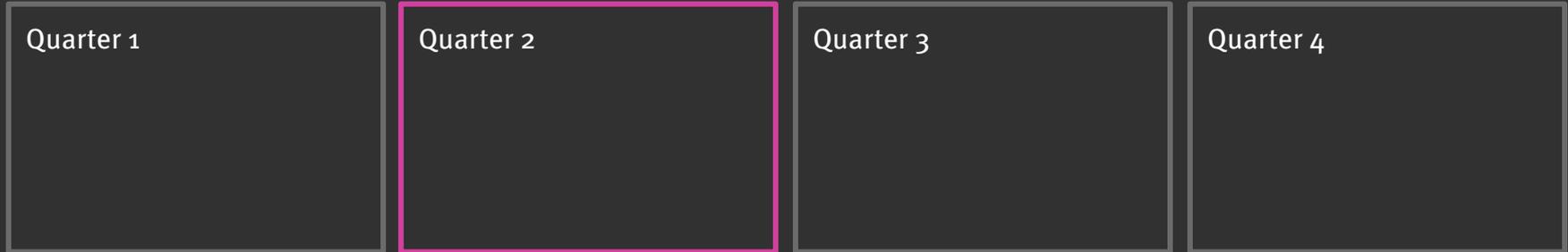
Methods	IDSE201 Rapid Ideation and Creative Problem Solving
Theory	IDSE202 Service Design
Application	IDSE203 Studio: Research & Synthesis

This quarter is about conducting research in the field, thinking about complex, large-scale systems, and solving problems in new ways.

We'll learn:

- Rapid sketching, visualization, and divergent thinking
- How to work with ecologies, customer journeys, multiple touchpoints
- How to apply ethnography and design research & synthesis in the context of actual social and humanitarian problem solving
- Thinking in services and interfaces
- How to work with a client, through issues of project management, coordination, budgeting, and schedules

Patterns in Quarter 2



Quarter 2 – now with more ambiguity

Quarter 2 will probably feel more ambiguous than Q1. Assignments might require you to establish your own criteria or application of a method in-order to be completed.

In addition to being critiqued on process & execution – you will also be critiqued on your application of the methods and the criteria in which you constrain your focus.

This is by design. The goal is autonomy.

Ethnography

Immersion in the cultural context of a problem

- Contextual Inquiry
- Contextual Observation
- Participatory Research
- Journaling / Diary Study
- Cultural Probes

Synthesis

Making meaning through inference and reframing

- Affinity Diagramming
- Workflow Modeling
- Cultural Diagramming
- Customer Journey Map
- Storyboarding
- Archetype Definition
- Concept Mapping

Prototyping

Hypothesis validation through generative, form-giving activities

- Service Blueprint
- Storyboarding
- Paper Prototype
- Simulation

Ethnography

Immersion in the cultural context of a problem

- Contextual Inquiry
- Contextual Observation
- Participatory Research
- Journaling / Diary Study
- Cultural Probes

Synthesis

Making meaning through inference and reframing

- Affinity Diagramming
- Workflow Modeling
- Cultural Diagramming
- Customer Journey Map
- Storyboarding
- Archetype Definition
- Concept Mapping

Prototyping

Hypothesis validation through generative, form-giving activities

- Service Blueprint
- Storyboarding
- Paper Prototype
- Simulation

Course Outcomes:

- Articulate and execute an end-to-end process for crafting/redesigning complex services that span multiple touch points across time
- Identify and utilize the appropriate tools and methods to synthesize user data into systematic visualizations of an existing service or problem landscape
- Articulate a vision for an ideal customer journey
- Identify and visually communicate touch points that support the ideal customer journey and be able to articulate the “system” as a tangible artifact
- Create opportunities and concepts for touchpoints within the customer journey

Syllabus Overview:

- Grading Opportunities
- Schedule (Class on thanksgiving?)
- Effort \leftrightarrow Time
- Critique of the class
- What to do when you have problems

Syllabus Overview:

- Grading Opportunities
- Schedule (Class on thanksgiving?)
- Effort \leftrightarrow Time
- Critique of the class
- What to do when you have problems



Here is what I did & why I tried it this way (Shows rough artifact)

Did you try this and consider this..



Ok – I'll try another iteration like that

Great, send me the next rev if you want more feedback

Questions so far?



Matt Franks

mfranks@AC4D.com

@franknatic

859.803.1874

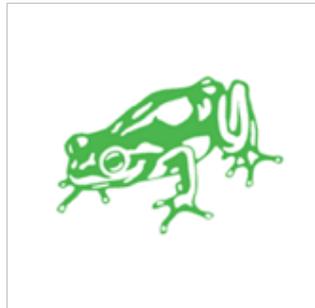
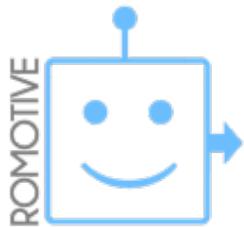


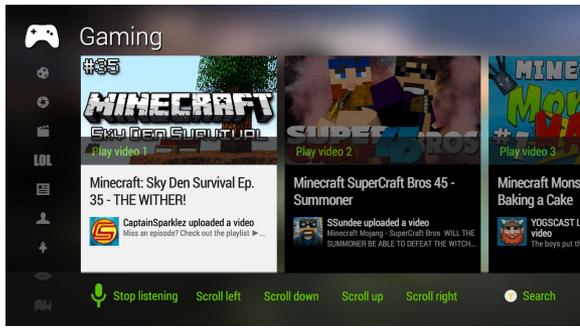
Founding
Member



Lead Interaction Designer







Questions for me?

What is a **Service**?

“There is a growing emphasis in business practice on creating meaningful, memorable customer experiences. The fundamental premise is that firms can no longer compete solely on providing superior value through their products, but rather they must move into the realm of customer experience management, creating long-term, emotional bonds with their customers through an evolving constellation of goods and services.”



Mary Jo Bitner

Executive Director of the Center for Services Leadership
W.P. Carey School of Business, Arizona State University

*“There is a growing emphasis in business practice on **creating meaningful, memorable customer experiences**. The fundamental premise is that firms can no longer compete solely on providing superior value through their products, but rather they must move into the realm of customer experience management, creating long-term, emotional bonds with their customers through an evolving constellation of goods and services.”*

Can you create a customers experience?

“There is a growing emphasis in business practice on creating meaningful, memorable customer experiences. The fundamental premise is that firms can no longer compete solely on providing superior value through their products, but rather they must move into the realm of customer experience management, creating long-term, emotional bonds with their customers through an evolving constellation of goods and services.”

Why is this a challenge?

“There is a growing emphasis in business practice on creating meaningful, memorable customer experiences. The fundamental premise is that firms can no longer compete solely on providing superior value through their products, but rather they must move into the realm of customer experience management, creating long-term, emotional bonds with their customers through an evolving constellation of goods and services.”

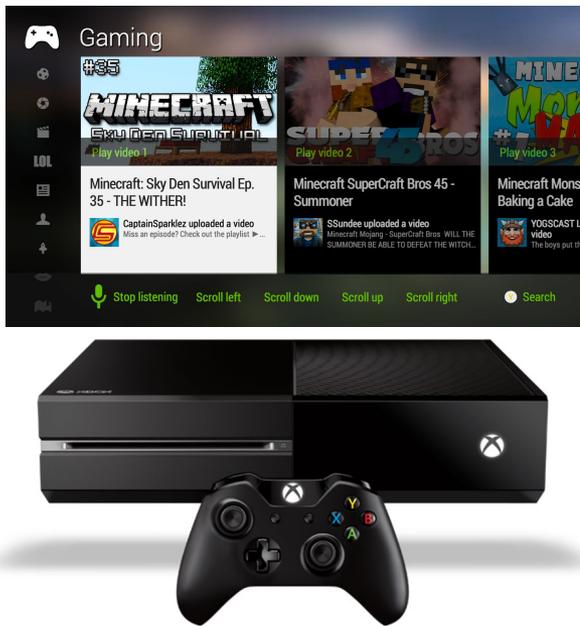
What does this mean for the way a company views its customer?

“There is a growing emphasis in business practice on creating meaningful, memorable customer experiences. The fundamental premise is that firms can no longer compete solely on providing superior value through their products, but rather they must move into the realm of customer experience management, creating long-term, emotional bonds with their customers through an evolving constellation of goods and services.”

What is a **Service**?

Relationship | Time | Meaningful | Evolving | Constellation

Are these products or services?



Are these products or services?

Can the product components and service components be created apart from one another?



Product & service components are increasingly intertwined..

“I’d like to buy the cloud please”

Actual AT&T Customer – In a retail store

“I’d like to buy the cloud please”

Actual AT&T Customer – In a retail store

While the “touchpoints” of a service may or may not be tangible, the service as a whole is most definitely not.

“I’d like to buy the cloud please”

Actual AT&T Customer – In a retail store

While the “touchpoints” of a service may or may not be tangible, the service as a whole is most definitely not.

Why is this challenging?

“I’d like to buy the cloud please”

Actual AT&T Customer – In a retail store

While the “touchpoints” of a service may or may not be tangible, the service as a whole is most definitely not.

Why is this challenging?

Is this different from “Interaction Design?”

As interaction designers, our role is to understand how a person views the world, so that we can create something that helps them achieve a goal.

With a physical or digital product, the user goal is achieved through the use of a tangible interface (a single touchpoint)

As interaction designers, our role is to understand how a person views the world, so that we can create something that helps them achieve a goal.

With a physical or digital product, the user goal is achieved through the use of a tangible interface (a single touchpoint)

With a service, the user goal is achieved through the orchestration of multiple touchpoints. While this can encompass use of physical or digital components, the entity (service provider) remains largely conceptual

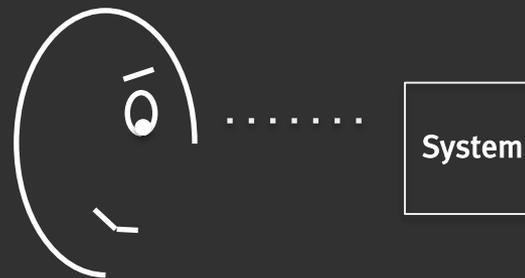
**In both instances, we are creating a dialogue
between a person and system of components**

Interaction Design is the creation of a dialogue between a person and a product, service or system. This dialogue is usually found in the world of behavior; an interaction that exists over time...

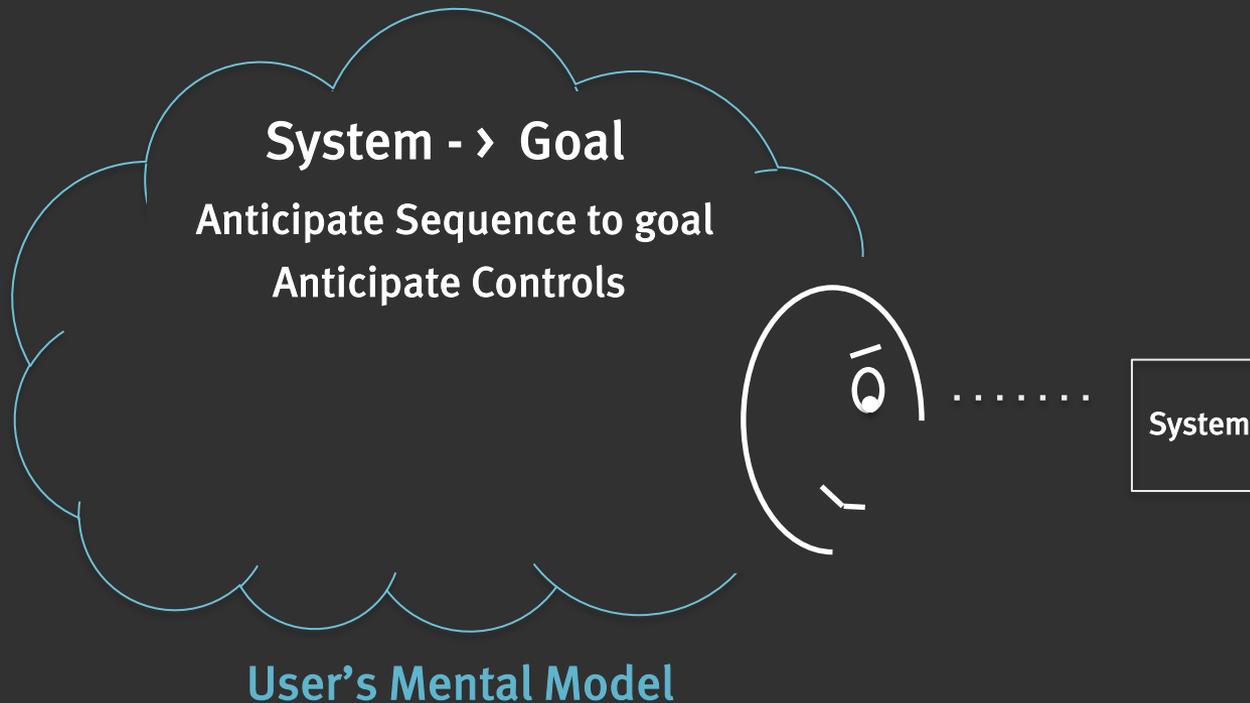
Interaction Design is the creation of a dialogue between a person and a product, service or system. This dialogue is usually found in the world of behavior; an interaction that exists over time...

To design behavior requires an understanding of the fluidity of natural dialogue, which is both reactionary and anticipatory at the same time.

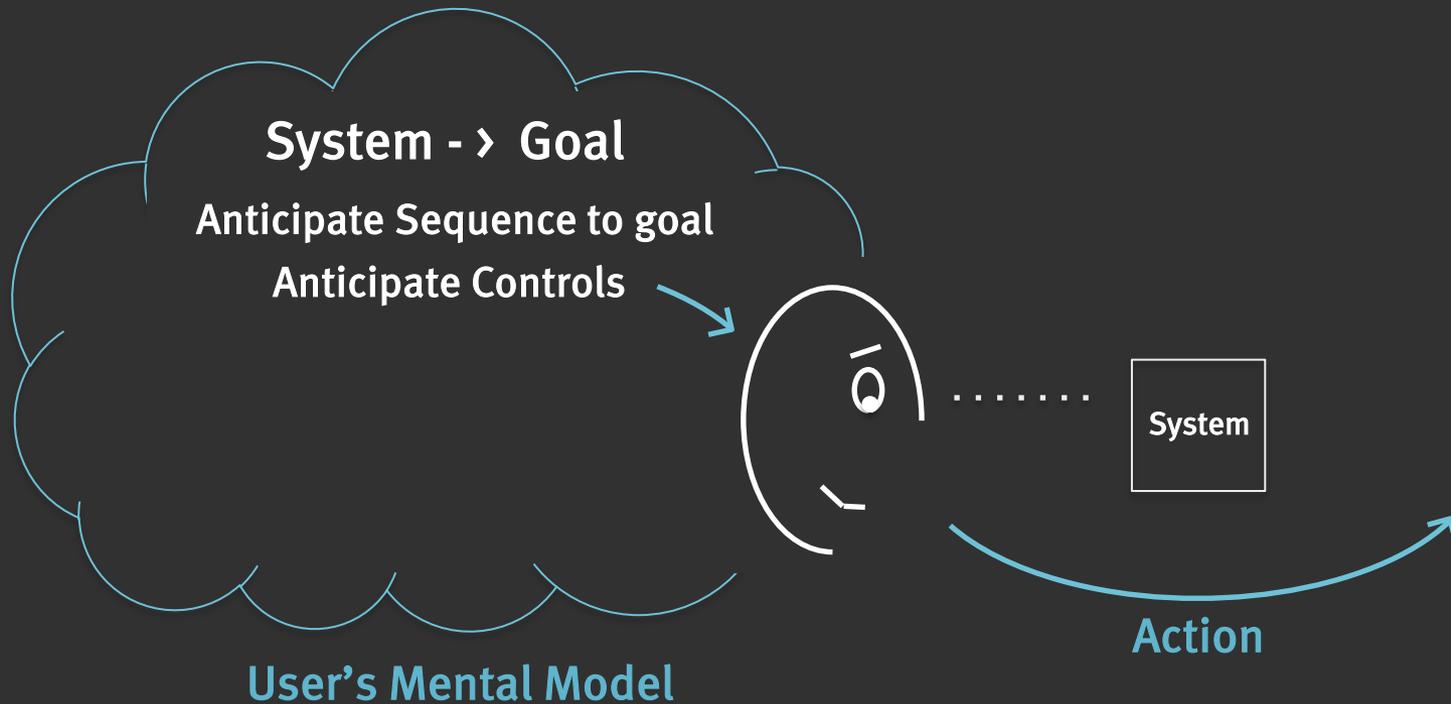
Behavior, which is simultaneously reactionary and anticipatory is governed by and informs the user's mental model of the world:



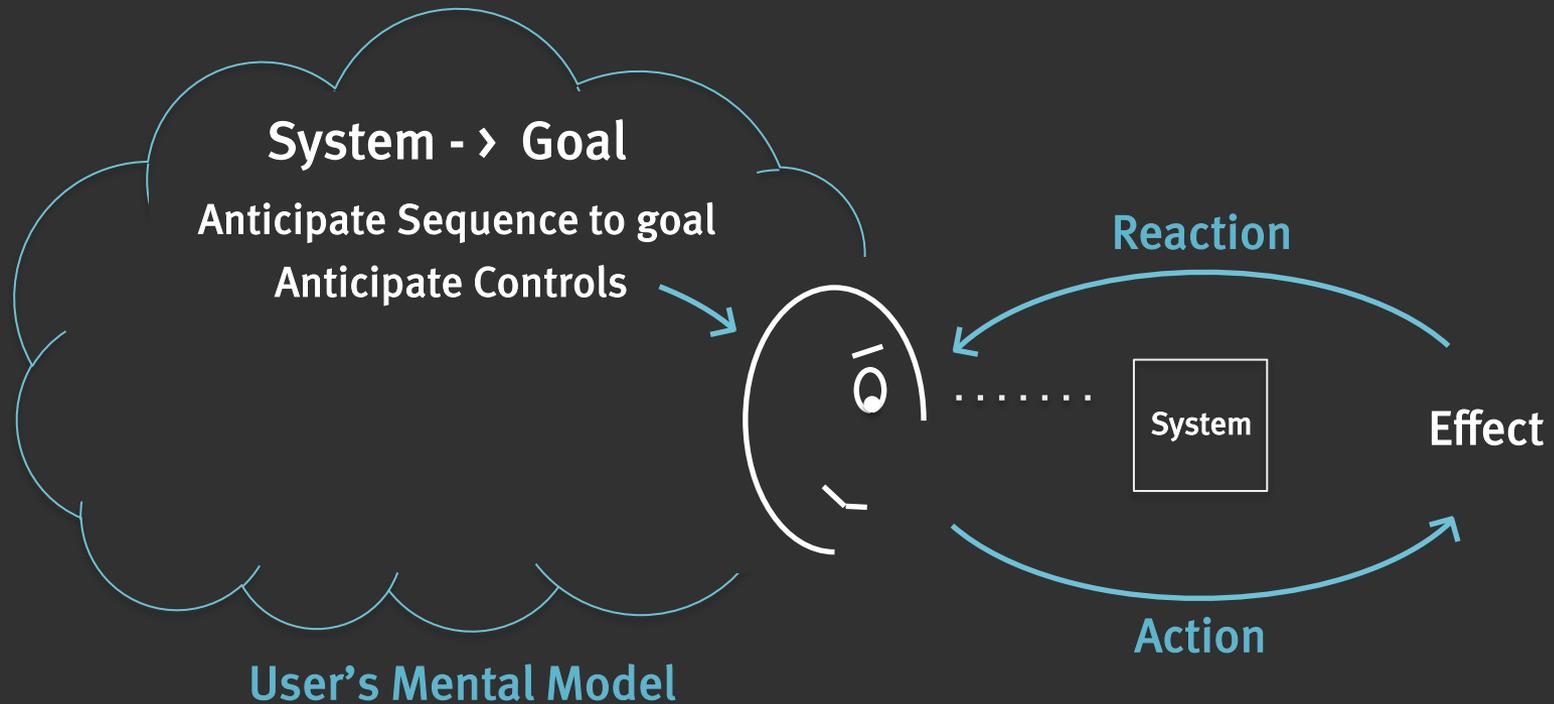
Behavior, which is simultaneously reactionary and anticipatory is governed by and informs the user's mental model of the world:



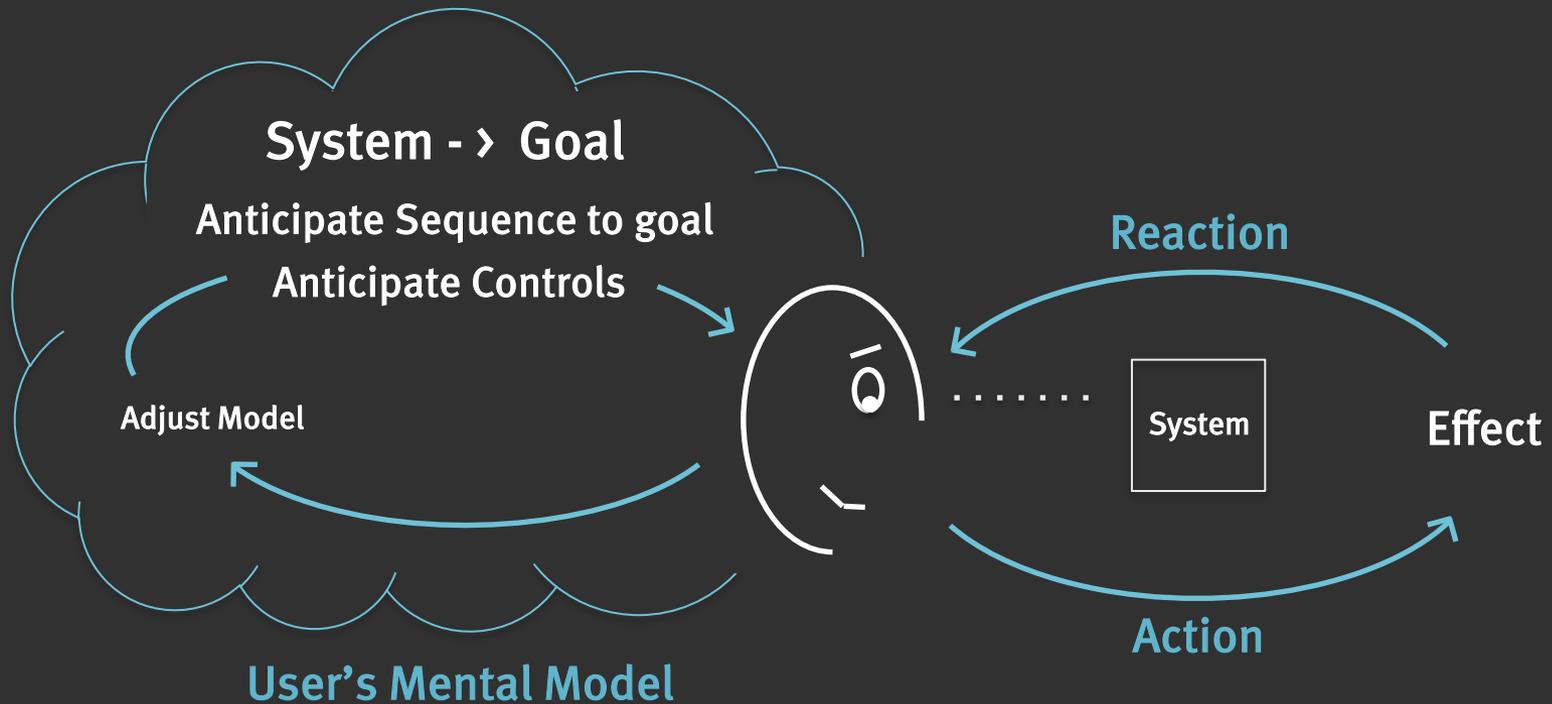
Behavior, which is simultaneously reactionary and anticipatory is governed by and informs the user's mental model of the world:



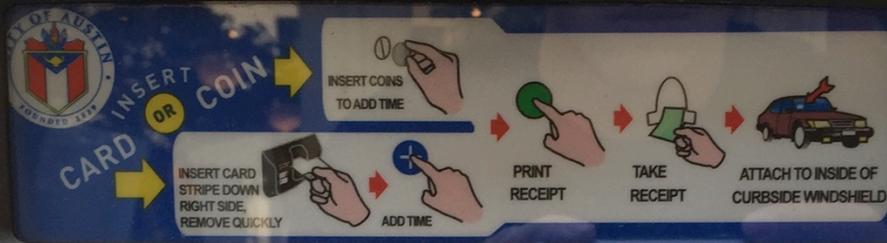
Behavior, which is simultaneously reactionary and anticipatory is governed by and informs the user's mental model of the world:



Behavior, which is simultaneously reactionary and anticipatory is governed by and informs the user's mental model of the world:



PARKEON



1:58

Meter Enforced
MON - WED: 8 AM - 6 PM
THUR - FRI: 8 AM - MIDNIGHT
SATURDAY: 11 AM - MIDNIGHT
\$1.00 = 1 Hour, 3 hour MAX
15 Minute Minimum Coin Purchase
1 Hour Minimum Credit Card Purchase
NO REFUND / NO CHANGE

Language

Add Time

Max Time

Next Day

Print

Cancel

Purchase

Receipt

Payment Methods

To design behavior requires an understanding of technology, such that the use and outcome can be applied in a humanistic and relevant manner.

Advances in technology →



A 1 to 1 relationship between the controls and the outcome.

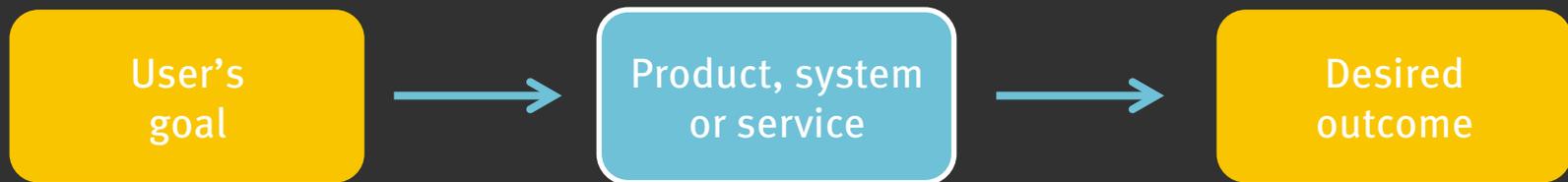


The function is no longer obvious, as the mechanics are no longer visible



The product, system, and controls can be separated. They can be “experienced” and created independently of each other

We must balance the technical capability (what “it” can do) with the user’s goal (“what I want”, “how I want to feel”) and the user’s perception of the world (“how I expect to achieve this”).



“[a service designer] can visualize, express, and choreograph what other people can’t see, envisage solutions that do not exist, observe and interpret needs and behaviors and transform them into possible service futures, and express and evaluate, in the language of experience, the quality of the design”

Service Design Network - 2005

“[a service designer] can visualize, express, and choreograph what other people can’t see, envisage solutions that do not exist, observe and interpret needs and behaviors and transform them into possible service futures, and express and evaluate, in the language of experience, the quality of the design”

Service Design Network - 2005

The convergence of services & interactive artifacts has blurred any definitive boundary between the disciplines of Service Design and Interaction Design.

An Interaction designer “*can visualize, express, and choreograph what other people can’t see, envisage solutions that do not exist, observe and interpret needs and behaviors and transform them into possible service futures, and express and evaluate, in the language of experience, the quality of the design*”

An Interaction designer “*can visualize, express, and choreograph what other people can’t see, envisage solutions that do not exist, observe and interpret needs and behaviors and transform them into possible service futures, and express and evaluate, in the language of experience, the quality of the design*”

An Interaction designer observe and interpret needs and behaviors and transform them into possible service futures, can visualize, express, and choreograph what other people can't see, envisage solutions that do not exist and translate them into possible futures, and express and evaluate, in the language of experience, the quality of the design”

An Interaction designer observe and interpret needs and behaviors and transform them into possible service futures, can visualize, express, and choreograph what other people can't see, envisage solutions that do not exist and translate them into possible futures, and express and evaluate, in the language of experience, the quality of the design”

**Making the conceptual tangible; through
depictive and symbolic representations**

Making the conceptual tangible; through depictive and symbolic representations

Customer Journey Map

Depicts the archetypical journey
of a user as they attempt to
achieve a goal or satisfy a need

A good way to visualize the sequence
actions, feelings, & interactions that a
user has over time

This isn't science, or engineering.
It's design. Trust your (informed)
intuition, and try to move on
without *all of the data*.

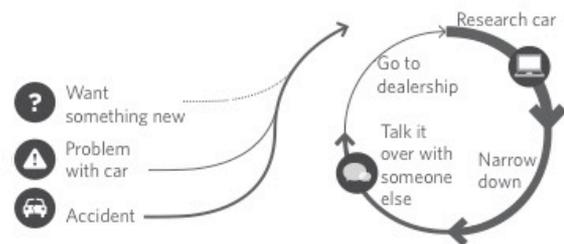
While there is a general theme for creating a customer journey map, there are no hard and fast rules. This is a tool for you THE DESIGNER to articulate an informed opinion.

Let's try it..

Let's create a customer journey
map of buying a car

Customer Journey Map: Buying a car

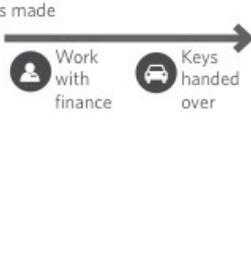
① There's a problem



② Enter the Shark Tank

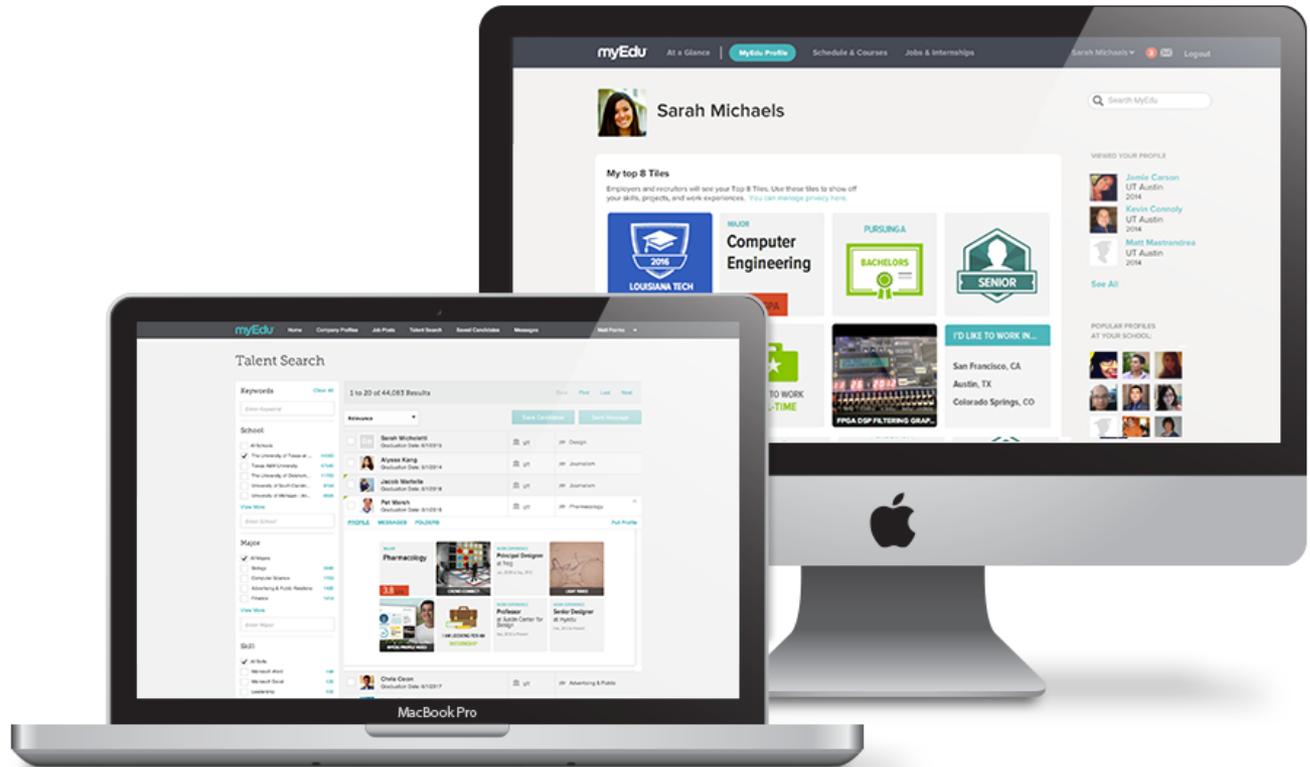


④ You survived



Thinking	Feeling
<ul style="list-style-type: none"> Do I really need a new car? Why did this have to happen? Do I even need a car? Maybe I can buy a car from one of my family members or friends? 	<ul style="list-style-type: none"> Unsure
<ul style="list-style-type: none"> I only want a certain brand or type of car. What's the price? What are the reviews? Do I really need a new car? I'm excited to get a new car. Where should I go to get this. Which of my friends or family will help me out the best at the dealership? 	<ul style="list-style-type: none"> Confident Still unsure Some excitement
<ul style="list-style-type: none"> I'm really not looking forward to this. Please let me just look at the cars on my own before I get swarmed by sales people. Do they have the model I'm looking for. How is the inside since I know this is probably going to be an all day affair. This car is great. What does my friend or family think of the car? 	<ul style="list-style-type: none"> Some excitement Uncertainty (should I stay or go) Uncomfortable
<ul style="list-style-type: none"> Here we go lets see how this all plays out. Do I have all my facts in line? Why is this taking so long? Where does the sales person keep going? I need coffee? Can I leave and come back? I hope I can get this today? Do I need any of these extra options? 	<ul style="list-style-type: none"> Nervous Tired Hungry Uncertainty (am I going to be able to purchase for that price)
<ul style="list-style-type: none"> Finally I wonder if the interest rate can be lowered? Will my credit go through? Why are they still using these dated printers? Why couldn't this finance person be my sales person? I can't wait to go. 	<ul style="list-style-type: none"> Excitement Exhausted

Case Study: MyEdu



Participant #9

Stacy

They told me that everyone should be looking into doing multiple internships. It's really competitive right now. Before one was fine, but I probably need to do more like three. I wanted to be lazy like I was back home, but now I kind of have to try. To stand out from the rest I guess.

I found out about the major from a guy at The Gap. I didn't even know what that was. I Google it, and it sounded better than just regular business, so I just chose that. My life decisions are based on stupid things.

I wanted to know that I have a degree that allows me to travel. It gives me the luxury of knowing multiple languages and cultures. I had to take a lot of extra classes - I have to learn another language. It's taking a lot more work than a [major] degree.

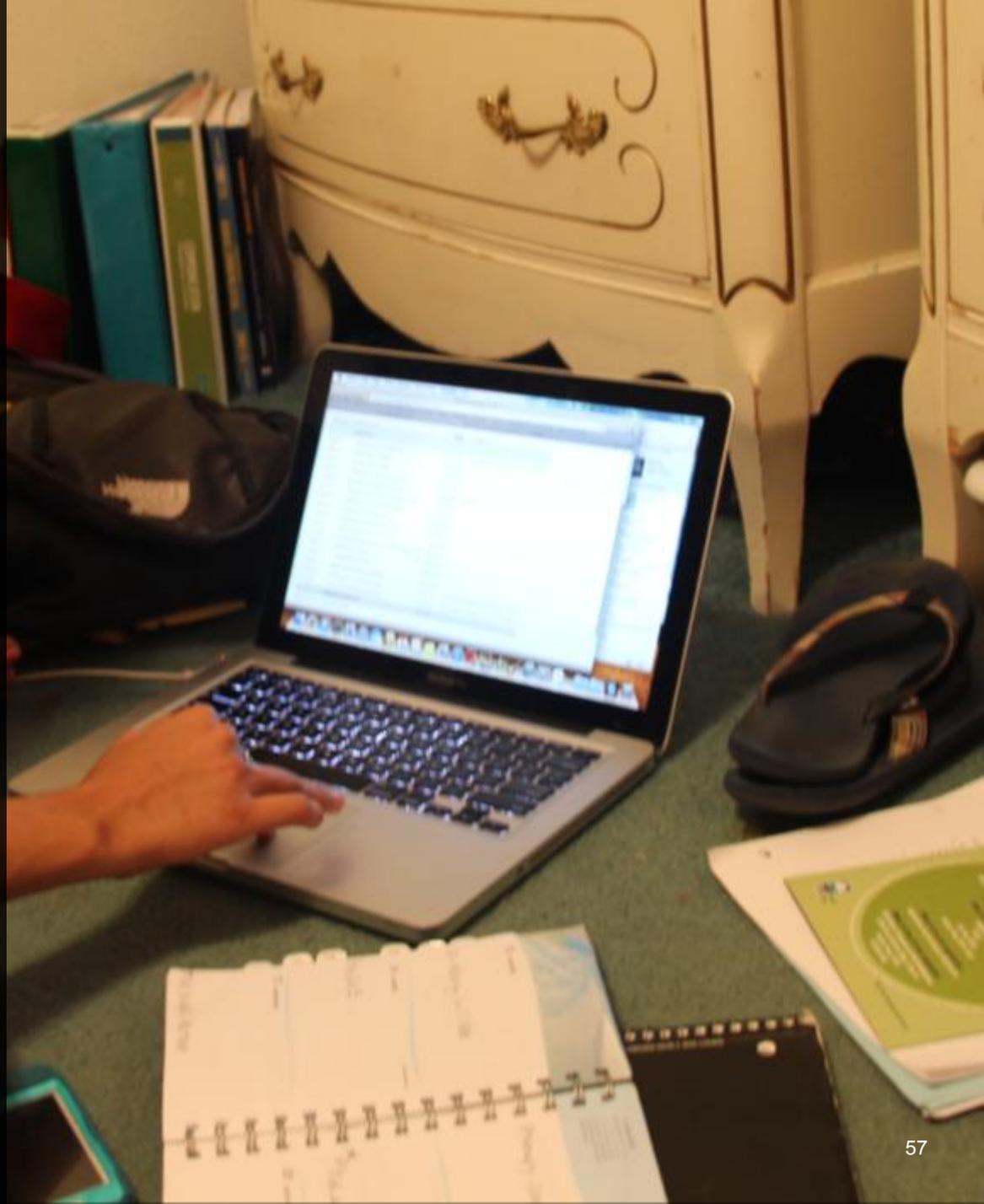


Participant #13

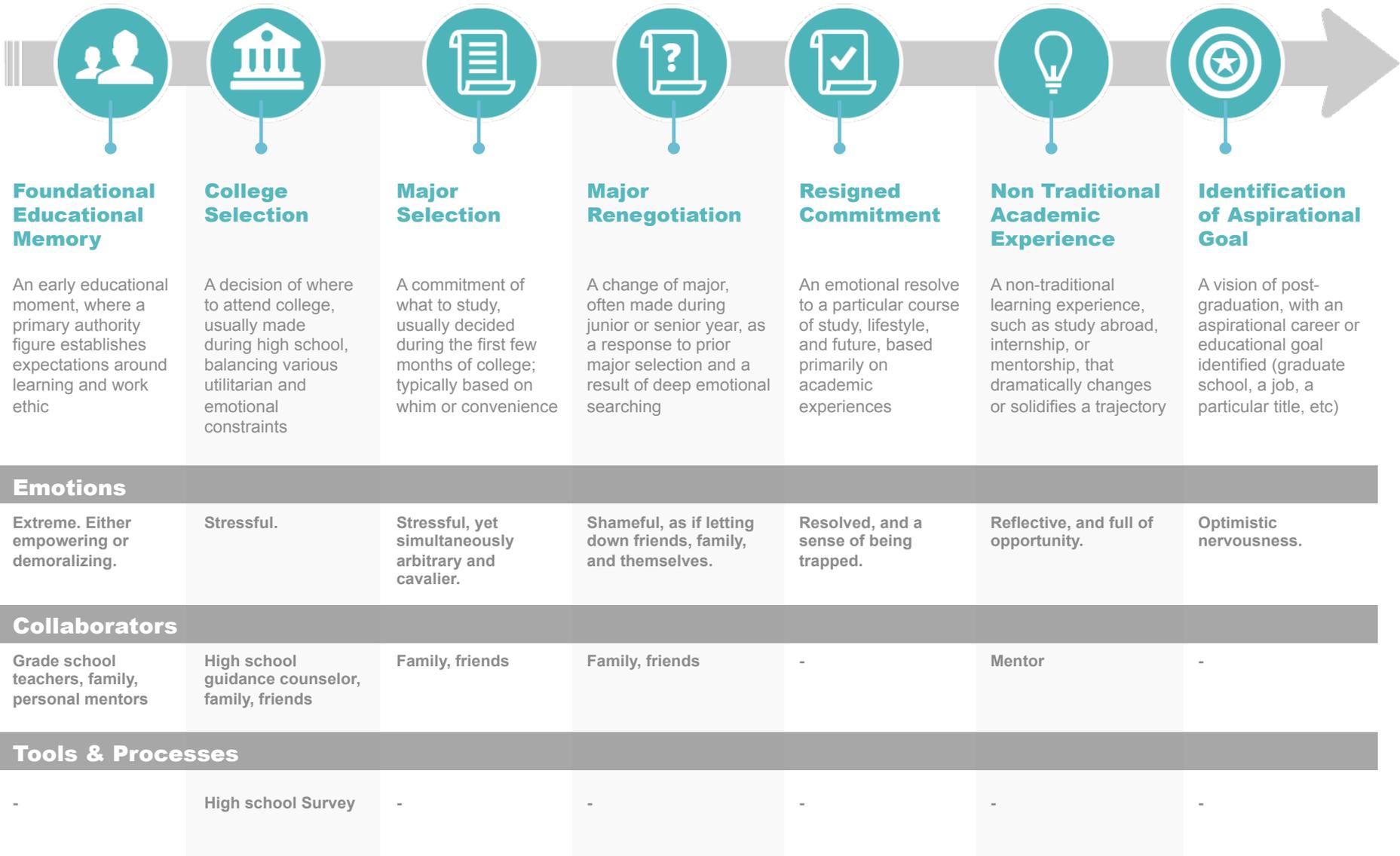
Amy

I didn't even want to do Mech E. I wanted to do biomedical engineering. When I got to [school] it wasn't available. SO randomly I picked mechanical engineering because I had a lot of mechanical engineering friends.

After the non-profit then there is grad school. I'll either go to another country and study abroad or go to grad school. I won't know till graduation, I like to take it day by day, I don't like to plan ahead. I have a bunch of ideas but I don't think they are my plan.



Academic Journey



Let's try it again..

As a class, create a customer journey map for the following services:

Yellow Taxi

Uber

Instacart

Air Travel

Crafting A Customer Journey Map

Starting with your design research (never rely on just one data source):

1. Choose your lens (here are just a few*) :
 - Current customer journey – from the customers perspective
 - Ideal customer journey – from the customers perspective
 - Current or ideal customer journey from the service or service provider's perspective
2. Pick a starting point (it often will not be the beginning) – an action, stage, or interaction that you have seen more than one person go through. Sketch it out on a whiteboard.
3. Plot the following building blocks – mixing visual elements with words and headlines:
 - Actions the customers are taking to meet their needs
 - Noticeable behaviors
 - Touch-points or artifacts they are interacting with
 - Any cycles
4. Iterate and refine the map – start to place visual emphasis based on a desired outcome:
 - **Have a point of view** – What do you want to illustrate? What key points do you want them to tell other people
 - **Consider your audience** – What kind of details help them understand the story? Which insights are essential for them to buy into the problem – or to make good strategic design decisions?
5. While still sketchy, test the flow and outcome with an outsider. If your point is made, increase the level of fidelity (make it digital)

Making the conceptual tangible; through depictive and symbolic representations

Customer Journey Map

Depicts the archetypical journey of a user as they attempt to achieve a goal or satisfy a need

A good way to visualize the sequence actions, feelings, & interactions that a user has over time

Concept Model

Depicts the components of a system, their relationship to one another, and conveys a sense of hierarchy.

A good way to visualize a problem or system

A Concept Model..

A way to visualize the content and functionalities of a system in a single diagram. It details the main sections of the system, their relationship to one another & conveys a sense of hierarchy.

A Concept Model..

A way to visualize the content and functionalities of a system in a single diagram. It details the main sections of the system, their relationship to one another & conveys a sense of hierarchy.

- allows you to explore the range, scope, and depth of the system without getting bogged down into the details of the interface

A Concept Model..

A way to visualize the content and functionalities of a system in a single diagram. It details the main sections of the system, their relationship to one another & conveys a sense of hierarchy.

- allows you to explore the range, scope, and depth of the system without getting bogged down into the details of the interface
- allows you to experiment with varying hierarchies & organization schemes

A Concept Model..

A way to visualize the content and functionalities of a system in a single diagram. It details the main sections of the system, their relationship to one another & conveys a sense of hierarchy.

- allows you to explore the range, scope, and depth of the system without getting bogged down into the details of the interface
- allows you to experiment with varying hierarchies & organization schemes
- will shift and change over time (is a working document)

A Concept Model..

A way to visualize the content and functionalities of a system in a single diagram. It details the main sections of the system, their relationship to one another & conveys a sense of hierarchy.

- allows you to explore the range, scope, and depth of the system without getting bogged down into the details of the interface
- allows you to experiment with varying hierarchies & organization schemes
- will shift and change over time (is a working document)
- doesn't have to be complex to be powerful (error on the side of simplicity)

This isn't science, or engineering.
It's design. Trust your (informed)
intuition, and try to move on
without *all of the data*.

While there is a general theme for creating a customer journey map, there are no hard and fast rules. This is a tool for you visualize a problem, system, structure, etc..

Case Study:
Comcast

Recommendation

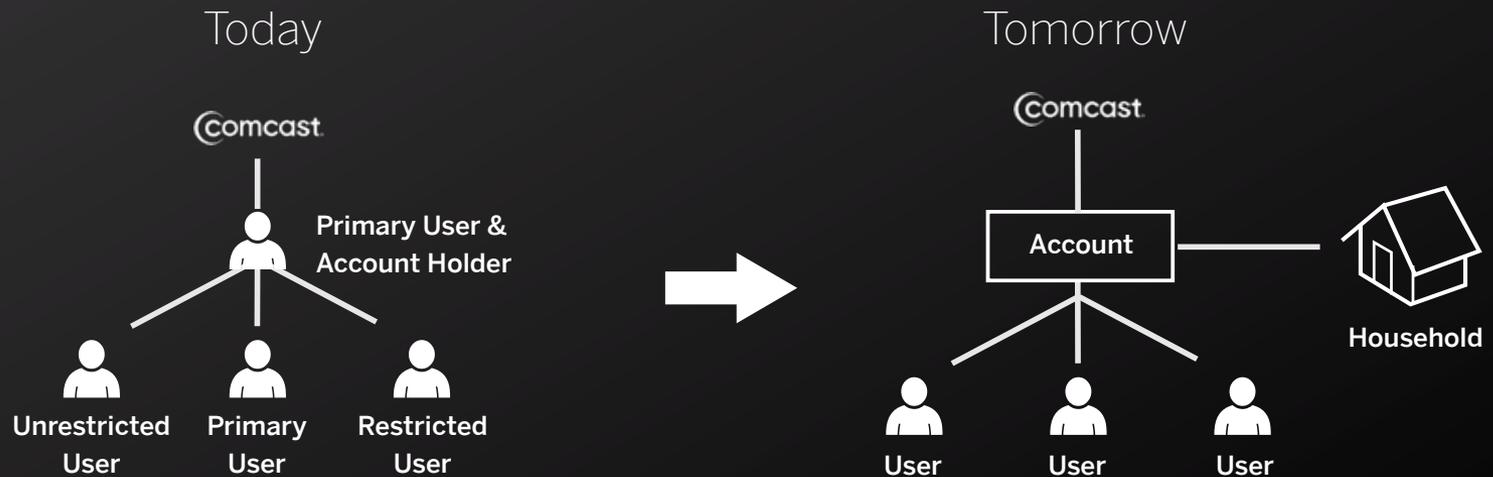
Navigation Structure

Individual Identity

Personalization

Flexible Identity

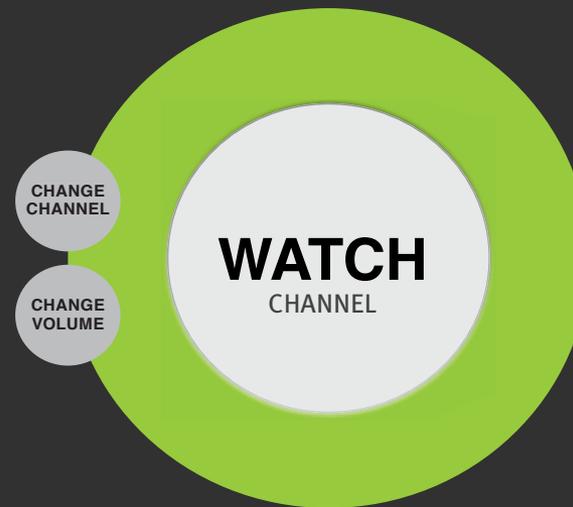
The identity structure should be de-coupled from a primary account or billing address. Allowing users to move freely between accounts while retaining their personal data, and enabling Comcast to build lasting relationships with every individual in the household.



Case Study:
Xbox 1



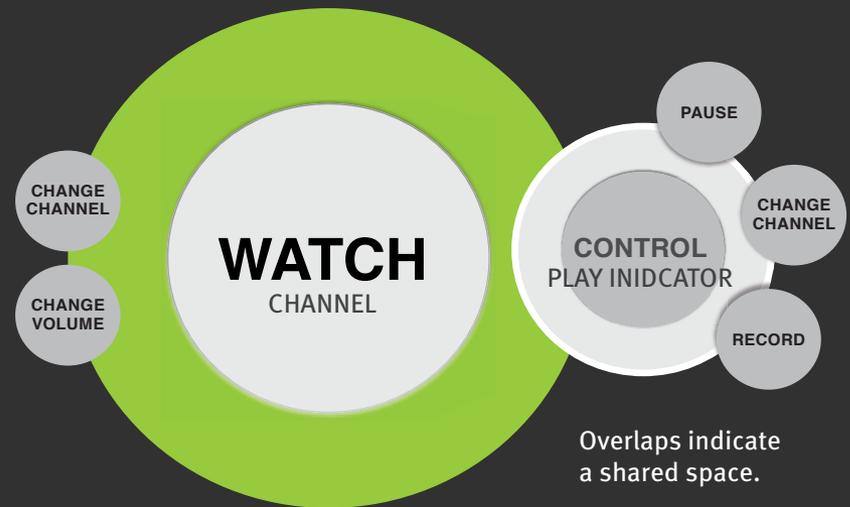
Television Interface



Nouns and verbs
describe content
and actions

Contextual Controls

Users can display contextual controls without interrupting the channel they are watching. These controls allow for asymmetrical channel browsing & channel manipulation (pause, play, etc..)



Program Guide

Users can view a program guide to discover what's playing on each channel.



Program Details

User can get additional program details by diving into the details area.



Settings

Users can access the system settings at any moment by pressing the settings button. The settings page will remove users from any watching / discovering experience.



Concept Model

For a television interface

What might be the user's primary and secondary goals when using this interface?



Concept Model

For a television interface

How has the concept of on demand Programming started to change “our” mental model of watching television?



Let's try it again..

Create a concept model for each service that shows the components of the system and how they relate to each other:

Yellow Taxi

Uber

Instacart

Air Travel

Crafting A Concept Model

1. Define the purpose of the illustration:
 - **Examples Include:** Showing all of the components and their priority, showing a problem with a structure, mapping connection points between products, (you make this part up)
 - **Have a point of view** – What do you want to illustrate? What key points do you want them to tell other people
 - **Consider your audience** – What kind of details help them understand the story? Which insights are essential for them to buy into the problem – or to make good strategic design decisions?
 - **Identify the narrative** – Do I need to establish the current state before the “next” state? Should I use a progressive build with annotations?
2. Sketch the components – start to establish visual patterns:
 - A circle might represent a part of the system
 - Lines or overlaps might be used to show relation, proximity, or interaction
 - Use arrows or action lines to indicate motion
 - Use text sparingly – A headline, tags, and 3 – 4 word labels should be enough to make your point
3. While still sketchy, test the flow and outcome with an outsider & iterate on the diagram
4. Once the concept model illustrates your point, bring increase the level of fidelity

Both of these tools are catalysts, not conclusions

Customer Journey Map

Depicts the archetypical journey of a user as they attempt to achieve a goal or satisfy a need

A good way to visualize the sequence actions, feelings, & interactions that a user has over time

Concept Model

Depicts the components of a system, their relationship to one another, and conveys a sense of hierarchy.

A good way to visualize a problem or system

**Questions on concept models or
customer journey maps?**

For next class..

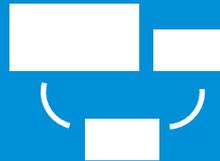
Read: Innovation X: Chapter 4 (pdf in the drive)

Create: Position Diagram 1

1. Capture the primary points or arguments in the reading.



2. Build your own framework to make sense of the world



For next class..

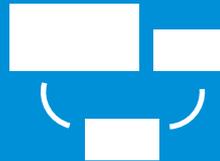
Read: Innovation X: Chapter 4 (pdf in the drive)

Create: Position Diagram 1

1. Capture the primary points or arguments in the reading.



2. Build your own framework to make sense of the world



3. Push these concepts from the reading through your framework

4. Synthesize new ideas from the result



ac4d

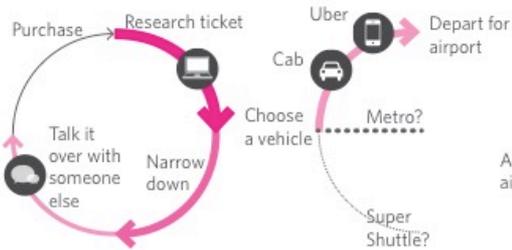
Matt Franks
Professor, Austin Center for Design
mfranks@ac4d.com

Appendix:

Some additional examples

Customer Journey Map: Air Travel

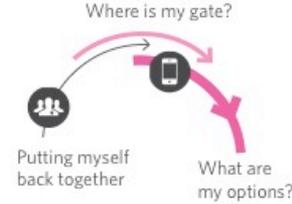
① Journey 1 Point A to A



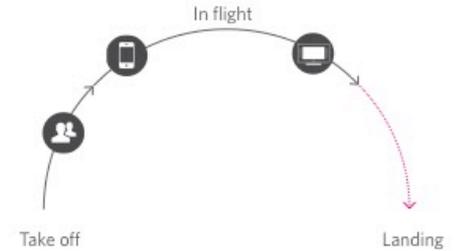
② Journey 2 Start the maze



③ Journey 3 Wait or Run



④ Journey 4 Point B to B



Thinking	Feeling
<ul style="list-style-type: none"> I only want to fly direct. What's the price? What time does it depart and arrive? I'm not looking forward to expensing this. I hope Virgin has a ticket. Where does this fly in and out of? 	<ul style="list-style-type: none"> Anxiety
<ul style="list-style-type: none"> Give false take off time to ensure on time arrival. What are the unexpected events that will delay me? How is my mode of transportation going to be. How security going to be? Should I have joined the TSA preferred list? The more people travel the less time they leave themselves. 	<ul style="list-style-type: none"> Anxiety compounds
<ul style="list-style-type: none"> False sense of security that you're at the airport but you're still not at your plane Is my bag going to be ok and will it be lost? Am I going to be the 1 person who is going to be flagged? How much time do I have? I'm worried about slowing down the line. It's strange that I'm undressing in front of everyone. 	<ul style="list-style-type: none"> Confusion Anxiety Some sense of calm Humiliation/Shame
<ul style="list-style-type: none"> Should I take the ticket and my ID out of my pocket? Do I have everything that I started with? What the gate number & which is my seat number? Where can I work? Where do I eat and drink? What do my kids do? What can I do to kill time? 	<ul style="list-style-type: none"> Nervous Rushed Anxiety Tired Hungry Relief
<ul style="list-style-type: none"> Where is my connecting flight & will I make it on time? Will people stay seated so I can make my connecting flight from the back of the plane? Will my bag be at the baggage claim and what number is it? How do I get to my hotel? Where will my rental car be? I can't wait to get some sleep. How much traffic will there be? 	<ul style="list-style-type: none"> Anxious Scared of possible turbulence Hungry Confined Dehydrated