Class process

1. Project proposal
2. Customer journey
3. Value proposition testing
4. Feature development
5. Information structure
6. Interaction prototype
7. Strategy

User needs to specifications

Why do we care about user needs and specifications?

Customer needs:

90% of all successful new products and services are grounded in real customer needs.

Independent of the product, customer needs point to opportunity spaces: gaps between ideal and actual.

Key question:
"what are the user's unmet needs?"

Specifications:

Needs leave too much interpretation – it can be hard to know if your new service is satisfying the needs adequately if you do not identify the appropriate metrics.

Key question:
"what does the product need to do?"

Source: The Primacy of the Idea Itself as a Predictor of New Product Success. Jacob Goldenberg, Donald R. Lehmann, and David Mazursky; Management Science; 1998

There are four steps in the process of transforming customer needs into service specifications:

① Make a thorough list of what the users said and did (from your empathy maps and user journeys)

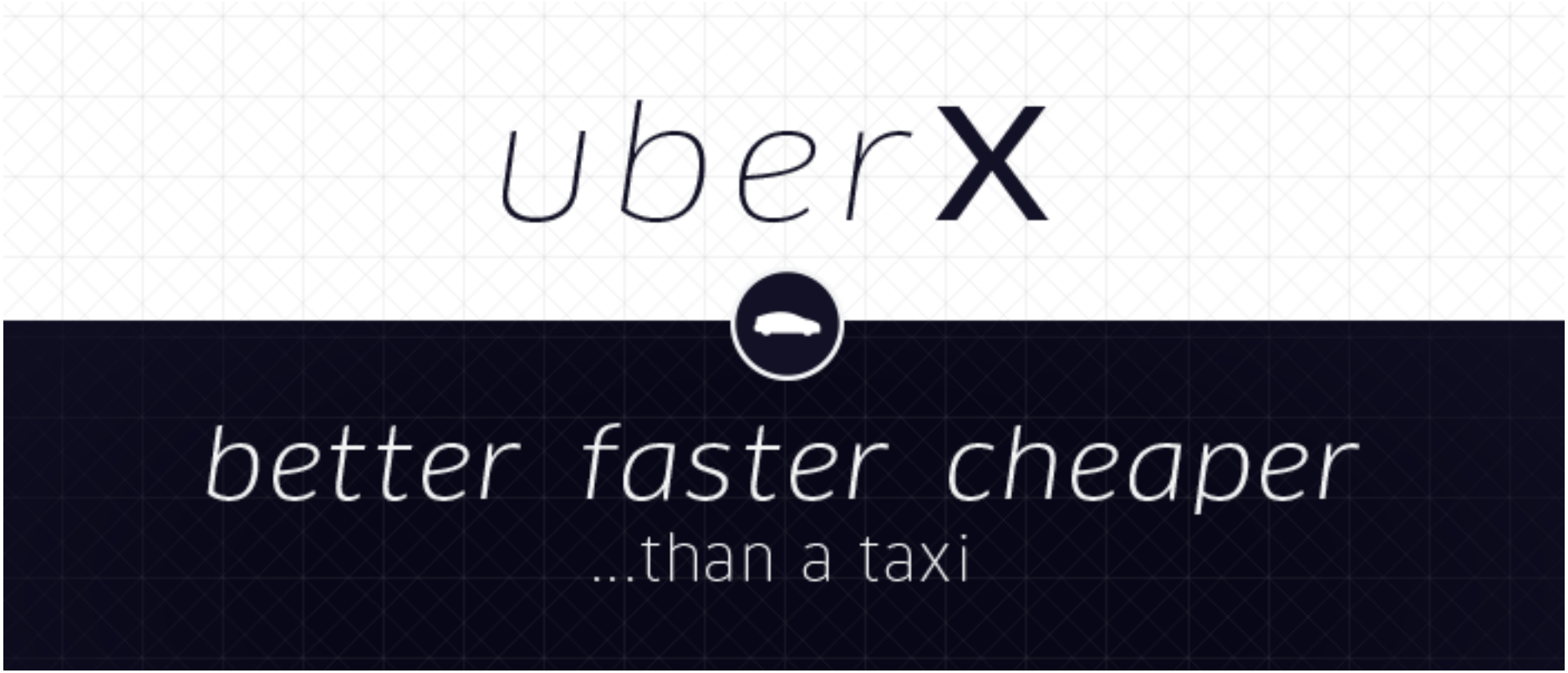
② Author need statements (based on your discussion of the empathy maps and user journeys)

③ Organize and prioritize the needs

④ Identify metrics for each need (how can you measure if the service is solving for the need?)

⑤ Identify your target specification (what value is ideal for each measurement?)

Our example will be focused on the service Uber X



Step 1: Make a thorough list of what the users said (interviews) and did (observations)

In your small group take turns sharing your empathy maps and user journeys. On the white board write down specific quotes and observations, highlighting areas where people were:

- Frustrated
- Wasting time
- Wasting money
- Unsafe
- Identifying Polarizing issues

Example quote:
"I don't like that all taxis won't take my credit card".

Example observation:
People trying to split fairs when paying for a taxi ride.

Step 2: Author need statements (based on list from interviews and observations)

Re-write each insight (the important quotes and observations you wrote on the board) in the voice of the user. We recommend writing each need statement on a separate sticky note. Be sure to make all the statements parallel: all the statements should share a similar sentence structure and equivalent detail. For example all statements should read “I need a <your service> that <what the service needs to do>”

Good examples (do this):

- I need a car service that makes it easy to pay with a credit card.
- I need a car service that speeds up my departure from the vehicle.

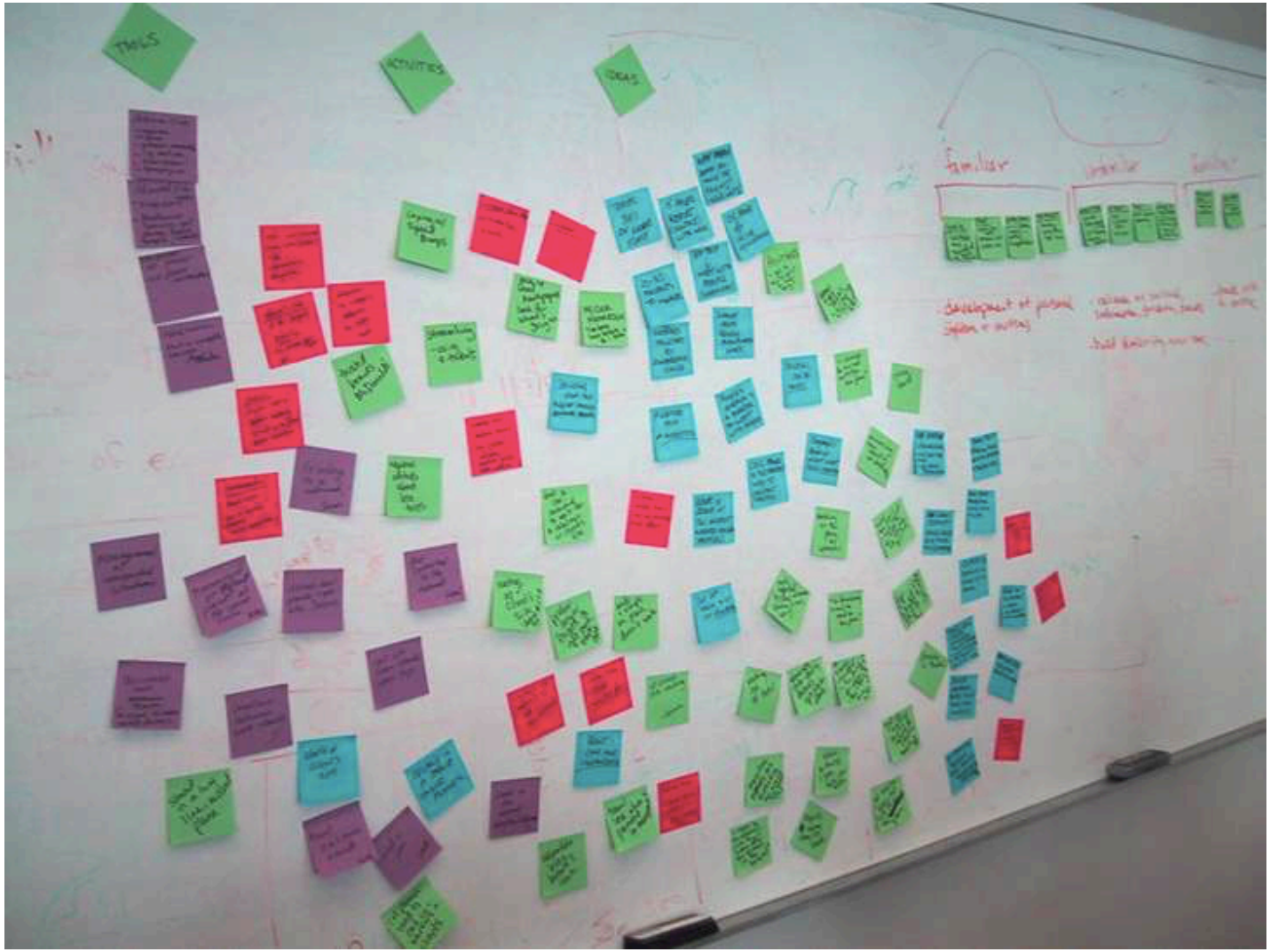
These examples state WHAT the service should do, not how. This will ensure there are multiple ways you can solve the problem, leading to more creative services. The statements are also written in a positive, not negative voice.

Bad examples (don’t do this):

- I need a car service that uses an app to request a ride.
- I need a car service that is not as disgusting and dirty as taxis.

These statements suggest how a product should solve for the need, this will limit the options you can consider and will likely lead to derivative, uncreative products.

Step 2: Author need statements should look and feel like this:



Step 3: Organize and prioritize the needs

Review the list and eliminate any redundant needs.

Group similar needs, give the group of needs a descriptive name. (you should have between 5 – 7 needs per group)

Sort each group of needs into one of three categories:

- **The service MUST satisfy these needs:** these are needs that have to be addressed or the service will not be viable (a car service needs to be safe and reliable)
- **Linear satisfaction needs:** the more of these you can address the more the user will be satisfied with the service – distinguishing your service from existing alternatives. These are often needs that are well known to all but addressed in different ways / extents (a car service that is less expensive than taxis, a car service with shorter wait times for a ride).
- **Unknown needs**: these are needs that are unarticulated by the user and potentially unknown to competitors. People are not expecting you to solve these needs, so when you do the service has a distinct advantage. Think of these as "bonus" needs (splitting a fair, paying for someone else's ride).

Step 4: Identify metrics for each need (how can you measure if the service is solving for the need?)

For this step ask (for each need, not category), how can we measure if we satisfied the need? Remember, you are not defining the value of the metric at this point, just the metric. When doing this, keep in mind:

- Look for common industry metrics (horsepower for cars, decibels for sound equipment).
- Be practical, make sure that it is feasible and cost effective to take measurements.
- Make sure the service has direct influence on the metric
- Some things are not easily quantified, often the emotional / cultural aspects of the product. You still want to define a metric, but it may not be measurable in a truly scientific way. For example, you can determine that a new service should make someone feel accomplished because they use the service. It is hard to gain a scientific measurement of “accomplished”, but surveys and user interviews can help you establish a reasonable proxy.

Needs:	*Metrics:*
• I need a more affordable car service	• Total price of ride compared to equivalent taxi ride
• I need a car service that makes it easy to pay with a credit card	• Steps and time required to use a credit card when paying for a ride

Step 5: Identify your target specification (what value is ideal for each measurement?)

To adequately determine a target specification you need to do a combination of benchmarking (determining how existing offerings measure up) and user interviews (what do users expect, tolerate, what will delight them). For our class you will use the method most often employed in product development, a reasonable guess. It is important to have some rationale for each of your target specifications, even if it is initially a guess.

Needs:	*Metrics:*	*Target specification:*
• I need a more affordable car service	• Price compared to equivalent taxi ride	• 30% cheaper than an equivalent taxi ride
• I need a car service that makes it easy to pay with a credit card	• Time required to pay and exit the car	• < 5 seconds to swipe / pay / confirm

Assignment

Complete steps 1 – 5 in class. First use the white boards and sticky notes (and take a picture of your work product. Transfer your work to a spreadsheet. Submit your spreadsheet and picture on iGroups (in the folder user needs and specifications). Here is an example spreadsheet:

Categories:	Needs:	Types of need:	Metrics:	Target Specification
Convenience	I need a lunch box that is easily portable.	linear	Weight of lunch box in lbs	<=.5 lbs
	I need something small/compact.	linear	Volume of lunch box in^3	$180in^3$
	I need a lunch box that is easy to clean.	must	Time to wash lunch box (secs)	>1 min.
	I need insulation that takes up minimal space.	linear	% of lunch box that's insulation	10.00%
Added Functionality	I need a lunch box with flexible compartments.	unknown	# of configurations	>=3
	I need a lunch box that can be multipurpose.	linear	# of purposes	2
	I need somewhere to put ice packs in my lunch box.	linear	% of box taken up by ice pack	<=10%
	I need somewhere to put silverware in my lunch box.	linear	# of utensils held	3
Food Safety	I need a lunch box that prevents leakage.	must	leakage in fl oz	0 oz
	I need something that keeps food in place.	must	area of box vs. avg volume of lunch	95% filled
	I need a lunch box that is microwave safe.	must	heat resistant in degrees F	>212 F
	I need a lunch box that keeps my food cold.	must	degrees F	<50 F
	I need a lunch box that is dishwasher safe.	must	# of times it melts in diswasher	0 oz
	I need a lunch box that preserves the flavor of my food.	must	% of people in survey who agree	>90%
	I need material that is stain resistant.	linear	# of food stains in 1 week	<2
	I need a lunch box that keeps my food warm.	must	Temp in degrees F	>=55 F
Improved Construction	I need a lunch box that is durable.	must	# of breakages in 5 year period	<1
	I need a lunch box that is environmentally friendly.	must	% of certified materials use	100.00%
	I need a lunch box that is hard to lose.	unknown	# of lunch boxes bought in 1 year	<=0.2
	I need a lunch box that is stylish.	unknown	% of people in survey who agree	>50%

Value proposition

Strategy is about saying NO

After several years of development, Uber X can claim to be faster, cheaper, and more convenient compared to Taxis.

However, when it launched, they did not have the resources to achieve all three on the first version. They faced the same question that all service developers face: “of all the benefits we can provide to customers, which one is the most critical for us to get right at launch?”

Unlike other parts of this process, we prefer you don’t make a guess for this step. We are going to use Facebook and/or Google ad words to determine which value proposition you should design your service around.

Process for testing value propositions

① Create two or three alternative value propositions based on your needs / metrics / specifications.
② Transform these value propositions into ads that can be placed on Facebook or Google.

Finish this for next week

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③ Set up and execute the ads.
④ Assess the data: which value proposition was more popular with potential customers? You will base the remainder of your design on this value proposition.

Next week in class we will help you set up and run the ads

Step 1: create your alternative value propositions

There are many forms of value proposition statements. We suggest using the very simple form below:

Our <Service type>
Delivers <benefits delivered>
For <target customers>

< Service type >
This is the general category of your service. It is unlikely that you have a completely new service – base this on an existing, accepted way to define the industry in which you will compete. *E.g. car service*

< Benefits delivered>
This is the main benefit you are providing to the customer. This should be one of your metrics / specifications. You may try to test several different benefits to see which one resonates with you customer. *E.g. 30% cheaper than a taxi*

< Target customer>
This is the customer group you hope will adopt the FIRST iteration of your service. The more specific the better. *E.g. people in Chicago that attend summer festivals*

Step 1: create your alternative value propositions

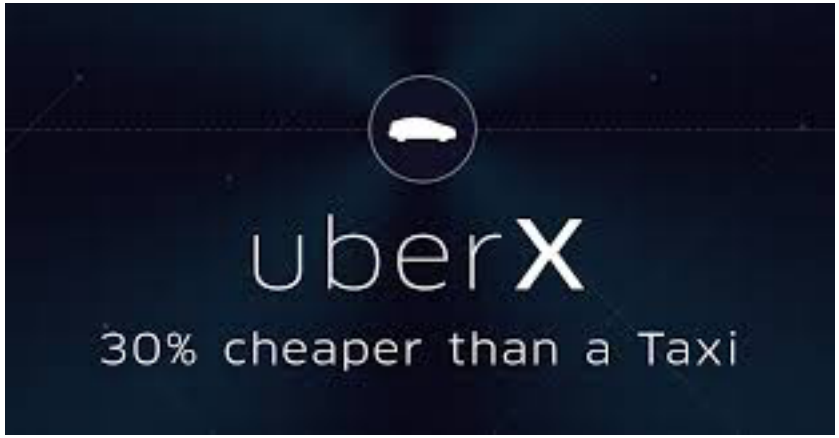
To create alternative value propositions, create several values for one of the variables (variables are service type, benefits delivered, target customers), leaving the other two consistent.

Alternative A:
Our shared ride service
Delivers rides for 30% less than a taxi
For daily commuters

Alternative B:
Our shared ride service
Delivers more convenient payment and pick up / drop off
For daily commuters

For these two tests we varied the benefits delivered, to test which benefit was more compelling to consumers. Remember, you are trying to create an A/B test, so you can only change one variable (leaving the other two constant) in order to create a valid test. It is fine to run multiple, small tests if you want to test a variety of variables.

Step 2: Transform the value propositions into web ads



Assignment

- Complete steps 1 and 2 for next week. Create your value propositions in MS Word, PPT, Keynote, really whatever you want. Create images (high resolution JPEGs) for the ads you want to test. Submit the files to the iGroups folder Value propositions.