

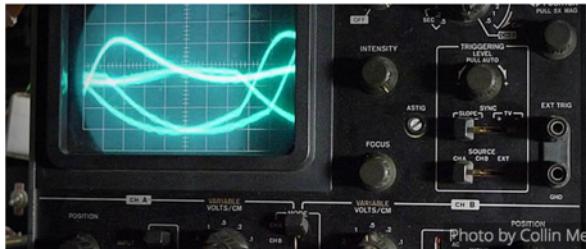
Why the HEART framework?

- IIAAYKIG - If it's an acronym, you know it's good
- Metrics are tougher than you think!
- It's a simple way to ensure you're thinking about every aspect of the user journey / way a user sees your product

How to choose the right UX metrics for your product

by Kerry Rodden

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When designing for the web, you can analyze usage data for your product and compare different interfaces in A/B tests. This is sometimes called “data-driven design”, but I prefer to think of it as data-*informed* design — the designer is still driving, not the data.

To make this work in practice it’s important to use the right metrics. Basic traffic metrics (like overall page views or number of unique users) are easy to track and give a good baseline on how your site is doing, but they are often not very useful for evaluating the impact of UX changes. This is because they are very general, and usually don’t relate directly to either the quality of the user experience or the goals of your project — it’s hard to make them actionable.

I’m part of a group of quantitative UX researchers at Google, and we like to think of large-scale data analysis as just another UX research method. We’ve developed a couple of useful methods to help choose and define appropriate metrics that reflect:

- The quality of user experience (the HEART framework)
- The goals of your product or project (the Goals-Signals-Metrics process)

The HEART framework

While helping Google product teams define UX metrics, we noticed that our suggestions tended to fall into five categories:

- **Happiness:** measures of user attitudes, often collected via survey. For example: satisfaction, perceived ease of use, and net-promoter score.
- **Engagement:** level of user involvement, typically measured via behavioral proxies such as frequency, intensity, or depth of interaction over some time period. Examples might include the number of visits per user per week or the number of photos uploaded per user per day.
- **Adoption:** new users of a product or feature. For example: the number of accounts created in the last seven days or [the percentage of Gmail users who use labels](#).
- **Retention:** the rate at which existing users are returning. For example: how many of the active users from a given time period are still present in some



for X

U B E R

Uber + Alcohol + Lemonade

UBER FOR SPIKED LEMONADE



Happiness

Engagement

Adoption

Retention

Task Success

Happiness

- How happy is your user?

Engagement

- How engaged is your user in the short term?

Adoption

- How many interested users have actually tried your product?

Retention

- How many users do you retain long term?

Task Success

- How successful are you at allowing users to perform the most valuable task?

Goals

What do you want to happen?

Signals

What is the thing we need to measure?

Metrics

A signal expressed over time.
This is the thing you watch.

Goals

Signals

Metrics

Happiness

Engagement

Adoption

Retention

Task Success

- 1. Happiness**
- 2. Engagement**
- 3. Adoption**
- 4. Retention**
- 5. Task Success**

- 1. Adoption**
- 2. Task Success**
- 3. Engagement**
- 4. Retention**
- 5. Happiness**

	Goals
Happiness	<ul style="list-style-type: none"> • Maximize drinker satisfaction with our spiked lemonade and the delivery service
Engagement	<ul style="list-style-type: none"> • Maximize # of orders and total value of the orders (through add-ons like additional shots in the lemonade or extra fast delivery)
Adoption	<ul style="list-style-type: none"> • Maximize the # of people who order at least 1 glass of spiked lemonade
Retention	<ul style="list-style-type: none"> • Maximize the % of users that return and place a repeat order on a monthly basis
Task Success	<ul style="list-style-type: none"> • Minimize # of "abandoned carts" (people that don't complete purchase) • Maximize the # of users that successfully complete an order within 5 minutes

Signals

Happiness

- App store rating
 - Scores from the NPS survey sent to customers
-

Engagement

- # of orders per customer
 - Order value in dollars per customer
-

Adoption

- # of users who order at least 1 glass of spiked lemonade
 - # of users that have downloaded and opened the app
-

Retention

- People that order spiked lemonade
-

Task Success

- Incomplete orders
- Time taken to place each order, from app start to "success" screen

Metrics

Happiness

- App store rating change, month over month
 - % of perfect 10 NPS scores
-

Engagement

- Average order value in dollars per day
 - Average # of orders per day **per user**
-

Adoption

- % of new users -> customers
(# of new users that order **divided by** the # of people that have opened the app to get a percentage)
-

Retention

- Retained users
(# of people ordering this month **divided by** the # of those same people that ordered last month to get a percentage)
-

Task Success

- Average time to checkout
- % of orders incomplete per month

	Goals	Signals	Metrics
Happiness	<ul style="list-style-type: none"> Maximize drinker satisfaction with our spiked lemonade and the delivery service 	<ul style="list-style-type: none"> App store rating Scores from the NPS survey sent to customers 	<ul style="list-style-type: none"> App store rating change, month over month % of perfect 10 NPS scores
Engagement	<ul style="list-style-type: none"> Maximize # of orders and total value of the orders (through add-ons like additional shots in the lemonade or extra fast delivery) 	<ul style="list-style-type: none"> # of orders per customer Order value in dollars per customer 	<ul style="list-style-type: none"> Average order value in dollars per day Average # of orders per day per user
Adoption	<ul style="list-style-type: none"> Maximize the # of people who order at least 1 glass of spiked lemonade 	<ul style="list-style-type: none"> # of users who order at least 1 glass of spiked lemonade # of users that have downloaded and opened the app 	<ul style="list-style-type: none"> % of new users -> customers (# of new users that order divided by the # of people that have opened the app to get a percentage)
Retention	<ul style="list-style-type: none"> Maximize the % of users that return and place a repeat order on a monthly basis 	<ul style="list-style-type: none"> People that order spiked lemonade 	<ul style="list-style-type: none"> Retained users (# of people ordering this month divided by the # of those same people that ordered last month to get a percentage)
Task Success	<ul style="list-style-type: none"> Minimize # of "abandoned carts" (people that don't complete purchase) Maximize the # of users that successfully complete an order within 5 minutes 	<ul style="list-style-type: none"> Incomplete orders Time taken to place each order, from app start to "success" screen 	<ul style="list-style-type: none"> Average time to checkout % of orders incomplete per month

Tips on using HEART

- Flexible – use it for a product area or a whole company
- Use it for reporting, not exploring
- It's not strict and you don't have to use them all – try to **pick one that matters most**
- You can use the signals column to inform engineers of tracking requirements