GOOGLE HEART METRICS FRAMEWORK

How to measure the user experience of your product.

Outline

- Baseline metrics
- Where to find the right metrics for your product.
- How to identify which ones are most relevant.
- Some common pitfalls to watch out for

#WHOAMI

I build "Stuff"

Thing I'm into:
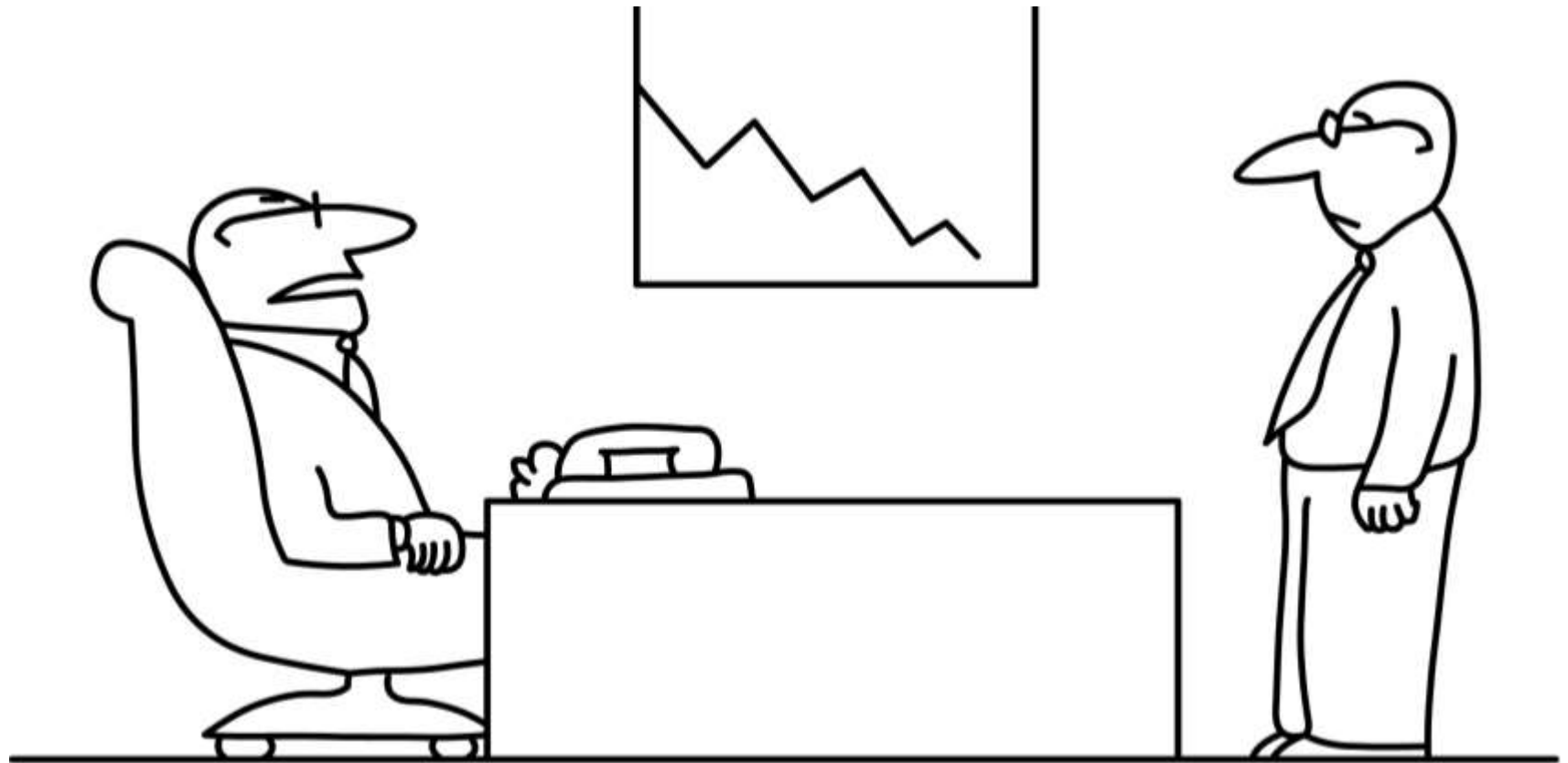#PredictiveAnalytics #LeanStartup #ProductManagement #Cooking #Tea #QuantumPh

Companies I worked with

Baseline Metrics

- Unique visitors
- Page Views
- Session Length/Interval
- Traffic Sources

- But how do I take action on product decisions from these metrics?

Data-Informed UX Vs. Gut feeling

"It turns out, Hopkins, your gut feeling was only food poisoning"

What is UX?

User Experience

noun:

"The overall *experience* of a *person*(user)using a *product* such as a website or computer application, especially in terms of how easy or pleasing it is to use."

The HEART Framework

- ☐ Will help define Metrics to measure your user experience.

- ☐ You can apply HEART to a specific feature or a whole product.

- ☐ UX metrics fall into five categories
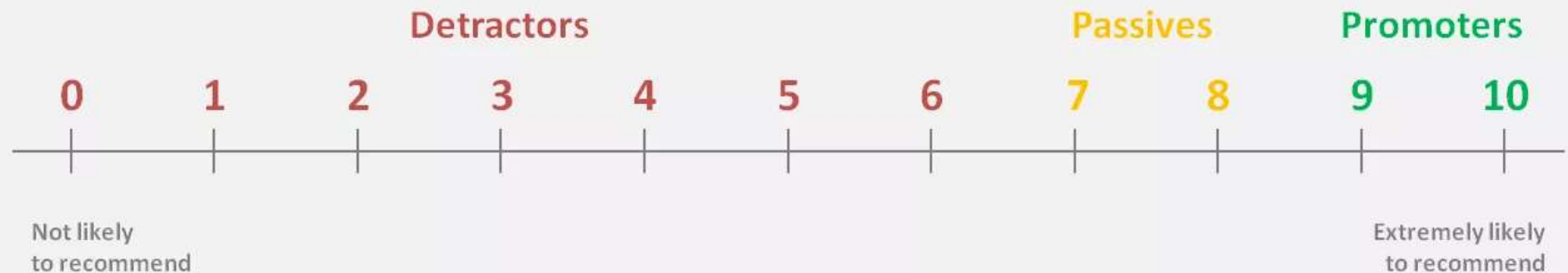
The HEART Framework

- Happiness
  - Measures of user attitudes, often collected via survey.

- FOR EXAMPLE
  - Satisfaction
  - Perceived ease of use
  - Net-promoter score

The HEART Framework - NPS

One Question Survey: How Likely are you to recommend the product to your friends?

Detractors   Passives   Promoters

0   1   2   3   4   5   6   7   8   9   10

Not likely
to recommend

Extremely likely
to recommend

$$NPS = \% \ \ddot\smile - \% \ \ddot\frown$$

It can be between -100 to +100%

The HEART Framework

□ Engagement

- Level of user involvement.

□ FOR EXAMPLE
  ◻ # of visits/user/week
  ◻ # of photos uploaded/user/day
  ◻ # of shares/user/duration
  ◻ Rule of Thumb: Action Count/user/duration

The HEART Framework

☐ Adoption

- Gaining new users of a product or feature.

☐ FOR EXAMPLE

- ☐ Upgrades to the latest version
- ☐ New subscriptions created
- ☐ Purchases made by new users
- ☐ % of Gmail Users who use labels

The HEART Framework

- Retention

- The rate at which existing users are returning.

- FOR EXAMPLE
  - Number of active users remaining present over time
  - Renewal rate or failure to retain (churn)
  - Repeat purchases

The HEA**R**T Framework - DAU

- Daily Active Users
- It depends on what Active means to your Business
  - (logged in, posted a picture, buying something,

Users See Details

Daily Active Users	Daily New Users	Total Installed Users
11,643 ▼23%	15 ▼29%	11,767 ▲0.12%

Daily Active Users

Marketing Campaign

Press Release

Retention = 1-Churn

Retention over 12 Weeks

The HEART Framework

☐ Task Success

- Efficiency, effectiveness, and error rate.

☐ FOR EXAMPLE
  ◻ Search result success
  ◻ Time to upload a photo
  ◻ Profile creation complete

The HEART Framework - OMTM

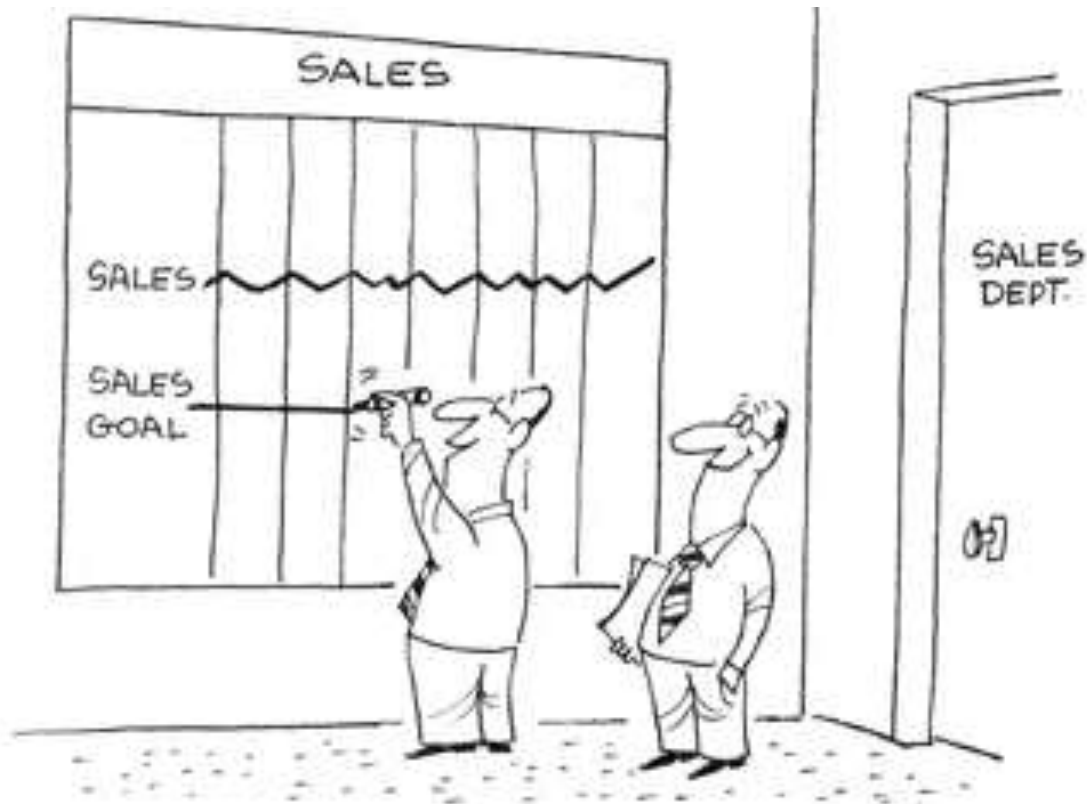Choose 1 or 2 categories from the HEART framework that are the focus of your product or project.

The Goals-Signals-Metrics Framework

- But how do you figure out which metrics to implement and track?

It starts with goals.

- The *Goals Signals Metrics* process facilitates the identification of meaningful metrics you'll actually use.

Why to start with goals

"By setting our sales goals after the sales, we're able to consistently maintain an above average sales quota."

The Goals-Signals-Metrics Framework

Goals

- Identifying clear goals will help choose the right metrics to help you measure progress.

- You may not realize that different members of your team have different ideas about the goals of your project. This process provides an opportunity to build consensus about where you're headed.

The Goals-Signals-Metrics Framework

- A common pitfall is to define your goals in terms of your existing metrics

- ```
  "well, our goal is to increase
  traffic to our site." – everyone with a
  website
  ```

- Yes, everyone wants to do that, but:
  - how will the user experience help?
  - Are you interested in increasing the engagement of existing users or in attracting new users?

The Goals-Signals-Metrics Framework

Signals

- Map your goals to lower-level signals.

- There are usually a large number of potentially useful signals for a particular goal. Once you have generated some promising candidates, you may need to pause and do some research or analysis to choose.

The Goals-Signals-Metrics Framework

Signals Cont.

- If you're already collecting potentially useful signals, you can analyze the data you have and try to understand which signals seem to be the best predictors of the associated goal.

- Things to Consider,
  - how easy or difficult is each signal to track?
  - Is your product instrumented to log the relevant actions, or could it be?
  - you should choose signals you expect to be sensitive to changes in your design.

The Goals-Signals-Metrics Framework

Metrics

- Refine those signals into metrics you'll track over time or use in A/B testing.

- The specifics depend a lot on your particular infrastructure. But, as in the previous step, there may be many possible metrics you could create from a given signal.

- You'll need to do some analysis of the data you've already collected to decide what's most appropriate.

The Goals-Signals-Metrics Framework

Metrics Cont.

- To Avoid the temptation to add "interesting stats" to your list, ask yourself:
  - Will you actually use these numbers to help you make a decision?
  - Do you really need to track them over time, or is a current snapshot sufficient?
  - Stay focused on the metrics that are closely related to your goals to avoid unnecessary implementation effort and dashboard clutter.

Example: YouTube + YouTube Search

Goals ➡ Signals ➡ Metrics

Product: Youtube	Engagement	Users to enjoy the videos they watch and discover more videos	the amount of time they spend watching those videos	Avg # of minutes spent watching videos/user/day
Feature: Youtube Search	Task Success	Quickly and easily find the videos or channels that are most relevant	A failure signal entering a query but not clicking on any of the results.	% of Zero CTR searches

The Goals-Signals-Metrics Framework

□ The Goals Signals Metrics process should lead to a natural prioritization of the various

HEART FRAMEWORK

	GOAL	SIGNALS	METRICS
HAPPINESS	For users to feel like the site is unique	A satisfaction rating from a survey	• Satisfaction • Perceived ease of use • Net promoter score
ENGAGEMENT	For users to keep discovering more content	The amount of time people spend viewing from analytics	• Number of videos watched per user per week • Number of uploads • Number of shares
ADOPTION	For users to use the site or app	The number of signups per day from analytics	• Upgrades to latest version • New subscriptions • Purchases by new users
RETENTION	For users to continue to use the site or app	The number of return customers from customer data	• Number of active users • Renewal rate • Repeat purchases
TASK SUCCESS	For users to accomplish their goal	The number of successful completes from a study	• Search result success • Time to upload • Profile creation completion

Google Ventures

Final Thoughts Vanity Metrics

- □ Be carful of vanity metrics

There will always be something up and to the right

Good Use Cases for Vanity Metrics (Self-Deception)
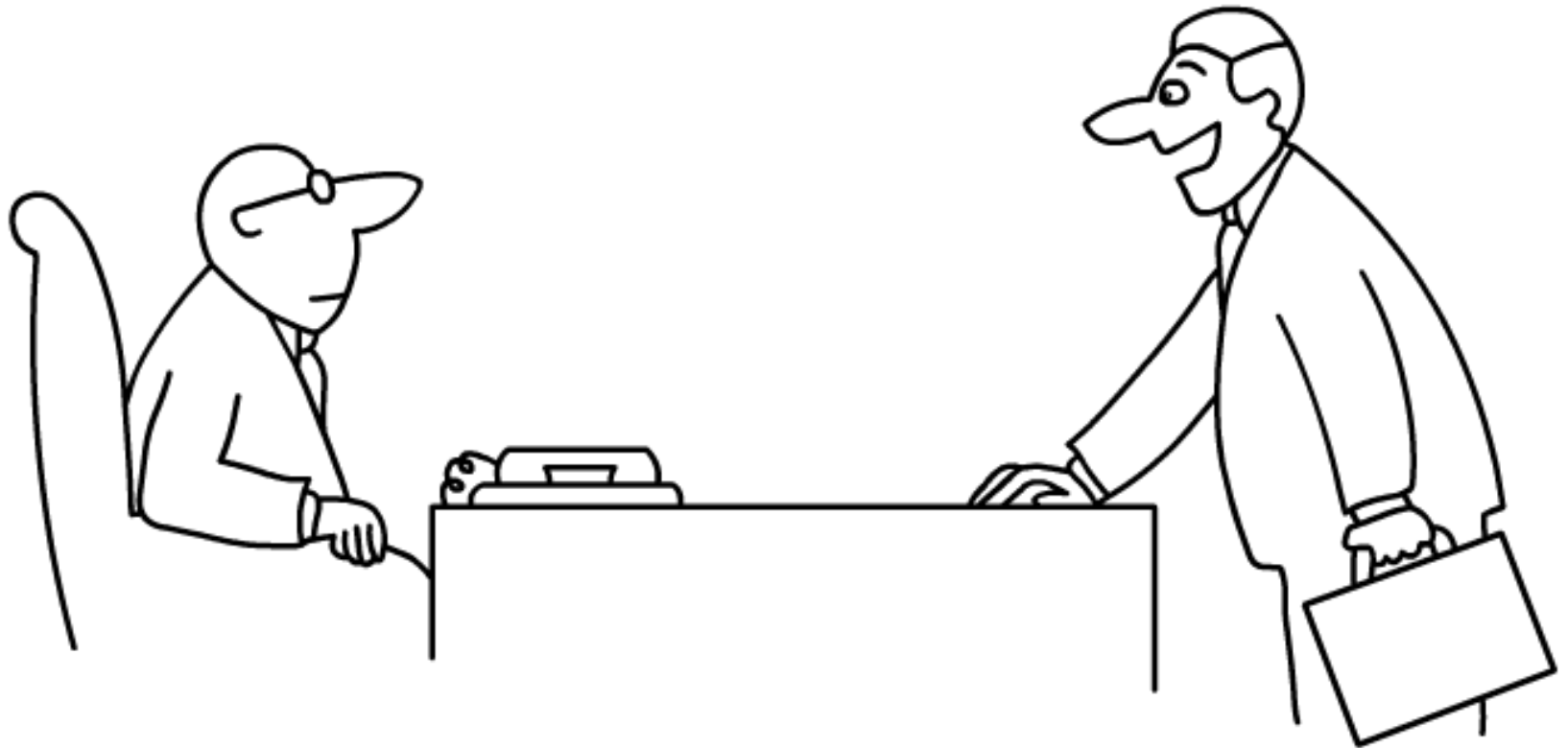
timoelliott.com

"Our dashboards are so advanced, they automatically filter out any bad news"

Vanity Metrics Examples

- TechCrunch & Co
  - "mDialog raises 5 Million from Blackberry partners"
  - "GroupMe is now sending one Million texts every day"
  - "Google Plus hits 10 Million users in 2 weeks"
  - "StartupX raised X Amont of Money"

Wrap up

- ☐ You should Measure the experience users are having with your product/features

- ☐ The HEART framework gives you categories to focus on when you brainstorm your metrics.

- ☐ The Goals-Signals-Metrics Frameworks helps to identify the best metrics to use for the categories you focus on.

- ☐ Try to limit how many metrics you use.

- ☐ Be careful of vanity Metrics

Thank You!

Questions???

- ☐ Follow me on twitter @hla3mi

- ☐ We have open positions at Project-A
  - ◻ Data Engineer/Scientist
  - ◻ Product Management & UX
  - ◻ Java, PHP & Mobile Devs

- ☐ If interested send me an email: raed@marji.me