



GE Transportation  
a Wabtec company

# Engineering Focused UX

MINI-WORKSHOP

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# Agenda

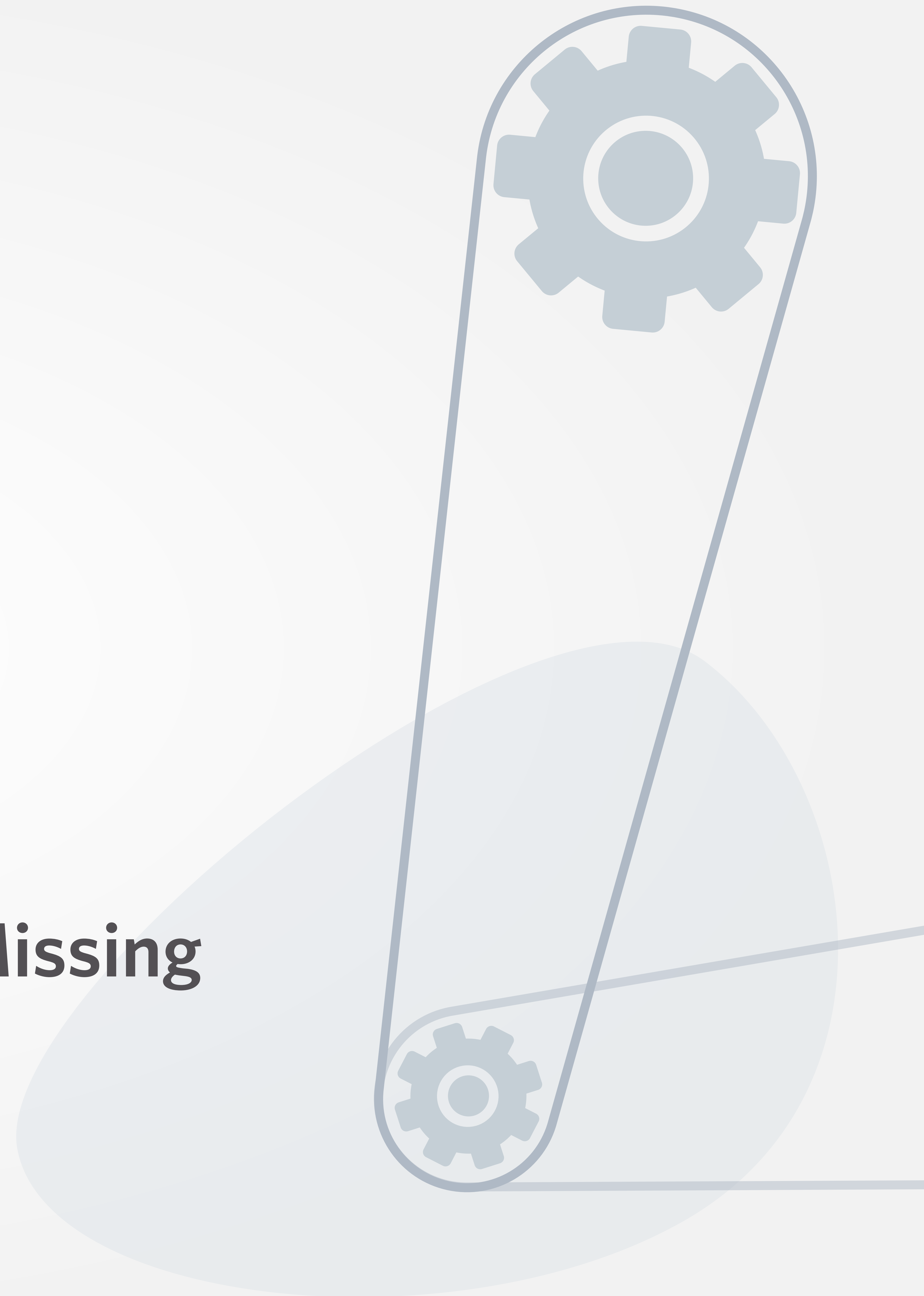
Workshop goals

Break into teams

Topic intro

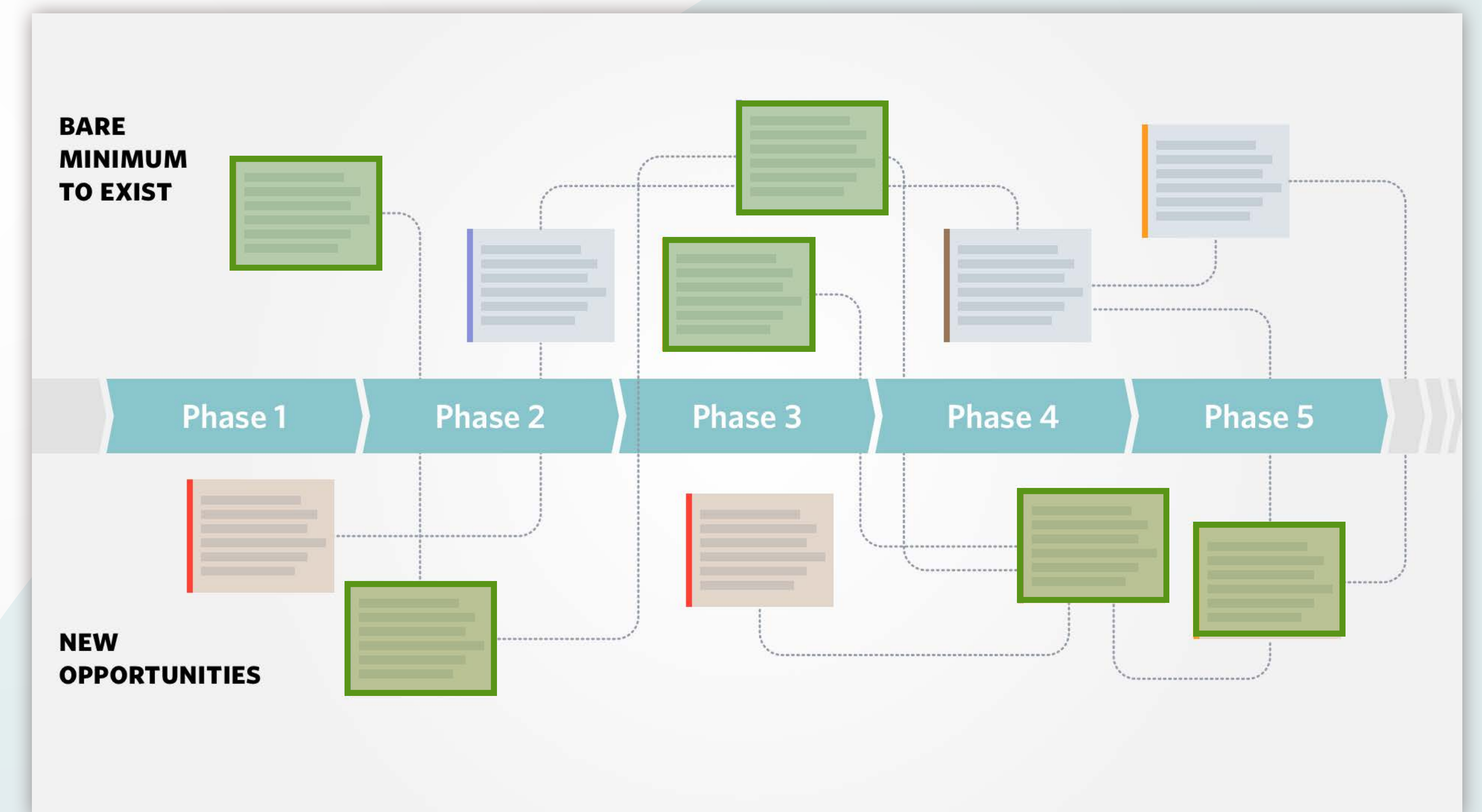
Workshop: Opportunities, Contributions, Missing

Q&A



# Workshop goal

Leave feeling confident you can lead a team to create a strategic roadmap



# Workshop!

*We'll give you this...*



1. Current. Worst. Vision.

2. Plot opportunities. Vote.

3. Document contributions.

4. What are we missing?

*So we can focus on this...*





# Break into teams

Break into teams of five. Each team should have:

- Sharpies
- Sticky notes
- Voting dots
- Timeline



**Let's get  
started...**







**Uber** is ubiquitous in the ride sharing space—they offer limos, private cars, group rides, bikes & scooters. Q2 2019 earnings showed **\$2.8b in revenue**, but a **\$5.2b loss**.

*Today, we're going to turn Uber into a profit center.*



# Getting started...

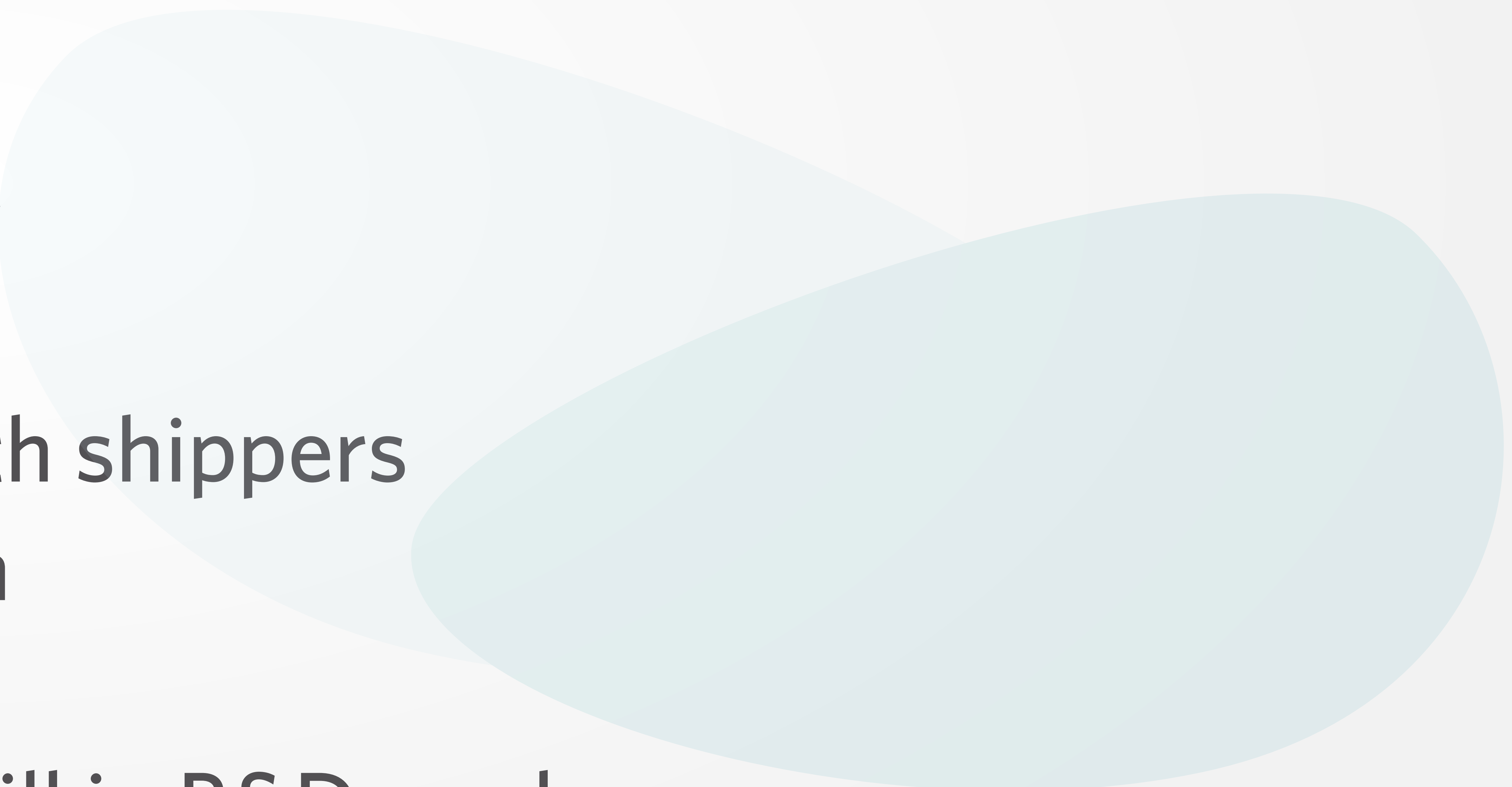
Typically we'd start with **Secondary research** for context; **Stakeholder interviews** to understand current state; **Market research** to put things in perspective. Host an **internal share-out** to validate & form consensus.

Next, host a **stakeholder workshop** to share final research insights and perform **co-creation** exercises to define worst-case scenario and a shared vision.



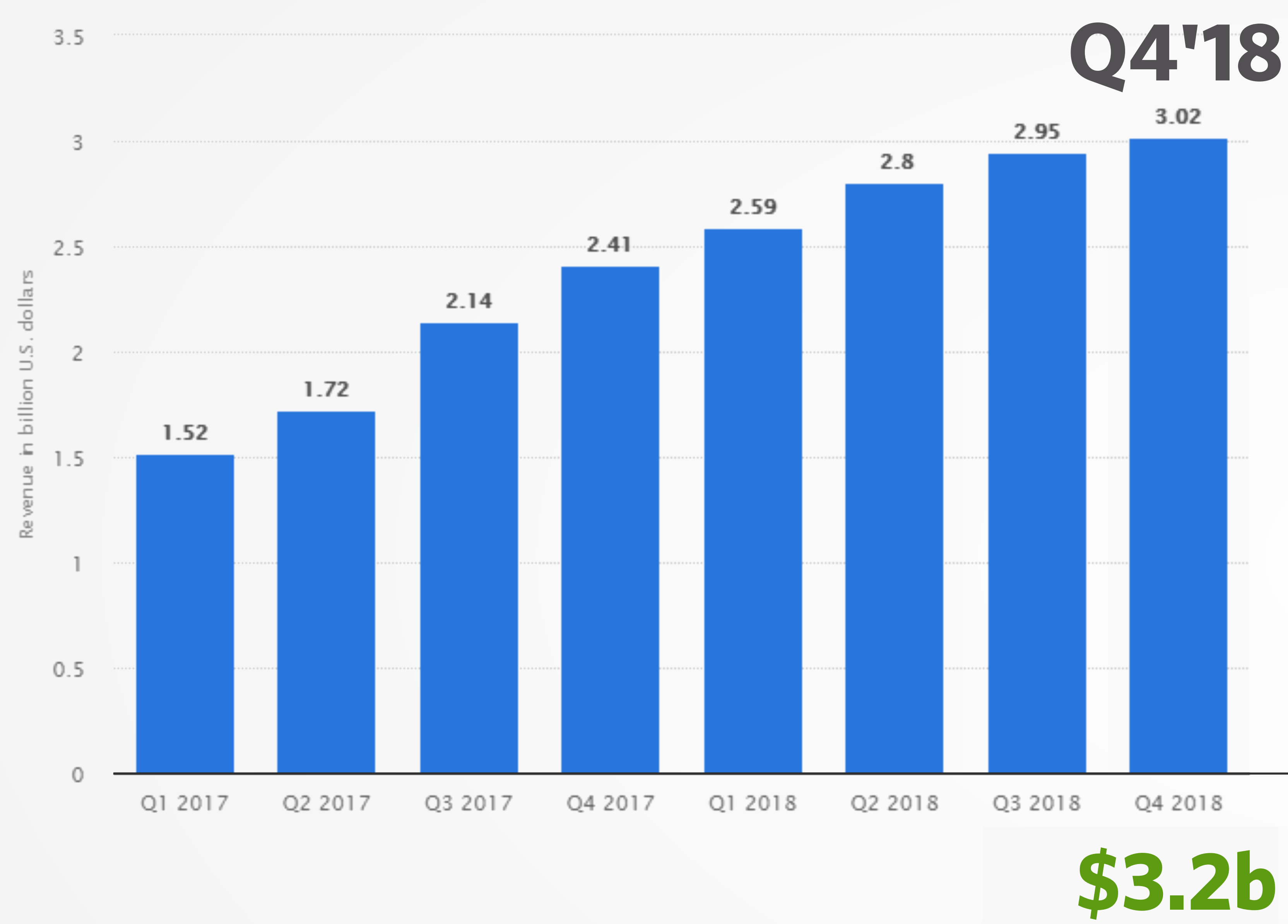
# Uber's Current State

Seven product lines:

- **Uber & Uber Business** - ride sharing
  - **Uber Eats** - food delivery
  - **Uber Freight** - matching carriers with shippers
  - **Uber Health** - patient transportation
  - **Uber Bike** - bike sharing
  - **Uber Elevate** - urban air transport, still in R&D mode
- 

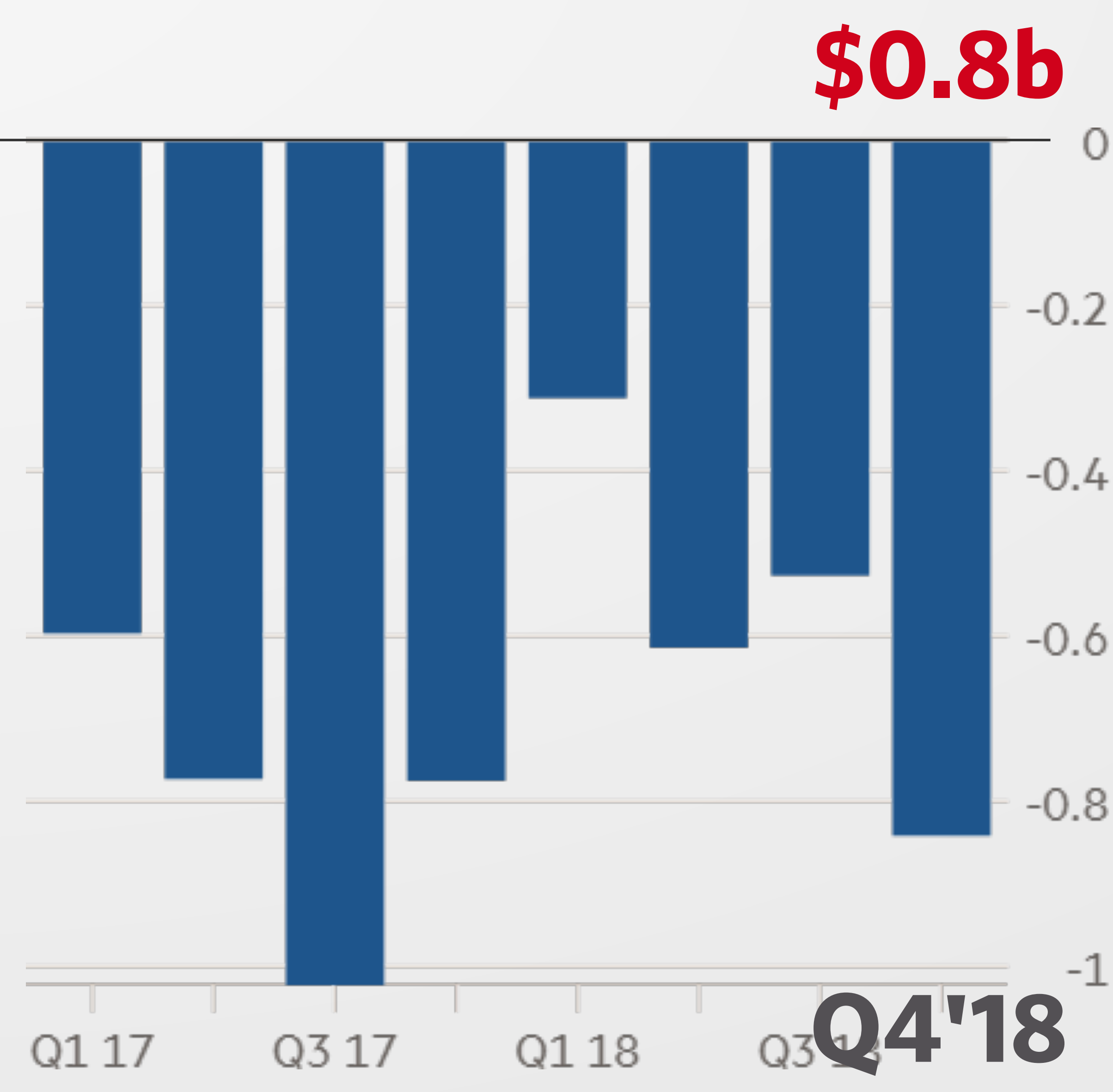


# Uber (company) earnings



Uber's quarterly earnings

Uber's recurring quarterly losses  
*Adjusted EBITDA (\$bn)*





# Uber ride-sharing

~\$9b revenue in 2018\*

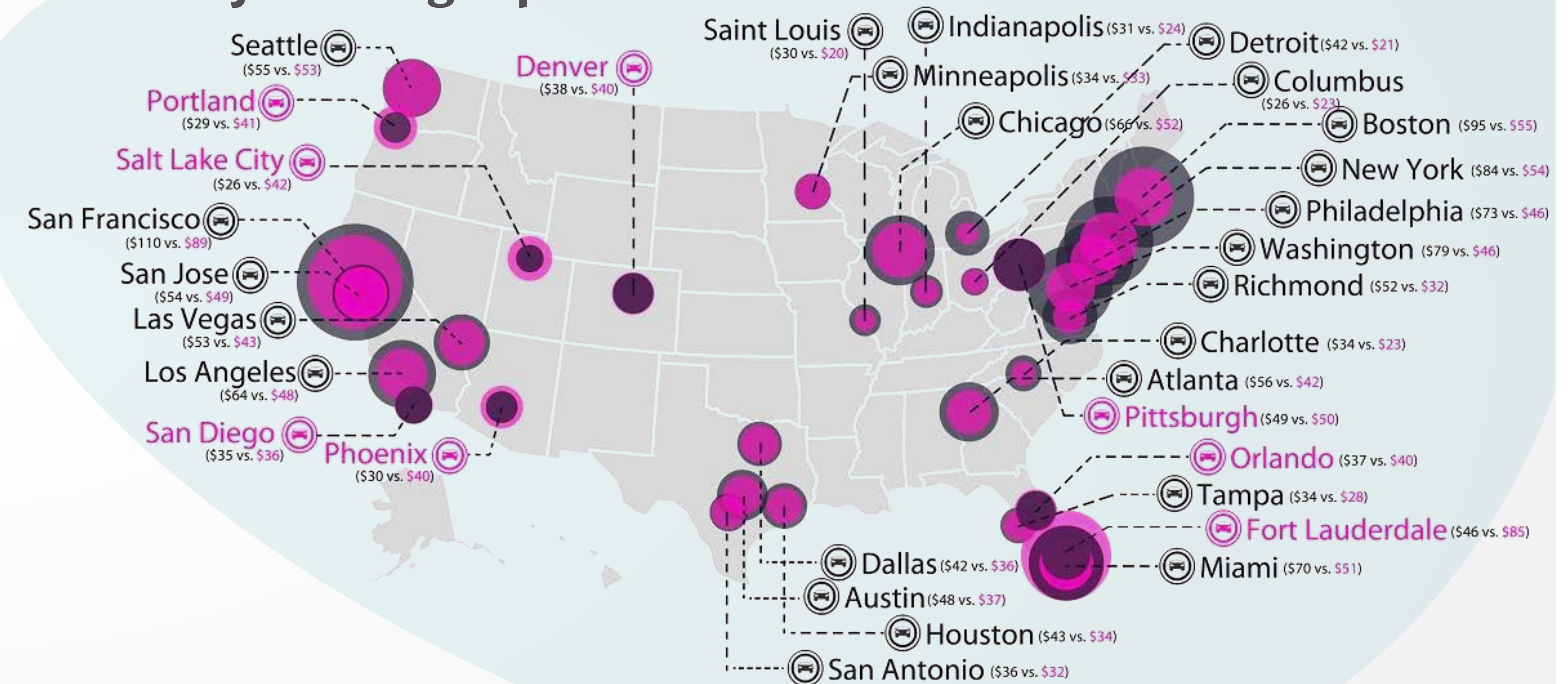
Uber holds ~**65% US market share**

But continues to **drop ride-hailing margins** to drive gross bookings

Market share of 12% of **business expenses** (*by volume, not value*) compares to a 3.5% Lyft market share

\*ride-sharing revenue includes cars, business, bikes, & scooters

Uber vs. Lyft average spend in US





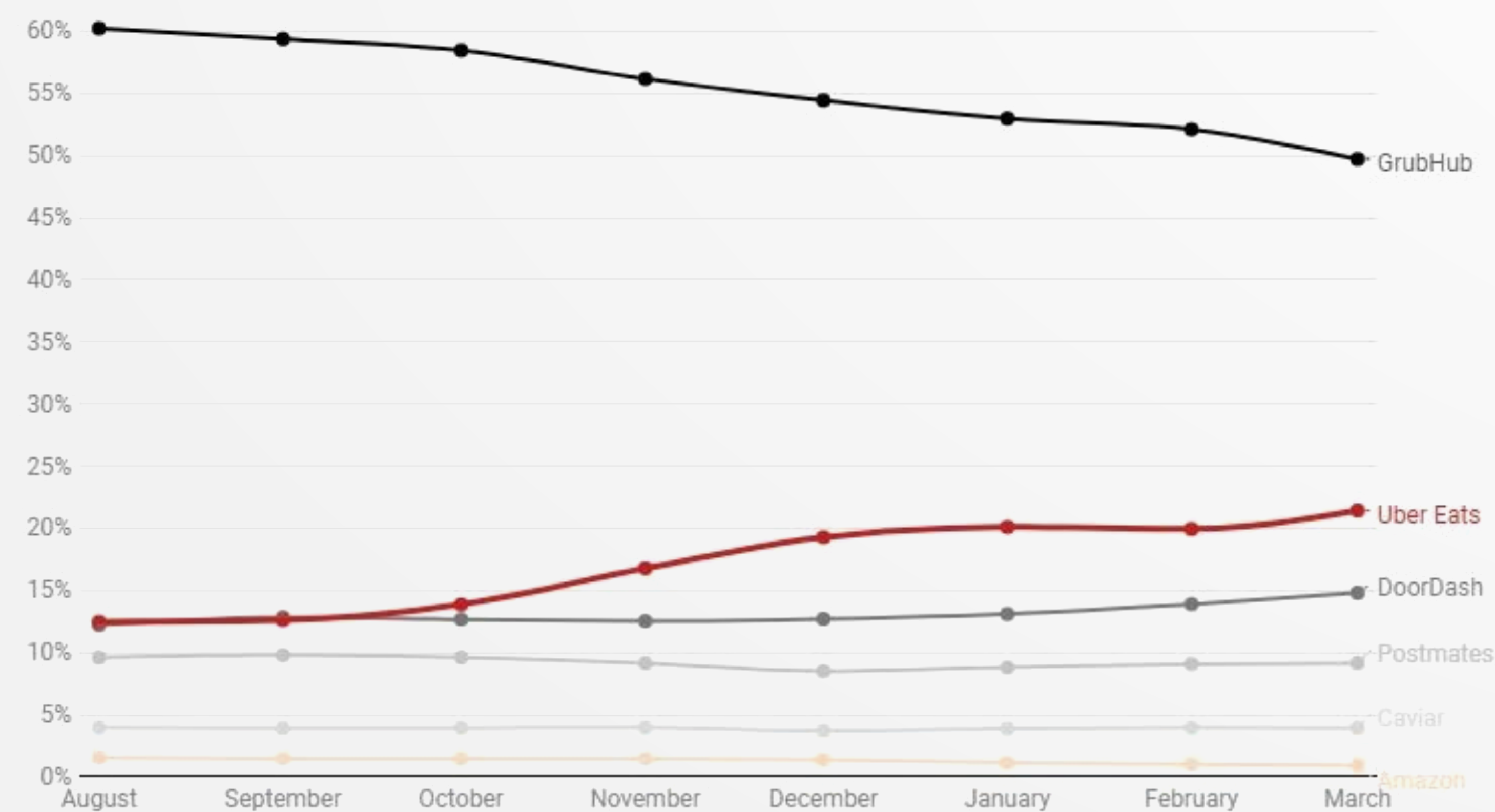
# Uber Eats

Uber Eats not dominating any market, though 2018 revenue grew to \$1.5b

Uber Eats expects 10% take rate to keep falling in the U.S. & India

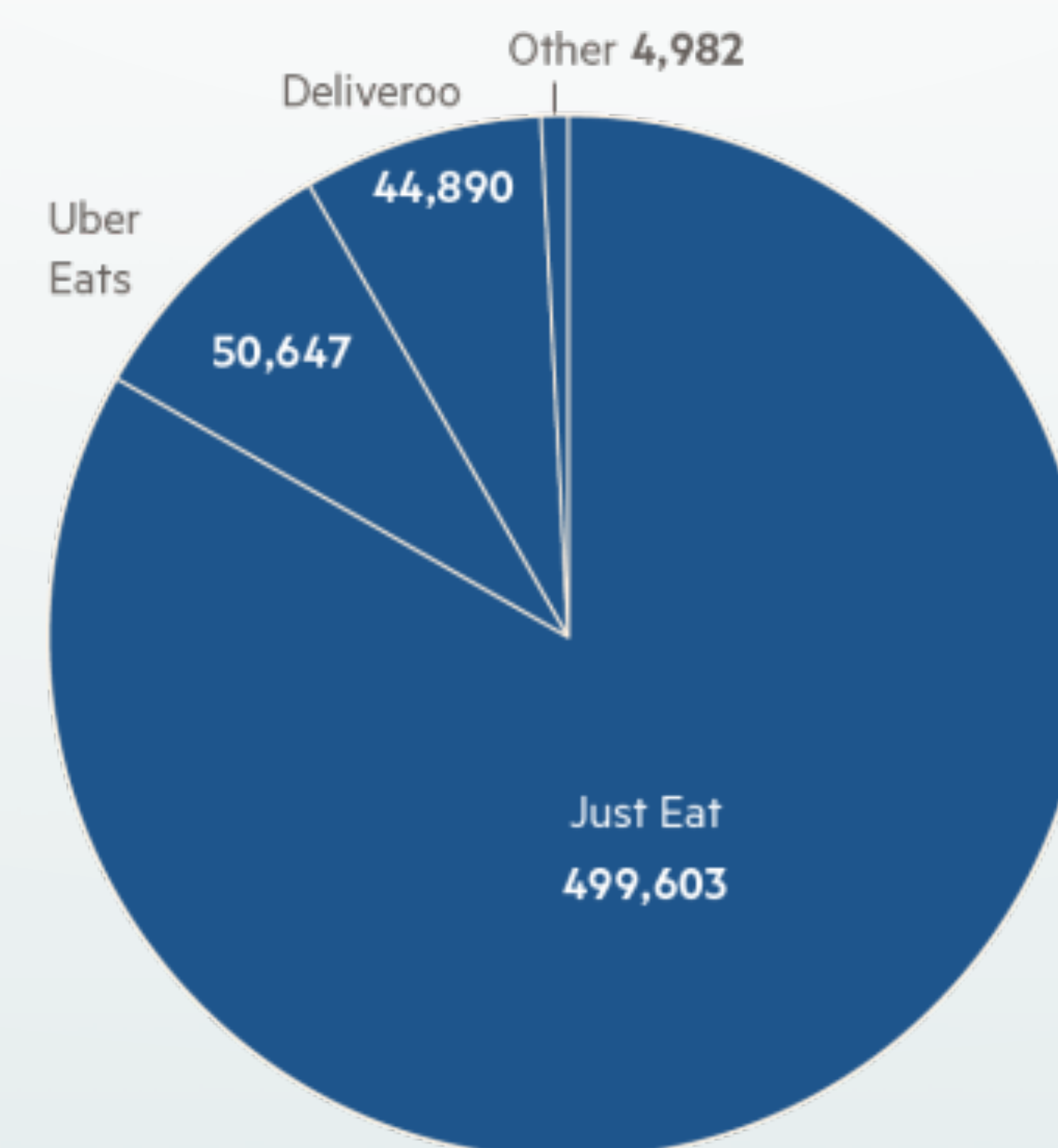
Uber still lost \$3b in 2018, company wide

US market share, 2017-18

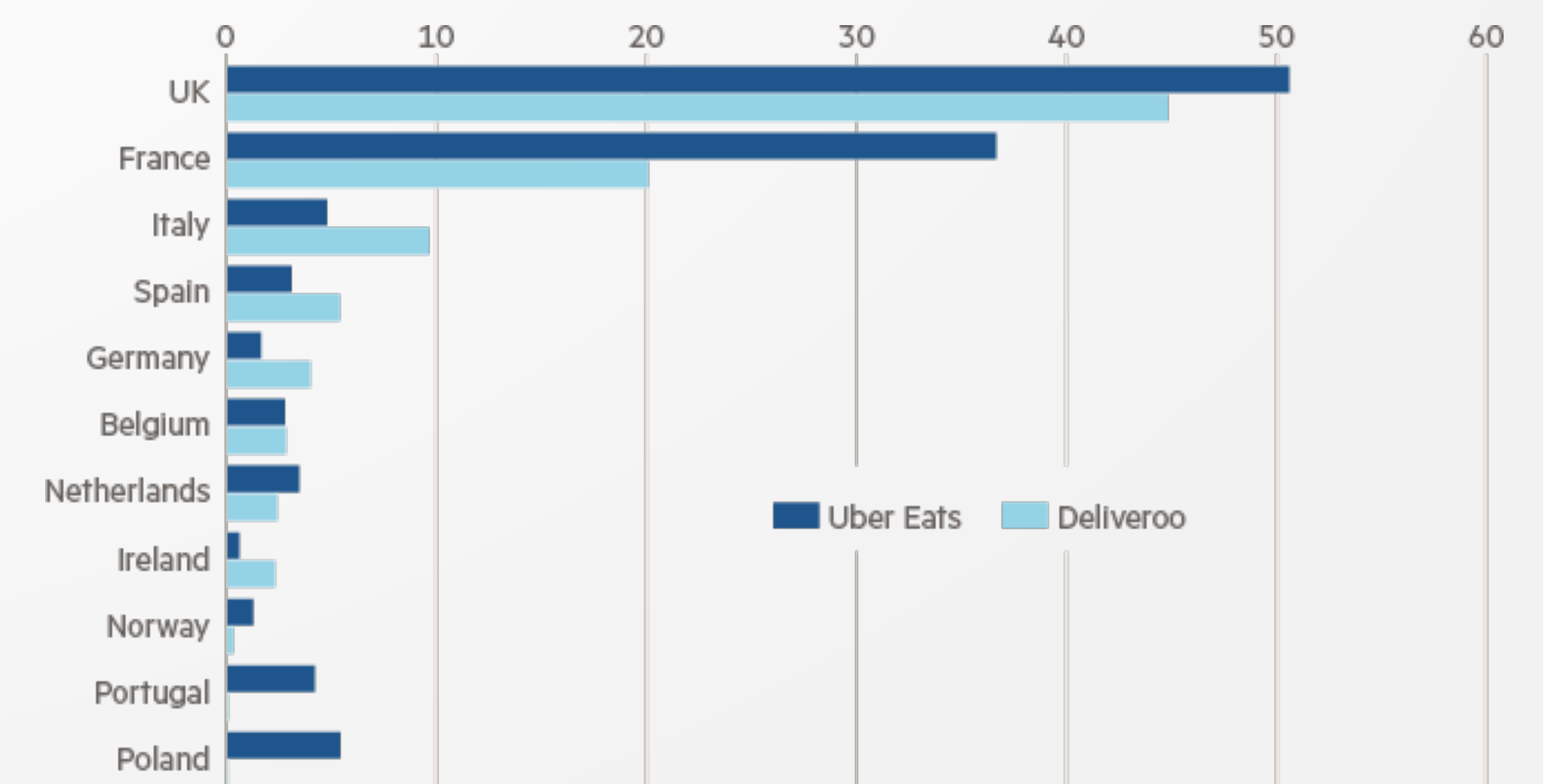


Eat24 data for Aug. - Oct. 2017 is combined with GrubHub. Postmates data may be slightly overrepresented due to other delivery types.  
Source: Second Measure - Created with Datawrapper

London average daily active users



UK & France average daily active users





# Uber by the numbers

Uber raised **\$24.7b in funding** over 23 rounds; \$10b in loss since 2016

**2018 revenue** of \$11.3b, up 43% from 2017; Adjusted losses of \$1.8b

**2018 exits:** Uber China \$7.95b; Uber Russia \$1.4b; Uber SE Asia \$3.2b (\$12.5b)

**Uber Eats** revenue of \$1.46b, 13% of Uber's gross bookings

**Uber Freight** revenue of \$0.35b, 3% of Uber's gross bookings

**Self-driving cars R&D** costs ~\$0.8b, or 40% of adjusted losses



# Bare minimum to exist...

**Increase** Uber Eats, Uber Freight, Uber Bike, and Uber International market share while maintaining or increasing booking margins

**Deliver** on Uber Health market, expand into other hospitality-transit markets

**Decrease** capture costs, R&D, capital expenses (rent, travel costs, etc.)



**What's the worst  
that could happen?**



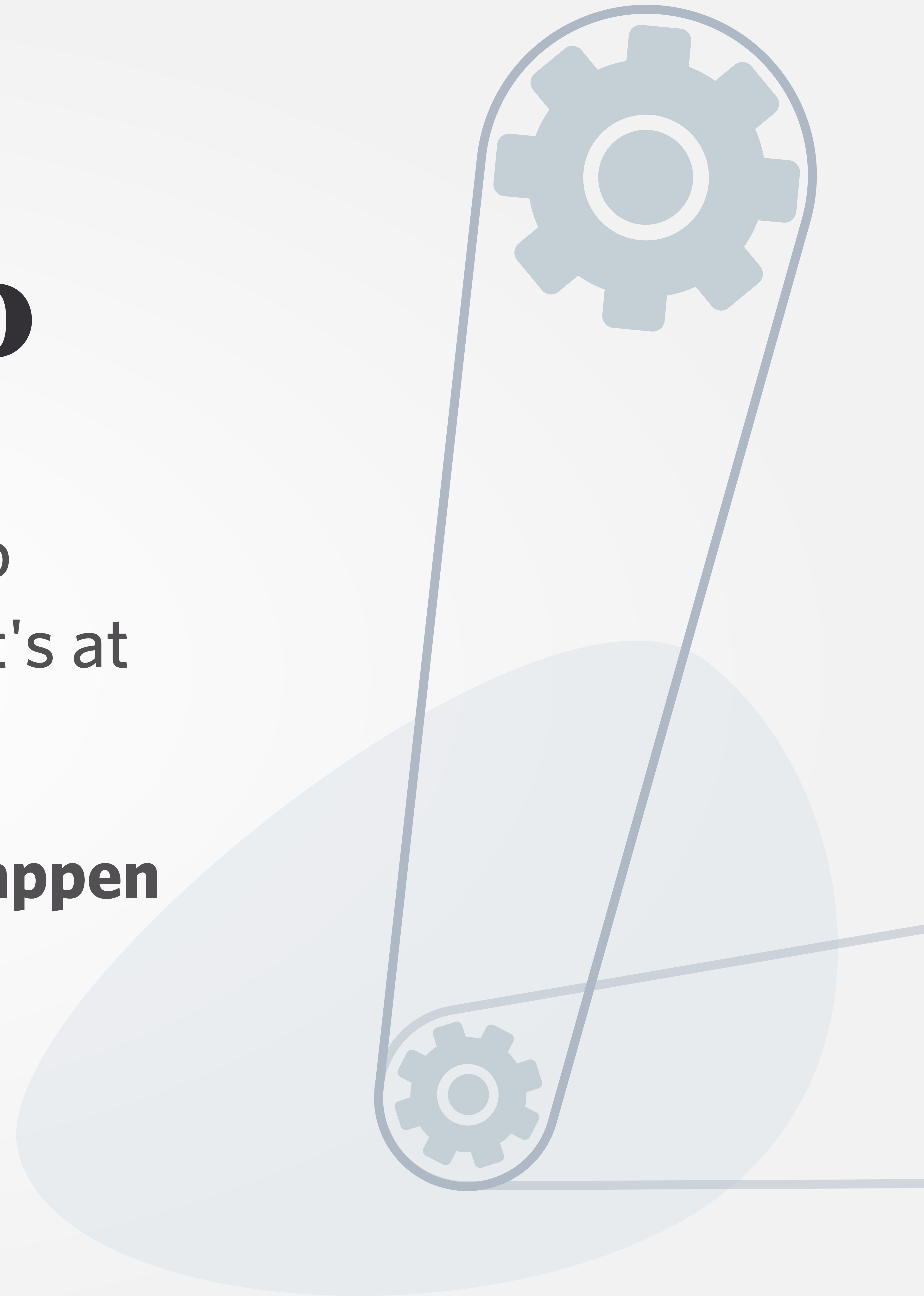


## INTRODUCTION

# Worst-case scenario

Understanding the worst-case scenario will help underscore importance of this project, and what's at stake if we're not successful.

**Collectively, let's paint a picture of what will happen if we do nothing? What happens if we fail?**





ACTIVITY

# Imagine the worse...

Use the stickies on your table to  
**list 3-5 things** that will happen if this  
project fails.



- 1 item per sticky
- Be specific
- Be realistic



## OUTPUT

# Worst-case scenario

Uber's **margins will continue to decrease** to stay competitive, number of rides increase while **revenue decreases**, causing the company to go bankrupt. Millions of **employees & drivers lose jobs**.

**Public opinion sours** on all forms of public transit

Metropolitan gridlock increases, **environmental damage increases**

Taxi companies grow, **customer experience decreases** due to monopoly



# What's our vision?





## INTRODUCTION

# Vision

A vision statement is our **north star** and ensures all user touch points positively reinforce the experience, resulting in a more cohesive solution and customer relationship.



ACTIVITY

# Vision Mad Libs

*The main purpose of PRODUCT is to*

PURPOSE

*which will be beneficial to the END USER by*

BENEFIT 1 and

BENEFIT 2.

- 1 item per sticky
- Be specific
- Be realistic



# Uber's *fictional* Vision

PRODUCT *The main purpose of **Uber** is to*

PURPOSE **simplify transit from point A to point B**

END USER *which will be beneficial to the **world** by*

BENEFIT 1 **providing a seamless experience** *through*

BENEFIT 2 **removing barriers in transportation, healthcare, & freight.**

# How did we get here?

## **Bare minimum**

Secondary & market research, stakeholder interviews. Work with product leaders to validate synthesis before presenting to broader audiences.

## **Worst-case scenario**

Co-creation exercise with primary team

## **Vision**

Co-creation exercise with primary team

- ☒ **Current state & bare-minimum**
- ☒ **Worst-case scenario**
- ☒ **Vision**



**Let's get  
started...**



**What are our  
opportunities?**





## INTRODUCTION

# Opportunities

Visualizing opportunities enable us to get a clear picture of our future, and make better decision.

It's important to understand how feasible each opportunity is, and the potential business impact it could make.



**ACTIVITY**

# Opportunities

Use the opportunity stickies, document new opportunities we should explore to achieve our vision.

Describe the opportunity, needs to accomplish, and potential owner and revenue scale.

- **1 item per sticky**
- **Be specific**
- **Be realistic**



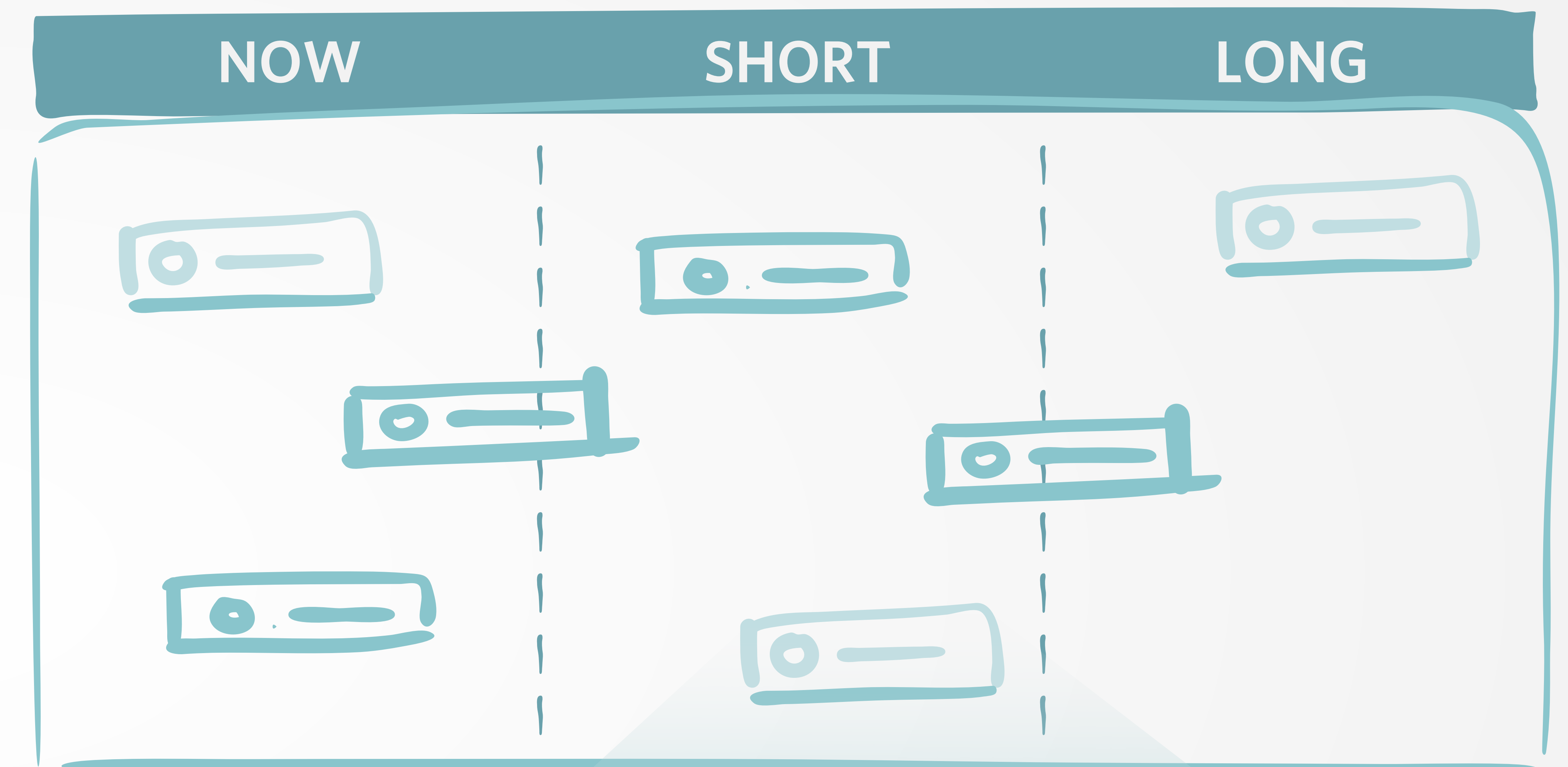
🕒 20 min

SHARE

# Opportunities

Share your opportunities with the team, one-by-one, and place it on the timeline where it best fits.

Stack duplicates as needed.



New opportunity: \$\$\$\$

What do we need to get there? (tech, money, etc.)

**What's already in  
progress?**

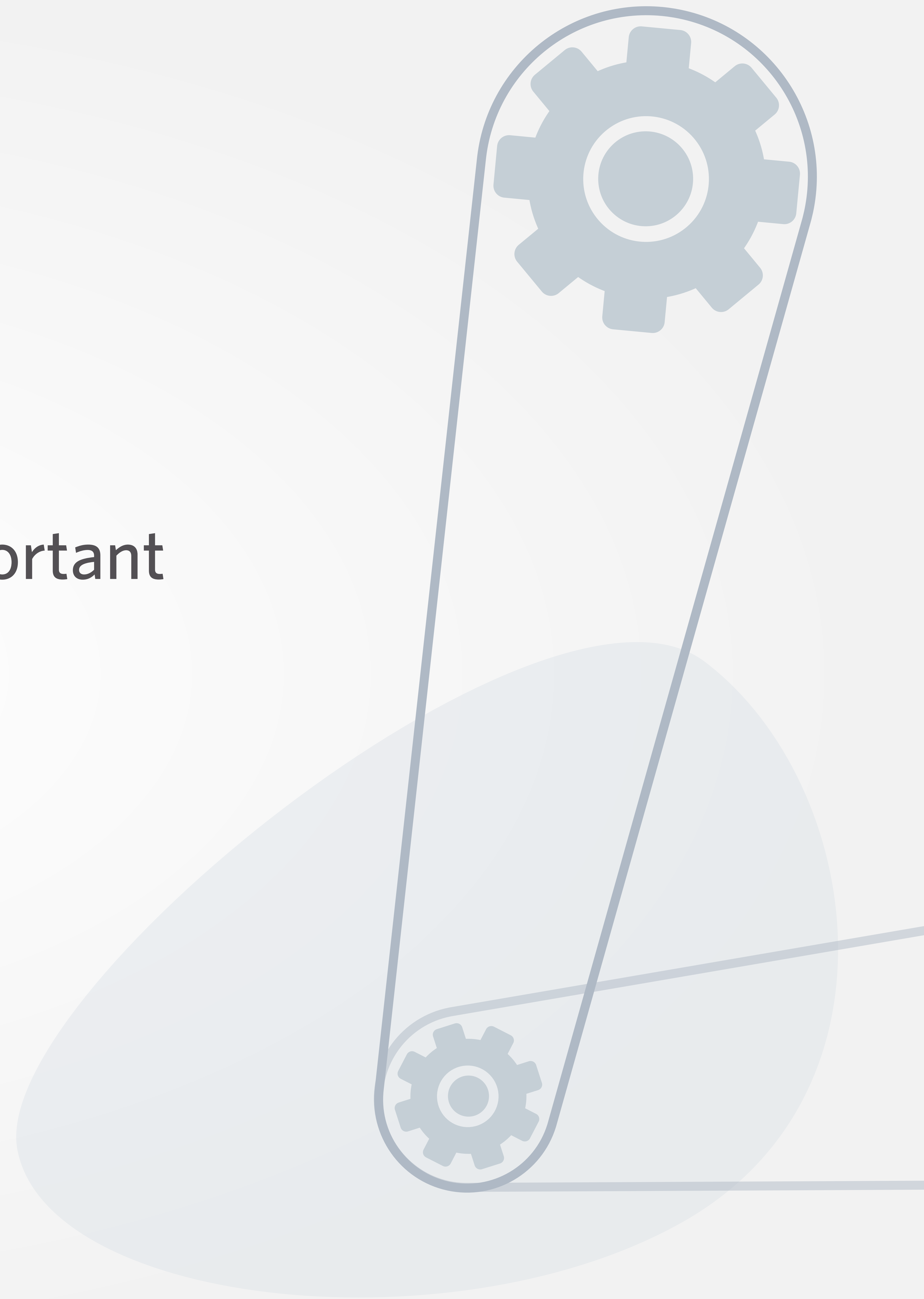




## INTRODUCTION

# Building blocks

Before we start executing on our vision, it's important to catalog existing work and building blocks



**ACTIVITY**

# Building blocks

Use the building block stickies, capture any known projects to realize opportunities faster.

Think about existing projects or initiatives we can build on, companies we can partner with or acquire, etc.

- **1 item per sticky**
- **Be specific**
- **Be realistic**



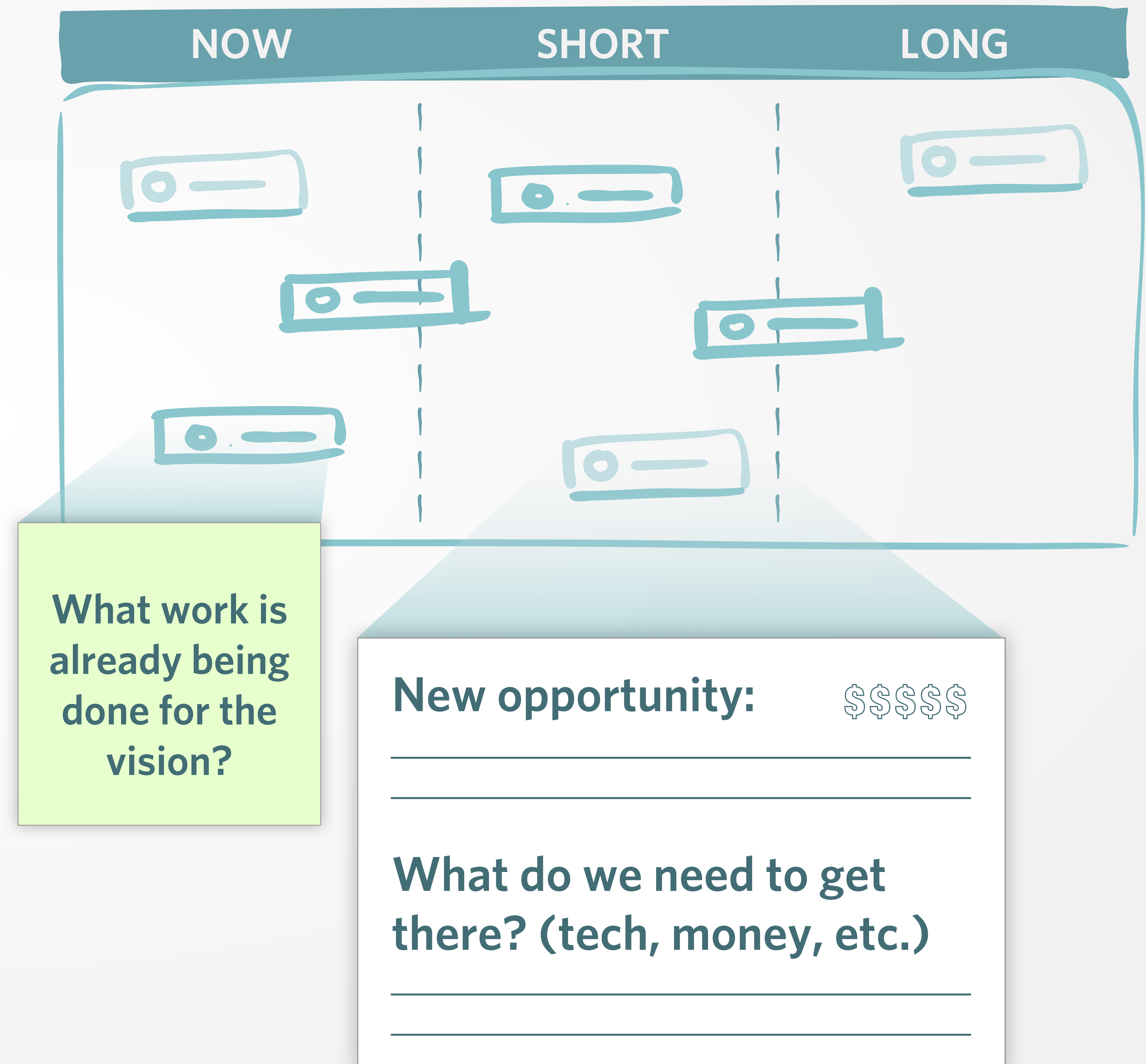
🕒 15 min

SHARE

# Building blocks

Share your opportunities with the team, one-by-one, and place it on the timeline where it best fits.

Stack duplicates as needed. Use a sharpie to draw dependencies when found.



# What's missing?

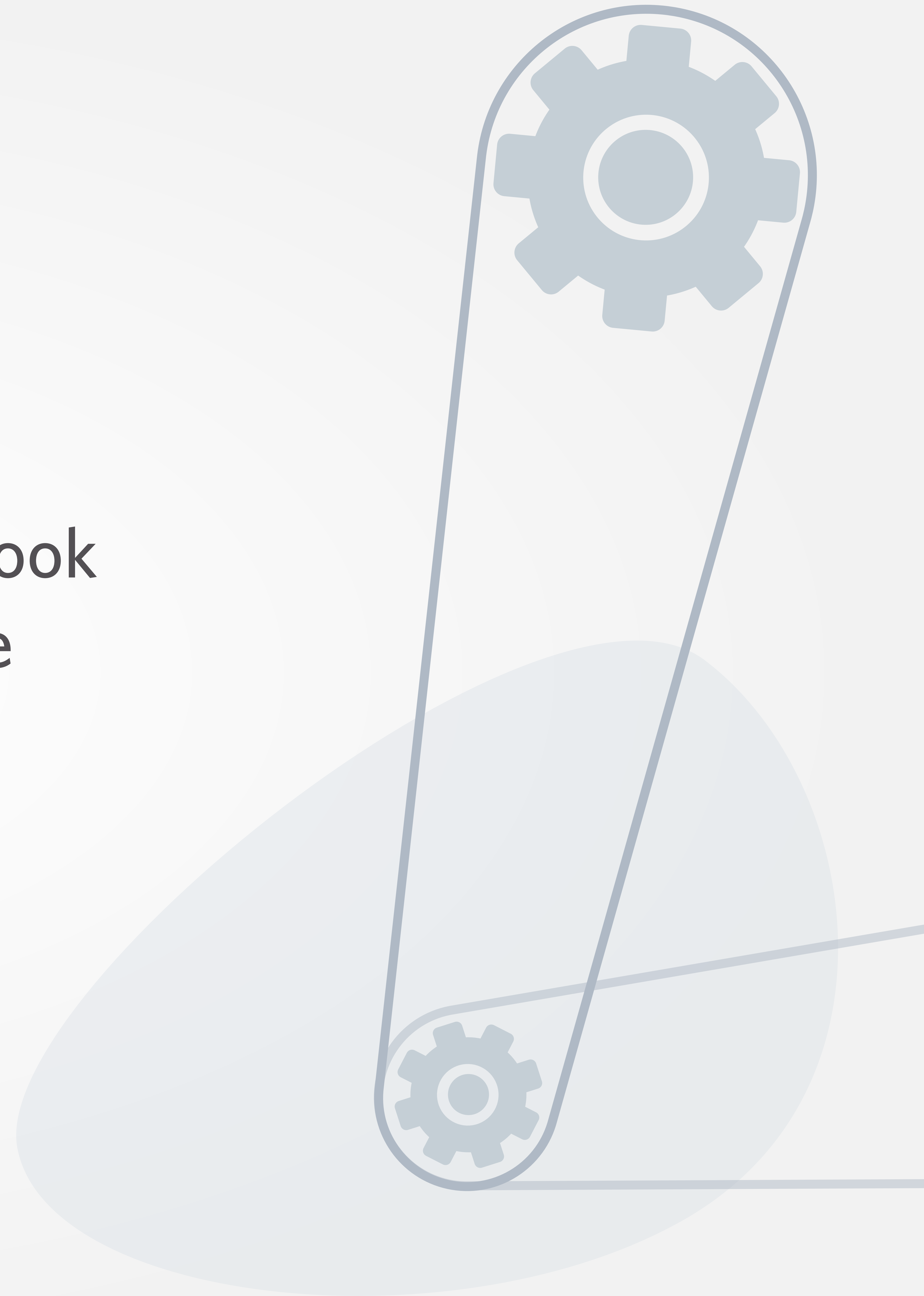




## INTRODUCTION

# Gaps

Let's step back and take inventory of all ideas. Look for any dependencies or gaps we might not have taken into consideration.



## ACTIVITY

# Gaps

Use the **gaps stickies**, capture anything missing we'll need to accomplish our shared vision.

Look for any dependencies or gaps we haven't captured yet...`

- 1 item per sticky
- Be specific
- Be realistic



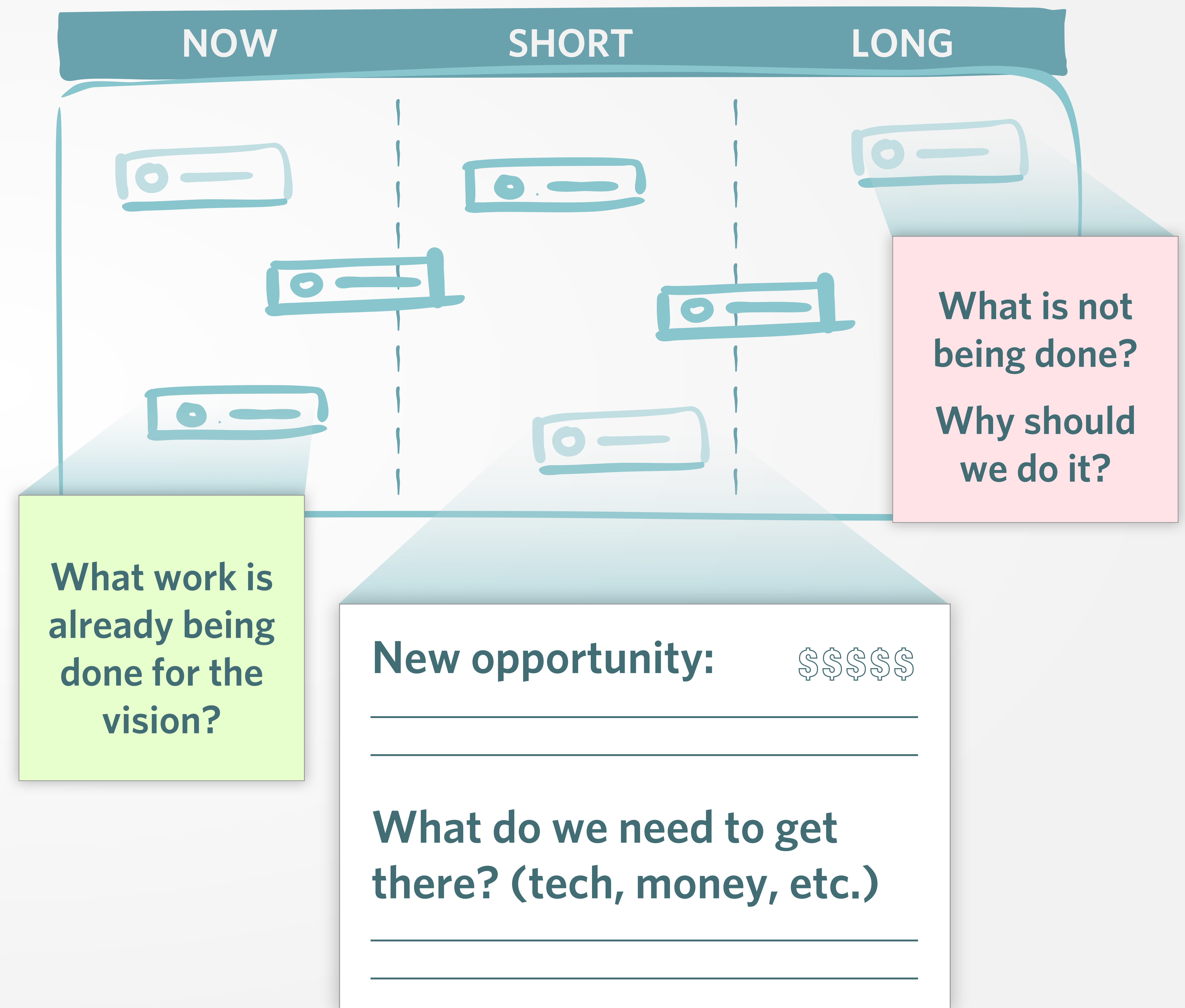
🕒 10 min

SHARE

# Gaps

Share your opportunities with the team, one-by-one, and place it on the timeline where it best fits.

Stack duplicates as needed. Use a sharpie to draw dependencies when found.




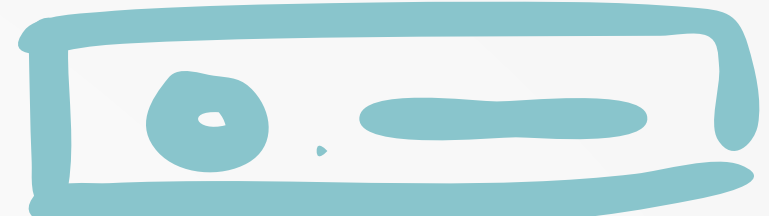






🕒 10 min

# Vote!

Review all the items posted on the timeline. Be sure to pay attention to any Building Blocks and Gaps related to opportunities.

Use 3 voting dots, vote for the most promising opportunities.

NOW	SHORT	LONG
  	  	 
<div>What work is already being done for the vision?</div>	<div>New opportunity: \$\$\$\$\$ <hr/><hr/></div> <div>What do we need to get there? (tech, money, etc.) <hr/><hr/></div>	<div>What is not being done? Why should we do it?</div>



# Recap

## **New opportunities**

Ideate new directions to achieve our unified vision

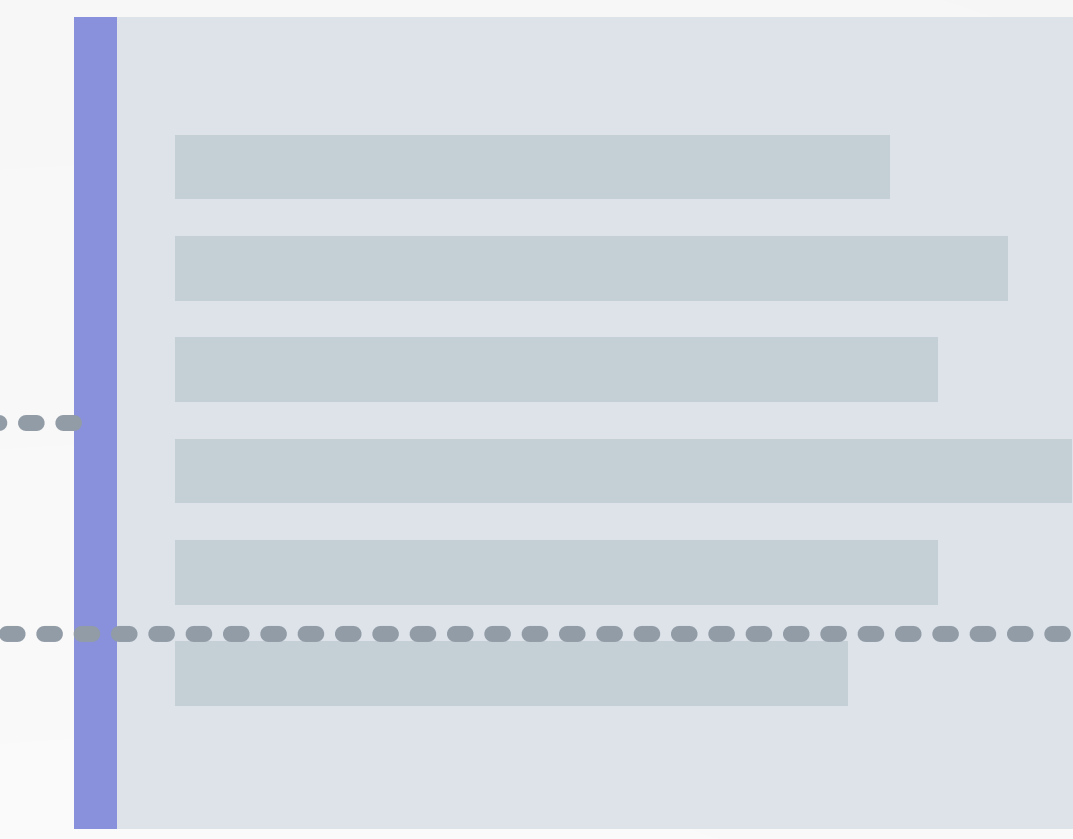
## **Building blocks**

Document any starting points we already have

## **Gaps**

Find any unanswered questions, planning gaps

**BARE  
MINIMUM  
TO EXIST**



**Phase 1**

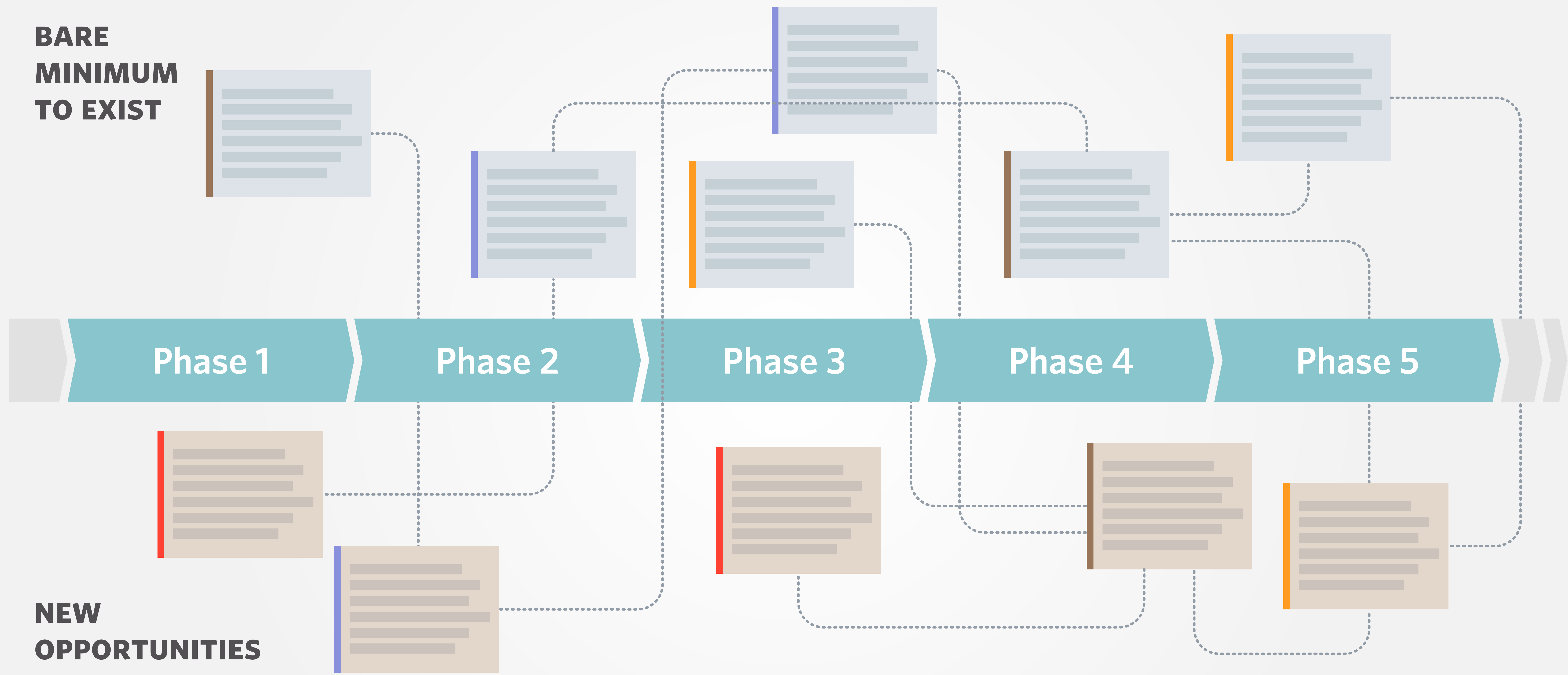
**Phase 2**

**Phase 3**

**Phase 4**

**Phase 5**

**NEW  
OPPORTUNITIES**





# Thanks!

Presentation & workshop assets:

<http://rwbaker.com/engineering-focused-ux>

 @rwbaker

 @dorancynyeplu



GE Transportation  
a Wabtec company