Predicting the Value of a Reliability Goal in Your Organization

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Goal
COLUMBIA

Target

Objective

Customer Requirement

Customer Expectation

Why Set a Reliability Goal?

Direction & Decisions

Comparisons

Risk Reduction

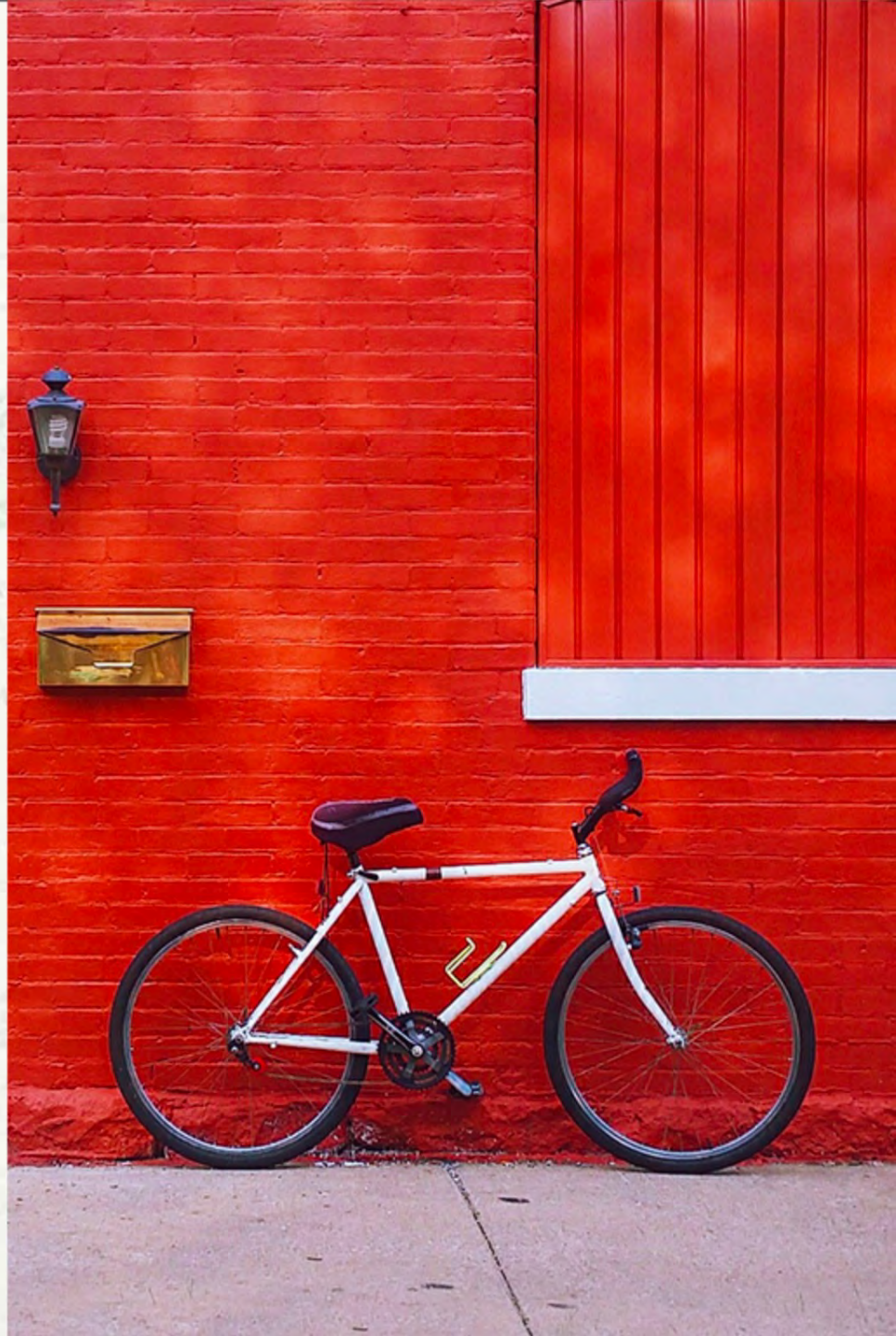
Let's say...

We are creating a new serious hobbyist bicycle...

to enter a new market

to explore new materials and processes

Elements of a Reliability Goal



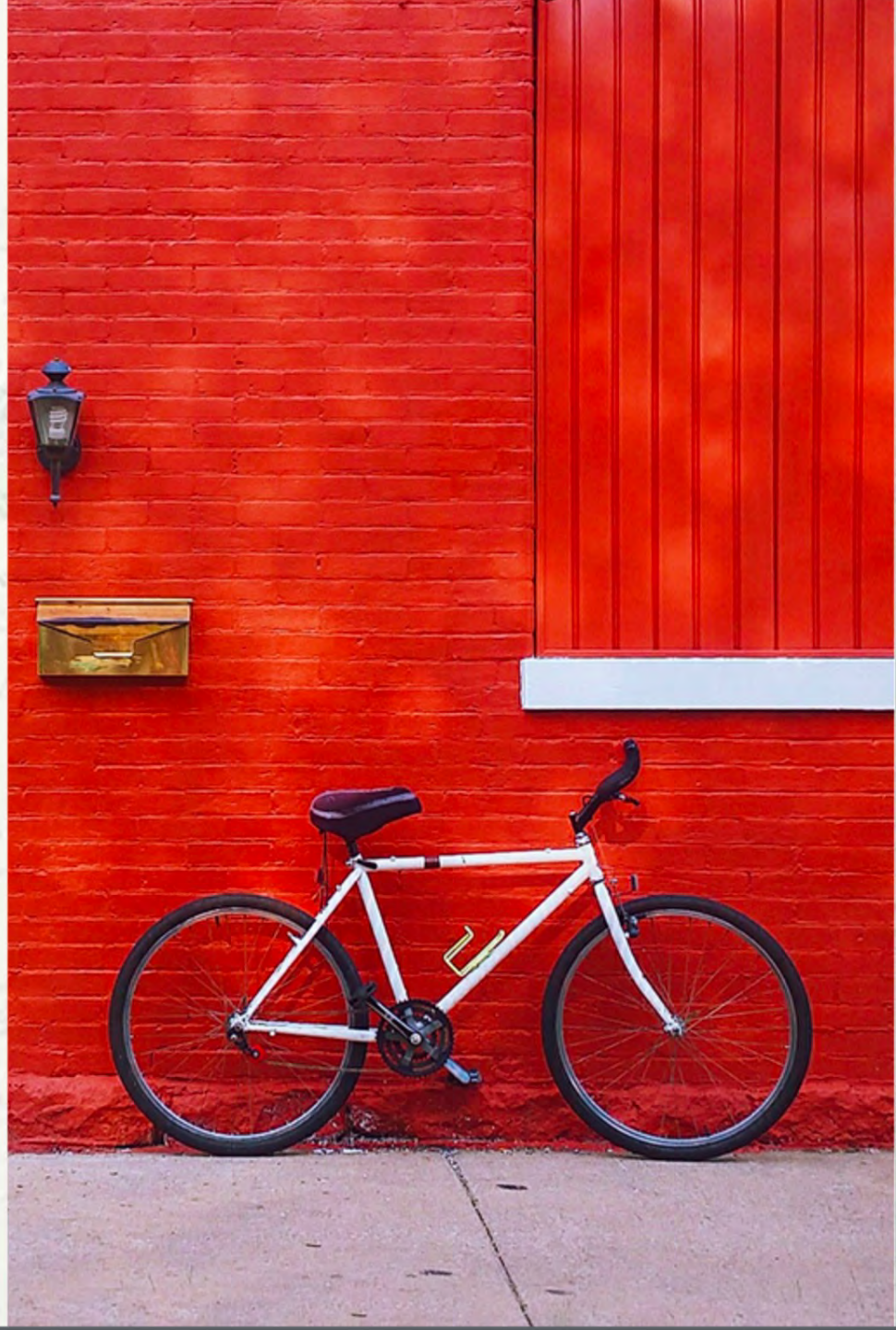
Elements of a Reliability Goal

Function

Environment

Probability

Duration



What is “Value”

What is “Value”

The material or monetary worth of something

You get started...

asking questions in order to establish a reliability goal, and...

your boss asks, “Why?”

Direction & Decisions

Is there value in having the team aligned?

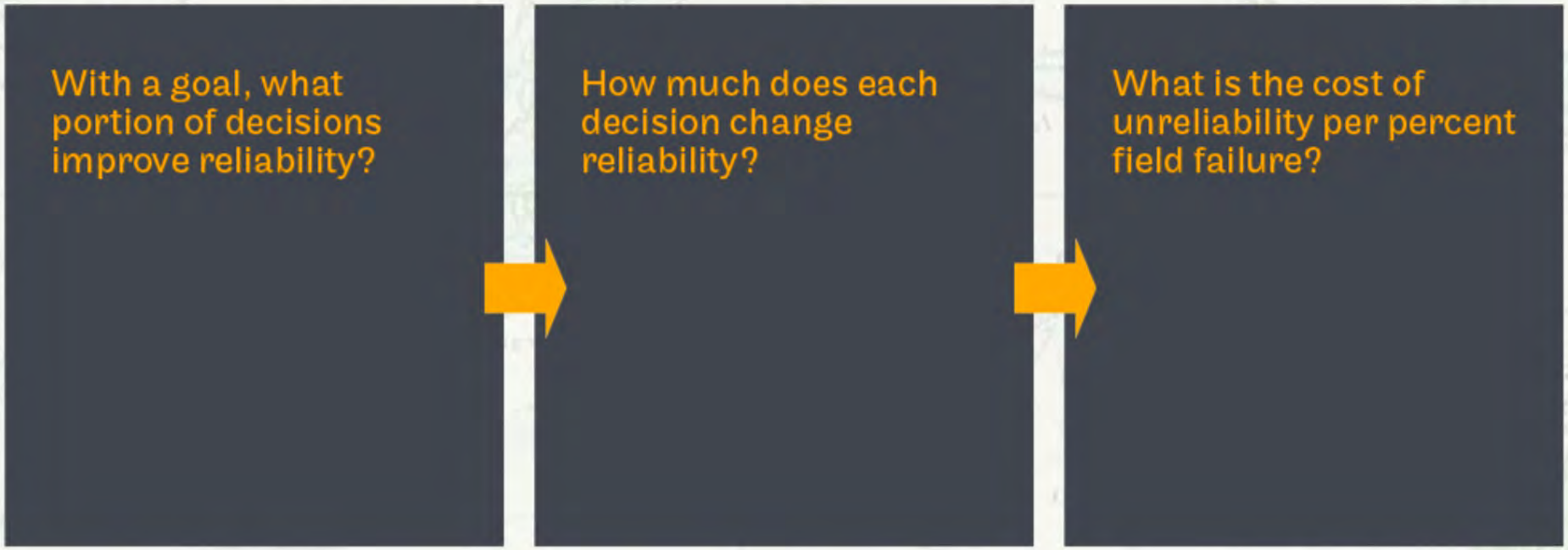
How would you show value here?

Performance is a Priority

The reliability goal establishes a threshold for decision making

Cost, Weight, ...

Many elements are measurable immediately.



Direction & Decisions

There is value in having the team aligned.

Setting a direction leads to a change in reliability

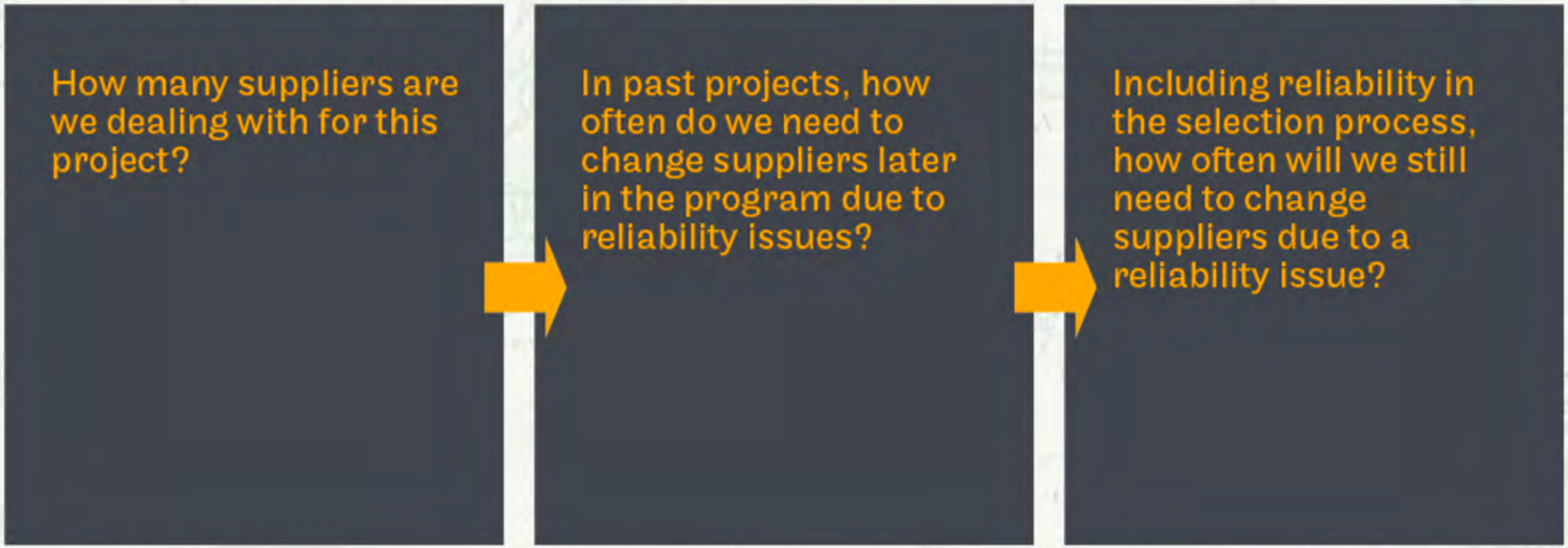
Component Selection

What is the value of picking the right components?

How do you evaluate the risk this selection process entails?

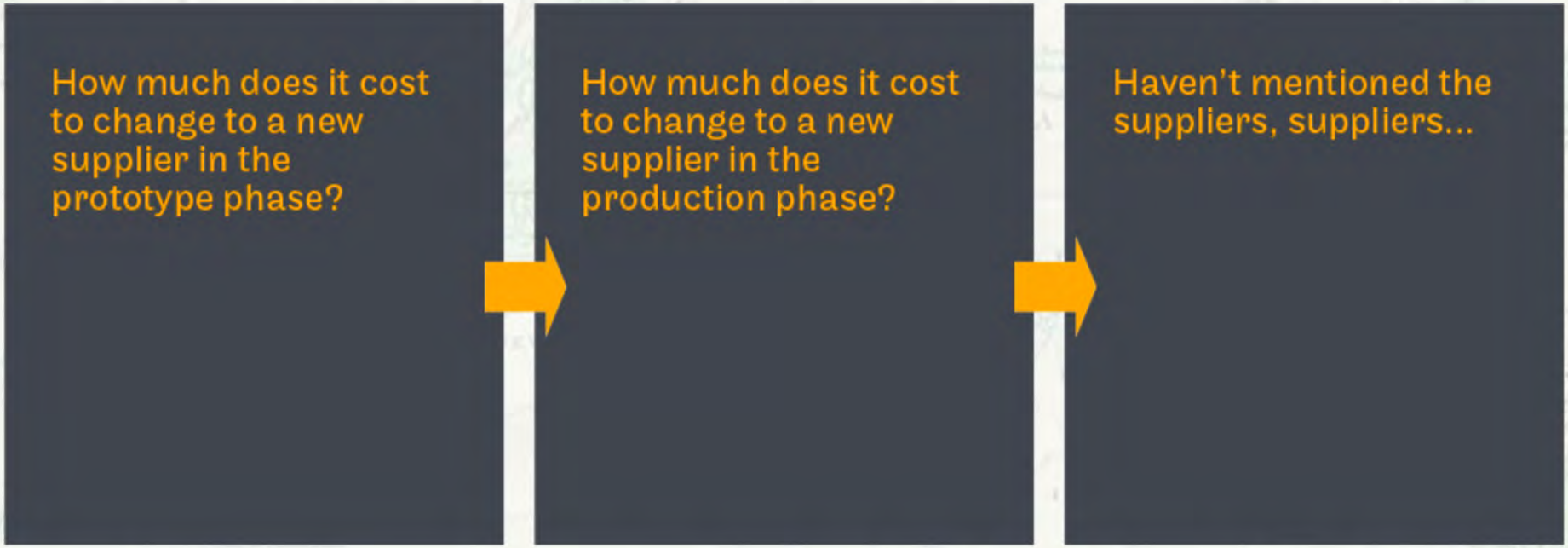
There are component suppliers ...

Each one has different ability related to the resulting reliability performance



Did the supplier understand the goal?

A discussion with your project manager or finance team may be in order



Component Selection

Reducing changes later has value

In initial selection process, increase the awareness and consideration of meeting the reliability target.

Final Design Review

Is there value in making informed decisions?

There is risk in every decision.

Start Production or Program Delay

We rarely have perfect information
Can we minimize the risk of a bad decision?

Does product reliability play a role

You can reduce the chance of making a mistake and ship on time when you should, and delay when you should

What is impact of a major product reliability issue in the past?

What is the lost revenue when delaying a month?

There are two types of decision error

Final Design Review

There is value in making informed decisions

Reduce the chance of project delay when unnecessary

Reduce the chance of project ship when design is not ready

How else could you find value?

Next Steps

Tools only add value when in use

Determine what is important to your organization (what is valued?)

Find the necessary information to estimate the value of setting a reliability goal

Encourage the practical use of the reliability goal

More Information

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