

# Quantifying the Cost of Delay

Workshop Design

by

**Joshua Arnold** and **Özlem Yüce**

of

**BLACK SWAN FARMING**

Delivered by

The Vistaprint Agile Transformation Team



# Quantifying Cost of Delay

1. Why is it the “one thing” to quantify?
2. Where do we start?



**2 years**

**104  
weeks**



# LOST LUGGAGE FORM

---

**PLEASE PRINT CLEARLY**

Passenger name: \_\_\_\_\_ Booking #: \_\_\_\_\_

Departure city: \_\_\_\_\_ Departure date: \_\_\_\_\_

Hotel name: \_\_\_\_\_ Room #: \_\_\_\_\_

Number of bags: \_\_\_\_\_ Description of luggage: \_\_\_\_\_

Daytime phone: \_\_\_\_\_ Evening phone: \_\_\_\_\_ Cell phone: \_\_\_\_\_

Email address: \_\_\_\_\_

Did you leave valuables in the safe of you hotel?  Yes  NO

**As soon as we have located you belongings, you will be contacted either directly or by our travel agent to make arrangements for pick-up.**

Ad2941 10/05

As difficult as it may be to believe, the major airlines have actually improved their mishandled-baggage record in the recent past.





Estimating value via

# Willingness To Pay

Scarcity forces us to

**CHOOSE**

and it is choice that  
defines

**VALUE**



JP



David



Julie



Daryl



Staci













Chris



Sean



INTRO	THEORY	1	2	REFLECT
 <p>10m</p>	 <p>Value</p>  <p>Urgency</p> <p>10m</p>	 <p>5m</p>	 <p>5m</p>	 <p>2m</p>

GET GOING	SHARE	WRAP UP	REFLECT
 <p>+</p>  <p>15m</p>	<p>Compare &amp; Contrast</p> <p>Identify key assumptions</p> <p>10m</p>	 <p>5m</p>	 <p>2m</p>

# Building Blocks

# Get Going

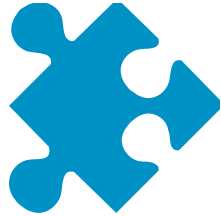
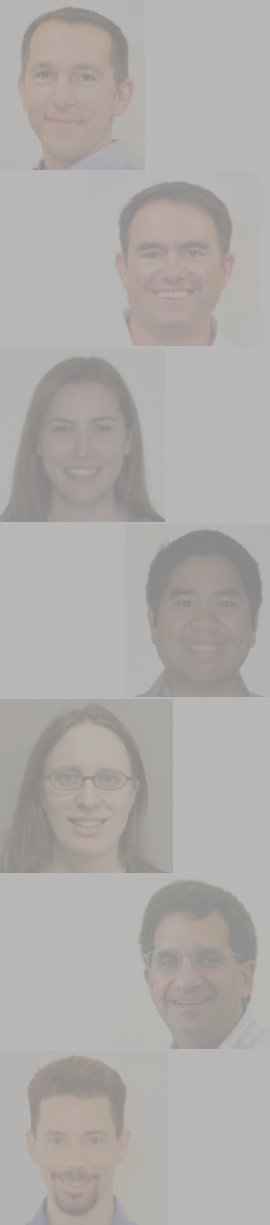
INTRO

THEORY

EXERCISE 1

EXERCISE 2

REFLECT



Value



Urgency



L'Unreal



NSOS

Name _____	Date _____
Topic _____	
Wide Points	Evidence and Detail

10m

10m

5m

10m

2m



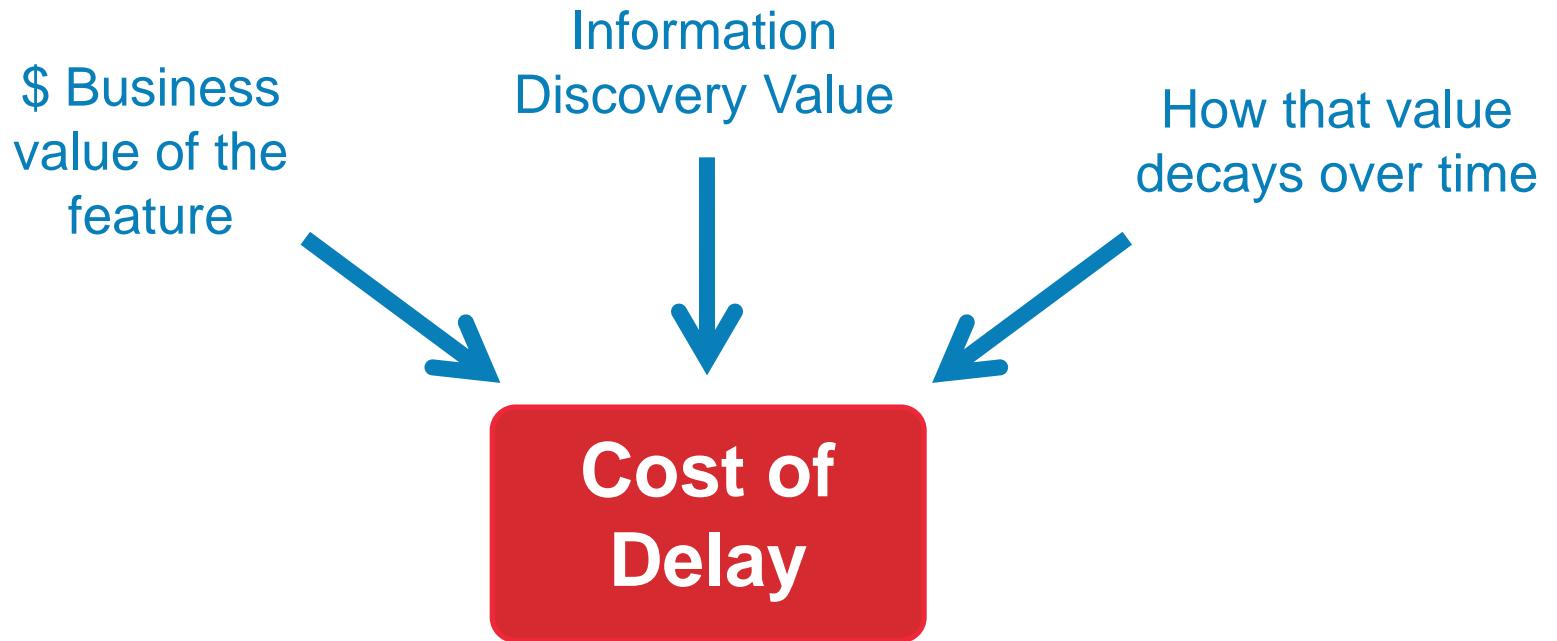
## Introducing the context for **Cost of Delay**



**BLACK SWAN FARMING**

from Joshua Arnold

# Cost of Delay: Putting a price-tag on time





# A framework for thinking about **value**

Increase  
Revenue

**Increasing** sales to new or existing customers. Delighting or Disrupting to increase market share and size

Protect  
Revenue

Improvements and incremental innovation to **sustain** current market share and revenue figures

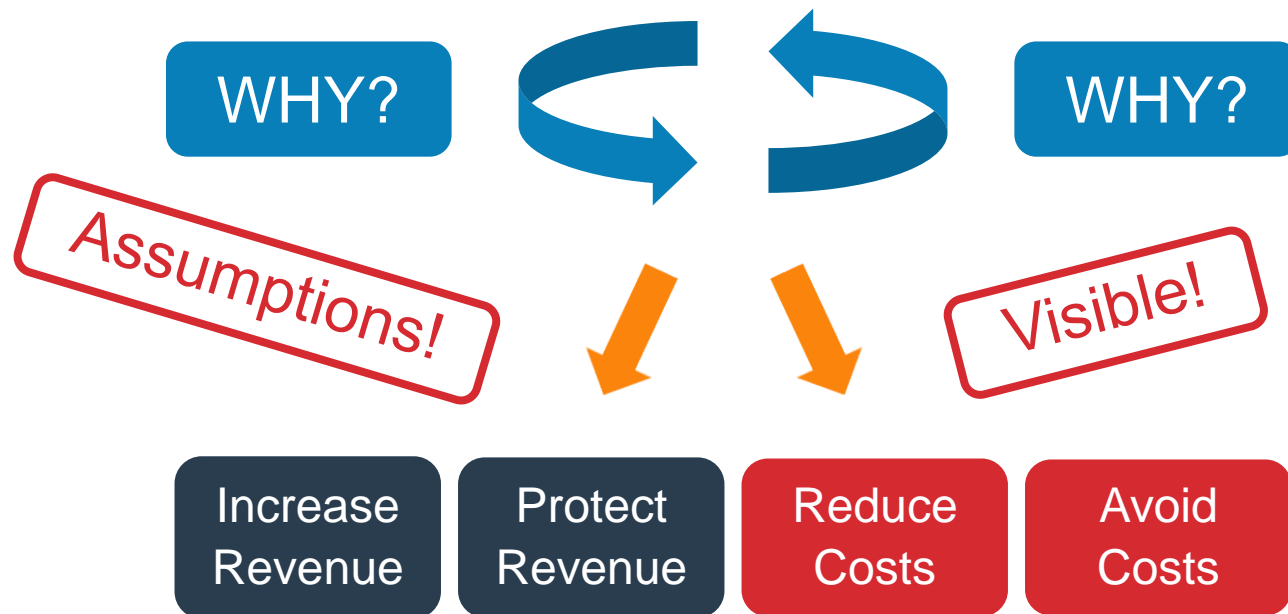
Reduce  
Costs

Costs that we are *currently* incurring, that can be **reduced**. More efficient, improved margin or contribution

Avoid  
Costs

Improvements to **sustain** current cost base. Costs we are not currently incurring but may do in the future

# Ask: Why should we do this?



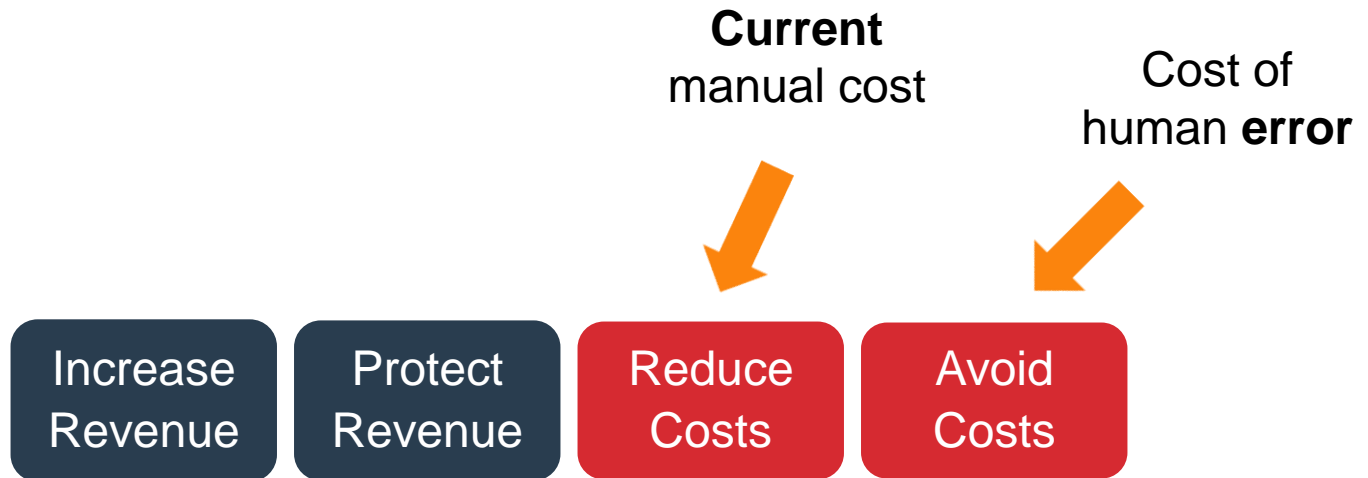
If we can't estimate the value, is it worthless?

# A couple of tactics for getting to \$

①

Make the value equal to cost of *alternatives*

## Example: Automating a process



# A couple of tactics for getting to \$

②

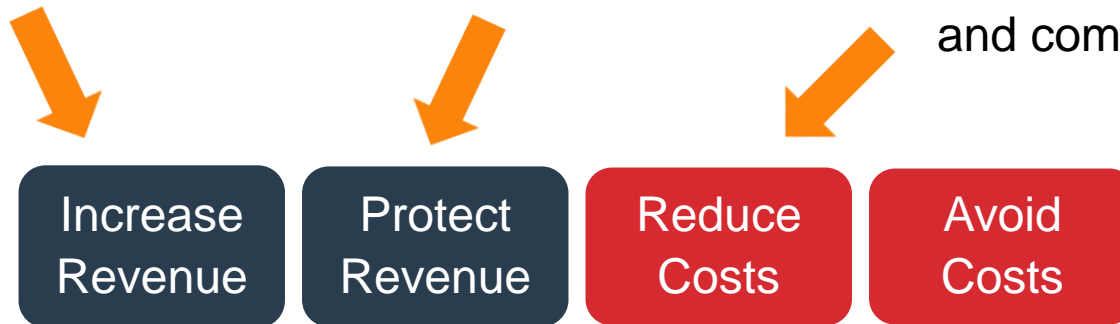
Estimate the value of the *effects of the change*

## Example: Improving invoice clarity and accuracy

Reduce  
payment  
**delays**

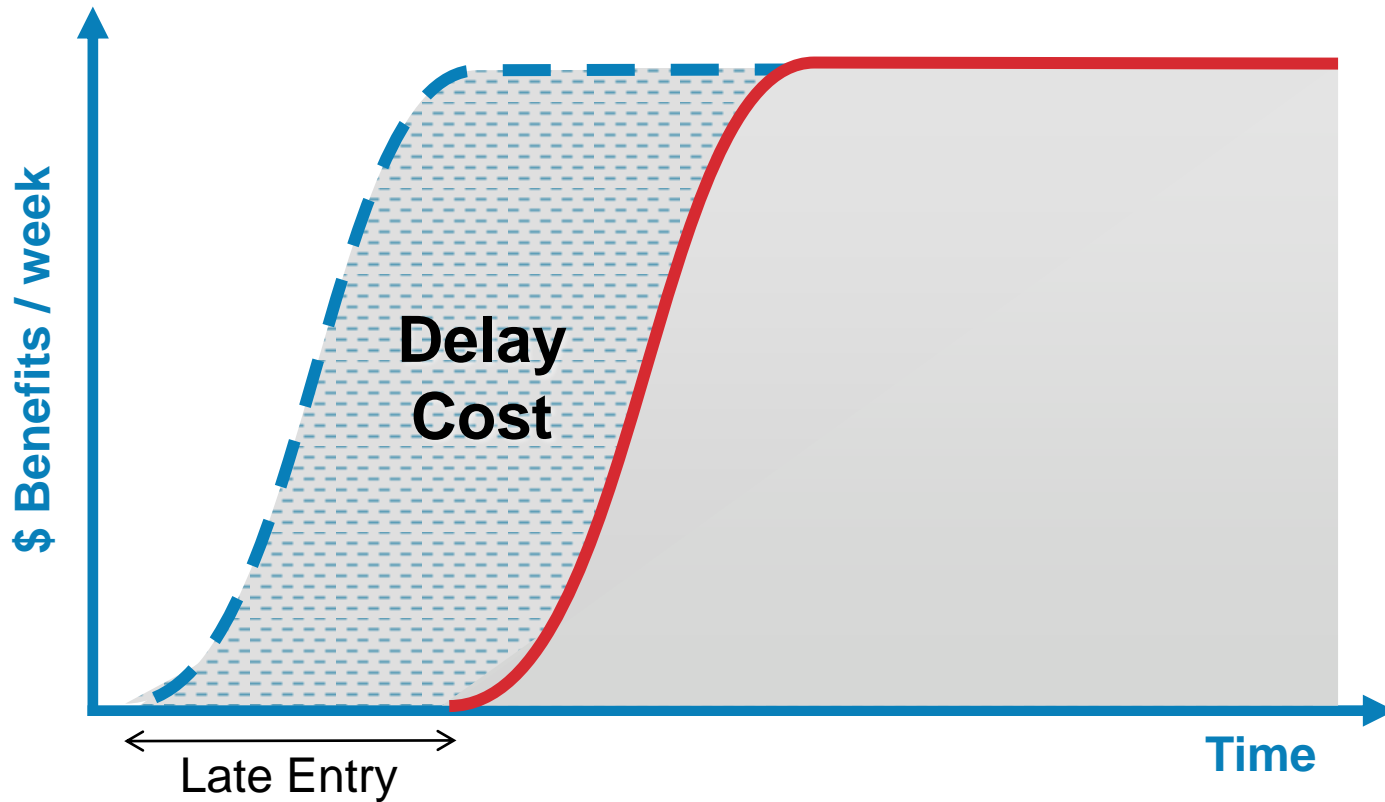
Make it **easier** for  
customers to pay the  
**correct** amount

Use less **employee**  
time processing  
customer inquiries  
and complaints



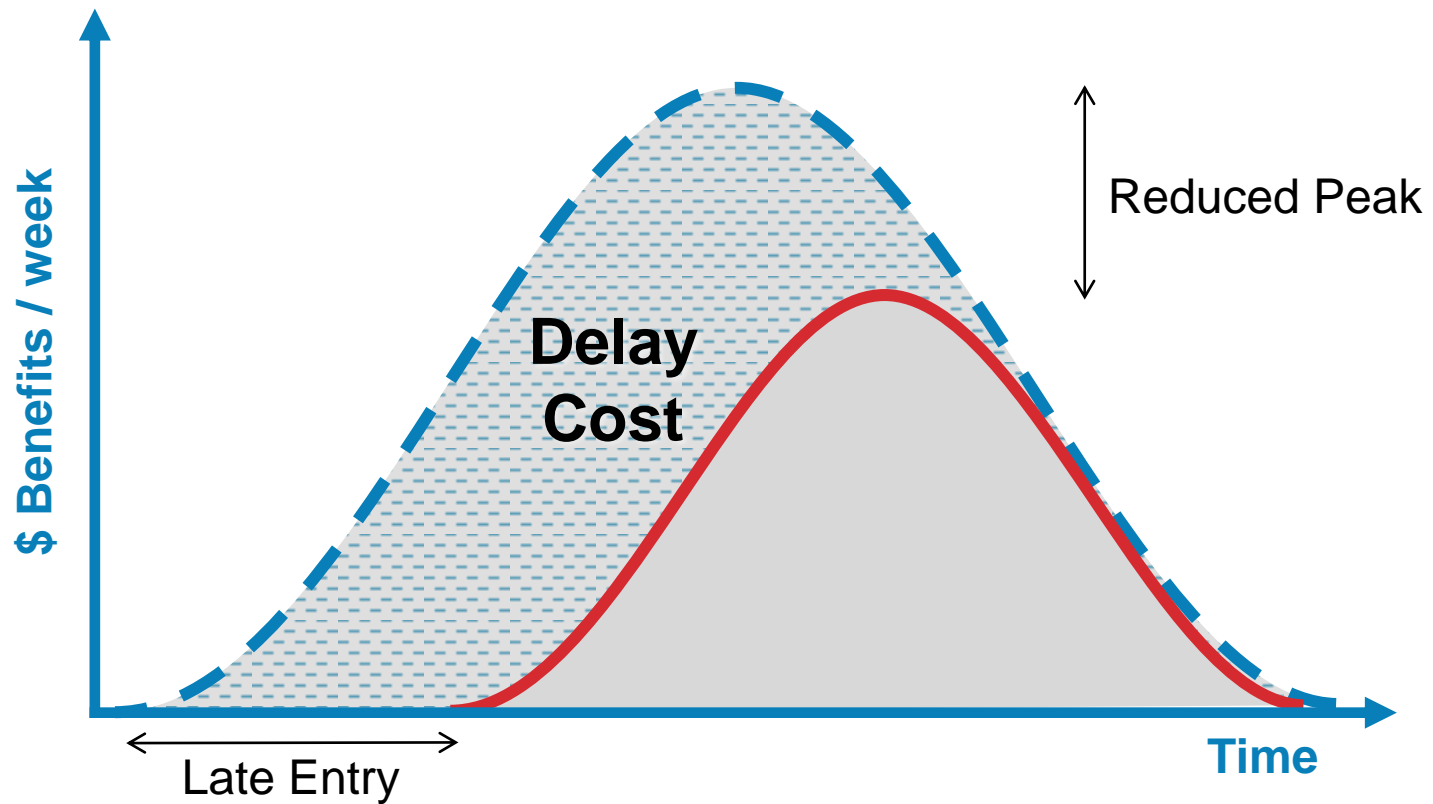


# ① Urgency profile (Long Unaffected)



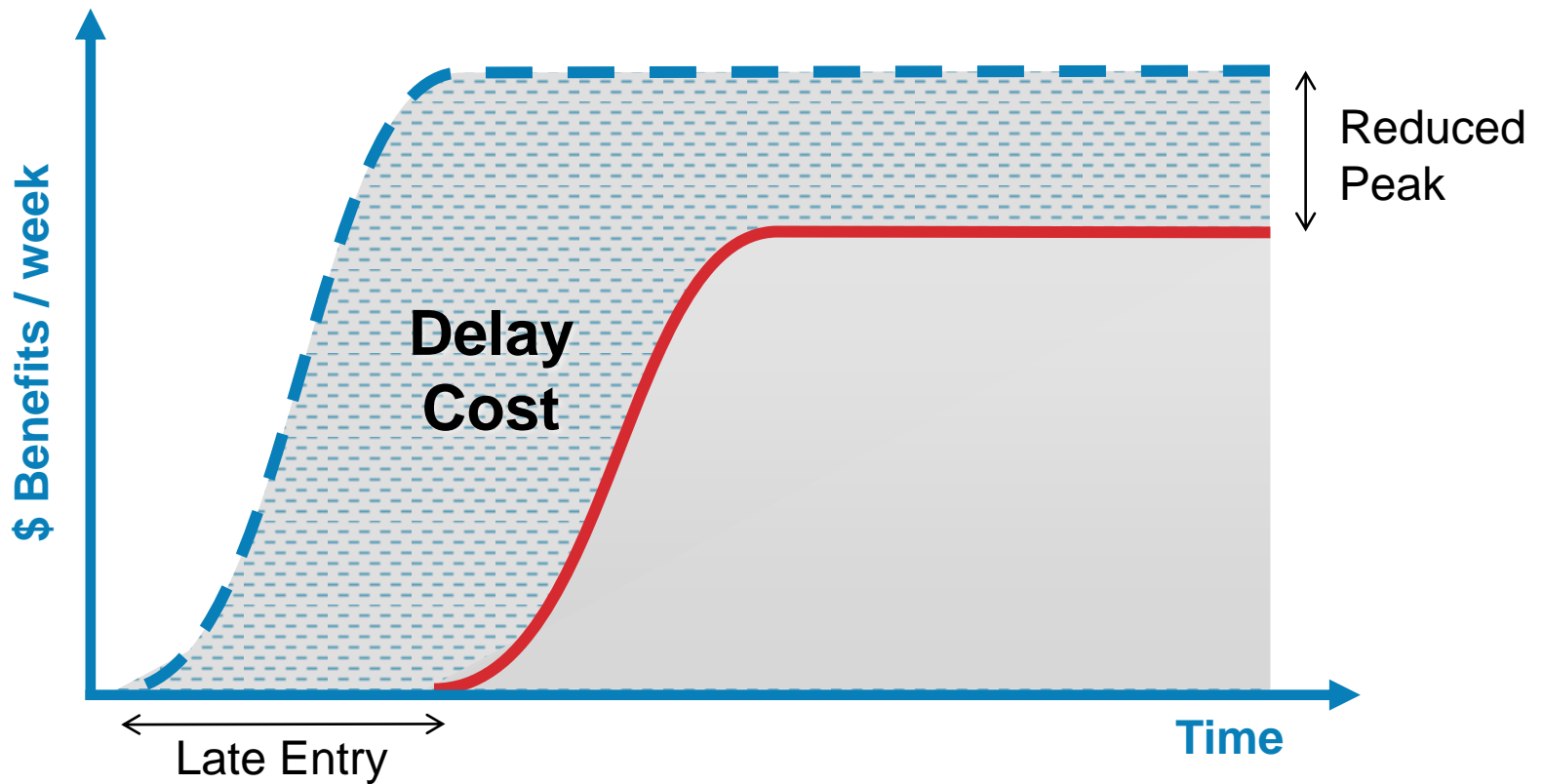
For ideas with a very long-life, with peak unaffected by delay

## ② Urgency profile (Short Affected)



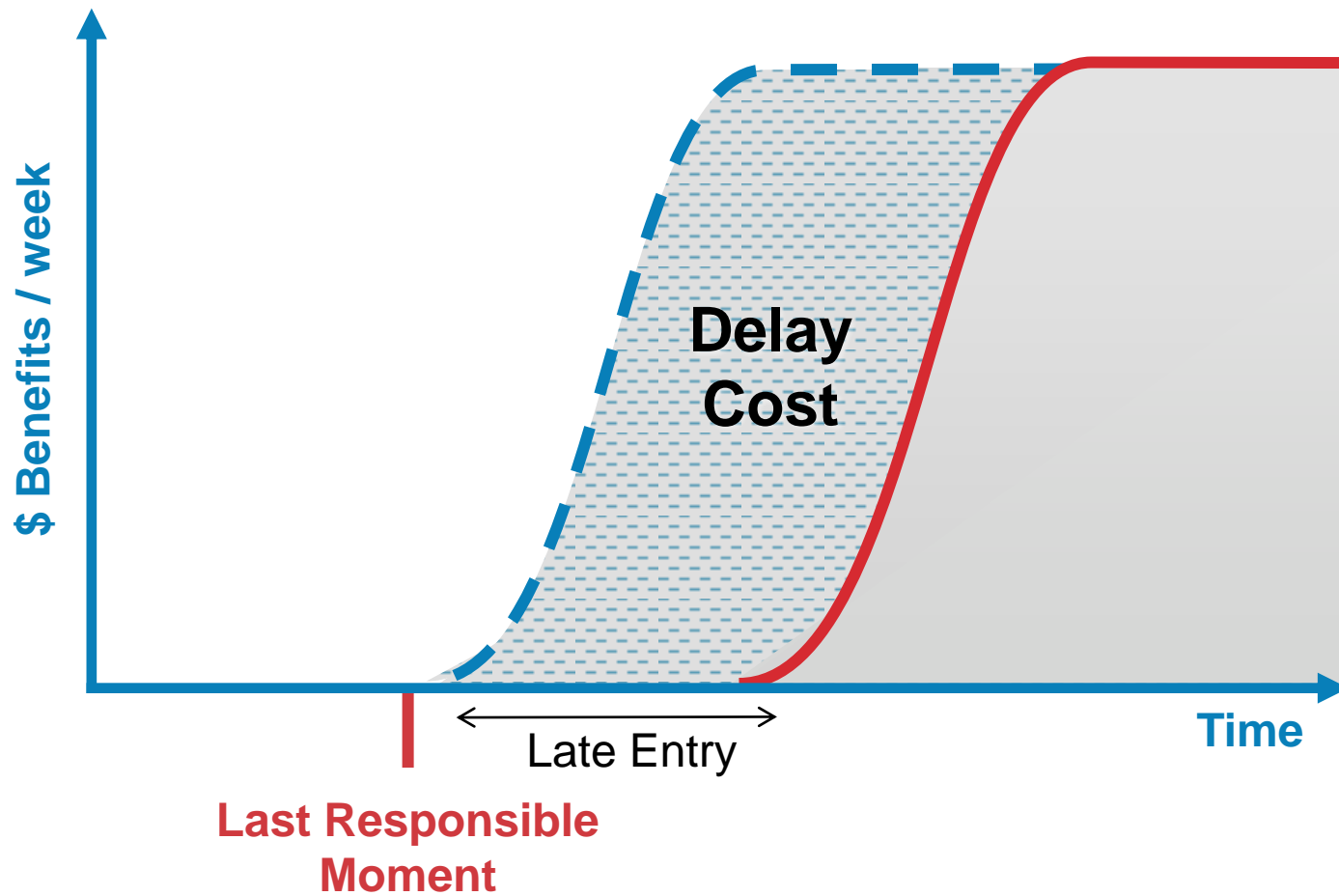
2. Short benefits horizon, and reduced peak due to late delivery

### ③ Urgency profile (Long Affected)



For ideas with a very long-life, with reduced peak due to later delivery

# ④ Urgency profile (Seasonal/Date driven)





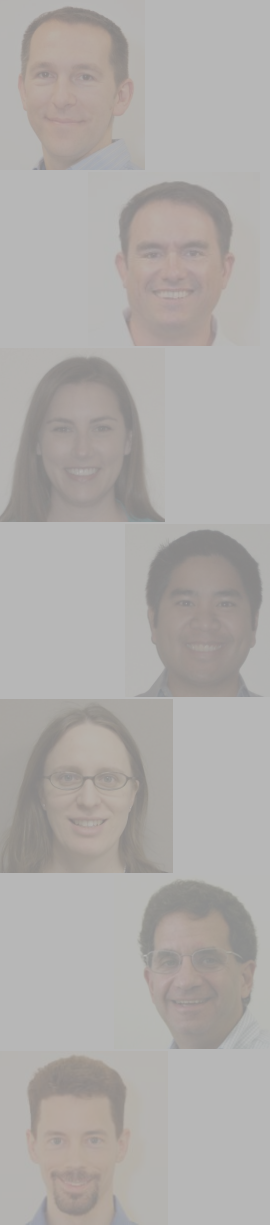
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EXERCISE 1

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Urgency

L'Unreal

NSOS

Name _____	Date _____
Topic _____	
Main Points	Evidence and Detail

10m

10m

5m

10m

2m

# Exercise 1: L'Unreal

You work for L'Unreal, a manufacturer of professional hair-care products. For inventory management purposes, L'Unreal requires weekly stock-take of the quantity of raw materials in the warehouse. Currently, this occupies a team of 12 people for five hours each week. The cost of a warehouse employee to the company is roughly \$20 per hour.

Mark, a new guy who recently joined the *L'Unreal* team, has come up with a way to instead automatically scan the barcodes as they arrive and leave the warehouse. In order to create a sense of urgency for making this change, he has come to you to help him work out the Cost of Delay.

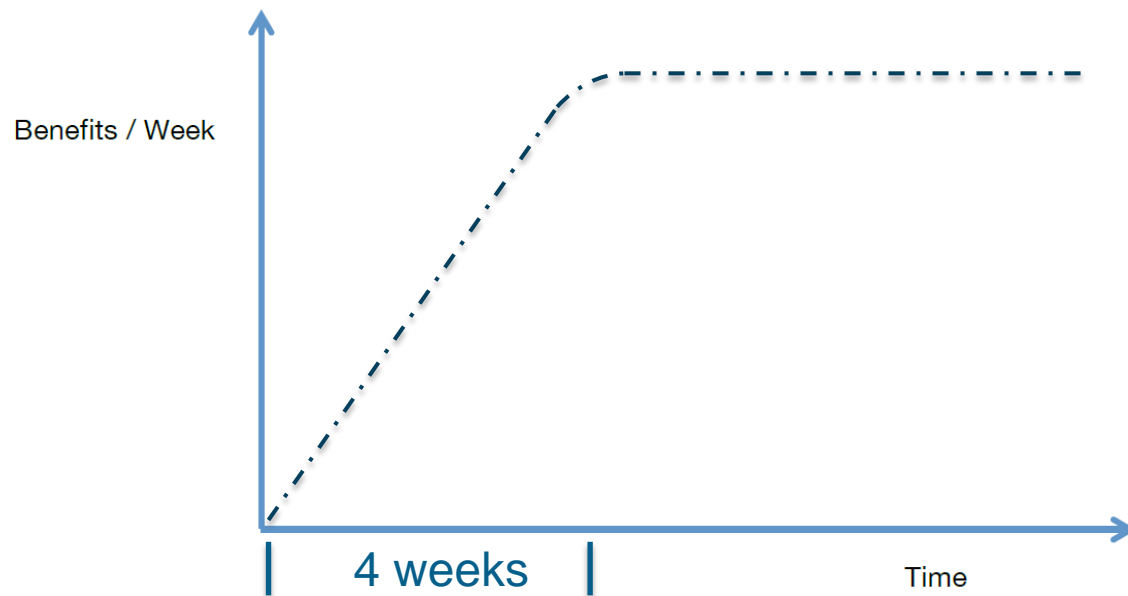
1. Which of the four benefit type(s) does this idea contribute to?

**Increase Revenue / Protect Revenue / Reduce Cost / Avoid Cost**

# Exercise 1: L'Unreal

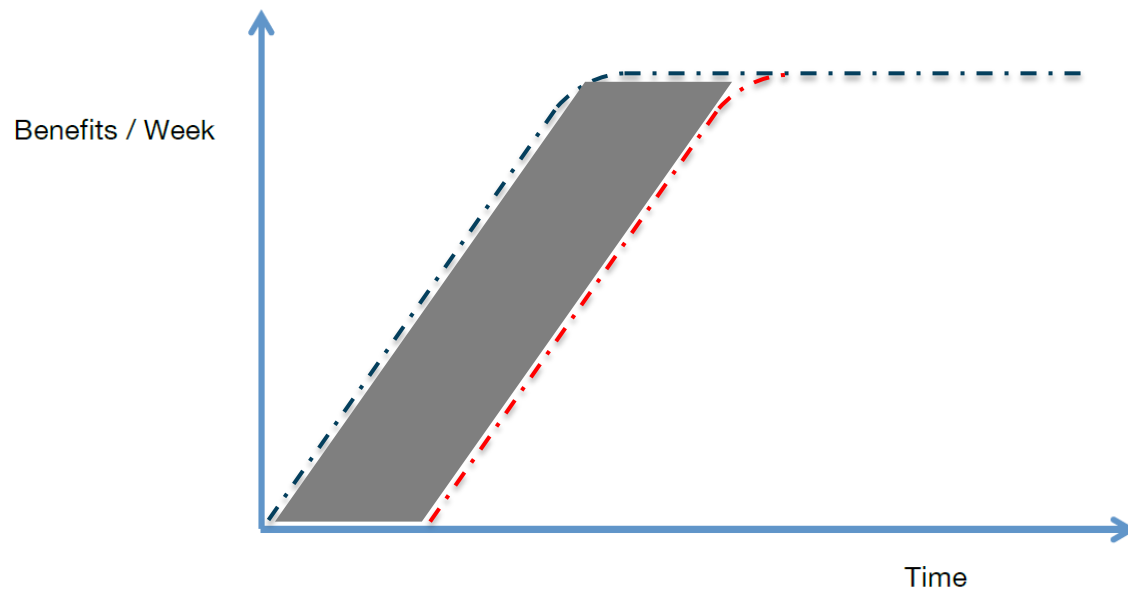
2. It is estimated that it will take four weeks to get the new system fully up and running. During this time, people will be gradually redeployed onto other tasks.

Assuming work starts today, draw what you think the ramp-up of benefits might look like. (Notice that the Y-axis is the *benefits per week*, not cumulative benefits).



# Exercise 1: L'Unreal

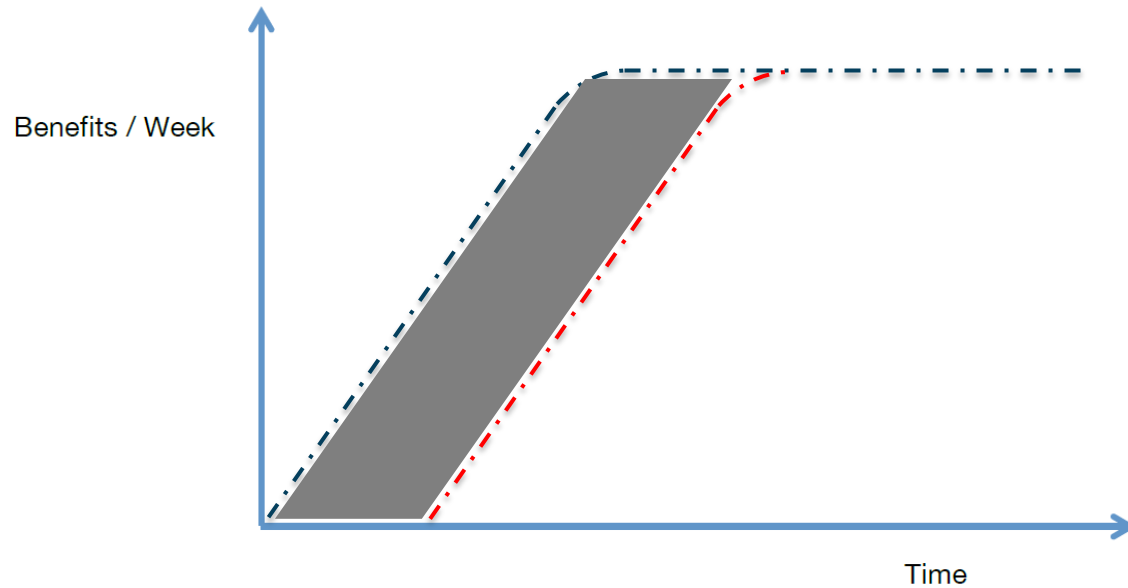
3. Due to a senior executive being away on vacation, approval of the implementation has been delayed by a couple of weeks. On the same chart above, now draw a second curve, showing how the benefits will ramp up taking into account this two-week delay. Shade the difference between the two curves to highlight the delay cost.





# Exercise 1: L'Unreal

4. Which of the four urgency profiles does this example most closely resemble?



**1. Long Life, Unaffected Peak**

## Exercise 1: L'Unreal

5. What is the Cost of Delay for this idea, expressed in dollars per week?

$$12 \text{ ppl} \times 5 \text{ hrs/wk} \times 20 \text{ \$/hr} = \mathbf{\$1200/wk}$$

6. What is the total Delay Cost incurred if this is delayed by two weeks?

$$\mathbf{\$1200/wk} \times 2 \text{ wks} = \mathbf{\$2400}$$

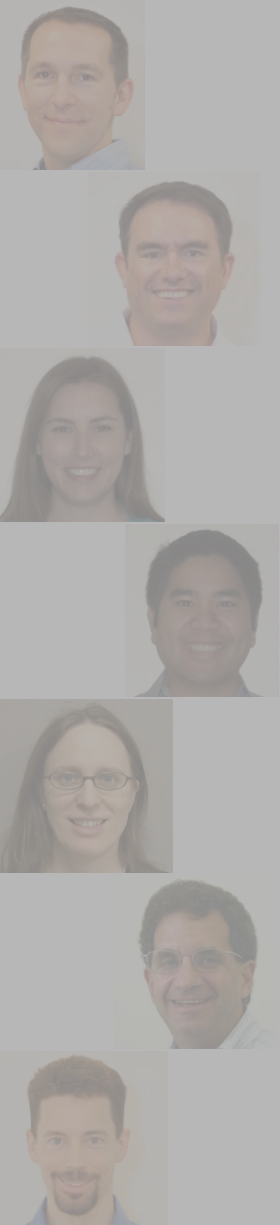
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Urgency



Name _____	Date _____
Topic _____	
Main Points	Evidence and Detail

10m

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5m

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2m



JP



David



Julie



Daryl



Staci



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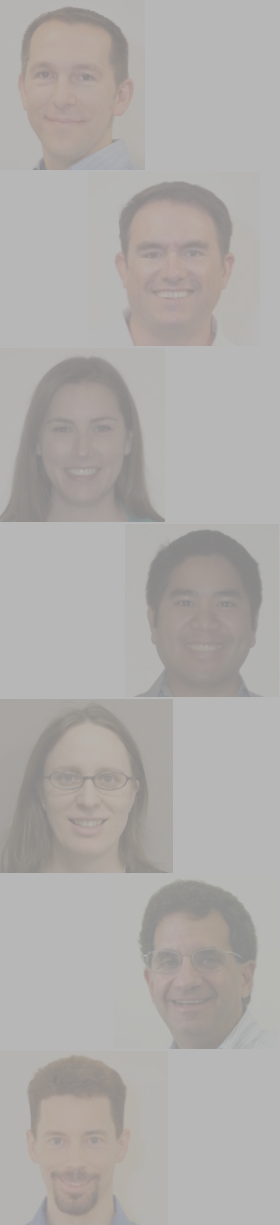
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Urgency



Name: _____		Date: _____	
Topic: _____			
Main Points		Evidence and Detail	

10m

10m

5m

10m

2m

# Reflections: Building Blocks

Using your graphic organizer,  
jot down...

What you learned so far

Any questions you have

A graphic organizer form with the following structure:

- Name: \_\_\_\_\_ Date: \_\_\_\_\_
- Topic: \_\_\_\_\_
- Main Points: \_\_\_\_\_
- Evidence and Detail: \_\_\_\_\_

# GET GOING



+



15m

# SHARE

Compare &  
Contrast

Identify key  
assumptions

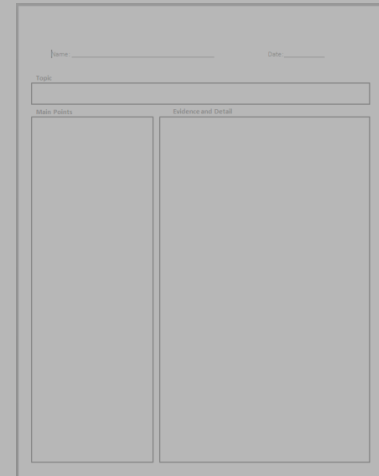
10m

# WRAP UP



5m

# REFLECT



2m



# Imagine you work for Vistaprint

One of your colleagues has a bright idea to offer business cards on LinkedIn. Using profile data (name, job title, phone number, email) you will display a customized business card alongside users' profile.

Users will be able to easily design and order business cards using their details on LinkedIn saving them time.



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# Özlem Yüce

Owner, Change agent and Transformation coach at Agile At Heart Ltd  
London, United Kingdom | Information Technology and Services

- Current Agile At Heart Ltd.
- Previous Maersk Line
- Education Middle East Technical University

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Contact Info

## Background

### Summary

I am a passionate, highly skilled and knowledgeable consultant, coach and trainer of Lean and Agile principles and practices. With over 6 years of international experience in this field I provide advice and guidance to senior leaders and teams helping them to improve the way they work. I help organisations to innovate faster by changing the way people think and act in the complex environments that they work in.

I am continuously looking for the opportunities to implement a lean and agile approach and would love to find out what benefits I could bring to your business, please do contact me at ozlem@agileatheart.com and I will get back to you straight away.

### People You May Know



**Maria Nezhdanova** 2nd  
customer service - Maersk Line  
[Connect](#) 10



Create a unique business card. Customize with your photo or logo on premium paper stocks and promote your business.



### Who's Viewed Your Profile

**7** Your profile has been viewed by 7 people in the past 3 days.

**15** You have shown up in search results 15 times in the past 15 days.

TITLE <b>LinkedIn business cards</b>		CD3 PRIORITY SCORE	
THE WHY (DESCRIBE THE PROBLEM, JTBD)	THE WHAT (POTENTIAL SOLUTION TO THE PROBLEM)	INCREASE REVENUE	PROTECT REVENUE
		REDUCE COST	AVOID COST
THE HOW (THE BENEFITS FOR THE ORGANISATION)		URGENCY PROFILE	
		COST OF DELAY (\$/wk)	
WHAT ARE THE KEY ASSUMPTIONS WE NEED TO VALIDATE?			

# Imagine you work for Vistaprint

One of your colleagues has a bright idea to offer business cards on LinkedIn. Using profile data (name, job title, phone number, email) you will display a customized business card alongside users' profile.

Users will be able to easily design and order business cards using their details on LinkedIn saving them time.



+



=



**15  
mins!**

GET GOING

SHARE

WRAP UP

REFLECT



+



15m

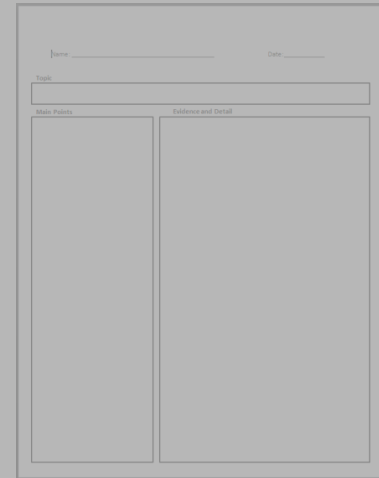
Compare &  
Contrast

Identify key  
assumptions

10m



5m



2m

# Variables

**Cost of Delay**

=

Total Addressable Market

x

Conversion Rate

x

Number of orders per user per year

x

Profit per order

÷

52

**Cost of Delay**

=

Total Addressable Market

x

***Conversion Rate***

x

Number of orders per user per year

x

Profit per order

÷

52



# GET GOING

# SHARE

# WRAP UP

# REFLECT



+



Compare &  
Contrast

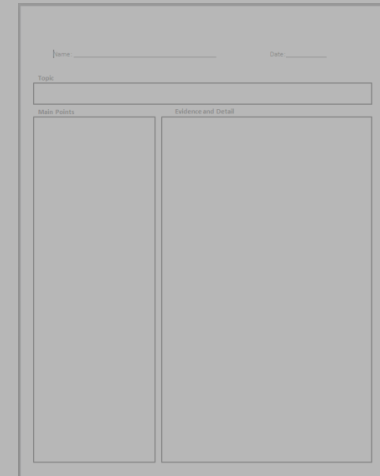
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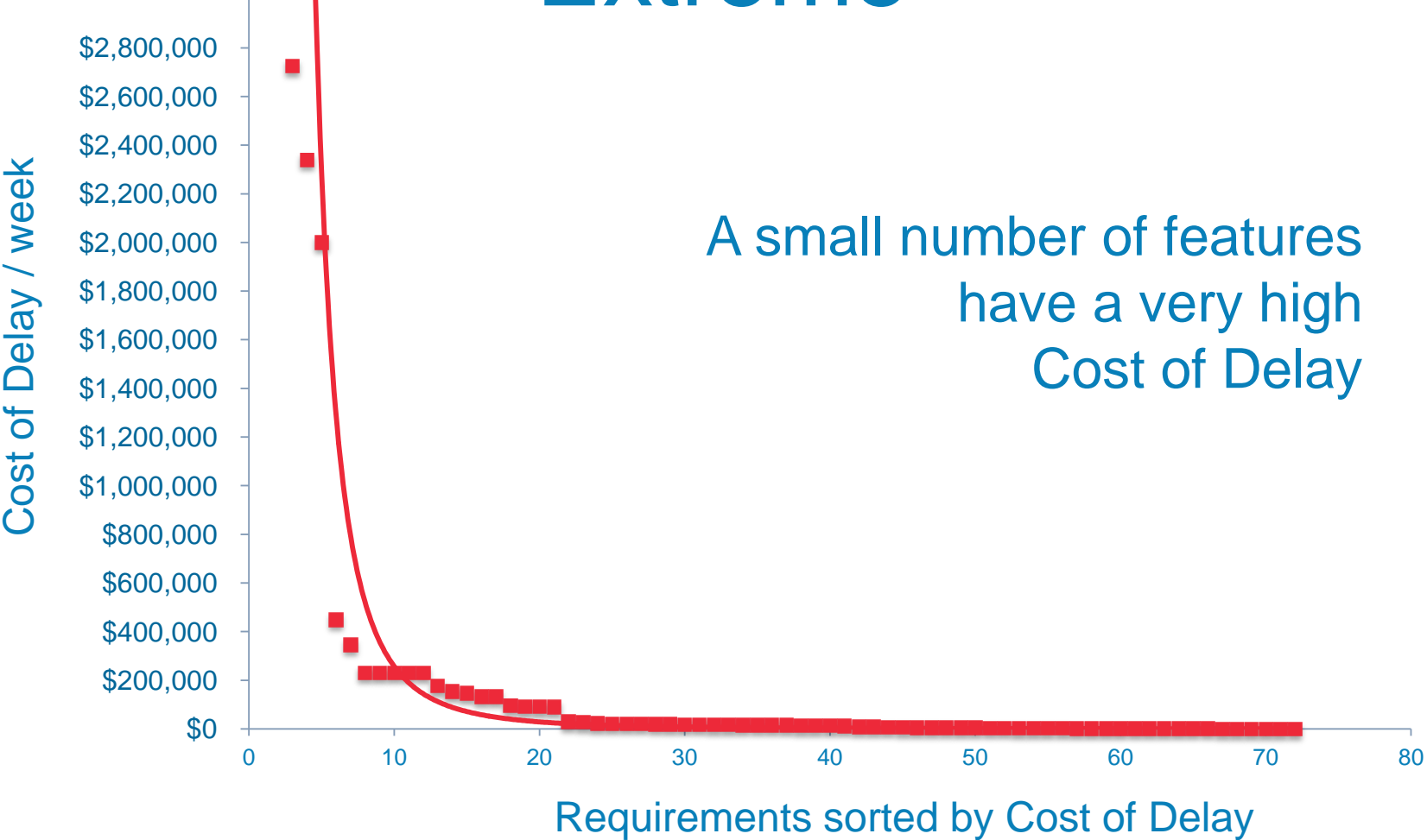


5m



2m

# Black Swans: Value is Rare, Extreme



Building blocks

(help you quantify the “one thing”)

Confidence

(it's not as hard as you think)

Conversation, not precision

(surface assumptions, share understanding)

Design Better Experiments

(enable better trade-off decisions)

# GET GOING

# SHARE

# WRAP UP

# REFLECT



+



Compare &  
Contrast

Identify key  
assumptions



15m

10m

5m

Name _____		Date _____	
Topic _____			
Main Points		Evidence and Detail	

2m

# Reflections: Real World Example

Using your graphic organizer,  
jot down...

What you learned so far

Any questions you have

The image shows a graphic organizer form. At the top, there are two lines for 'Name' and 'Date'. Below that is a box labeled 'Topic'. The main body of the form is divided into two columns: 'Main Points' on the left and 'Evidence and Detail' on the right.

Without information about

VALUE

the system optimizes  
for other things

# Want more?

Sean Barrett

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 @swb151

<http://www.blackswanfarming.com>

“The Principles of Product Development Flow”  
by Don Reinertsen

<http://www.reinertsenassociates.com>

<http://www.leadingagile.com/2015/06/an-introduction-to-cost-of-delay/>