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## Cost of Delay for Dummies

How much does it cost when we  
DON'T do the work?

# WHAT TO EXPECT

- Work as a table (Yes you will talk to each other) 😊 ***Introverts beware!***
- Yes, you will do MATH! Yay! Math is fun!
- Use your math to prioritize the work from other tables
- Create a schedule or Roadmap (All tables will participate)

# COST OF DELAY, SAY WHAT?

- What is Value?
- Definition of value: the regard that something is held to deserve; the importance, worth, or usefulness of something **OR** to estimate the monetary worth of (something)
- 3 ways to measure **Value**
  - Value points
  - Cost of Delay
  - ROI (Return On Investment)

<https://vimeo.com/101506552>

# WHAT IS COST OF DELAY REALLY?

- Cost of Delay is the monetary amount the problem is costing us; the impact of the problem over time

## In plain English that means =

1. Communicate impact of time on value
2. Based on reality
3. Doesn't need to be perfect

# WHY USE COST OF DELAY? WHAT HAPPENED TO ROI?

- Opportunity cost lost if we choose **NOT** to do something
- Fast and Simple - It's easy!
- Used for saying "**No**" or "**Not Now**"
- Everyone will speak the same language!

# WORK INTAKE/LIFECYCLE AND COST OF DELAY

Reality

- Is this possible?
- Does it make sense for us to do it?

Value

- Discover the true problem to be solved
- What is the Cost of Delay?

Size

- What is the duration or size?
- Is this too big to be solved quickly?

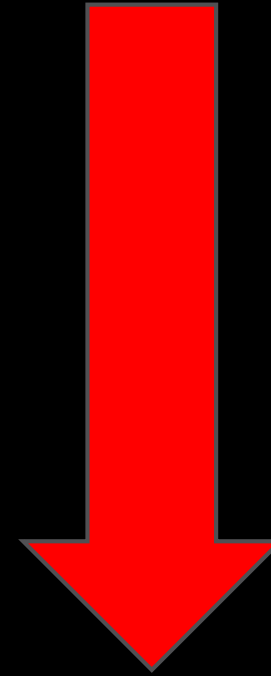
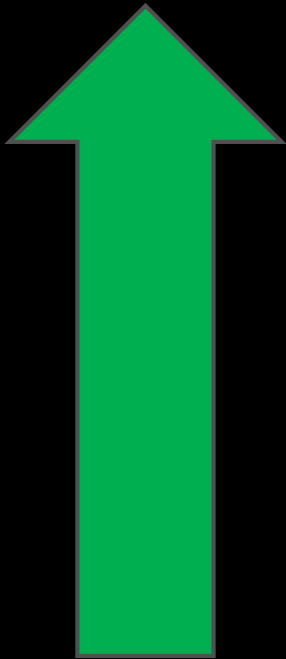
CD3

- Where does this land relative to our other priorities?

# LET'S GET STARTED!

## 2 MAIN IMPORTANT FACTORS

REVENUE



COST

# STORY EXAMPLE

The southern warehouse is the primary location for outbound widgets. John Smith, the office manager, has been complaining that his team needs to double check the work on the floor to ensure customers don't call in angry. He has asked for scanner to validate the loads automatically instead.

Based upon observation, currently a worker takes 4 trips out to confirm the right number of widgets every day. It takes them approximately 30 minutes to count the widgets. Per John Smith, they catch an error with 1% of the loads. The company ships 6 days a week.



# 2 mins

- At your table, read your case study/scenario provided
- This will be the topic that your tables focus on the remainder of our time

# FIRST THING'S FIRST?

- What are assumptions?
- Assumptions are educated best guesses based on current available data.
- How confident are you on those assumptions?
- Don't forget the Facts! Facts are Assumptions with 100% confidence

# INFORMATION GATHERING YOU WILL NEED:

- Data Description - What are you measuring?
- Value – How many? Or how much?
- Unit of Measure – Money, Time or # of Units
- Confidence – how sure you are of your assumption?
- Source – who/what is the author of the data point?
- Notes – general discussion points

# STORY EXAMPLE

Data Description	Value	Unit of Measure	Confidence	Source	Notes
Number of times confirming widgets per day	4	Qty / Day	70%	Observation	BA's did an observation of 3 Workers on March 3rd
Time to confirm widget	30	Min	70%	Observation	BA's did an observation of 3 Workers on March 3rd
Error Rate of Widgets	1	%	50%	John Smith	John Smith, Head of Dept said this was what he thought the rate was
Shipping days per week	6	Days/Wk	100%	Logistics	Standard business days

# 15 mins

- Using your case study, each table work as a team and identify assumptions for your case study
- You will always have more assumptions than you will use in the Cost of Delay formula – That is OK!

# WHAT IS THE FORMULA? IT DEPENDS!

- The CoD can be different as more assumptions are added.
- Common formula subsets of CoD:

**People:** #of people X \$hourly rate X Confidence

**People in multiple locations:** #of people X #of locations X \$hourly rate X Confidence

**Time:** Time Unit value(Time per week, Time per transaction, etc.) X Confidence / 60 minutes to get hours

# TIME MATH: BRING IT TO WEEK!

- Start at week: DONE!
- Start at month:  $### * 12 / 52$
- Start at year:  $### / 52$
- Delayed value: Calculate for 3 years, then bring back to a week level. Example:  $###$  Monthly Benefit won't be realized for 6 months:

<b>1<sup>st</sup> Year</b>		<b>2<sup>nd</sup> Year</b>		<b>3<sup>rd</sup> Year</b>
$(###*6)$	+	$(###*12)$	+	$(###*12)$

That Number / 156 (weeks in 3 years) = Weekly

# 10 mins

- Develop your cost of delay formula using your case study
- Keep in mind the value of the problem to be solved, NOT the amount it will cost to fix it.



# NOW WHAT? DURATION!

- More easy math!
- We've calculated duration for you!
  - Duration has been calculated for each case study and on your handout.

# WHAT'S YOUR CD3 VALUE?

- More easy math!
- Cost of Delay Divided by Duration  
 $CD3 = CoD / Duration$
- CD3 is a form of Weighted Shortest Job First  
 $WSJF = Value / Size$
- We've calculated duration for you!

# 2 mins

- Calculate your CD3 value
- $CD3 = \text{Cost of Delay} / \text{Duration}$

# HOW DO WE PRIORITIZE?

Using the CD3 Score:

Compare all desired things to be done.

# 10 mins

- Put your work in order by CD3 Value
- Use the wall and tape to move things around

# ARE WE DONE?

- Yes! Kind of.
- Using math, we can now make data driven decisions.

# RECAP - WHAT DID YOU DO?

- You learned about Cost of Delay.
- You DID Math!! Wooahoo!!
- You calculated CD3 using CoD. More Math!!
- You made data driven decisions to PRIORITIZE
- You made a schedule working on the MOST important VALUE work first!

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# Questions

