Taking an Economic View

Implementing an economic model for trade-off analysis and distributed decision-making for a product portfolio at scale.

SAFe SUMMIT
October 27-28, 2020

CHAT WITH US LIVE • DURING SESSION •

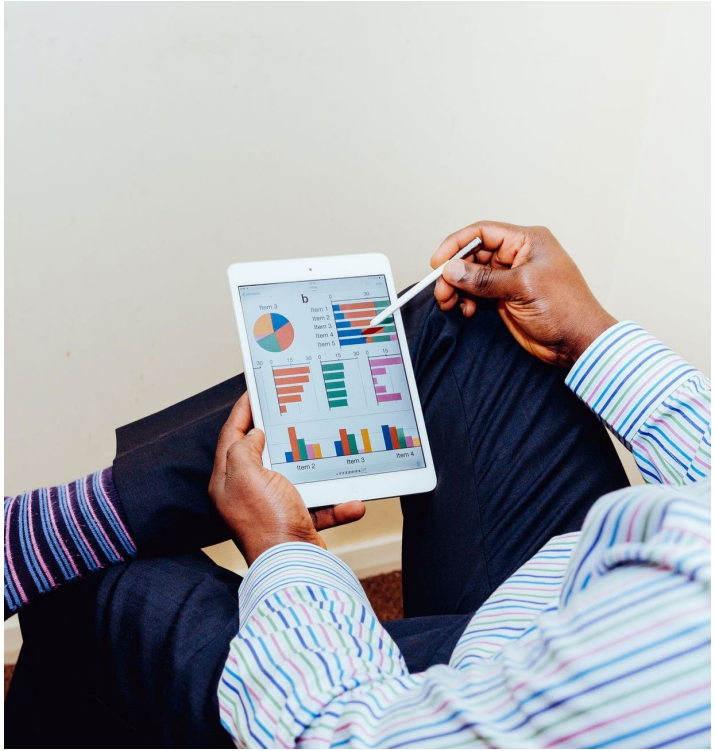
Simon Chesney

Enterprise Lean-Agile Coach, iSPCT
Western Digital Corporation

Alex Bould

Principal Consultant
Playbooks & Pathways, LP

Who will benefit from this technical talk?



- Advanced topic - establishing an economic framework & model
- We're assuming familiarity with key concepts in SAFe
- It will help if you also have familiarity with Don Reinertsen's work

  “The Principles of Product Development Flow”

Why do we need economically-based decision-making?

- “ If you only quantify one thing, quantify the Cost of Delay” - Don Reinertsen
- “ By the time we realized we needed to make trade-offs, few alternatives remained available to us”
- “ Why do we continually find ourselves over-committed?”
- “ People who can impact the product ship date have widely varying opinions about the Cost of Delay”

Four key questions

1. Does everyone understand the economics?
2. Are we managing variability correctly?
3. Are our priorities based on economics?
4. Are we ready to decentralize control?

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These are great questions…
but how the heck do we get started?

Delay Cost Modeling Approach

Templates

- Single, finite life product
- New product to replace an existing product
- Engineering expenditure to reduce product cost
- A platform that carries extra cost for the benefit of later derivative products
- A technology that is not sold alone but is used in other products
- Custom-built, contextually tuned

Delay Scenarios

- Dominant market-leading product
- Finite life product
- Long lived product with end of life convergence
- Long lived product without end of life convergence
- OEM-type product with small initial sampling rate
- OEM-type product with high switching costs

Customization

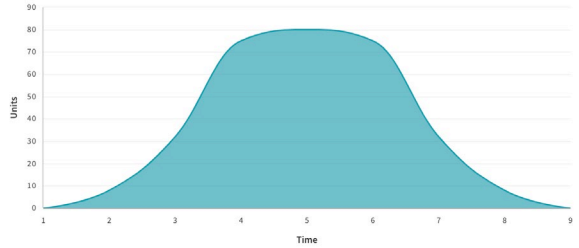
- Select an appropriate template
- Populate with product-specific data
- Adopt context-appropriate terminology
- Adapt & validate delay scenarios
- Extend the model to accommodate user requirements

Templates and Standard Delay Scenarios

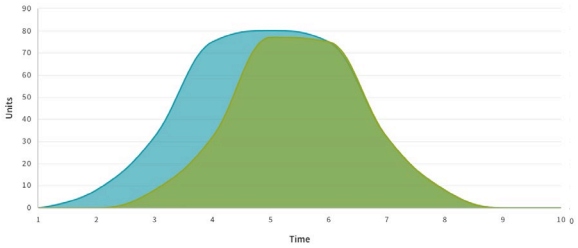
Templates

Delay Scenarios

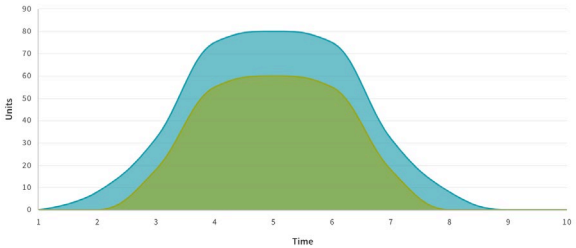
Finite life product



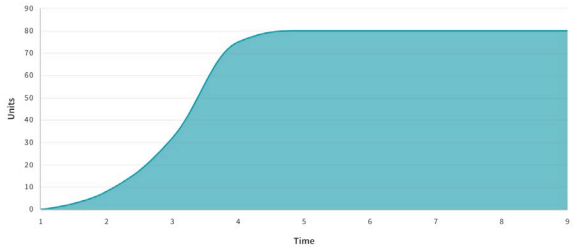
Dominant market-leading product



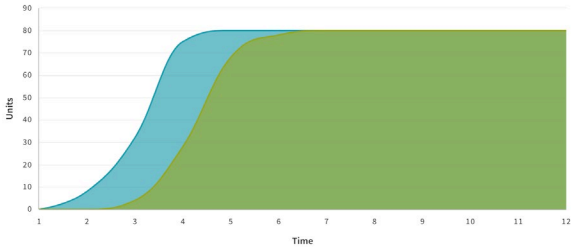
Classic Finite Life Product



Long-lived product



Long-lived product, able to make-up market share



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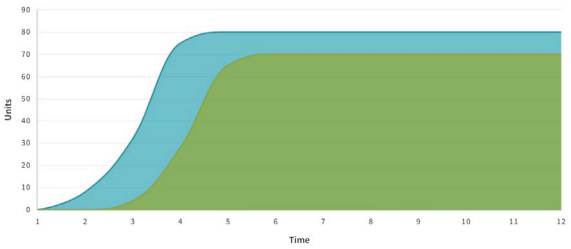

Baseline

Delayed

Template + your data = Baseline

Baseline Product Business Plan	FQ-1	FQ-2	FQ-3	Total
Volume (K)				
Price ($)				
Revenue ($K)	=Volume X Price			
COGS ($K)				
Gross Margin	=Revenue - COGS			
Gross Margin%	=(Revenue-COGS)/ Revenue			
Development Costs				
Contribution Margin	=Gross Margin - Development Costs			

Template + your data = Baseline

Customization

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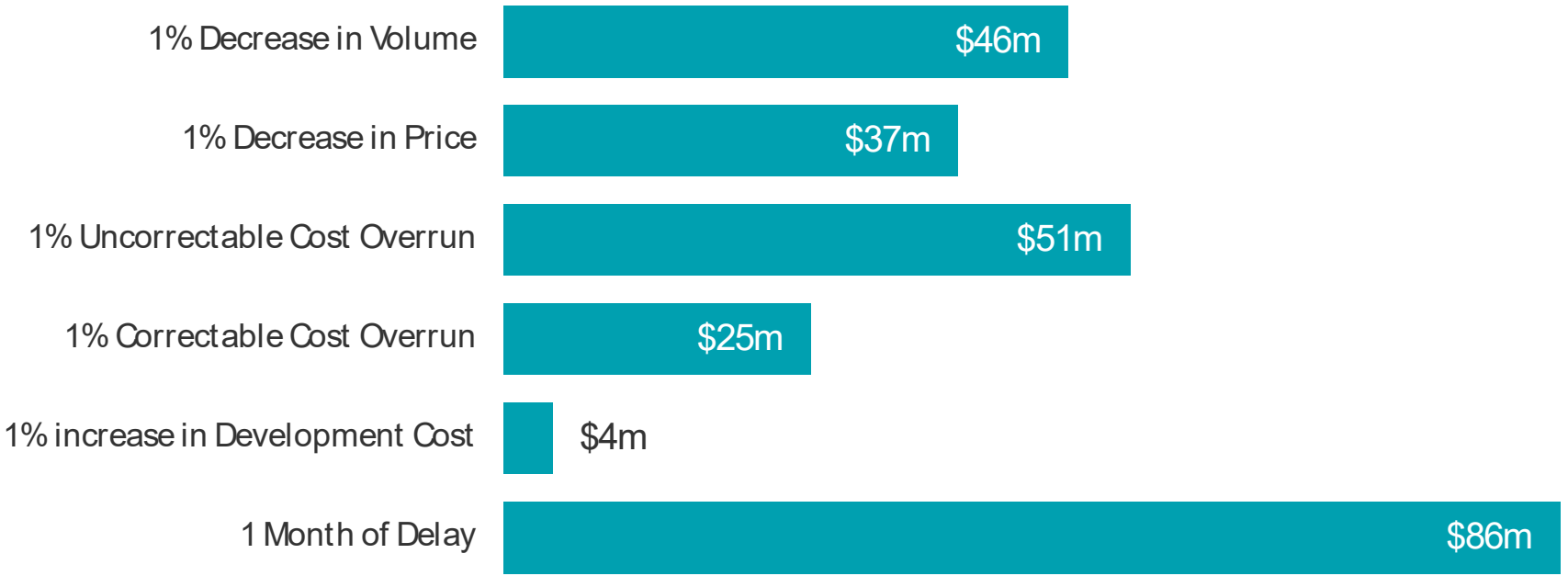
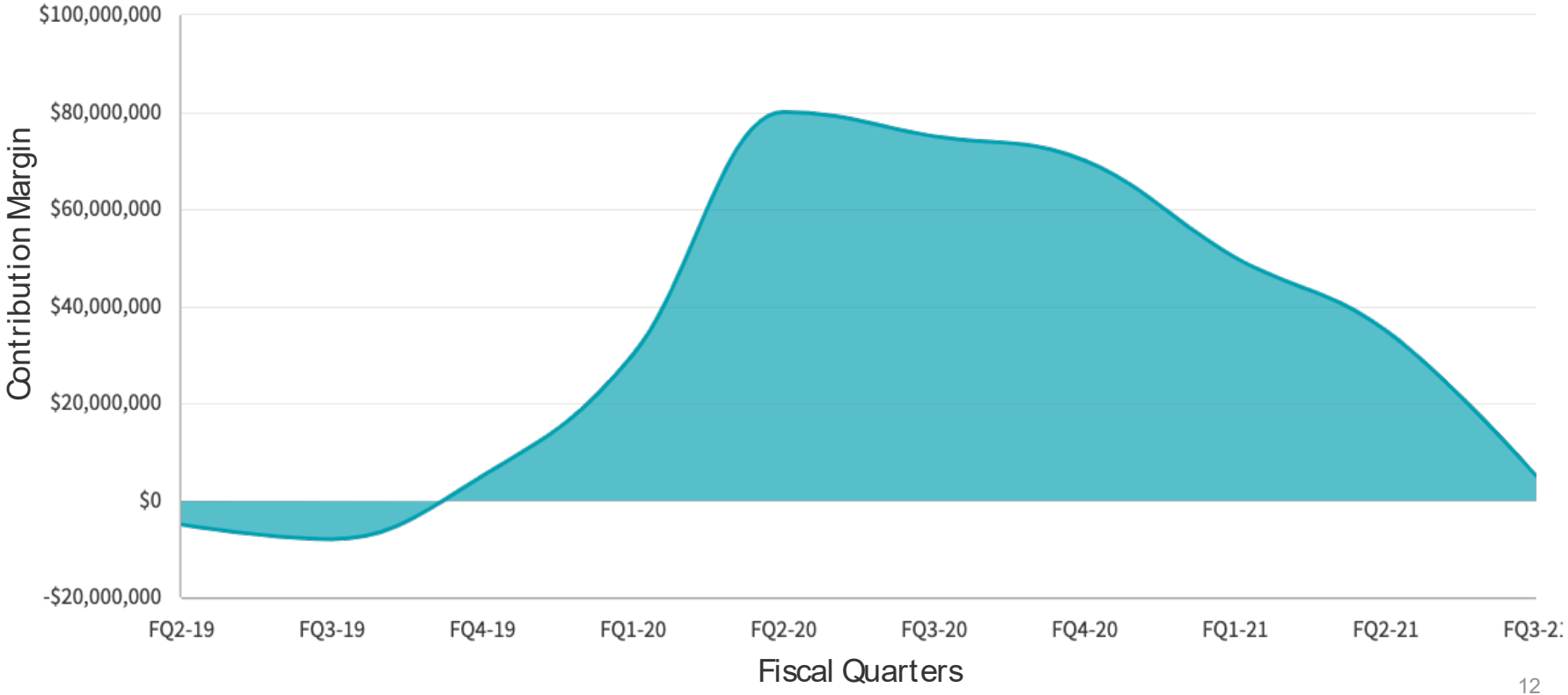
Which synonyms does your enterprise or finance department use?

Sensitivity Analysis

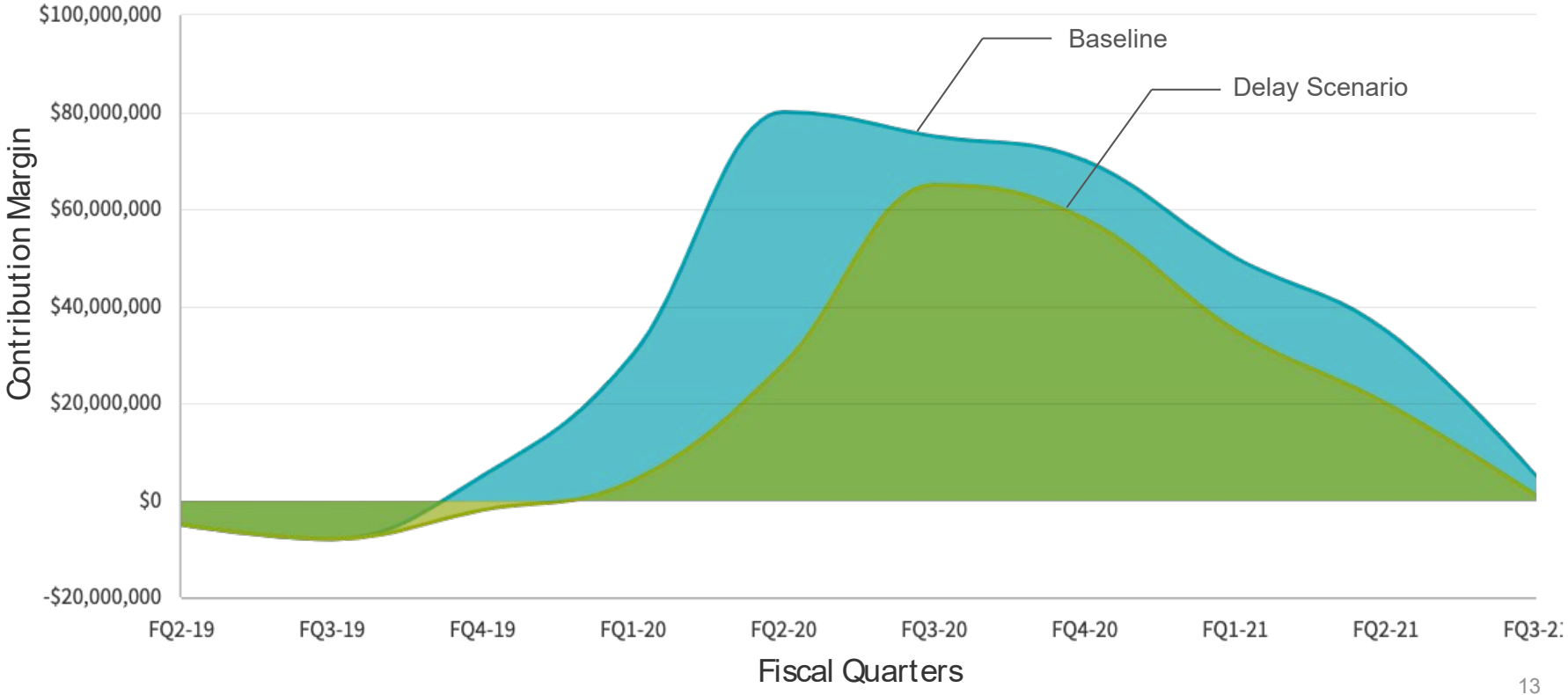


Calculated in Contribution Margin $ over the Product Life-cycle

Product Life-cycle Profits



Modeling a delay scenario

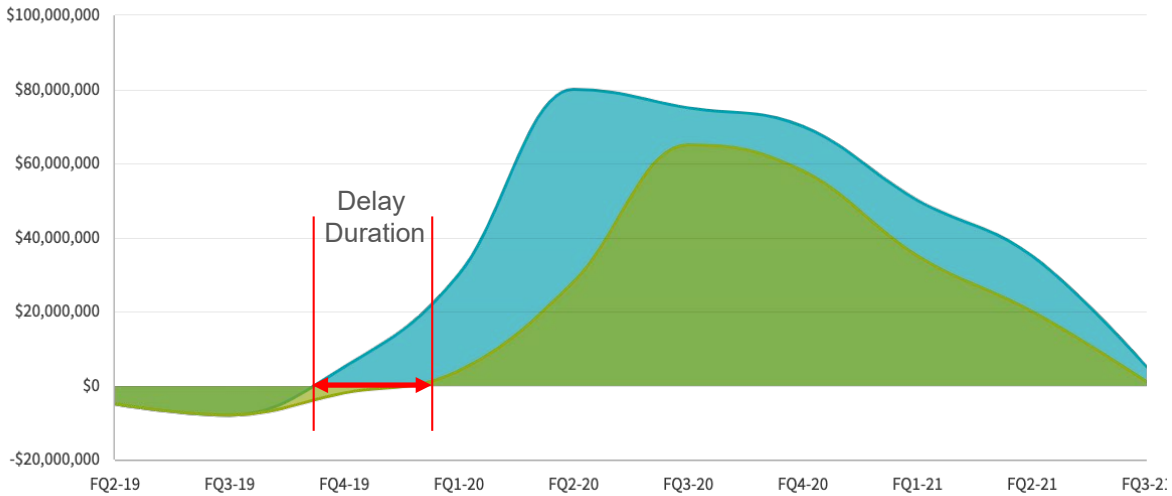


Modeling a delay scenario

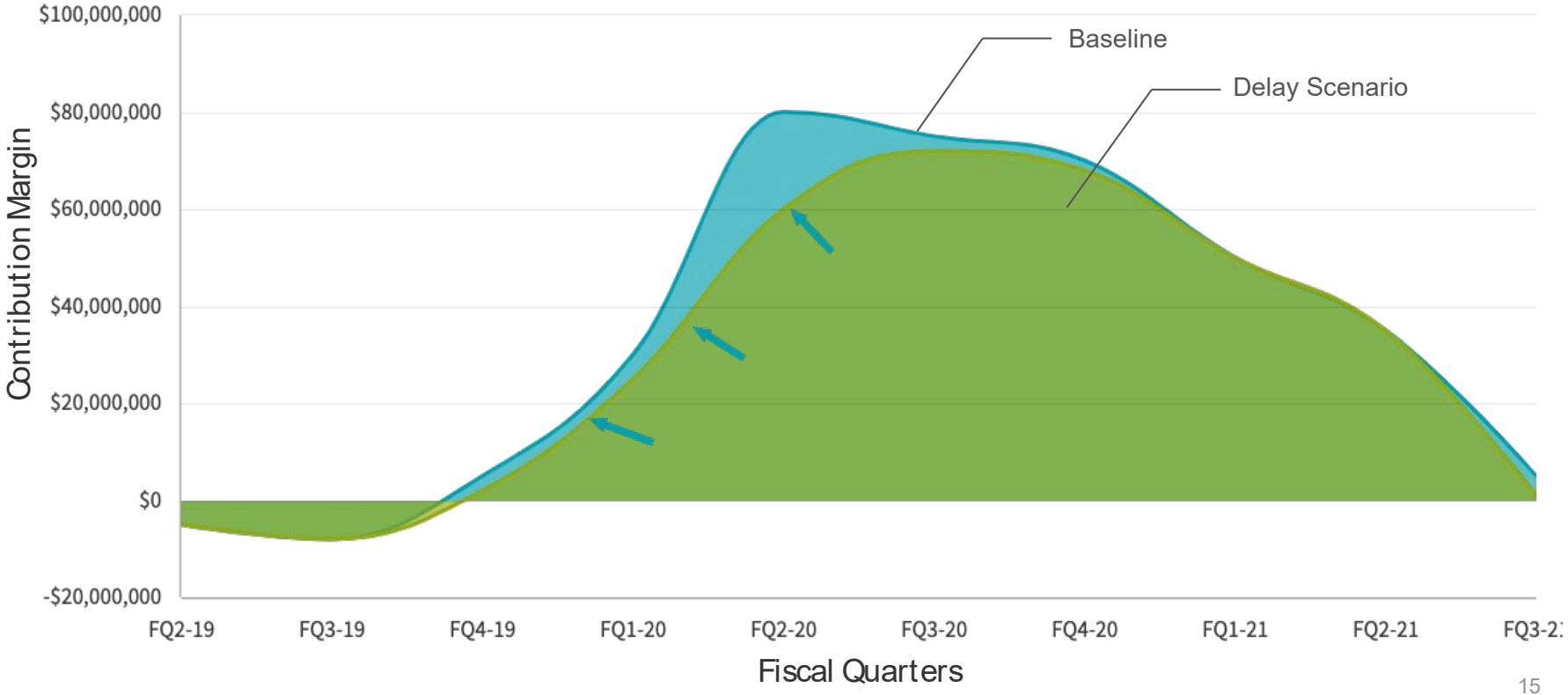
Cost of Delay is a Rate; Delay Cost is a Quantity

Cost of Delay = Delay Cost / Delay Duration in months

Delay Cost = Area under Blue curve – Area under Green curve

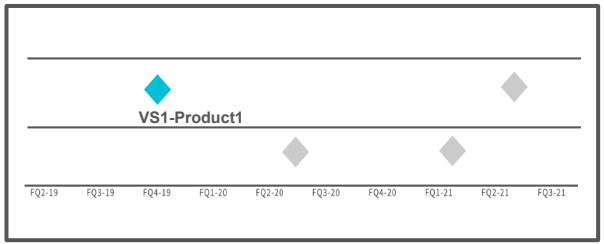


Exploring mitigation trade-offs

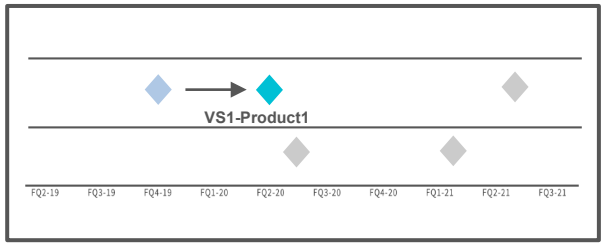


Delay as shown on roadmaps

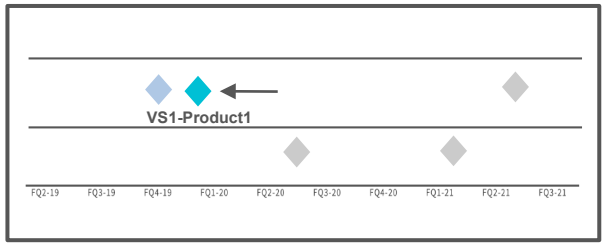
Baseline



Unmitigated Delay Scenario



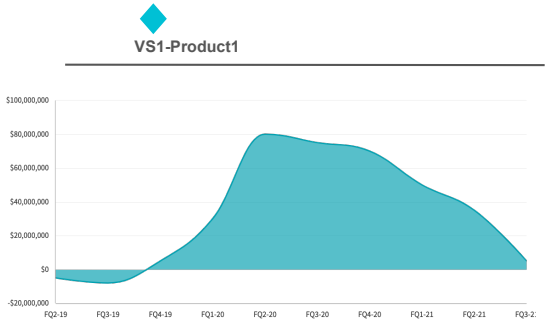
Mitigated Delay Scenario

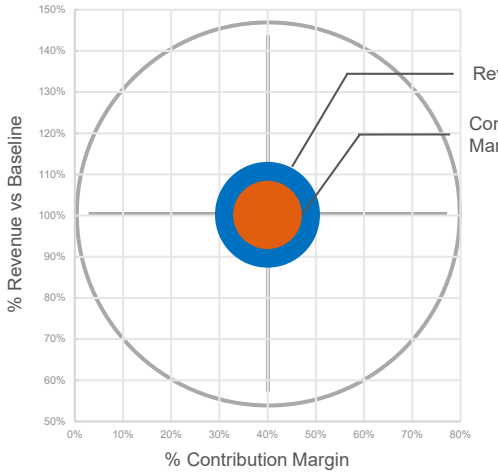


Does everyone understand the economics?

Comparing trade-off alternatives

Baseline





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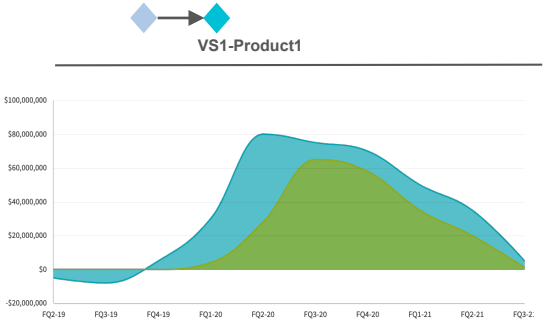
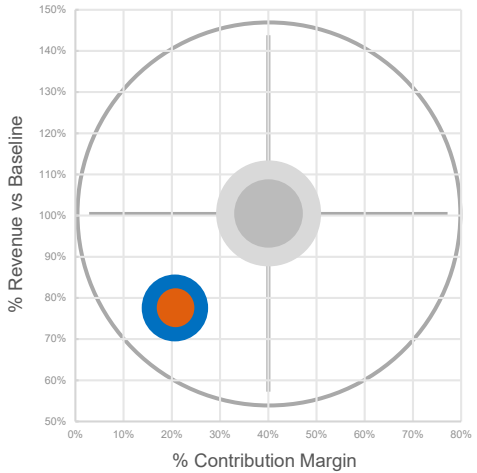
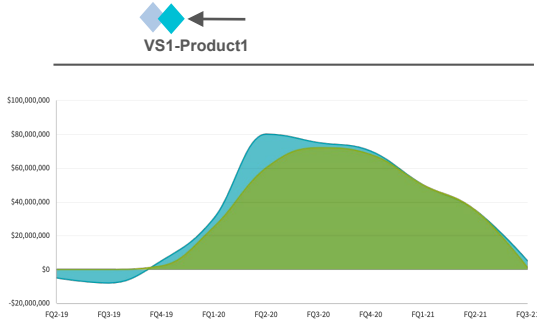
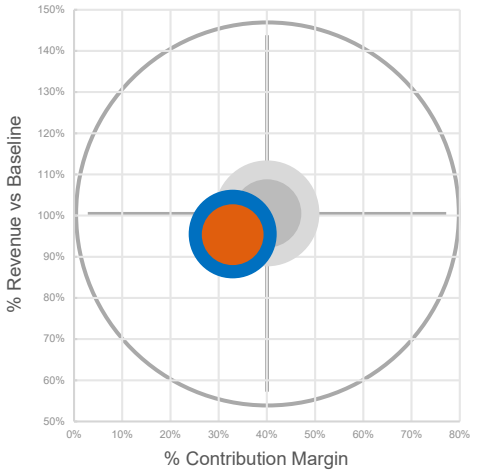


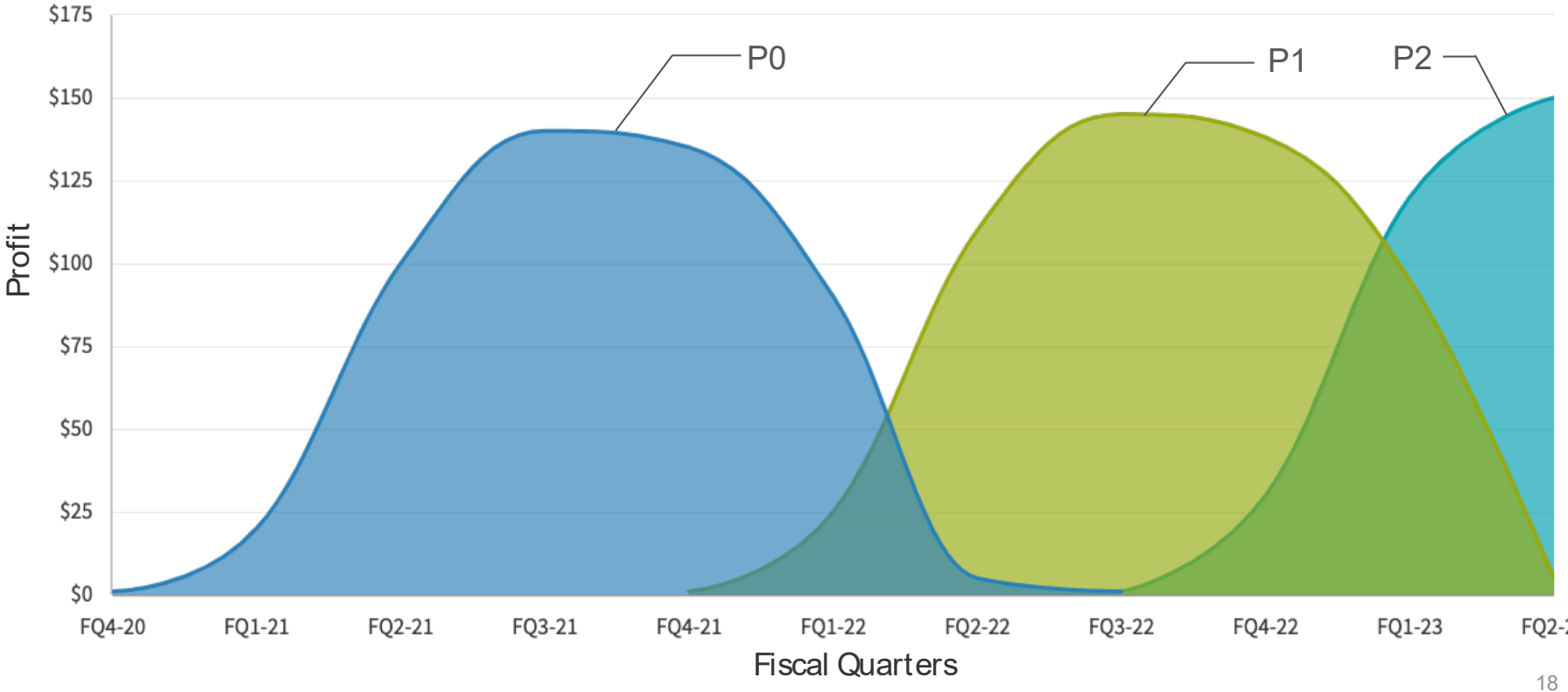


Mitigation Scenario #1





Value Stream Life-cycle profits



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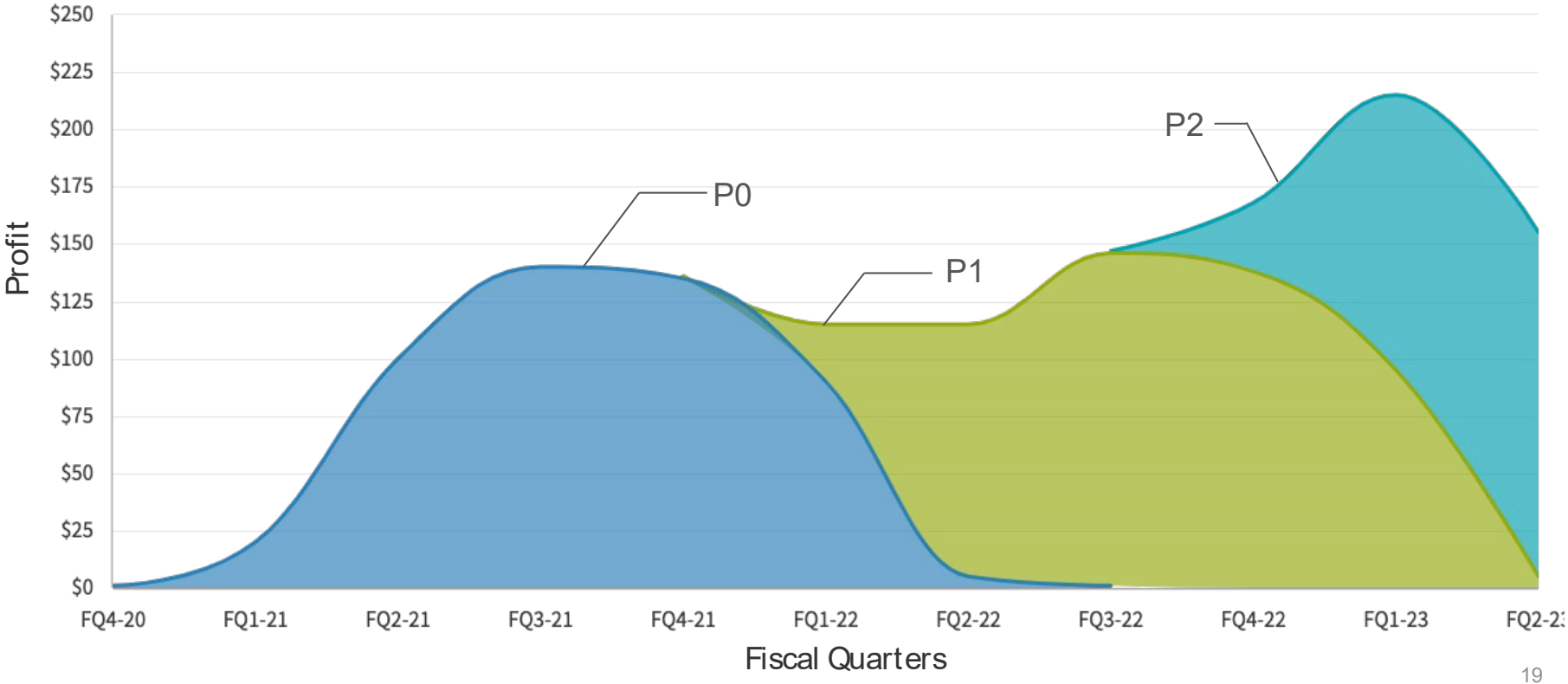


Use-Cases

Here are four Use-Cases where adoption of Delay Cost Modeling and Life-Cycle Profit Analysis can prove invaluable

1. ## Product Development

   The ability to apply decision-rules to make trade-offs between development cost, schedule delay, BOM and so on.

2. ## Product Management & Operations

   The ability to model the impact of mitigation scenarios on life-cycle profits.

3. ## Business Owners

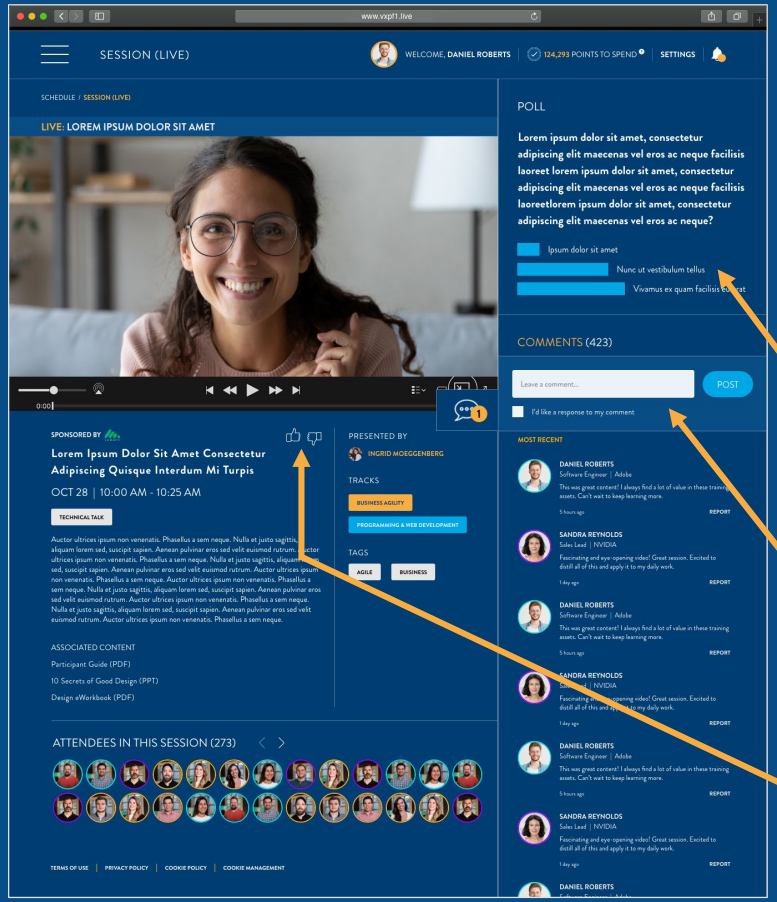
   The ability to determine how to optimize mitigation strategy when allocating finite resource capacity.

4. ## Lean Portfolio Management & Executives

   The ability to model the relative performance of value streams.

Join us at the Meet the Speakers Session!

Please refer to the agenda for scheduled times



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2. Comment
3. Thumbs up or down

Thank you!