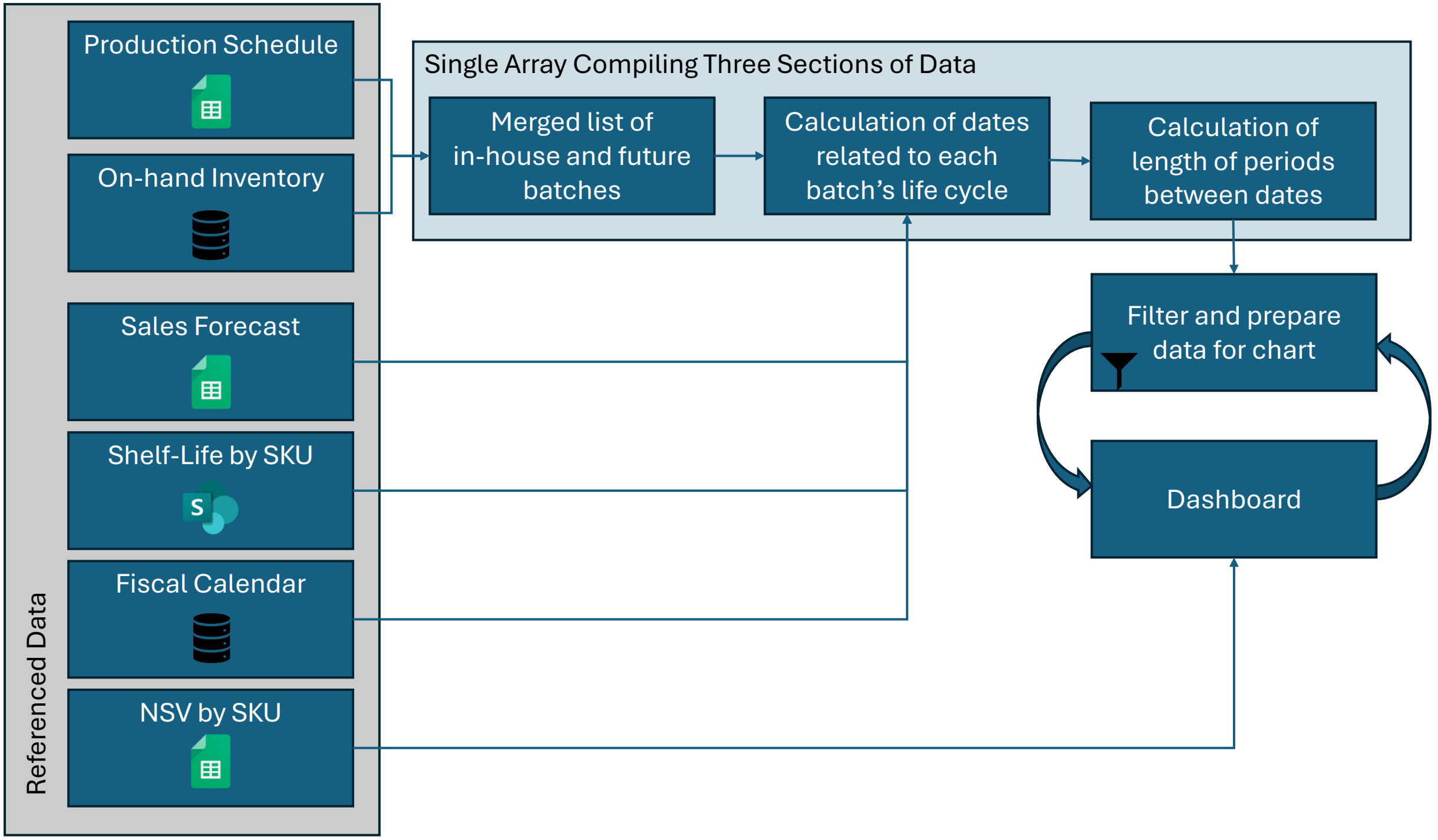
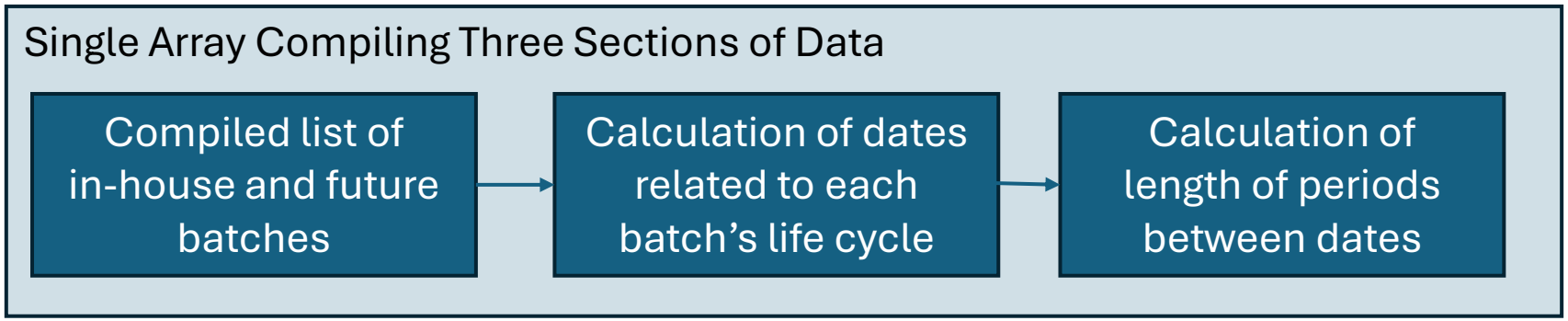
Data Structure

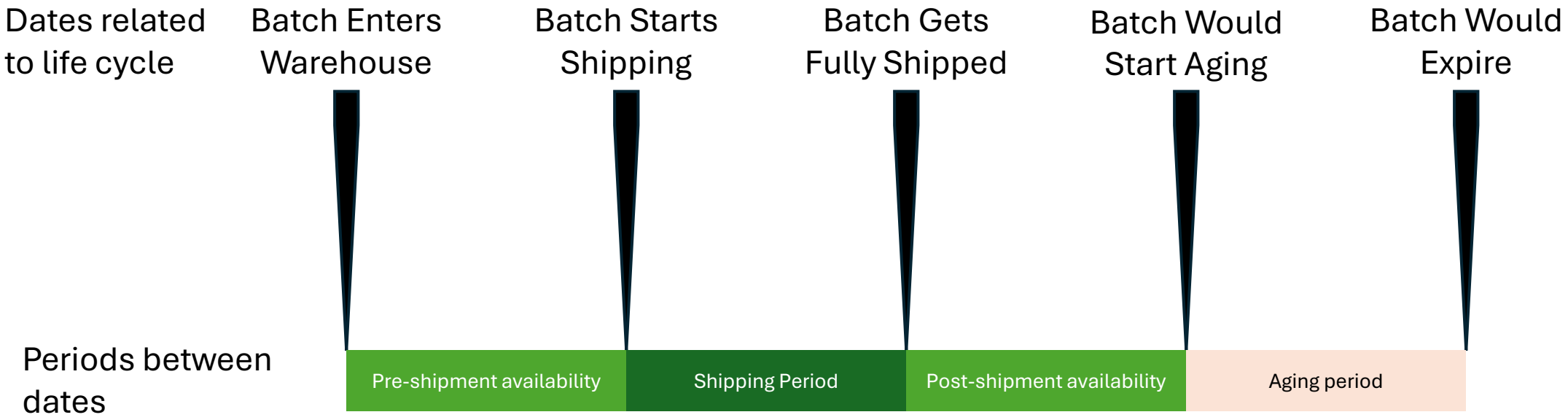
Shows the data that is merged to create the final product


Referenced Data
Production Schedule
On-hand Inventory
Sales Forecast
Shelf-Life by SKU
Fiscal Calendar
NSV by SKU
Single Array Compiling Three Sections of Data
Merged list of in-house and future batches
Calculation of dates related to each batch's life cycle
Calculation of length of periods between dates
Filter and prepare data for chart
Dashboard

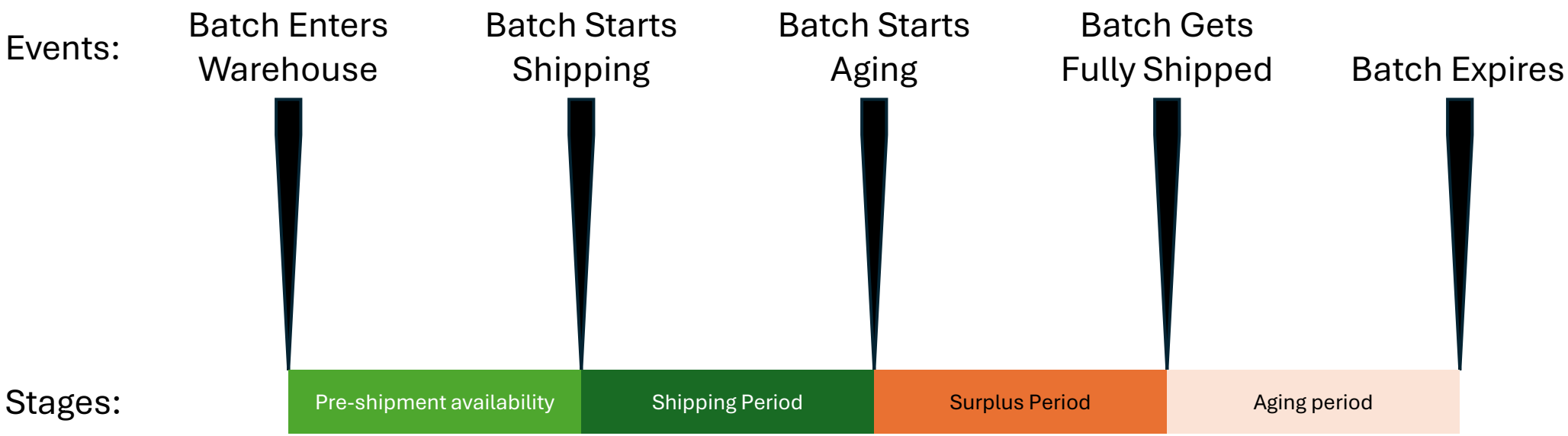
Batch Lifecycle at a DC

Shows how a batch’s lifecycle is represented on the dashboard

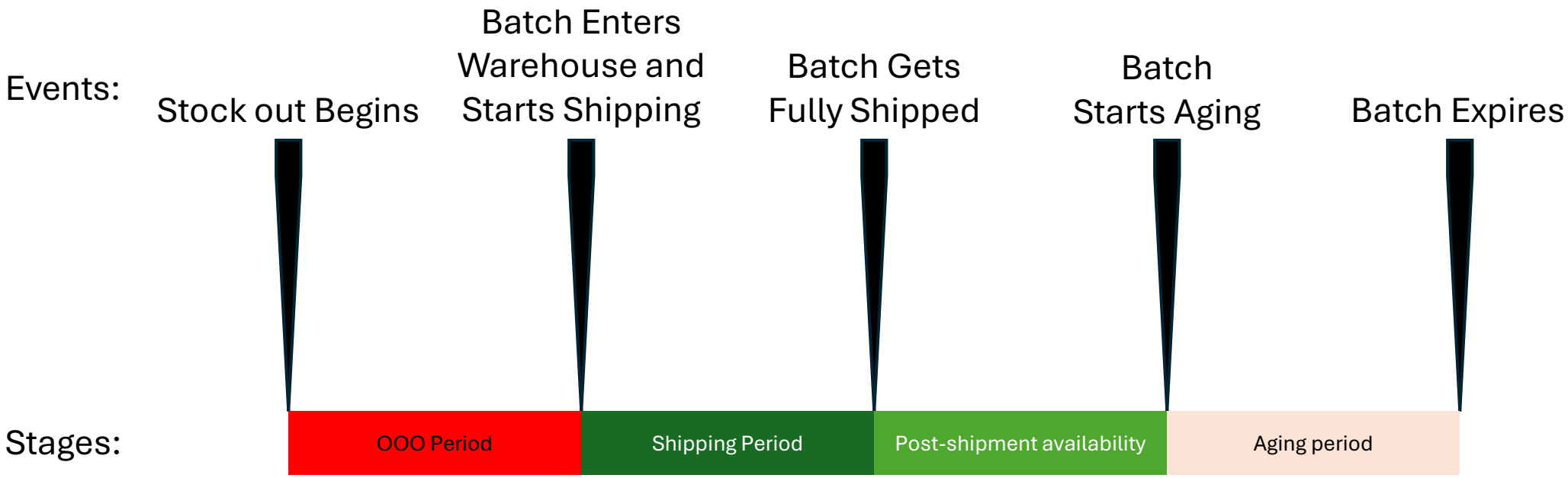

Single Array Compiling Three Sections of Data
Compiled list of in-house and future batches
Calculation of dates related to each batch's life cycle
Calculation of length of periods between dates


Dates related to life cycle
Batch Enters Warehouse
Batch Starts Shipping
Batch Gets Fully Shipped
Batch Would Start Aging
Batch Would Expire
Periods between dates
Pre-shipment availability
Shipping Period
Post-shipment availability
Aging period

Batch’s Lifecycle at a DC: Surplus Scenario



Batch’s Lifecycle at a DC: Stock Out Scenario



Suplus Forecast by SKU and Lot - and - Shipment Simulator

Max Table Results: 14

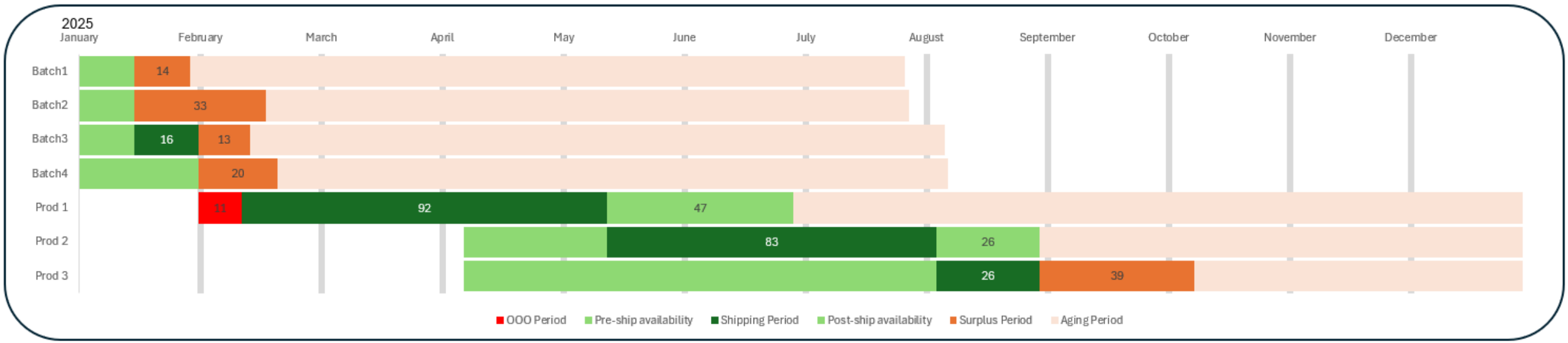
Lots / Prods	On Hand Qty	Production Qty Change	Production Date Change	Default Aging Date	Extension Sell-to Date	Surplus Sell-to Date	Aging Days	Aging % Start	Aging % End	Aging Extension	Extension qty	Surplus Qty	NSV
Batch1	1,281 CV			1/1/2025	1/1/2025	1/30/2025	29	53%	57%		0 CV	1,376 CV	$ -
Batch2	2,976 CV			1/1/2025	1/1/2025	2/18/2025	48	53%	58%		0 CV	2,931 CV	$ -
Batch3	2,728 CV			2/1/2025	2/1/2025	2/14/2025	13	52%	52%		0 CV	1,192 CV	$ -
Batch4	1,848 CV			2/1/2025	2/1/2025	2/21/2025	20	52%	52%		0 CV	1,787 CV	$ -
Prod 1	10,994 CV			7/1/2025	7/1/2025	5/15/2025	0	59%	59%		0 CV	0 CV	$ -
Prod 2	10,994 CV			9/1/2025	9/1/2025	8/6/2025	0	58%	58%		0 CV	0 CV	$ -
Prod 3	8,688 CV			9/1/2025	9/1/2025	10/10/2025	39	58%	58%		0 CV	5,459 CV	$ -
													$ -
													$ -
													$ -
													$ -
													$ -
													$ -
													$ -
Totals:											0 CV	12,744 CV	$ -

Select Productions by Date Range

Start	1/5/25
End	7/27/25

Select SKU:

Anonymous Product



Suplus Forecast by SKU and Lot - and - Shipment Simulator

Max Table Results: 14

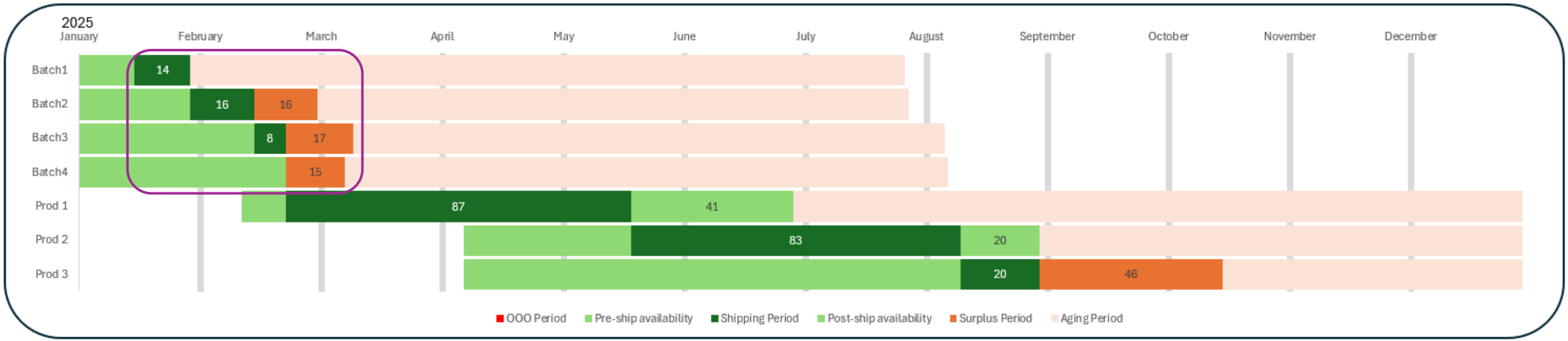
Lots / Prods	On Hand Qty	Production Qty Change	Production Date Change	Default Aging Date	Extension Sell-to Date	Surplus Sell-to Date	Aging Days	Aging % Start	Aging % End	Aging Extension	Extension qty	Surplus Qty	NSV
Batch1	1,281 CV			1/1/2025	1/30/2025	1/30/2025	29	53%	49%	29	1,376 CV	0 CV	$ 10,721.18
Batch2	2,976 CV			1/1/2025	2/15/2025	3/3/2025	61	53%	45%	45	1,442 CV	1,373 CV	$ 11,233.75
Batch3	2,728 CV			2/1/2025	2/23/2025	3/12/2025	39	52%	45%	22	477 CV	2,050 CV	$ 3,713.78
Batch4	1,848 CV			2/1/2025	2/23/2025	3/10/2025	37	52%	46%	22	0 CV	1,687 CV	$ -
Prod 1	10,994 CV			7/1/2025	7/1/2025	5/21/2025	0	59%	59%		0 CV	0 CV	$ -
Prod 2	10,994 CV			9/1/2025	9/1/2025	8/12/2025	0	58%	58%		0 CV	0 CV	$ -
Prod 3	8,688 CV			9/1/2025	9/1/2025	10/17/2025	46	58%	58%		0 CV	6,275 CV	$ -
													$ -
													$ -
													$ -
													$ -
													$ -
													$ -
													$ -
										Totals:	3,294 CV	11,385 CV	$ 25,668.71

Select Productions by Date Range

Start	1/5/25
End	7/27/25

Select SKU:

Anonymous Product



Suplus Forecast by SKU and Lot - and - Shipment Simulator

Max Table Results: 14

Lots / Prods	On Hand Qty	Production Qty Change	Production Date Change	Default Aging Date	Extension Sell-to Date	Surplus Sell-to Date	Aging Days	Aging % Start	Aging % End	Aging Extension	Extension qty	Surplus Qty	NSV
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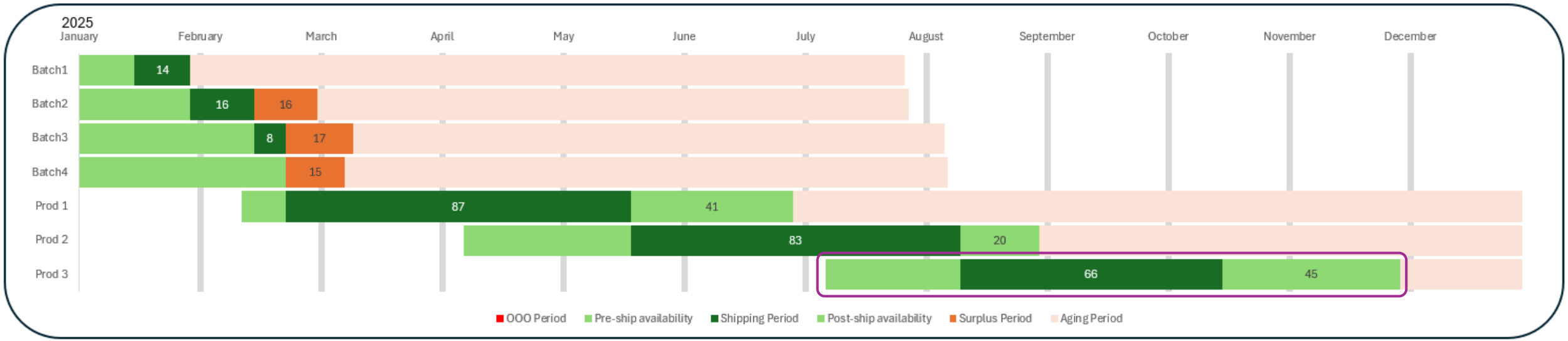
Batch2	2,976 CV			1/1/2025	2/15/2025	3/3/2025	61	53%	45%	45	1,442 CV	1,373 CV	$ 11,233.75
Batch3	2,728 CV			2/1/2025	2/23/2025	3/12/2025	39	52%	45%	22	477 CV	2,050 CV	$ 3,713.78
Batch4	1,848 CV			2/1/2025	2/23/2025	3/10/2025	37	52%	46%	22	0 CV	1,687 CV	$ -
Prod 1	10,994 CV			7/1/2025	7/1/2025	5/21/2025	0	59%	59%		0 CV	0 CV	$ -
Prod 2	10,994 CV			9/1/2025	9/1/2025	8/12/2025	0	58%	58%		0 CV	0 CV	$ -
Prod 3	8,688 CV		91	9/1/2025	9/1/2025	10/17/2025	46	58%	33%		0 CV	0 CV	$ -
													$ -
													$ -
													$ -
													$ -
													$ -
													$ -
													$ -
										Totals:	3,294 CV	5,110 CV	$ 25,668.71

Select Productions by Date Range

Start	1/5/25
End	7/27/25

Select SKU:

Anonymous Product



Calculation of the Fully Shipped date
Step 1: Sales in First Month

Calculation

MIN(Batch qty, (Net Workdays / Start Month Total Workdays) * Start Month Sales Forecast)
Net Workdays = Start Date to Fiscal Calendar Month End
MIN(5000, (Jan 15 to Feb 2 / 25) *2000)
MIN (5000, (13/25) * 2000)
MIN(5000, 1040)
= 1040

Referenced Data

Fiscal Calendar Data For Jan	
Total Workdays	25
Next Month Start	Feb 2

Sales Forecast by Month	
January	2,000 CV

Compiled List of Batches	
Batch qty	5,000 CV
Start Date	Jan 15

Calculation of the Fully Shipped Date
Step 2a: Months Shipped

Referenced Data

Compiled List of Batches	
Batch qty	5,000 CV
Start Month	January

Previous Calculation	
Sales in Jan	1,040 CV

Sales Forecast by Month	
January	2,000 CV
February	3,000 CV
March	3,000 CV
April	2,000 CV

Scan until Batch qty < Running Sum of Sale Forecast

Calculation

Sales in Jan + Sales in Feb + Sales in March > Batch Qty
1,040 + 3,000 + 3,000 > 5,000
So, Months to sell in = 3

Calculation of the Fully Shipped date
Step 2b: Sales in Middle Month(s)

Referenced Data

Previous Calculations	
Months Shipped	3
Start Month	January

Sales Forecast by Month	
January	2,000 CV
February	3,000 CV
March	3,000 CV
April	2,000 CV

Calculation

If *Months Shipped* > 2, scan to sum *Months Shipped* – 2 after *Start Month*
If 3 > 2, scan to sum 3 – 2 months after January
Scan to sum 1 month after January
= 3,000 CV

Calculation of the Fully Shipped date
Step 3: Sales in Last Month

Referenced Data

Compiled List of Batches	
Batch qty	5,000 CV

Previous Calculations	
Months Shipped	3
Sales in 1st Month	1,040 CV
Sales in Middle Month(s)	3,000 CV

Calculation

If *Months Shipped* = 1,
  Sales in 1st Month
Else
  Batch Qty – (Sales in 1st month + Sales in Middle Month(s))

= Batch Qty – (Sales in 1st month + Sales in Middle Month(s))
= 5000 – (3000 + 1040)
= 960

Calculation of the Fully Shipped Date
Step 4: Fully Shipped Date

Referenced Data

Previous Calculations	
Months Shipped	3
Sales in Last Month	960

Fiscal Calendar Data For Mar	
Total Workdays	20
Month Start Date	Mar 2

Sales Forecast by Month	
March	3,000 CV

Calculation

Fully Shipped Date = Start Date + Workdays

If Months Shipped != 1, Start Date = Last Month Start Date
Else Start Date = Shipping Start Date

Since Months Shipped = 3, Start Date = Mar 2

Workdays = (Sales in Last Month / March Forecast) * Workdays in March
*embedded is a logical operator like the one above to identify the month is March

Workdays = (960 / 3,000) * 20
Workdays = 6.4

Fully Shipped Date = Mar 2 + 6.4
Fully Shipped Date = Mar 11