Manufacturing Footprint Optimization

(Automotive Accessories Manufacturer)

Partnered with the client to **evaluate financial impact of optimizing manufacturing footprint** across multiple scenarios, that encompassed expanding/closing existing facilities, expanding production to economical geographies, and discontinuing unprofitable product lines, **to improve profitability** (through synergy gains)

merilytics
AN ACCORDION COMPANY

FOOTPRINT OPTIMIZATION FOR AN AUTOMOTIVE ACCESSORIES MANUFACTURER

ABOUT THE CLIENT

Client is an **automotive accessories manufacturing company** that sells accessories and spare parts for trucks, jeeps and cars with a widespread footprint across U.S. and Canada

SITUATION

- Given the widespread manufacturing footprint, 18 plants across U.S. and Canada, there was an opportunity to optimize the same to improve profitability
- Merilytics partnered with the client to **evaluate financial impact of optimizing manufacturing footprint** across multiple scenarios, that encompassed expanding/closing existing facilities, expanding production to economical geographies, and discontinuing unprofitable product lines, **to improve profitability** (through synergy gains)

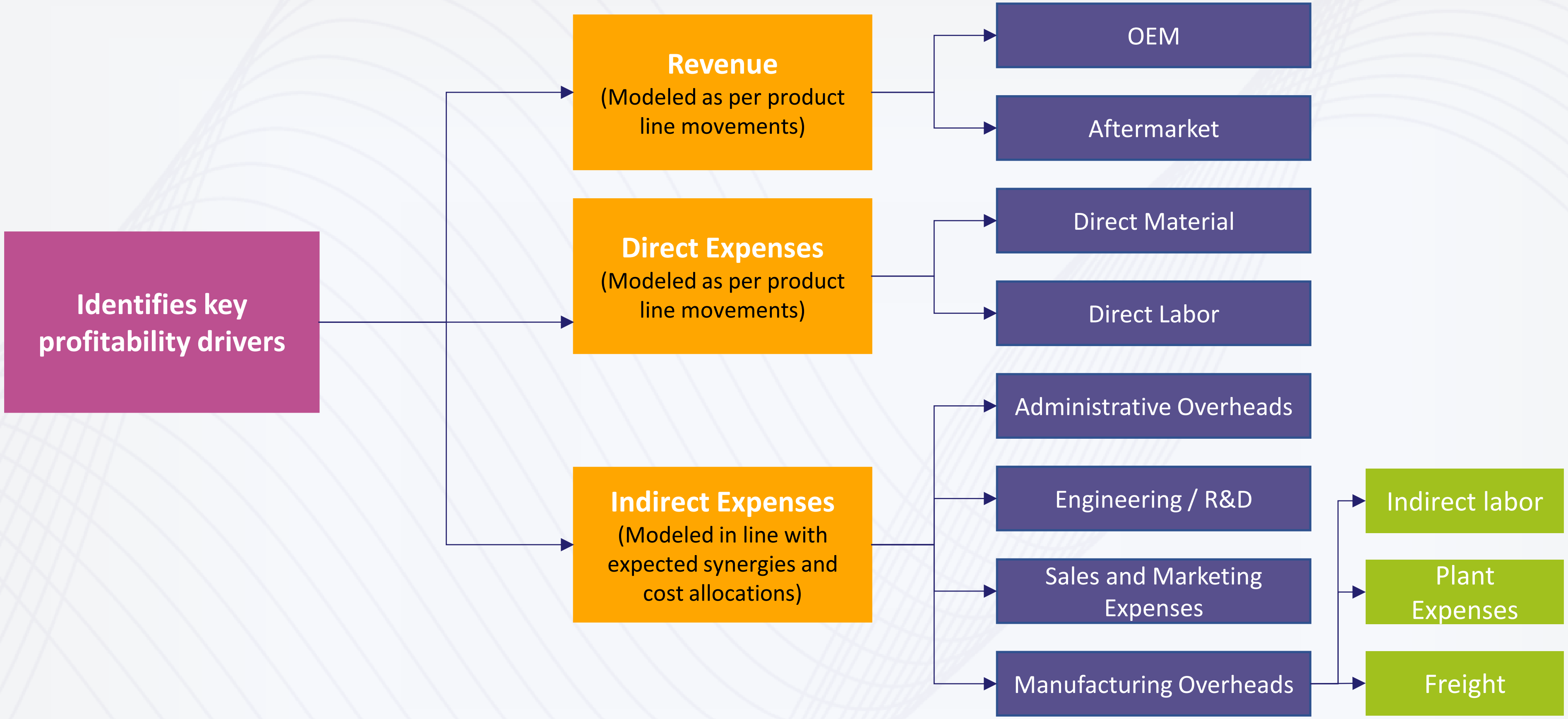
VALUE ADDITION

- Developed a **dynamic financial model** providing flexibility to tweak the COGS and SG&A related assumptions across scenarios by **analyzing the synergies in consolidating manufacturing operations**
- Provided **visibility into key cost drivers sizing the potential opportunity** by optimizing the cost and **estimated the potential impact on bottom line profitability** under the different scenarios thus, facilitating informed decision making
- **Snapshot of projected savings in EBITDA** across all the scenarios, highlighting the favorable/unfavorable variances in costs vs. baseline to **better understand net impact of each movement**

IMPACT

- **Identified opportunity with a projected EBITDA savings of $16.9M (7%)** by consolidating multiple manufacturing plants into a Mega facility at a new location, reducing procurement cost and manufacturing overheads, thereby improving margins
- The model demonstrated that administrative costs were not linear with production and **consolidating production facilities** led to a sizeable **reduction in Selling, General and Administrative overheads** and **operational costs**

METHODOLOGY/ APPROACH : SCENARIO ANALYSIS



1. Identified key profitability drivers essential for scenario-wise financial impact analysis – Revenue, Costs (Direct & Indirect)
2. Broken down the revenue at a product-line level at each manufacturing plant to estimate plant-wise revenue for each scenario
3. Estimated Direct Material and Direct Labor cost for each product line to estimate plant wise revenue for each scenario
4. Indirect expenses (non – linear to production) were modeled considering synergetic gains through consolidation as a % of actual Cost

EXHIBIT #1 – SCENARIO SUMMARY

Facilitates comparison with selected base year

ILLUSTRATIVE

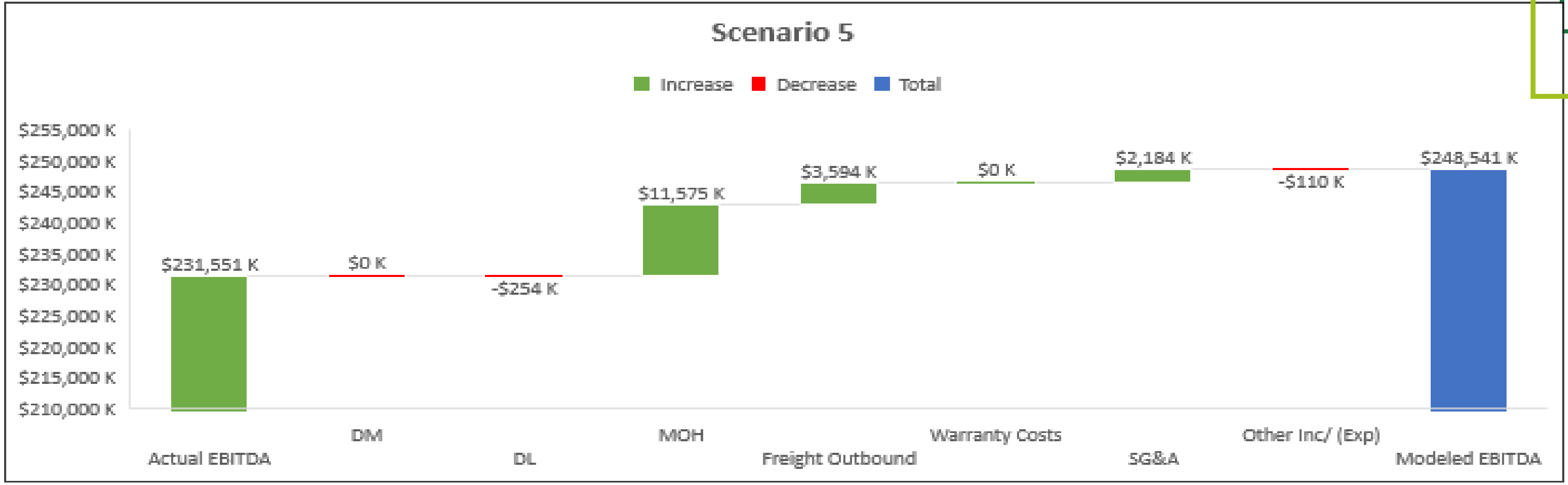
Footprint Optimization Analysis Summary

Please choose the base line year from the dropdown in cell D4

Year	20XX

	Scenario - 1			Scenario - 2			Scenario - 3		
	Actual Amount	Savings, $	Savings, %	Actual Amount	Savings, $	Savings, %	Revised	Savings, $	Savings, %
EBITDA, $	**$228,634 K**	**$2,591 K**	**1.13%**	**$228,634 K**	**$5,706 K**	**2.50%**	**$231,551 K**	**$2,756 K**	**1.19%**
Direct Materials (DM)	$373,610K	$0 K	0.00%	$373,610K	$0 K	0.00%	$365,705 K	$0 K	0.00%
Direct Labor (DL)	$92,107K	-$254 K	-0.11%	$92,107K	$0 K	0.00%	$89,593 K	$0 K	0.00%
Manufacturing OverHead	$98,091K	$1,373 K	0.60%	$98,091K	$4,406 K	1.93%	$93,652 K	$2,072 K	0.[illegible]9%
Freight Outbound	$36,136K	$162 K	0.07%	$36,136K	$567 K	0.25%	$34,644 K	$665 K	0.29%
Warranty Costs	$11,069K	$0 K	0.00%	$11,069K	$0 K	0.00%	$10,926 K	$0 K	0.00%
Sales General & Administration (SG&A)	$36,805K	$1,416 K	0.62%	$36,805K	$733 K	0.32%	$35,057 K	$35 K	0.02%
Other Income / (Expenses)	-$93K	-$106 K	-0.05%	-$93K	$0 K	0.00%	-$96 K	-$16 K	-0.01%

Signifies Savings



Signifies additional cost