

# Pune: Nexus Motors' Optimal Manufacturing Hub

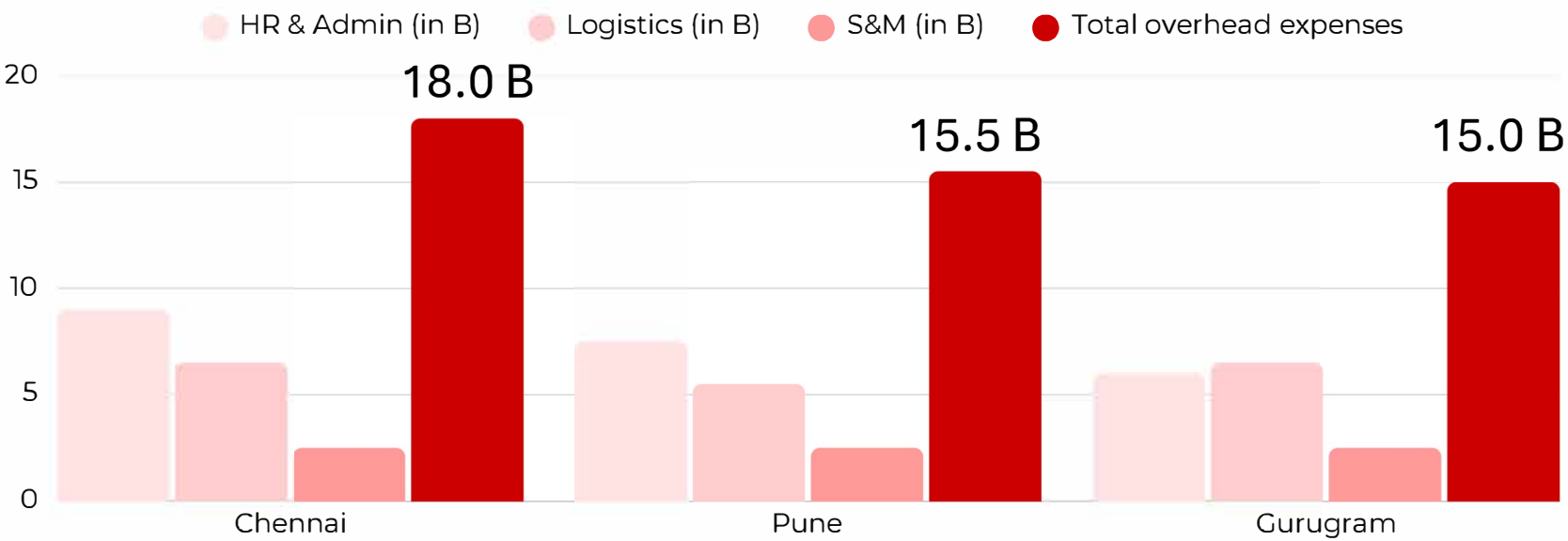
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1. Detailed analysis on **COGS** and any associated **overhead expenses** for the 3 shortlisted locations in 2027

Inventory Carrying Cost

CITY	DAILY PRODUCTION (cars/day)	SAFETY STOCK (no. of cars)	CYCLE INVENTORY (no. of cars)	AVERAGE INVENTORY (no. of cars)	INVENTORY COST / CAR (INR)
Chennai	137	1370	514	1884	1900
Pune	137	1370	685	2055	2651
Gurugram	137	1370	343	1713	1610

Associated Overhead Expenses



COGS (without depreciation and overheads)

**ASSUMPTION :** BeginningInventory=0(newfacility)&EndingInventory=0(allunits produced are sold)  
**COGS = BEGINNING INVENTORY COST + PURCHASES - ENDING INVENTORY**

City	Material cost	Labour cost	Total inventory carrying cost	Total COGS
Chennai	21 B	0.75 B	0.095 B	21.85 B
Pune	21.5 B	0.9 B	0.1325 B	22.50 B
Gurugram	23.5 B	0.6 B	0.0805 B	24.18 B

COGS (with depreciation)

**ASSUMPTION :** Beginning Inventory = Ending Inventory = 0  
**COGS (WITH DEPRECIATION) = COGS (W/O DEPRECIATION) + ANNUAL DEP.**

CITY	CAPEX (in Billion)	ANNUAL DEPRECIATION (Billion/years)	COGS (WITH DEPRECIATION) (in Billion)
Chennai	50	5	26.85 B
Pune	50	5	27.50 B
Gurugram	40	4	28.18 B

2. Evaluated *ideal location* for setting up the production facility, which *maximizes cost efficiency*

Assumption

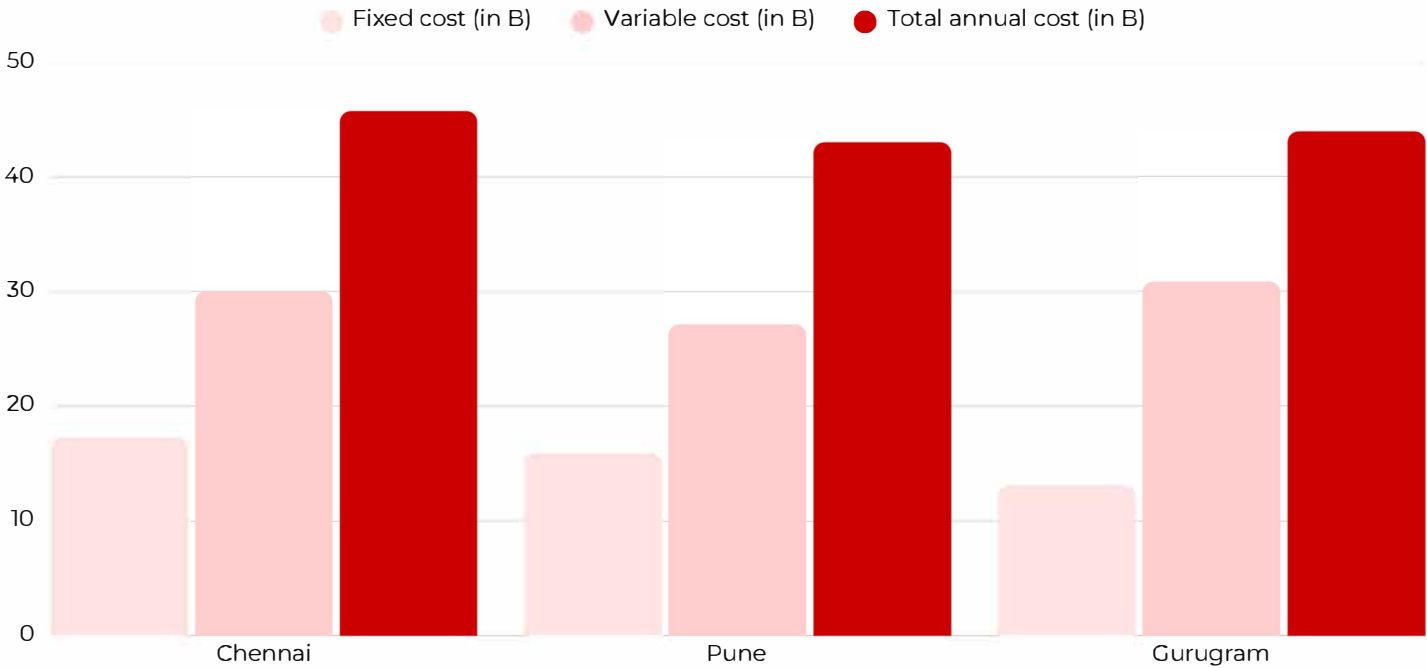
Labour, HR & Admin costs are fixed (no bonuses) & Logistics varies with sales.

Cost Breakdown For Each Location

Fixed costs	Cost Component	Chennai (INR Billion)	Gurugram (INR Billion)	Pune (INR Billion)
	Direct Labour	0.75	0.6	0.9
	HR & Admin	9.00	6.0	7.5
	Sales & marketing	2.5	2.5	2.5
	Depreciation	5.00	4.00	5.00
Variable costs	Material cost	21.00	23.5	21.5
	Logistics	6.5	6.5	5.5
	Inventory carrying cost	0.98	0.82	0.13
	Total annual spend (in B)	45.73 B	43.92	43.03

Maximum cost efficiency : Pune > Gurugram > Chennai

Cost comparison across cities



Key takeaways and recommendations

- Pune has the lowest variable costs due to competitive logistics and HR & Admin.
- Gurugram gains from cheaper labor but faces higher material costs.
- Gurugram has the lowest depreciation due to 25% lower CAPEX.
- Chennai and Pune share higher depreciation.

Ideal location

PUNE

Pune is the ideal location with the lowest total annual cost of ₹43.03 billion, driven by balanced variable costs and efficient logistics.

3. Potential procurement synergies and *discounts* post acquiring AutoAI *at location PUNE*

Takeaway from slide 2

- **Cost Efficiency :** Data insights highlight that Pune offers a highly cost-effective balance of fixed and variable costs.
- **Production facilities :** Pune is favored for its strategic location, robust infrastructure, and skilled workforce.
- **Competitive Advantage :** AutoAI discounts further reinforce Pune's appeal as a prime investment destination.

Combined Annual Spend Post-Acquisition

COST HEAD	ANNUAL SPEND OF NEXUS MOTORS W/O AUTO AI (75K CARS / YEAR)	AUTOAI'S CURRENT PROCUREMENT SPEND	Total Combined Spend
Raw Material	₹32.25 B (75k * ₹430k/car)	₹ 7.5 B	₹ 39.75 B
Factory Labour	₹1.35 B (75k * ₹18k/car)	₹ 0.5 B	₹ 1.85 B
Logistics	₹8.25 B (75k * ₹110k/car)	₹ 3 B	₹ 11.25 B

Discounts Applied

COST HEAD	TOTAL SPEND	DISCOUNT RATE	Savings (Total spend*Discount rate)
Raw Material	₹39.75 B	10%	₹ 3.975 B
Factory Labour	₹1.85 B	5%	₹ 0.0925 B
Logistics	₹11.25 B	10% (Since spend>₹8B)	₹ 1.125 B

Total Annual Synergies at Pune

Total Savings = ₹3.975 B + ₹0.0925 B + ₹1.125 B



₹5.1925 billion/year

Post-acquisition of AutoAI, Nexus Motors can achieve annual procurement synergies of ₹5.1925 billion through combined purchasing power and volume discounts.

THANK YOU!