

Product ID	Product Name	Category	Annual Demand	Unit Cost	Ordering Cost	Holding %	Lead Time (days)	Daily Demand
P001	Widget A	Electronics	1200	15	50	0.2	7	3.29
P002	Valve X	Industrial	800	25	60	0.25	10	2.19
P003	Battery Pac	FMCG	2500	8	40	0.18	5	6.85
P004	Motor Unit	Machinery	600	90	120	0.22	14	1.64
P005	Sensor Boa	Electronics	1500	35	70	0.2	9	4.11
P006	Paper Rolls	Office Supp	3500	2	30	0.15	4	9.59
P007	LED Tube Li	Lighting	1800	12	45	0.18	6	4.93
P008	Gear Assen	Mechanical	700	65	85	0.25	12	1.92
P009	Cleaning G	Chemical F	2200	6	35	0.2	5	6.03
P0010	RFID Scann	Tech Device	950	55	70	0.22	8	2.60

EOQ	ROP	Safety Stock	Avg Inventory	Inventory Turnover	DIO	Total Cost Value	Unit cost formula calculations
200.00	73.01	50.00	150.00	8.00	45.63	18000	15
123.94	52.90	30.98	92.95	8.61	42.41	20000	25
372.68	127.42	93.17	279.51	8.94	40.81	20000	8
85.28	44.33	21.32	63.96	9.38	38.91	54000	90
173.21	80.29	43.30	129.90	11.55	31.61	52500	35
836.66	247.52	209.17	627.50	5.58	65.44	7000	2
273.86	98.05	68.47	205.40	8.76	41.65	21600	12
85.57	44.41	21.39	64.18	10.91	33.47	45500	65
358.24	119.70	89.56	268.68	8.19	44.58	13200	6
104.84	47.03	26.21	78.63	12.08	30.21	52250	55

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P002	Valve X	Industrial	800	25	60	0.25	10
P003	Battery Pack	FMCG	2500	8	40	0.18	5
P004	Motor Unit	Machinery	600	9	120	0.22	14
P005	Sensor Board	Electronics	1500	35	70	0.2	9
P006	Paper Rolls	Office Supply	3500	2	30	0.15	4
P007	LED Tube Light	Lighting	1800	12	45	0.18	6
P008	Gear Assembly	Mechanical	700	65	85	0.25	12
P009	Cleaning Gel	Chemical FMC	2200	6	35	0.2	5
P0010	RFID Scanner	Tech Devices	950	55	70	0.22	8

Daily Demand	EOQ	ROP	Safety Stock	Avg		Inventory Turnover	DIO
				Inventory			
3.29	774.60	48.45	43.65	430.95		2.78	131.08
2.19	619.68	56.86	52.18	362.02		2.21	165.17
6.85	1054.09	42.75	36.90	563.94		4.43	82.34
1.64	809.04	66.53	61.74	466.26		1.29	283.64
4.11	1024.70	55.58	49.50	561.85		2.67	136.72
9.59	1183.22	39.19	33.00	624.61		5.60	65.14
4.93	948.68	45.86	40.42	514.76		3.50	104.38
1.92	689.93	61.95	57.16	402.12		1.74	209.68
6.03	877.50	42.38	36.90	475.64		4.63	78.91
2.60	777.53	51.23	46.67	435.43		2.18	167.30

Total Cost Value	Cumulative ABC	
	e Cost %	Category
18000	0.248189	A
20000	0.453709	A
20000	0.481112	A
5400	0.565668	A
52500	0.743785	B
7000	0.795459	B
21600	1	C
45500	1	C
13200	1	C
52250	1	C

Supplier Name	Cost Rating (1-10)	Lead Time Rating (1-10)	Quality Rating (1-10)	Weight: Cost (%)	Weight: Lead Time (%)	Weight: Quality (%)	Weighted Score
Supplier A	8	9	7	0.4	0.3	0.3	8
Supplier B	6	7	8	0.4	0.3	0.3	6.9
Supplier C	9	6	6	0.4	0.3	0.3	7.2
Supplier D	7	8	9	0.4	0.3	0.3	7.9
Supplier E	5	5	7	0.4	0.3	0.3	5.6

Strategy Type	Annual Holding Cost	Stockout Risk	Ordering Cost	Total Cost	Risk Rating	Notes	Total Cost
JIT	1,000	30%	2,000	3,000	8	Risky but lean	3000
Buffer	3,500	10%	1,000	4,500	3	Safe but costlier	4500

Smart Supply Chain Dashboard

Inventory KPIs

Average EOQ (Units)

875.89

Average Inventory Turnover

483.76

Average DIO (Days)

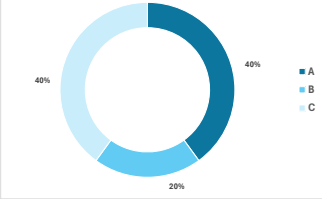
142.44

EOQ: Best order quantity to save cost
➤ Helps balance ordering and holding costs

Inventory Turnover: Higher is better
➤ Shows how fast products are selling/moving

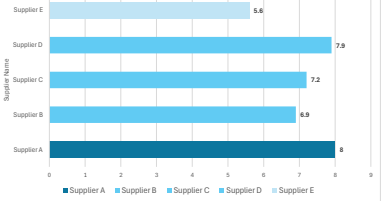
DIO (Days Inventory Outstanding): Lower is better
➤ Tells how long inventory sits before selling

ABC Category Distribution



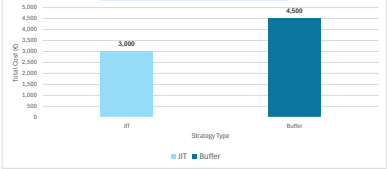
- Class A = Few items, high value → Focus more
- Class B = Moderate value and quantity
- Class C = Many items, low value → Review less often

Supplier Evaluation Score



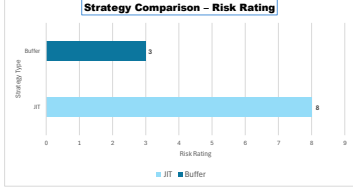
- Best supplier = highest score
- Low score = not reliable or too costly

Strategy Comparison - Total Cost



- Buffer is safer, but costs more
- JIT has lower cost

Strategy Comparison - Risk Rating



- Buffer is safer
- JIT has higher risk

ABC Category	Count	Supplier Name	Weighted Score	Strategy Type	Total Cost	Risk Rating
A	4	Supplier A	8	JIT	3,000	8
B	2	Supplier B	6.9	Buffer	4,500	3
C	4	Supplier C	7.2			
		Supplier D	7.9			
		Supplier E	5.6			