

Decision Support Systems in Daily Inventory Decisions



VISHWANATH HOLIN

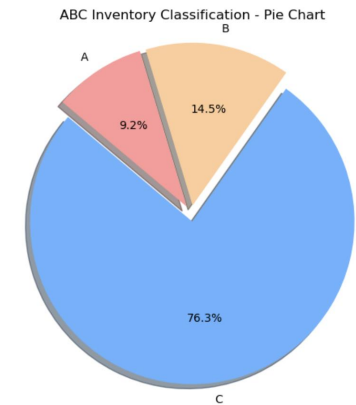
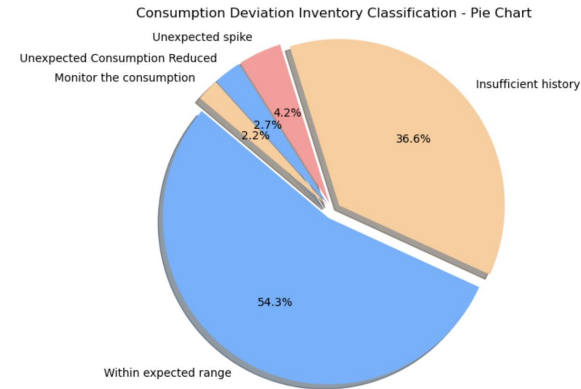
Action Recommendation for diluting stocks

Don't Act 5099

Low Priority: Move the stock or send back to Vendor 236

High Priority: Move the stock or send back to Vendor 1

Name: count, dtype: int64



Action Recommendation predicting stockouts

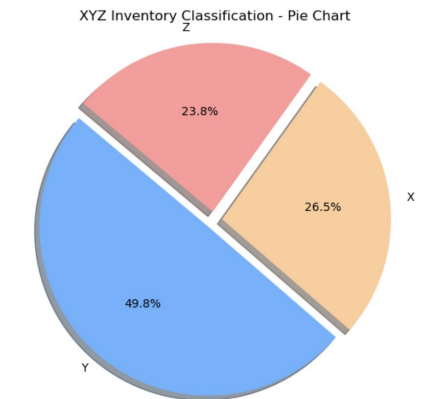
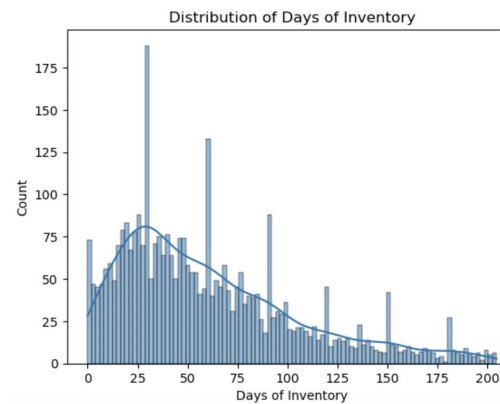
Don't Act 5112

Spike in consumption for moderate demand stocks 158

Spike in consumption irregular demand stocks 37

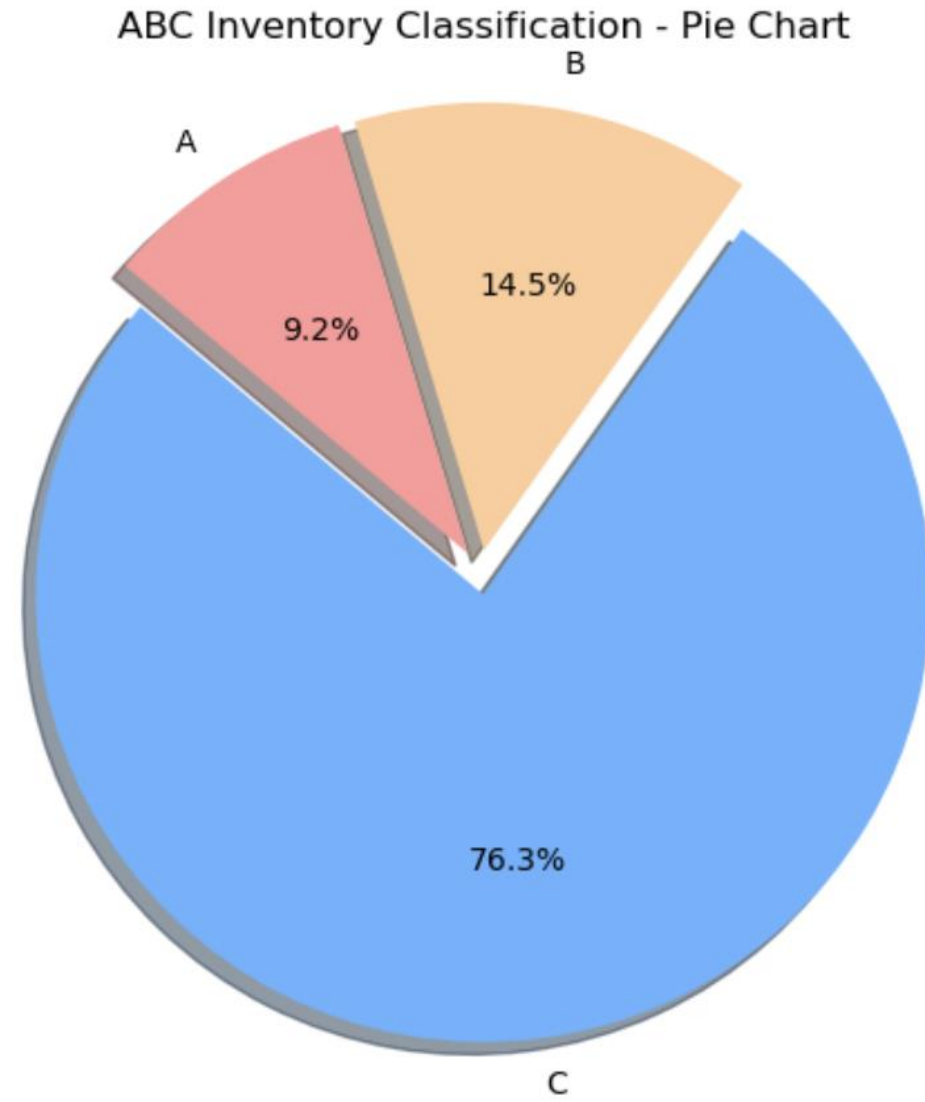
Spike in consumption regular demand stocks 29

Name: count, dtype: int64

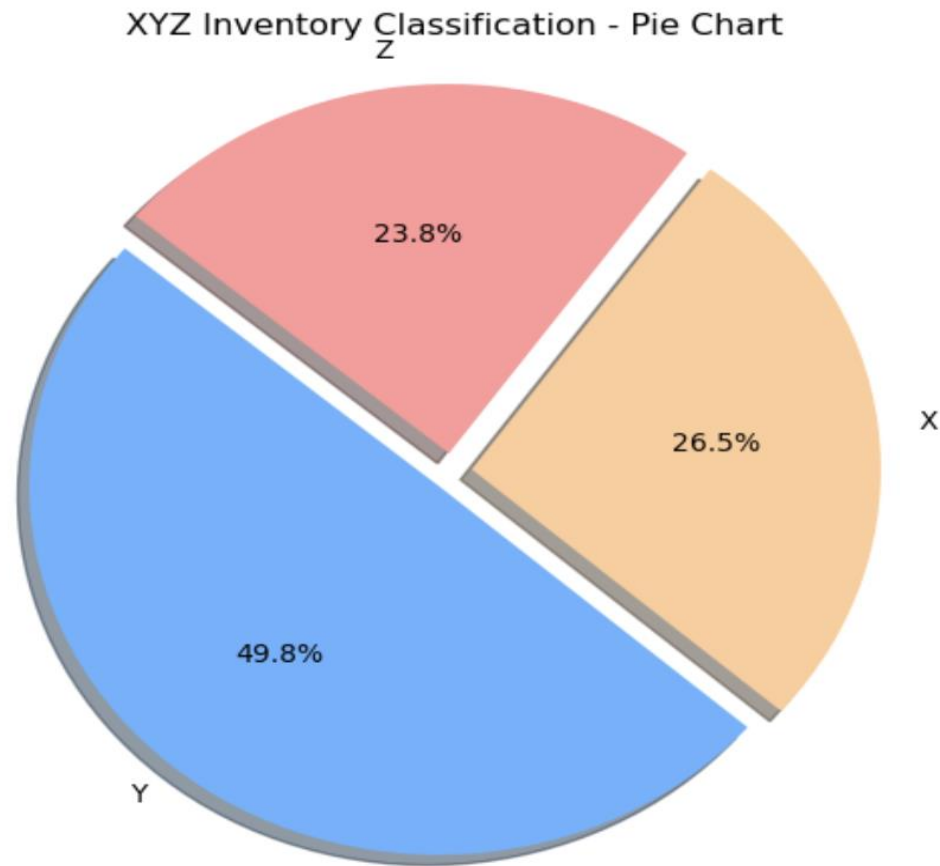


Supply Chain Dashboard

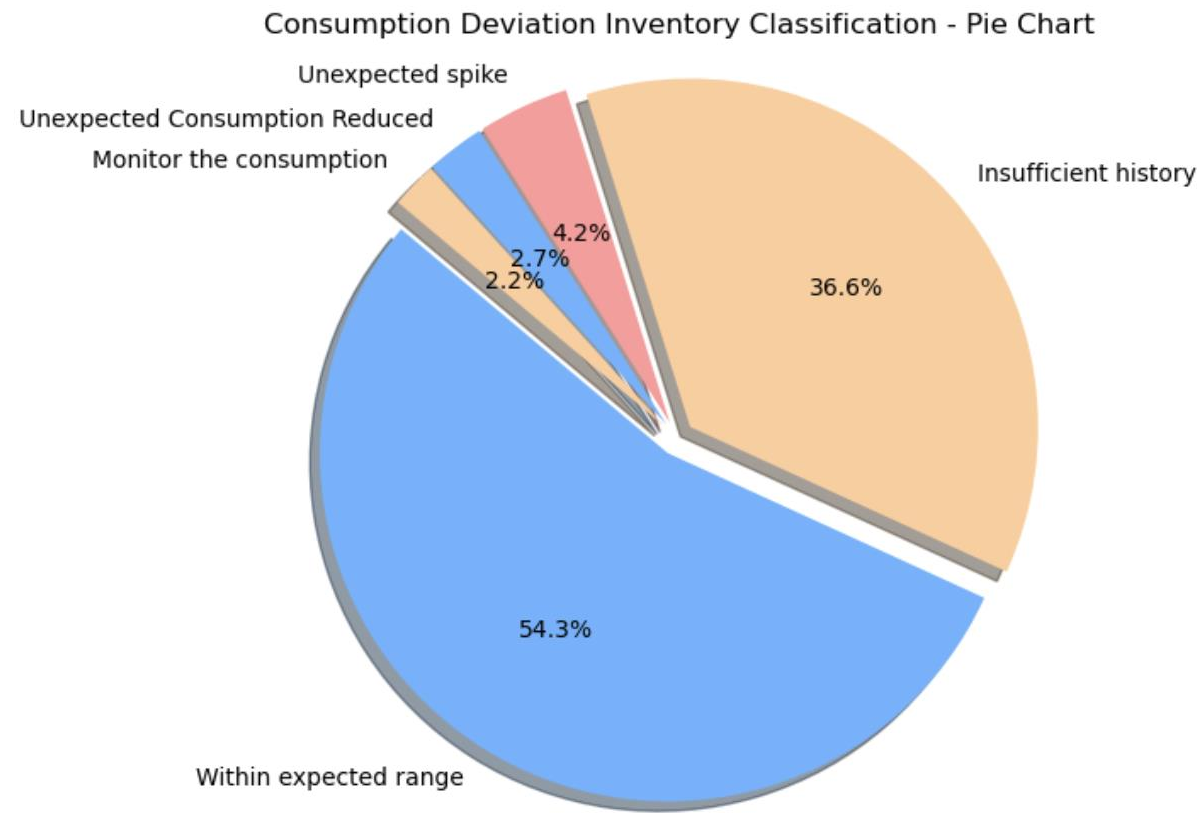
ABC Classification



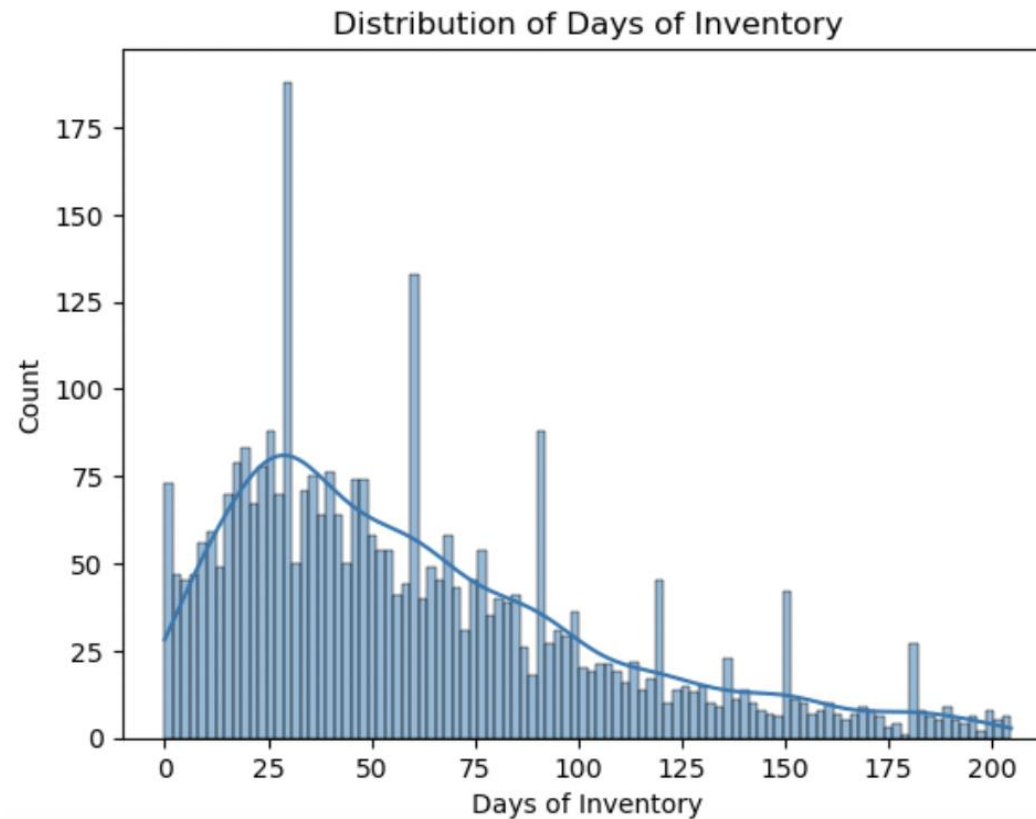
XYZ classification: Based on variation in consumption pattern



Stockout Prediction Based on Z-Score variation of consumption in latest cycle



Distribution of Days Of Inventory across the SKUs



Python output with Actions and Recomendations

Item Code	Total Cost	cum_pct	ABC	cv	XYZ	z_score	status	QTY	Daily Consumption	DOH	<reorder_point	Item Count	Moving Status	Action Recommendation for diluting stocks	Action Recommendation predicting stockouts
6672fbd4	58,36,783.74	0.02	A	0.50	X	(0.18)	Within expected range	37.00	9.80	3.78	1.00	3,455.00	Regular Moving	Don't Act	Don't Act
2d331125	37,09,988.16	0.03	A	0.37	X	0.23	Within expected range	171.00	3.18	53.81	-	1,171.00	Regular Moving	Don't Act	Don't Act
53509f65	24,77,282.67	0.04	A	0.32	X	(1.01)	Within expected range	17,265.00	602.66	28.65	-	3,957.00	Regular Moving	Don't Act	Don't Act
d158d5ce	24,36,510.53	0.05	A	0.51	Y	0.59	Within expected range	253.00	8.24	30.70	-	865.00	Regular Moving	Don't Act	Don't Act
ea97304e	21,33,111.49	0.06	A	0.33	X	1.17	Within expected range	116.00	5.94	19.51	-	1,953.00	Regular Moving	Don't Act	Don't Act
05b0ac38	20,92,740.75	0.07	A	0.82	Y	1.32	Within expected range	6.00	0.34	17.70	-	86.00	Regular Moving	Don't Act	Don't Act
3cc3c819	20,65,328.00	0.08	A	0.42	X	(4.24)	Unexpected Consumption	92.00	3.41	27.00	-	729.00	Regular Moving	Don't Act	Don't Act
b72cd6d2	18,68,741.65	0.08	A	0.42	X	(1.16)	Within expected range	47.00	2.44	19.27	-	672.00	Regular Moving	Don't Act	Don't Act
840f4d3c	17,13,866.89	0.09	A	0.64	Y	0.91	Within expected range	20.00	0.65	30.90	-	233.00	Regular Moving	Don't Act	Don't Act
79695af1	16,58,284.40	0.09	A	0.38	X	0.11	Within expected range	30.00	1.44	20.89	-	518.00	Regular Moving	Don't Act	Don't Act
03728de9	15,36,813.10	0.10	A	0.49	X	(1.03)	Within expected range	1,949.00	112.04	17.40	-	1,245.00	Regular Moving	Don't Act	Don't Act
67704193	14,59,115.67	0.11	A	0.39	X	(0.33)	Within expected range	2,430.00	139.87	17.37	-	1,117.00	Regular Moving	Don't Act	Don't Act
373e3c93	14,30,573.68	0.11	A	0.37	X	(1.40)	Within expected range	52.00	2.13	24.41	-	798.00	Regular Moving	Don't Act	Don't Act
8068cf9c	13,98,014.65	0.12	A	0.31	X	(2.22)	Unexpected Consumption	3,629.00	205.54	17.66	-	2,410.00	Regular Moving	Don't Act	Don't Act
1f7d2498	13,40,278.91	0.12	A	0.66	Y	2.03	Unexpected spike	77.00	1.71	45.00	-	288.00	Regular Moving	Don't Act	Spike in consumption for m
57e04afa	13,22,370.81	0.13	A	0.26	X	0.10	Within expected range	16,000.00	357.00	44.82	-	2,832.00	Regular Moving	Don't Act	Don't Act
364faa92	13,07,815.20	0.13	A	0.31	X	(2.49)	Unexpected Consumption	76.00	3.42	22.24	-	1,221.00	Regular Moving	Don't Act	Don't Act
0b7fcf14	12,56,488.04	0.14	A	0.53	Y	2.10	Unexpected spike	2,440.00	61.39	39.75	-	442.00	Regular Moving	Don't Act	Spike in consumption for m
1f34ade4	11,88,947.70	0.14	A	0.33	X	(0.81)	Within expected range	52.00	1.80	28.93	-	633.00	Regular Moving	Don't Act	Don't Act
981b6555	11,21,875.54	0.14	A	0.25	X	(0.85)	Within expected range	7,920.00	414.53	19.11	-	2,540.00	Regular Moving	Don't Act	Don't Act
b10b525a	11,01,622.20	0.15	A	0.49	X	0.69	Within expected range	19.00	0.36	53.44	-	128.00	Regular Moving	Don't Act	Don't Act
8ebc55b5	10,72,144.50	0.15	A	-	X		Insufficient history	280.00	4.67	60.00	-	2.00	Slow Moving	Don't Act	Don't Act
0e337829	10,42,453.90	0.16	A	0.55	Y	(0.84)	Within expected range	1,810.00	19.02	95.17	-	572.00	Regular Moving	Don't Act	Don't Act

Action recommendations for diluting the stocks to attack slow and non-moving stocks

Action Recommendation for diluting stocks

Don't Act	5099
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Low Priority: Move the stock or send back to Vendor	236
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High Priority: Move the stock or send back to Vendor	1
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Name: count, dtype: int64

Action recommendations for predicting the stockouts

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Action Recommendation predicting stockouts
Don't Act                                5112
Spike in consumption for moderate demand stocks    158
Spike in consumption irregular demand stocks       37
Spike in consumption regular demand stocks         29
Name: count, dtype: int64
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Thank you

