

SUPPLY CHAIN ANALYSIS

A	B	C	D	E	F	G	H	I	J	K	L
Product type	SKU	Price	Availability	Number of products sold	Revenue generated	Customer demographics	Stock levels	Lead times	Order quantities	Shipping times	Shipping carriers
haircare	SKU0	69.80800554	55	802	8661.996792	Non-binary	58	7	96	4	Carrier B
skincare	SKU1	14.84352328	95	736	7460.900065	Female	53	30	37	2	Carrier A
haircare	SKU2	11.31968329	34	8	9577.749626	Unknown	1	10	88	2	Carrier B
skincare	SKU3	61.16334302	68	83	7766.836426	Non-binary	23	13	59	6	Carrier C
skincare	SKU4	4.805496036	26	871	2686.505152	Non-binary	5	3	56	8	Carrier A
haircare	SKU5	1.699976014	87	147	2828.348746	Non-binary	90	27	66	3	Carrier B
skincare	SKU6	4.078332863	48	65	7823.47656	Male	11	15	58	8	Carrier C
cosmetics	SKU7	42.95838438	59	426	8496.103813	Female	93	17	11	1	Carrier B
cosmetics	SKU8	68.71759675	78	150	7517.363211	Female	5	10	15	7	Carrier C
skincare	SKU9	64.01573294	35	980	4971.145988	Unknown	14	27	83	1	Carrier A
skincare	SKU10	15.70779568	11	996	2330.965802	Non-binary	51	13	80	2	Carrier C
skincare	SKU11	90.63545998	95	960	6099.944116	Female	46	23	60	1	Carrier A
haircare	SKU12	71.21338908	41	336	2873.741446	Unknown	100	30	85	4	Carrier A
skincare	SKU13	16.16039332	5	249	4052.738416	Male	80	8	48	9	Carrier A
skincare	SKU14	99.17132864	26	562	8653.570926	Non-binary	54	29	78	5	Carrier B
skincare	SKU15	36.98924493	94	469	5442.086785	Non-binary	9	8	69	7	Carrier B
skincare	SKU16	7.54717211	74	280	6453.797968	Female	2	5	78	1	Carrier B
cosmetics	SKU17	81.46253437	82	126	2629.396435	Female	45	17	85	9	Carrier C
haircare	SKU18	36.44362777	23	620	9364.673505	Unknown	10	10	46	8	Carrier C
skincare	SKU19	51.12387009	100	187	2553.495585	Unknown	48	11	94	3	Carrier A
skincare	SKU20	96.34107244	22	320	8128.027697	Unknown	27	12	68	6	Carrier A
cosmetics	SKU21	84.89386898	60	601	7087.052696	Unknown	69	25	7	6	Carrier B
haircare	SKU22	27.67978089	55	884	2390.807867	Unknown	71	1	63	10	Carrier A
cosmetics	SKU23	4.324341186	30	391	8858.367571	Unknown	84	5	29	7	Carrier A
haircare	SKU24	4.156308359	32	209	9049.077861	Male	4	26	2	8	Carrier C
haircare	SKU25	39.62934399	73	142	2174.777054	Male	82	11	52	3	Carrier C
haircare	SKU26	97.44694662	9	353	3716.493326	Male	59	16	48	4	Carrier B
cosmetics	SKU27	92.55736081	42	352	2686.457224	Unknown	47	9	62	8	Carrier C
cosmetics	SKU28	2.397274706	12	394	6117.324615	Female	48	15	24	4	Carrier B
cosmetics	SKU29	63.44755919	3	253	8318.903195	Female	45	5	67	7	Carrier B
haircare	SKU30	8.022859211	10	327	2766.342367	Male	60	26	35	7	Carrier B
skincare	SKU31	50.84739305	28	168	9655.135103	Male	6	17	44	4	Carrier B
skincare	SKU32	79.20993602	43	781	9571.550487	Unknown	89	13	64	4	Carrier C
cosmetics	SKU33	64.795435	63	616	5149.99835	Non-binary	4	17	95	9	Carrier C
skincare	SKU34	37.46759233	96	602	9081.710896	Unknown	1	26	21	7	Carrier A
cosmetics	SKU35	84.95778682	11	449	6541.329345	Female	42	27	85	8	Carrier C
skincare	SKU36	9.813002579	34	963	7573.402458	Female	18	23	28	3	Carrier B
skincare	SKU37	23.39984475	5	963	2438.33993	Female	25	8	21	9	Carrier A
cosmetics	SKU38	52.07593068	75	705	9692.31804	Non-binary	69	1	88	5	Carrier B
skincare	SKU39	19.12747727	26	176	1912.465663	Female	78	29	34	3	Carrier A
skincare	SKU40	80.54142417	97	933	5724.95935	Female	90	20	39	8	Carrier C
skincare	SKU41	99.11329162	35	556	5521.205259	Female	64	19	38	8	Carrier B
skincare	SKU42	46.52916761	98	155	1839.609426	Female	22	27	57	4	Carrier C
haircare	SKU43	11.74327178	6	598	5737.425599	Unknown	36	29	85	9	Carrier B
cosmetics	SKU44	51.35579091	34	919	7152.286049	Female	13	19	72	6	Carrier C
haircare	SKU45	33.78413803	1	24	5267.956808	Male	93	7	52	6	Carrier B
haircare	SKU46	27.0822072	75	859	2556.767361	Non-binary	92	29	6	8	Carrier B
skincare	SKU47	95.71213588	93	910	7089.47425	Male	4	15	51	9	Carrier B
haircare	SKU48	76.03554443	28	29	7397.071005	Non-binary	30	16	9	3	Carrier C
cosmetics	SKU49	78.89791321	19	99	8001.613207	Unknown	97	24	9	6	Carrier C
cosmetics	SKU50	14.20348426	91	633	5910.88539	Female	31	23	82	10	Carrier A
haircare	SKU51	26.70076097	61	154	9866.465458	Male	100	4	52	1	Carrier A
skincare	SKU52	98.03182966	1	820	9435.762609	Male	64	11	11	1	Carrier B
skincare	SKU53	30.34147071	93	242	8232.334829	Male	96	25	54	3	Carrier B

SUPPLY CHAIN ANALYSIS

M	N	O	P	Q	R	S	T	U	V	W	X
Shipping costs	Supplier name	Location	Lead time	Production volumes	Manufacturing lead time	Manufacturing costs	Inspection results	Defect rates	Transportation modes	Routes	Costs
2.956572139	Supplier 3	Mumbai	29	215	29	46.27987924	Pending	0.226410361	Road	Route B	187.7520755
9.716574771	Supplier 3	Mumbai	23	517	30	33.61676895	Pending	4.854068026	Road	Route B	503.0655791
8.054479262	Supplier 1	Mumbai	12	971	27	30.68801935	Pending	4.580592619	Air	Route C	141.9202818
1.729568564	Supplier 5	Kolkata	24	937	18	35.6247414	Fail	4.746648621	Rail	Route A	254.7761592
3.890547916	Supplier 1	Delhi	5	414	3	92.0651606	Fail	3.145579523	Air	Route A	923.4406317
4.444098864	Supplier 4	Bangalore	10	104	17	56.76647556	Fail	2.779193512	Road	Route A	235.4612367
3.880763303	Supplier 3	Kolkata	14	314	24	1.08506857	Pending	1.000910619	Sea	Route A	134.3690969
2.348338784	Supplier 4	Bangalore	22	564	1	99.4661086	Fail	0.398177187	Road	Route C	802.0563118
3.404733857	Supplier 4	Mumbai	13	769	8	11.42302714	Pending	2.709862691	Sea	Route B	505.5571342
7.166645291	Supplier 2	Chennai	29	963	23	47.95760163	Pending	3.844614479	Rail	Route B	995.9294615
8.673211211	Supplier 5	Kolkata	18	830	5	96.52735279	Pass	1.727313928	Road	Route B	806.1031777
4.523943124	Supplier 2	Kolkata	28	362	11	27.59236309	Pending	0.021169821	Air	Route A	126.7230334
1.32527401	Supplier 4	Kolkata	3	563	3	32.32128621	Fail	2.161253748	Road	Route B	402.9687891
9.537283061	Supplier 5	Bangalore	23	173	10	97.82905011	Pending	1.63107423	Road	Route B	547.2410052
2.039770189	Supplier 1	Kolkata	25	558	14	5.79143663	Pending	0.100682852	Air	Route B	929.23529
2.422039723	Supplier 1	Bangalore	14	580	7	97.12128175	Pass	2.264405761	Sea	Route B	127.8618
4.191324586	Supplier 1	Bangalore	3	399	21	77.1063425	Pass	1.012563089	Air	Route A	865.5257798
3.585418958	Supplier 1	Chennai	7	453	16	47.67968037	Fail	0.102020755	Air	Route C	670.9343908
4.339224714	Supplier 2	Kolkata	18	374	17	27.1078085	Pending	2.231939111	Sea	Route A	593.4802587
4.742635883	Supplier 4	Chennai	20	694	16	82.37332059	Fail	3.646450865	Road	Route C	477.3076311
8.878334651	Supplier 1	Chennai	29	309	6	65.68625961	Pass	4.231416574	Air	Route B	493.8712153
6.037883769	Supplier 5	Chennai	19	791	4	61.73572895	Pending	0.018607568	Air	Route C	523.3609147
9.567648921	Supplier 4	Kolkata	22	780	28	50.12083961	Fail	2.591275473	Rail	Route C	205.5719958
2.924857601	Supplier 5	Kolkata	11	568	29	98.60995724	Pending	1.342291563	Rail	Route A	196.3294461
9.741291689	Supplier 2	Bangalore	28	447	3	40.3823597	Pending	3.691310293	Air	Route A	758.7247726
2.231073681	Supplier 4	Kolkata	19	934	23	78.28088312	Pending	3.797231217	Road	Route B	458.5359457
6.507548621	Supplier 2	Bangalore	26	171	4	15.97222976	Pass	2.119319737	Rail	Route A	617.8669165
7.406750953	Supplier 5	Mumbai	25	291	4	10.52824507	Fail	2.864667838	Sea	Route B	762.4591822
9.898140508	Supplier 1	Mumbai	13	171	7	59.42938181	Fail	0.815757079	Air	Route A	123.4370275
8.100973145	Supplier 1	Kolkata	16	329	7	39.29287559	Pass	3.878098937	Road	Route B	764.9353759
8.954528315	Supplier 4	Kolkata	27	806	30	51.6348934	Pending	0.965394705	Road	Route C	880.0809882
2.679660965	Supplier 3	Chennai	24	461	8	60.25114566	Pending	2.989000007	Rail	Route C	609.3792066
6.599104901	Supplier 3	Kolkata	30	737	7	29.69246715	Pass	1.946036119	Road	Route A	761.1739095
4.858270503	Supplier 5	Chennai	1	251	23	23.85342751	Fail	3.541046012	Sea	Route A	371.2552955
1.019487571	Supplier 1	Chennai	4	452	10	10.75427282	Pass	0.646604559	Road	Route B	510.3580004
5.28818999	Supplier 1	Delhi	3	367	2	58.00478704	Pass	0.541154098	Sea	Route C	553.4204712
2.107951267	Supplier 2	Delhi	26	671	19	45.53136424	Fail	3.805533379	Air	Route C	403.8089742
1.532655274	Supplier 3	Kolkata	24	867	15	34.34327747	Pending	2.610288085	Sea	Route A	183.932968
9.235931437	Supplier 5	Mumbai	10	841	12	5.930693646	Pending	0.613326899	Air	Route B	339.6728699
5.562503779	Supplier 2	Kolkata	30	791	6	9.005807429	Fail	1.451972204	Air	Route B	653.6729946
7.22959514	Supplier 1	Kolkata	18	793	1	88.1794071	Pending	4.213269431	Road	Route A	529.808724
5.773263744	Supplier 4	Chennai	18	892	7	95.33206455	Fail	0.045302262	Sea	Route A	275.5243711
7.526248327	Supplier 5	Bangalore	26	179	7	96.42282064	Fail	4.939255289	Road	Route A	635.6571205
3.694021268	Supplier 5	Mumbai	1	206	23	26.27736596	Pending	0.372304768	Air	Route A	716.0441198
7.577449657	Supplier 2	Delhi	7	834	18	22.55410662	Fail	2.96262632	Rail	Route A	610.4532696
5.215155009	Supplier 2	Chennai	25	794	25	66.31254444	Pass	3.219604612	Rail	Route A	495.305697
4.070955837	Supplier 3	Chennai	18	870	23	77.32235321	Pending	3.648610593	Road	Route B	380.4359371
8.978750756	Supplier 1	Kolkata	10	964	20	19.71299291	Pending	0.380573587	Rail	Route A	581.6023551
7.095833157	Supplier 2	Mumbai	9	109	18	23.12636358	Fail	1.698112541	Rail	Route B	768.651914
2.505621033	Supplier 5	Delhi	28	177	28	14.14781544	Pass	2.825813985	Rail	Route A	336.8901685
6.247860915	Supplier 2	Delhi	20	306	21	45.17875792	Fail	4.754800805	Rail	Route B	496.2486503
4.783000558	Supplier 5	Bangalore	18	673	28	14.19032834	Pending	1.772951172	Road	Route A	694.9823176
8.63105218	Supplier 1	Mumbai	10	727	27	9.166849149	Pending	2.122471619	Air	Route C	602.8984988
1.019487571	Supplier 1	Delhi	4	452	10	10.75427282	Pass	0.646604559	Road	Route B	510.3580004