

Appendices

Appendix 1 – Layout of the simulator.

The image displays three sequential panels of a simulator interface, each with a navigation bar at the top containing 'Estrutura de Custos', 'Fornecedor', 'Armazéns', 'Rotas', 'Nível de Serviço', and 'Working Capital'.

Panel 1: Cenário de Descentralização
This panel is titled 'Cenário de Descentralização'. It features four radio button options: 'JM', '3PL Dimensão Grande', '3PL Dimensão Pequena', and 'Fornecedor'. To the right, there are four input fields labeled 'Admin/UMC', 'Picking/UMC', 'CF Trans/Mês', and 'CV Trans/Km'. Below the radio buttons is a 'Tipologia Veiculo' dropdown menu. To the right of the dropdown is an 'Análise Temporal' section with two radio button options: 'Semanal' and 'Mensal'. At the bottom of the panel are five buttons: 'Anterior', 'Próximo', 'Simular', 'Limpar', and 'Cancelar'.

Panel 2: Fornecedor
This panel is titled 'Fornecedor'. It features a 'Fornecedor:' dropdown menu. Below it are two input fields: '# UMCs Semanais' and '# UMCs/Palete'. A section titled 'Cenário de Descentralização' contains an 'Entregas Semanais' input field and a checkbox labeled 'Repositor Externo' followed by a 'Custo Semanal' input field.

Panel 3: Armazéns
This panel is titled 'Armazéns'. It features three dropdown menus labeled 'Centro', 'Norte', and 'Sul'.

Estrutura de Custos | Fornecedor | Armazéns | **Rotas** | Nível de Serviço | Working Capital

Região

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Estrutura de Custos | Fornecedor | Armazéns | Rotas | **Nível de Serviço** | Working Capital

Cenário de Centralização

NS Fornecedor-Armazém %

NS Armazém-Lojas %

Cenário de Descentralização

NS Fornecedor-Lojas %

Appendix 2 – ABC Analysis for Global Purchasing segmented in Decentralized and Centralized

Decentralization				
ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	33.947.591	74,96%	266	2,62%
B	9.072.664	20,03%	1.846	18,18%
C	2.265.392	5,00%	8.042	79,20%
Total	45.285.647	100%	10.154	100%

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	33.885.821	74,83%	23	6,53%
B	9.117.432	20,13%	74	21,02%
C	2.282.393	5,04%	255	72,44%
Total	45.285.647	100%	352	100%

Centralization				
ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	10.904.789	74,95%	251	9,19%
B	2.916.305	20,04%	501	18,34%
C	727.886	5,00%	1.980	72,47%
Total	14.548.980	100%	2.732	100%

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	10.831.707	74,45%	32	10,16%
B	2.984.313	20,51%	69	21,90%
C	732.960	5,04%	214	67,94%
Total	14.548.980	100%	315	100%

Aggregation				
ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	44.860.499	74,97%	497	3,89%
B	11.981.647	20,02%	2.306	18,05%
C	2.992.481	5,00%	9.971	78,06%
Total	59.834.627	100%	12.774	100%

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	44.797.158	74,87%	41	7,19%
B	12.025.210	20,10%	121	21,23%
C	3.012.259	5,03%	408	71,58%
Total	59.834.627	100%	570	100%

Appendix 2 – Braga’s Store Analysis

DECENTRALIZED PURCHASING

Analysis

Indicator	Recheio
# Stores	1
# SKUs	9.039
# Suppliers	298
Purchasing Vol.	4.957.784

Purchasing Volume Distribution by SKU - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	3.715.495	74,94%	229	2,53%
B	994.318	20,06%	1.651	18,27%
C	247.971	5,00%	7.159	79,20%
Total	4.957.784	100%	9.039	100%

Quantity and Purchasing Vol. Of Unique-Store SKUs and Regional SKUs

SKUs	Braga's Store SKI	Braga's Vol.	Regional SKU (North)	Regional SKU Vol. (North)	Others	Others Vol.
A	6	50.619	9	109.156	214	3.555.720
B	42	21.613	60	47.396	1.549	925.309
C	952	12.370	313	9.016	5.894	226.585
Total	1.000	84.602	382	165.568	7.657	4.707.614

Purchasing Volume Distribution by Suppliers - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	3.684.761	74,32%	26	8,72%
B	1.020.948	20,59%	75	25,17%
C	252.075	5,08%	197	66,11%
Total	4.957.784	100%	298	100%

Quantity and Purchasing Vol. Of Unique-Store Suppliers and Regional Suppliers

Suppliers	Braga's Store SKI	Braga's Vol.	Regional SKU (North)	Regional SKU Vol. (North)	Others	Others Vol.
A	0	0	1	54.868	25	3.629.893
B	2	42.315	5	61.370	68	917.263
C	14	13.021	11	10.082	172	228.972
Total	16	55.336	17	126.320	265	4.776.128

CENTRALIZED PURCHASING

Analysis

Indicator	Recheio
# Stores	1
# SKUs	1.838
# Suppliers	247
Purchasing Vol.	1.256.984

Purchasing Volume Distribution by SKU - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	941.610	74,91%	220	11,97%
B	252.461	20,08%	465	25,30%
C	62.913	5,01%	1.153	62,73%
Total	1.256.984	100%	1.838	100%

Quantity and Purchasing Vol. Of Unique-Store SKUs and Regional SKUs

SKUs	raga's Store SKI	Braga's Vol.	Regional SKU (North)	egional SKU Vol. (Nort)	Others	Others Vol.
A	0	0	1	1.817	219	939.793
B	1	240	3	1.187	461	251.034
C	136	1.327	23	633	994	60.953
Total	137	1.567	27	3.637	1.674	1.251.780

Purchasing Volume Distribution by Suppliers - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	937.539	74,59%	31	12,55%
B	255.919	20,36%	65	26,32%
C	63.526	5,05%	151	61,13%
Total	1.256.984	100%	247	100%

Quantity and Purchasing Vol. Of Unique-Store Suppliers and Regional Suppliers

Suppliers	raga's Store SKI	Braga's Vol.	Regional SKU (North)	egional SKU Vol. (Nort)	Others	Others Vol.
A	0	0	0	0	31	937.539
B	0	0	1	1.817	64	254.102
C	14	501	3	951	134	62.074
Total	14	501	4	2.768	229	1.253.715

Appendix 3 – Regional Analysis of Centralized and Decentralized Purchasing

South Region
Decentralization

Indicator	Recheio
# Stores	5
# SKUs	7.304
# Suppliers	259
Purchasing Vol.	4.197.022

Purchasing Volume Distribution by SKU - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	3.147.186	74,99%	252	3,45%
B	839.942	20,01%	1.582	21,66%
C	209.894	5,00%	5.470	74,89%
Total	4.197.022	100%	7.304	100%

Purchasing Volume Distribution by SKU - Number of Stores

# Stores	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
1	26.852	0,64%	937	12,83%
2	66.166	1,58%	787	10,77%
3	221.519	5,28%	780	10,68%
4	242.856	5,79%	1.010	13,83%
5	3.639.629	86,72%	3.790	51,89%
Total	4.197.022	100,00%	7.304	100,00%

Quantity and Purchasing Vol. Of Unique-Store SKUs and Regional SKUs

SKUs	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (South)	Regional SKU Vol. (South)	Others	Others Vol.
A	0	0	4	41.165	248	3.106.021
B	2	1.355	4	2.917	1.576	835.670
C	31	614	6	204	5.433	209.076
Total	33	1.969	14	44.286	7.257	4.150.768

Purchasing Volume Distribution by Suppliers - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	3.140.442	74,83%	21	8,11%
B	843.200	20,09%	57	22,01%
C	213.381	5,08%	181	69,88%
Total	4.197.022	100%	259	100%

Purchasing Volume Distribution by Suppliers - Number of Stores

# Avg. Stores	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
1	3.739	0,09%	19	7,34%
2	37.148	0,89%	35	13,51%
3	638.244	15,21%	65	25,10%
4	3.238.982	77,17%	103	39,77%
5	278.909	6,65%	37	14,29%
Total	4.197.022	100,00%	259	100,00%

Quantity and Purchasing Vol. Of Unique-Store Suppliers and Regional Suppliers

Suppliers	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (South)	Regional SKU Vol. (South)	Others	Others Vol.
A	0	0	1	35.510	20	3.104.932
B	0	0	0	0	57	843.200
C	3	742	0	0	178	212.639
Total	3	742	1	35.510	255	4.160.771

Centralization

Indicator	Recheio
# Stores	5
# SKUs	1.659
# Suppliers	230
Purchasing Vol.	1.396.912

Purchasing Volume Distribution by SKU - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	1.046.889	74,94%	234	14,10%
B	280.006	20,04%	483	29,11%
C	70.017	5,01%	942	56,78%
Total	1.396.912	100%	1.659	100%

Purchasing Volume Distribution by SKU - Number of Stores

# Stores	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
1	1.628	0,12%	77	4,64%
2	2.514	0,18%	57	3,44%
3	2.034	0,15%	60	3,62%
4	15.884	1,14%	129	7,78%
5	1.374.852	98,42%	1.336	80,53%
Total	1.396.912	100,00%	1.659	100,00%

Quantity and Purchasing Vol. Of Unique-Store SKUs and Regional SKUs

SKUs	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (South)	Regional SKU Vol. (South)	Others	Others Vol.
A	0	0	0	0	234	1.046.889
B	0	0	1	818	482	279.188
C	1	1	0	0	941	70.016
Total	1	1	1	818	1.657	1.396.093

Purchasing Volume Distribution by Suppliers - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	1.039.182	74,39%	31	13,48%
B	286.643	20,52%	63	27,39%
C	71.088	5,09%	136	59,13%
Total	1.396.912	100,00%	230	100,00%

Purchasing Volume Distribution by Suppliers - Number of Stores

# Stores	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
1	86	0,01%	6	2,61%
2	1.798	0,13%	6	2,61%
3	25.171	1,80%	16	6,96%
4	168.652	12,07%	29	12,61%
5	1.201.206	85,99%	173	75,22%
Total	1.396.912	100,00%	230	100,00%

Quantity and Purchasing Vol. Of Unique-Store Suppliers and Regional Suppliers

Suppliers	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (South)	Regional SKU Vol. (South)	Others	Others Vol.
A	0	0	0	0	31	1.039.182
B	0	0	0	0	63	286.643
C	1	1	0	0	135	71.087
Total	1	1	0	0	229	1.396.911

Centre Region

Decentralization

Indicator	Recheio
# Stores	19
# SKUs	8.516
# Suppliers	304
Purchasing Vol.	20.656.822

Purchasing Volume Distribution by SKU - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	15.487.391	74,97%	223	2,62%
B	4.136.366	20,02%	1.700	19,96%
C	1.033.065	5,00%	6.593	77,42%
Total	20.656.822	100%	8.516	100%

Purchasing Volume Distribution by SKU - Number of Stores

# Stores	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
1	62.315	0,30%	533	6,26%
2	65.533	0,32%	340	3,99%
3	69.773	0,34%	258	3,03%
4	56.134	0,27%	288	3,38%
5	69.515	0,34%	326	3,83%
6	127.015	0,61%	252	2,96%
7	92.272	0,45%	289	3,39%
8	61.300	0,30%	303	3,56%
9	105.383	0,51%	310	3,64%
10	489.932	2,37%	343	4,03%
11	229.544	1,11%	388	4,56%
12	347.338	1,68%	413	4,85%
13	324.557	1,57%	486	5,71%
14	1.085.672	5,26%	760	8,92%
15	1.790.667	8,67%	1.734	20,36%
16	15.575.101	75,40%	1.460	17,14%
17	92.783	0,45%	29	0,34%
18	11.990	0,06%	4	0,05%
19	0	0,00%	0	0,00%
Total	20.656.822	100%	8.516	100%

Quantity and Purchasing Vol. Of Unique-Store SKUs and Regional SKUs

SKUs	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (Centre)	Regional SKU Vol. (Centre)	Others	Others Vol.
A	0	0	2	86.469	221	15.400.922
B	18	29.835	15	25.273	1.667	4.081.258
C	131	6.819	71	8.550	6.391	1.017.695
Total	149	36.654	88	120.292	8.279	20.499.876

Purchasing Volume Distribution by Suppliers - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	15.390.608	74,51%	17	5,59%
B	4.213.517	20,40%	67	22,04%
C	1.052.698	5,10%	220	72,37%
Total	20.656.822	100%	304	100%

Purchasing Volume Distribution by Suppliers - Number of Stores

# Avg. Stores	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
1	40.106	0,19%	26	8,55%
2	32.585	0,16%	24	7,89%
3	112.781	0,55%	14	4,61%
4	31.090	0,15%	11	3,62%
5	35.018	0,17%	20	6,58%
6	88.893	0,43%	10	3,29%
7	56.450	0,27%	9	2,96%
8	135.011	0,65%	16	5,26%
9	153.233	0,74%	15	4,93%
10	1.279.449	6,19%	20	6,58%
11	3.423.777	16,57%	34	11,18%
12	2.511.475	12,16%	39	12,83%
13	8.983.135	43,49%	31	10,20%
14	2.706.439	13,10%	19	6,25%
15	738.314	3,57%	10	3,29%
16	329.065	1,59%	6	1,97%
17	0	0,00%	0	0,00%
18	0	0,00%	0	0,00%
19	0	0,00%	0	0,00%
Total	20.656.822	100%	304	100%

Quantity and Purchasing Vol. Of Unique-Store Suppliers and Regional Suppliers

Suppliers	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (Centre)	Regional SKU Vol. (Centre)	Others	Others Vol.
A	0	0	0	0	17	15.390.608
B	0	0	0	0	67	4.213.517
C	11	15.423	9	29.853	200	1.007.421
Total	11	15.423	9	29.853	284	20.611.546

Centralization

Indicator	Recheio
# Stores	19
# SKUs	2.550
# Suppliers	295
Purchasing Vol.	7.265.654

Purchasing Volume Distribution by SKU - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	5.444.562	74,94%	256	10,04%
B	1.457.583	20,06%	511	20,04%
C	363.509	5,00%	1.783	69,92%
Total	7.265.654	100%	2.550	100%

Purchasing Volume Distribution by SKU - Number of Stores

# Stores	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
1	78.428	1,08%	834	32,71%
2	892	0,01%	25	0,98%
3	4.627	0,06%	26	1,02%
4	14.793	0,20%	27	1,06%
5	2.626	0,04%	20	0,78%
6	7.052	0,10%	32	1,25%
7	5.011	0,07%	25	0,98%
8	2.270	0,03%	22	0,86%
9	1.792	0,02%	28	1,10%
10	5.304	0,07%	25	0,98%
11	7.645	0,11%	22	0,86%
12	18.253	0,25%	38	1,49%
13	9.877	0,14%	35	1,37%
14	29.375	0,40%	38	1,49%
15	75.647	1,04%	140	5,49%
16	447.960	6,17%	239	9,37%
17	1.655.006	22,78%	348	13,65%
18	1.903.050	26,19%	264	10,35%
19	2.996.046	41,24%	362	14,20%
Total	7.265.654	100%	2.550	100%

Quantity and Purchasing Vol. Of Unique-Store SKUs and Regional SKUs

SKUs	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (Centre)	Regional SKU Vol. (Centre)	Others	Others Vol.
A	1	24.780	1	13.210	254	5.406.572
B	2	2.169	1	3.795	508	1.451.619
C	791	51.178	18	752	974	311.579
Total	794	78.127	20	17.757	1.736	7.169.770

Purchasing Volume Distribution by Suppliers - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	5.417.230	74,56%	34	11,53%
B	1.479.488	20,36%	67	22,71%
C	368.936	5,08%	194	65,76%
Total	7.265.654	100%	295	100%

Purchasing Volume Distribution by Suppliers - Number of Stores

# Avg. Stores	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
1	24.729	0,34%	59	20,00%
2	219	0,00%	5	1,69%
3	62.636	0,86%	5	1,69%
4	45.079	0,62%	6	2,03%
5	176.072	2,42%	14	4,75%
6	178.349	2,45%	10	3,39%
7	74.901	1,03%	9	3,05%
8	182.799	2,52%	12	4,07%
9	69.345	0,95%	10	3,39%
10	1.166.941	16,06%	24	8,14%
11	267.956	3,69%	10	3,39%
12	1.184.454	16,30%	16	5,42%
13	200.422	2,76%	11	3,73%
14	806.171	11,10%	20	6,78%
15	674.760	9,29%	17	5,76%
16	1.046.182	14,40%	20	6,78%
17	672.482	9,26%	27	9,15%
18	400.800	5,52%	17	5,76%
19	31.359	0,43%	3	1,02%
Total	7.265.654	100%	295	100%

Quantity and Purchasing Vol. Of Unique-Store Suppliers and Regional Suppliers

Suppliers	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (Centre)	Regional SKU Vol. (Centre)	Others	Others Vol.
A	0	0	0	0	34	5.417.230
B	0	0	0	0	67	1.479.488
C	48	9.085	2	129	144	359.722
Total	48	9.085	2	129	245	7.256.441

North Region

Decentralization

Indicator	Recheio
# Stores	13
# SKUs	9.829
# Suppliers	320
Purchasing Vol.	20.431.802

Purchasing Volume Distribution by SKU - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	15.319.835	74,98%	224	2,28%
B	4.089.977	20,02%	1.645	16,74%
C	1.021.990	5,00%	7.960	80,98%
Total	20.431.802	100%	9.829	100%

Purchasing Volume Distribution by SKU - Number of Stores

# Stores	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
1	135.204	0,66%	1.428	14,53%
2	82.867	0,41%	586	5,96%
3	175.750	0,86%	455	4,63%
4	82.018	0,40%	377	3,84%
5	73.939	0,36%	375	3,82%
6	137.913	0,67%	384	3,91%
7	233.409	1,14%	402	4,09%
8	344.530	1,69%	446	4,54%
9	416.889	2,04%	451	4,59%
10	585.850	2,87%	528	5,37%
11	989.098	4,84%	576	5,86%
12	2.357.358	11,54%	1.062	10,80%
13	14.816.977	72,52%	2.759	28,07%
Total	20.431.802	100%	9.829	100%

Quantity and Purchasing Vol. Of Unique-Store SKUs and Regional SKUs

SKUs	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (North)	Regional SKU Vol. (North)	Others	Others Vol.
A	1	14.970	6	438.292	217	14.866.574
B	16	53.118	42	118.651	1.587	3.918.208
C	1.096	28.969	361	27.468	6.503	965.553
Total	1.113	97.057	409	584.411	8.307	19.750.334

Purchasing Volume Distribution by Suppliers - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	15.224.414	74,51%	23	7,21%
B	4.178.802	20,45%	72	22,57%
C	1.028.586	5,03%	224	70,22%
Total	20.431.802	100%	319	100%

Purchasing Volume Distribution by Suppliers - Number of Stores

# Avg. Stores	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
1	107.851	0,53%	34	10,66%
2	38.181	0,19%	22	6,90%
3	239.260	1,17%	24	7,52%
4	79.995	0,39%	15	4,70%
5	68.740	0,34%	15	4,70%
6	152.440	0,75%	14	4,39%
7	412.662	2,02%	18	5,64%
8	1.053.901	5,16%	40	12,54%
9	1.652.766	8,09%	34	10,66%
10	7.417.430	36,30%	41	12,85%
11	6.300.769	30,84%	30	9,40%
12	2.492.050	12,20%	22	6,90%
13	415.759	2,03%	10	3,13%
Total	20.431.802	100%	319	100%

Quantity and Purchasing Vol. Of Unique-Store Suppliers and Regional Suppliers

Suppliers	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (North)	Regional SKU Vol. (North)	Others	Others Vol.
A	0	0	1	211.280	22	15.013.134
B	1	34.170	5	276.232	66	3.868.400
C	21	24.739	11	20.155	192	983.692
Total	22	58.909	17	507.666	280	19.865.227

Centralization

Indicator	Recheio
# Stores	13
# SKUs	1.905
# Suppliers	255
Purchasing Vol.	5.886.414

Purchasing Volume Distribution by SKU - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
A	4.413.913	74,98%	214	11,23%
B	1.177.749	20,01%	465	24,41%
C	294.752	5,01%	1.226	64,36%
Total	5.886.414	100%	1.905	100%

Purchasing Volume Distribution by SKU - Number of Stores

# Stores	Purchasing Vol.	% Purchasing Vol.	# SKUs	% SKUs
1	2.365	0,04%	179	9,40%
2	978	0,02%	31	1,63%
3	54.861	0,93%	26	1,36%
4	2.682	0,05%	44	2,31%
5	4.058	0,07%	35	1,84%
6	6.971	0,12%	40	2,10%
7	16.496	0,28%	48	2,52%
8	11.888	0,20%	45	2,36%
9	9.703	0,16%	41	2,15%
10	28.702	0,49%	62	3,25%
11	71.101	1,21%	74	3,88%
12	127.580	2,17%	116	6,09%
13	5.549.029	94,27%	1.164	61,10%
Total	5.886.414	100%	1.905	100%

Quantity and Purchasing Vol. Of Unique-Store SKUs and Regional SKUs

SKUs	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (North)	Regional SKU Vol. (North)	Others	Others Vol.
A	0	0	0	0	214	4.413.913
B	0	0	3	8.694	462	1.169.055
C	142	1.577	25	1.903	1.059	291.272
Total	142	1.577	28	10.597	1.735	5.874.240

Purchasing Volume Distribution by Suppliers - ABC Analysis

ABC	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
A	4.399.004	74,73%	29	11,37%
B	1.188.357	20,19%	64	25,10%
C	299.054	5,08%	162	63,53%
Total	5.886.414	100%	255	100%

Purchasing Volume Distribution by Suppliers - Number of Stores

# Avg. Stores	Purchasing Vol.	% Purchasing Vol.	# Suppliers	% Suppliers
1	649	0,01%	20	7,84%
2	46	0,00%	2	0,78%
3	3.061	0,05%	3	1,18%
4	830	0,01%	4	1,57%
5	82.515	1,40%	7	2,75%
6	1.366	0,02%	4	1,57%
7	10.473	0,18%	9	3,53%
8	35.952	0,61%	8	3,14%
9	133.443	2,27%	9	3,53%
10	436.769	7,42%	16	6,27%
11	291.952	4,96%	14	5,49%
12	1.534.228	26,06%	27	10,59%
13	3.355.133	57,00%	132	51,76%
Total	5.886.414	100%	255	100%

Quantity and Purchasing Vol. Of Unique-Store Suppliers and Regional Suppliers

Suppliers	Unique-Store SKUs	Unique-Store Vol.	Regional SKU (North)	Regional SKU Vol. (North)	Others	Others Vol.
A	0	0	0	0	29	4.399.004
B	0	0	0	0	64	1.188.357
C	16	504	5	9.368	141	289.182
Total	16	504	5	9.368	234	5.876.542

Appendix 4 – Exclusive SKUs and Suppliers Analysis

South Region				
Exclusive SKUs	# SKUs	% SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	1.628	18%	1.273.866	23%
Decentralized	7.273	81%	4.138.972	74%
Centr.&Decentr.	31	0%	181.096	3%
Total	8.932	100%	5.593.934	100%
Exclusive Suppliers	# Suppliers	Sum of SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	175	1.220	841.222	15%
Decentralized	202	5.317	2.212.679	40%
Total	377	6.537	3.053.901	-

Centre Region				
Exclusive SKUs	# SKUs	% SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	2.443	22%	6.469.322	23%
Decentralized	8.409	77%	19.486.628	70%
Centr.&Decentr.	107	1%	1.966.526	7%
Total	10.959	100%	27.922.476	100%
Exclusive Suppliers	# Suppliers	Sum of SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	203	1.559	3.589.676	13%
Decentralized	210	3.592	5.194.131	19%
Total	413	5.151	8.783.807	-

North Region				
Exclusive SKUs	# SKUs	% SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	1.864	16%	4.935.750	19%
Decentralized	9.788	84%	19.129.582	73%
Centr.&Decentr.	41	0%	2.252.884	9%
Total	11.693	100%	26.318.216	100%
Exclusive Suppliers	# Suppliers	Sum of SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	187	1.345	2.974.199	11%
Decentralized	249	6.938	11.404.702	43%
Total	436	8.283	14.378.901	-

South-Centre Regions				
Exclusive SKUs	# SKUs	% SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	1.609	18%	7.623.840	24%
Decentralized	7.090	81%	23.067.413	72%
Centr.&Decentr.	31	0%	1.570.624	5%
Total	8.730	100%	32.261.878	100%
Exclusive Suppliers	# Suppliers	Sum of SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	173	1.205	5.048.983	16%
Decentralized	197	5.194	10.807.927	34%
Total	370	6.399	15.856.910	-

South-North Regions				
Exclusive SKUs	# SKUs	% SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	1.611	18%	6.086.893	20%
Decentralized	7.182	81%	22.023.163	74%
Centr.&Decentr.	31	0%	1.630.697	5%
Total	8.824	100%	29.740.753	100%
Exclusive Suppliers	# Suppliers	Sum of SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	190	1.371	4.699.991	16%
Decentralized	218	5.866	13.512.009	45%
Total	408	7.237	18.212.000	-

Centre-North Regions				
Exclusive SKUs	# SKUs	% SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	1.682	17%	11.162.340	21%
Decentralized	8.135	83%	37.579.568	72%
Centr.&Decentr.	36	0%	3.258.526	6%
Total	9.853	100%	52.000.434	100%
Exclusive Suppliers	# Suppliers	Sum of SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	171	1.229	7.008.699	13%
Decentralized	213	5.883	16.632.154	32%
Total	384	7.112	23.640.853	-

South-Centre-North Regions				
Exclusive SKUs	# SKUs	% SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	1.596	18%	12.303.223	22%
Decentralized	7.048	81%	40.706.057	73%
Centr.&Decentr.	31	0%	3.020.225	5%
Total	8.675	100%	56.029.505	100%
Exclusive Suppliers	# Suppliers	Sum of SKUs	Purchasing Vol.	% Purchasing Vol.
Centralized	170	1.195	8.060.124	14%
Decentralized	194	5.177	21.115.445	38%
Total	364	6.372	29.175.569	-