

Coefficients of the linear functions provided by the OLS

Estimating optimal ABC zone sizes in manual warehouses

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<i>S/R policy</i>	<i>Zone</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Aa/Aba	A	29.80	75.84	-0.60	-4.55	0.17	-2.60	-1.58	-0.08	-1.18	3.94	-1.33	0.30	0.31	0.16
	B	36.63	-16.00	-0.40	-3.06	-0.06	1.68	0.40	-0.04	1.67	0.98	-3.18	0.22	0.01	-0.08
	C	33.58	-59.84	1.00	7.62	-0.11	0.92	1.18	0.12	-0.50	-4.91	4.52	-0.52	-0.32	-0.08
Aa/Sh	A	14.68	21.34	-0.53	-0.03	-0.32	1.01	0.72	-0.04	0.72	1.01	0.72	-0.04	0.72	-0.06
	B	6.86	5.91	0.06	2.01	-0.14	1.93	1.10	0.03	2.39	-0.61	3.73	-0.02	-0.20	-0.13
	C	78.46	-27.25	0.46	-1.98	0.46	-2.94	-1.82	0.00	-3.10	-3.27	-2.15	-0.27	0.19	0.19
Aa/Lg	A	5.85	20.15	-0.69	2.32	-0.45	0.90	0.66	-0.07	2.16	0.90	0.66	-0.07	2.16	-0.02
	B	36.56	17.59	-1.06	-2.58	-0.18	-1.00	-0.17	0.12	-1.33	-1.00	-0.17	0.12	-1.33	-0.02
	C	57.59	-37.74	1.76	0.26	0.62	0.10	-0.49	-0.06	-0.83	0.10	-0.49	-0.06	-0.83	0.03
Aa/Co	A	10.61	23.81	-0.46	1.34	-0.11	0.72	0.11	-0.08	1.67	-0.20	1.06	0.22	-0.01	0.00
	B	36.61	17.02	-0.55	-5.65	-0.21	-0.03	0.28	0.01	-0.84	-0.03	0.28	0.01	-0.84	-0.06
	C	52.79	-40.82	1.00	4.31	0.32	-0.68	-0.38	0.06	-0.83	-0.68	-0.38	0.06	-0.83	0.06
Nl/Aba	A	-22.65	43.57	-0.25	4.61	-0.10	2.83	1.53	-0.14	6.57	-0.38	3.76	0.15	-0.21	-0.11
	B	42.38	30.74	-0.08	-3.70	0.16	-0.66	-0.70	-0.11	-1.63	1.14	-2.11	-0.03	0.14	0.14
	C	80.27	-74.31	0.33	-0.92	-0.07	-2.18	-0.84	0.25	-4.94	-0.76	-1.66	-0.11	0.07	-0.03
Nl/Sh	A	-6.90	33.74	0.19	4.11	-0.26	1.47	0.72	-0.13	1.89	1.58	1.16	-0.08	0.01	-0.01
	B	4.36	27.83	0.12	3.15	0.28	1.87	0.58	-0.17	7.16	-3.35	2.42	-0.17	-0.04	0.03
	C	102.54	-61.56	-0.31	-7.26	-0.02	-3.34	-1.30	0.30	-9.04	1.77	-3.58	0.25	0.03	-0.01
Nl/Lg	A	6.61	34.33	-0.05	2.52	-0.49	-0.35	0.08	-0.03	0.06	2.82	0.07	-0.06	0.11	0.08
	B	7.81	25.23	-0.53	-0.88	0.42	4.10	1.41	-0.23	5.92	-3.52	0.71	0.17	-0.19	-0.11
	C	85.58	-59.55	0.58	-1.64	0.07	-3.75	-1.49	0.26	-5.98	0.70	-0.78	-0.11	0.09	0.03
Nl/Co	A	-1.87	34.71	0.09	4.22	-0.16	1.89	0.41	-0.14	2.11	0.60	-0.06	-0.08	0.12	-0.04
	B	3.34	26.72	-0.21	1.86	0.28	1.50	0.95	-0.14	6.14	-3.61	3.87	0.03	-0.25	0.05
	C	98.53	-61.43	0.11	-6.08	-0.12	-3.40	-1.35	0.28	-8.26	3.01	-3.81	0.05	0.13	-0.01
Ns/Aba	A	-15.58	41.12	0.06	5.33	-0.30	1.75	1.08	-0.02	2.58	1.98	3.22	-0.06	-0.08	-0.11
	B	39.61	27.48	-0.12	-3.01	0.30	-0.28	-0.42	-0.10	0.41	-0.02	-2.22	-0.08	0.07	0.15
	C	75.97	-68.61	0.06	-2.32	-0.01	-1.47	-0.67	0.12	-2.99	-1.96	-1.00	0.14	0.01	-0.04
Ns/Sh	A	3.43	28.01	0.03	8.85	-0.41	-0.13	0.18	-0.05	0.72	1.82	0.16	0.01	0.05	0.06
	B	10.01	24.05	-0.17	-0.84	0.49	2.08	0.67	-0.21	5.03	-2.93	2.55	0.06	-0.17	0.02
	C	86.56	-52.06	0.14	-8.01	-0.08	-1.95	-0.85	0.25	-5.76	1.11	-2.71	-0.08	0.12	-0.08
Ns/Lg	A	7.44	31.98	-0.32	1.11	-0.59	0.19	0.33	-0.06	-0.27	4.65	-0.92	0.16	0.11	0.02
	B	6.34	29.66	-0.13	0.86	0.51	4.64	1.28	-0.21	5.70	-5.26	0.59	0.04	-0.12	-0.16
	C	86.22	-61.64	0.45	-1.97	0.07	-4.83	-1.62	0.27	-5.43	0.61	0.33	-0.20	0.01	0.14
Ns/Co	A	-1.36	29.67	0.17	5.68	-0.45	1.04	0.42	-0.15	2.03	2.42	0.59	-0.03	0.08	0.00
	B	11.97	30.27	-0.23	-0.31	0.68	2.18	0.58	-0.22	4.42	-4.77	2.44	0.18	-0.19	-0.02
	C	89.39	-59.94	0.06	-5.37	-0.23	-3.22	-1.00	0.37	-6.45	2.35	-3.03	-0.15	0.11	0.01
Wa/Aba	A	5.81	25.26	0.12	3.25	0.30	0.03	-0.18	-0.16	0.93	0.43	-1.20	-0.07	0.08	0.13
	B	23.94	39.40	-0.41	2.34	0.78	4.43	0.44	-0.10	0.91	-10.05	-0.78	0.20	0.09	-0.26
	C	70.24	-64.65	0.28	-5.59	-1.08	-4.46	-0.26	0.26	-1.84	9.61	1.98	-0.13	-0.17	0.13
Wa/Sh	A	-8.15	20.16	0.09	10.10	-0.88	0.62	1.29	-0.04	0.08	5.37	1.70	-0.13	-0.13	0.03
	B	24.42	35.13	-0.20	-4.43	0.87	1.94	0.04	-0.02	-0.05	-4.53	0.82	0.07	-0.05	-0.09
	C	83.73	-55.29	0.11	-5.67	0.01	-2.56	-1.33	0.06	-0.02	-0.84	-2.53	0.05	0.18	0.06
Wa/Lg	A	1.78	23.02	-0.18	1.66	-1.31	-1.32	0.84	-0.06	0.15	11.10	-0.60	0.06	-0.02	0.20
	B	33.21	36.73	-0.12	-5.11	0.93	1.34	-0.32	-0.02	-0.60	-4.44	0.22	0.05	-0.04	-0.09
	C	65.01	-59.75	0.30	3.44	0.39	-0.02	-0.52	0.09	0.45	-6.67	0.38	-0.11	0.06	-0.11
Wa/Co	A	-7.98	26.55	0.05	7.63	-1.01	0.90	1.33	-0.01	0.23	7.09	0.66	-0.18	-0.07	0.03
	B	32.18	32.04	-0.29	-4.20	0.88	0.64	-0.03	0.02	-3.22	-3.58	0.86	0.15	-0.10	-0.07
	C	75.80	-58.59	0.23	-3.43	0.13	-1.53	-1.30	-0.01	2.99	-3.52	-1.51	0.02	0.16	0.05

(1): Intercept, (2): Skewness, (3): Subaisle length, (4): Picks per subaisle, (5): Picks per route, (6): Aisle width, (7): Number of aisles, (8): Warehouse length, (9): Dimensions ratio, (10): Picks per aisle, (11): Number of cross aisles, (12): Aisle length, (13): Number of subaisles, (14): Warehouse width, Aa: Across-aisle, Nl: Nearest-location, Ns: Nearest-subaisle, Wa: Within-aisle, Aba: Aisle-by-aisle, Sh: S-shape, Lg: Largest gap, Co: Combined