

A blockchain-based approach for food surplus management

GIANPAOLO IAZZOLINO^{1*}, FRANCESCA GUERRIERO¹, LUIGINO FILICE¹,
GIORGIO SCARPELLI²

¹Department of Mechanical, Energy and Management Engineering, University of Calabria, Rende, Italy

²NTT DATA Italia SpA., Milano, Italy

*Corresponding author: gp.iazzolino@unical.it

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Electronic supplementary material

Supplementary Table S1

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Table S1. Rewarding evaluation for Donor Company 1

Scenario 1 (<i>ex-ante</i>): Rewarding based on estimated overall kg donated $a_1 = a_2 = 0.5$ and $a_1 = 0.7; a_2 = 0.3$		Scenario 2 (<i>ex-ante</i>): Rewarding based on estimated unitary rewarding $a_1 = a_2 = 0.5$		Scenario 3 (<i>ex-post</i>): Rewarding based on quota-value donated $a_1 = a_2 = 0.5$		Scenario 2 (<i>ex-ante</i>): Rewarding based on estimated unitary rewarding $a_1 = 0.7; a_2 = 0.3$		Scenario 3 (<i>ex-post</i>): Rewarding based on quota-value donated $a_1 = 0.7; a_2 = 0.3$	
coefficient	rewarding (EUR)	rewarding (EUR)	coefficient	rewarding (EUR)	rewarding (EUR)	coefficient	rewarding (EUR)	coefficient	rewarding (EUR)
0.0010	100.00	39.82	0.0335	3 354.71	47.59	0.0362	3 618.44		
0.0007	66.67	36.33	0.0306	3 060.43	45.42	0.0345	3 453.41		
0.0010	100.00	54.49	0.0459	4 590.65	68.13	0.0518	5 180.12		
0.0012	120.00	57.85	0.0487	4 873.15	71.19	0.0541	5 412.99		
0.0016	160.00	77.13	0.0650	6 497.54	94.92	0.0722	7 217.33		
0.0011	113.33	54.63	0.0460	4 602.42	67.24	0.0511	5 112.27		
0.0005	50.00	22.01	0.0185	1 853.92	26.73	0.0203	2 032.32		
0.0010	100.00	44.01	0.0371	3 707.83	53.46	0.0406	4 064.63		
0.0017	166.67	68.93	0.0581	5 806.98	82.90	0.0630	6 303.40		
0.0020	200.00	78.81	0.0664	6 638.79	94.01	0.0715	7 147.63		
0.0010	100.00	37.31	0.0314	3 142.83	44.07	0.0335	3 350.72		
0.0010	100.00	34.51	0.0291	2 907.41	40.16	0.0305	3 053.25		
0.0010	100.00	27.81	0.0234	2 342.41	30.77	0.0234	2 339.34		
0.0010	100.00	27.81	0.0234	2 342.41	30.77	0.0234	2 339.34		
0.0005	50.00	12.37	0.0104	1 041.72	13.23	0.0101	1 006.07		
0.0010	100.00	24.73	0.0208	2 083.45	26.46	0.0201	2 012.13		
0.0005	50.00	10.76	0.0091	906.36	10.98	0.0084	835.02		
0.0005	50.00	10.76	0.0091	906.36	10.98	0.0084	835.02		
0.0007	66.67	11.27	0.0095	949.52	10.34	0.0079	786.15		
0.0013	133.33	22.54	0.0190	1 899.04	20.68	0.0157	1 572.31		
0.0010	100.00	61.20	0.0516	5 155.66	77.52	0.0589	5 894.04		
0.0005	50.00	30.60	0.0258	2 577.83	38.76	0.0295	2 947.02		
0.0015	150.00	91.80	0.0773	7 733.48	116.28	0.0884	8 841.05		
Total	2 326.67	937.47	–	78 974.91	1 122.60	–	85 354.02		

 a_1 – weight of the variable x_1 for calculating the donated value; a_2 – weight of the variable x_2 for calculating the donated value