



Online-Appendix

„Sustainability in the Corporate Sector: A News Textual Analysis Approach to Measuring ESG Performance“

Mohammad Izzat Raihan Imron
Technical University of Munich

Junior Management Science 10(2) (2025) 369-401

Appendix

Class	Sentiment				Score	Normalized Score	
	Negative	Neutral	Positive	Total			
1. Climate Change	0	3	0	3	3	0	0.00
2. Resource Stewardship	0	4	0	4	4	0	0.00
3. Environmental Opportunities	1	2	2	5	5	1	0.20
4. Human Capital	24	37	10	71	-14	-0.20	
5. Product Liability	86	153	29	268	-57	-0.21	
6. Social Opportunities	1	23	5	29	4	0.14	
7. Corporate Governance	17	75	15	107	-2	-0.02	
8. Business Ethics	81	131	25	237	-56	-0.24	
Total	210	428	86	724			

Table A 1 Apple's Sentiment Analysis and Scores

Class	Sentiment				Score	Normalized Score	
	Negative	Neutral	Positive	Total			
1. Climate Change	1	3	1	5	5	0	0.00
2. Resource Stewardship	0	2	0	2	2	0	0.00
3. Environmental Opportunities	0	0	1	1	1	1	1.00
4. Human Capital	13	35	7	55	-6	-0.11	
5. Product Liability	59	93	15	167	-44	-0.26	
6. Social Opportunities	2	40	16	58	14	0.24	
7. Corporate Governance	32	125	23	180	-9	-0.05	
8. Business Ethics	113	136	16	265	-97	-0.37	
Total	220	434	79	733			

Table A 2 Microsoft's Sentiment Analysis and Scores

Class	Sentiment				Score	Normalized Score
	Negative	Neutral	Positive	Total		
1. Climate Change	1	13	4	18	3	0.17
2. Resource Stewardship	0	5	1	6	1	0.17
3. Environmental Opportunities	1	18	3	22	2	0.09
4. Human Capital	33	98	11	142	-22	-0.15
5. Product Liability	154	294	24	472	-130	-0.28
6. Social Opportunities	5	88	20	113	15	0.13
7. Corporate Governance	25	136	21	182	-4	-0.02
8. Business Ethics	228	281	42	551	-186	-0.34
Total	447	933	126	1506		

Table A 3 Alphabet's Sentiment Analysis and Scores

Class	Sentiment				Score	Normalized Score
	Negative	Neutral	Positive	Total		
1. Climate Change	0	2	0	2	0	0.00
2. Resource Stewardship	0	5	1	6	1	0.17
3. Environmental Opportunities	0	1	2	3	2	0.67
4. Human Capital	18	38	5	61	-13	-0.21
5. Product Liability	160	286	24	470	-136	-0.29
6. Social Opportunities	4	41	2	47	-2	-0.04
7. Corporate Governance	32	106	12	150	-20	-0.13
8. Business Ethics	140	270	12	422	-128	-0.30
Total	354	749	58	1161		

Table A 4 Meta's Sentiment Analysis and Scores

Class	Sentiment				Score	Normalized Score	
	Negative	Neutral	Positive	Total			
1. Climate Change	1	2	0	3	-1	-0.33	
2. Resource Stewardship	5	8	0	13	-5	-0.38	
3. Environmental Opportunities	0	1	0	1	0	0.00	
4. Human Capital	2	6	0	8	-2	-0.25	
5. Product Liability	3	8	0	11	-3	-0.27	
6. Social Opportunities	1	9	0	10	-1	-0.10	
7. Corporate Governance	4	27	4	35	0	0.00	
8. Business Ethics	6	13	1	20	-5	-0.25	
Total	22	74	5	101			

Table A 5 Coca-Cola's Sentiment Analysis and Scores

Class	Sentiment				Score	Normalized Score	
	Negative	Neutral	Positive	Total			
1. Climate Change	0	5	0	5	0	0.00	
2. Resource Stewardship	2	1	0	3	-2	-0.67	
3. Environmental Opportunities	0	0	0	0	0	0.00	
4. Human Capital	0	3	0	3	0	0.00	
5. Product Liability	2	5	0	7	-2	-0.29	
6. Social Opportunities	1	4	5	10	4	0.40	
7. Corporate Governance	1	22	1	24	0	0.00	
8. Business Ethics	5	4		9	-5	-0.56	
Total	11	44	6	61			

Table A 6 PepsiCo's Sentiment Analysis and Scores

Class	Sentiment				Score	Normalized Score	
	Negative	Neutral	Positive	Total			
1. Climate Change	0	0	0	0	0	0	0.00
2. Resource Stewardship	0	2	0	2	2	0	0.00
3. Environmental Opportunities	0	1	0	1	1	0	0.00
4. Human Capital	4	11	0	15	-4	-0.27	
5. Product Liability	43	35	24	102	-19	-0.19	
6. Social Opportunities	6	88	49	143	43	0.30	
7. Corporate Governance	10	31	6	47	-4	-0.09	
8. Business Ethics	16	36	2	54	-14	-0.26	
Total	79	204	81	364			

Table A 7 Pfizer's Sentiment Analysis and Scores

Class	Sentiment				Score	Normalized Score	
	Negative	Neutral	Positive	Total			
1. Climate Change	0	0	0	0	0	0	0.00
2. Resource Stewardship	1	0	0	1	-1	-1.00	
3. Environmental Opportunities	0	0	1	1	1	1.00	
4. Human Capital	1	4		5	-1	-0.20	
5. Product Liability	63	45	14	122	-49	-0.40	
6. Social Opportunities	4	29	15	48	11	0.23	
7. Corporate Governance	3	11	1	15	-2	-0.13	
8. Business Ethics	25	11	1	37	-24	-0.65	
Total	97	100	32	229			

Table A 8 Johnson & Johnson's Sentiment Analysis and Scores