Supplementary Material

Table 3 The initial trust network matrix

	e_1	e_2	e_3	e_4	e_5	e_6	e_7	e_8	e_9	e_{10}	e_{11}	e_{12}	e_{13}	e_{14}	e_{15}	e_{16}	e_{17}	e_{18}	e_{19}	e_{20}
e_1	(1,0)	(0.4,0.3)	(0.9,0.1)	(0.8,0.1)	(0.8,0.1)	(0.6,0.2)	(0.5,0.3)	(0.5,0.3)	(0.6,0.2)	(0.5,0.3)	(0.8,0.1)	(0.7,0.2)	(0.4,0.3)	(0.7,0.2)	(0.4,0.3)	(0.3,0.4)	(0.9,0.1)	(0.8,0.1)	(0.2,0.4)	(0.8,0.1)
e_2	(0.5,0.3)	(1,0)	(0.5,0.3)	(0.8,0.1)	(0.6,0.2)	(0.4,0.3)	(0.7,0.2)	(0.7,0.2)	(0.5,0.3)	(0.8,0.1)	(0.3,0.4)	(0.9,0.1)	(0.7,0.2)	(0.3,0.4)	(0.6,0.2)	(0.5,0.3)	(0.5,0.3)	(0.6,0.2)	(0.4,0.3)	(0.8,0.1)
e_3	(0.8,0.1)	(0.6,0.2)	(1,0)	(0.3,0.4)	(0.7,0.2)	(0.5,0.3)	(0.8,0.1)	(0.5,0.3)	(0.4,0.3)	(0.8,0.1)	(0.7,0.2)	(0.2,0.4)	(0.4,0.3)	(0.8,0.1)	(0.9,0.1)	(0.9,0.1)	(0.8,0.1)	(0.9,0.1)	(0.8,0.1)	(0.4,0.4)
e_4	(0.9,0.1)	(0.7,0.2)	(0.9,0.1)	(1,0)	(0.9,0.1)	(0.8,0.1)	(0.6,0.2)	(0.4,0.3)	(0.7,0.2)	(0.5,0.3)	(0.9,0.1)	(0.5,0.3)	(0.6,0.2)	(0.8,0.1)	(0.7,0.2)	(0.3,0.4)	(0.7,0.2)	(0.5,0.3)	(0.1,0.5)	(0.5,0.3)
e_5	(0.8,0.1)	(0.9,0.1)	(0.3,0.4)	(0.7,0.2)	(1,0)	(0.9,0.1)	(0.6,0.2)	(0.3,0.4)	(0.6,0.2)	(0.3,0.4)	(0.6,0.2)	(0.3,0.4)	(0.9,0.1)	(0.4,0.3)	(0.5,0.3)	(0.3,0.4)	(0.5,0.3)	(0.3,0.4)	(0.9,0.1)	(0.9,0.1)
e_6	(0.4,0.3)	(0.9,0.1)	(0.4,0.3)	(0.6,0.2)	(0.7,0.2)	(1,0)	(0.4,0.3)	(0.7,0.2)	(0.6,0.2)	(0.8,0.1)	(0.7,0.2)	(0.8,0.1)	(0.6,0.2)	(0.6,0.2)	(0.3,0.4)	(0.9,0.1)	(0.9,0.1)	(0.6,0.2)	(0.1,0.5)	(0.3,0.4)
e_7	(0.6,0.2)	(0.7,0.2)	(0.5,0.3)	(0.9,0.1)	(0.7,0.2)	(0.7,0.2)	(1,0)	(0.6,0.2)	(0.8,0.1)	(0.6,0.2)	(0.7,0.2)	(0.7,0.2)	(0.4,0.3)	(0.6,0.2)	(0.7,0.2)	(0.3,0.4)	(0.5,0.3)	(0.5,0.3)	(0.4,0.3)	(0.8,0.1)
e_8	(0.8,0.1)	(0.5,0.3)	(0.6,0.2)	(0.3,0.4)	(0.5,0.3)	(0.9,0.1)	(0.8,0.1)	(1,0)	(0.5,0.3)	(0.3,0.4)	(0.4,0.3)	(0.2,0.4)	(0.7,0.2)	(0.2,0.4)	(0.4,0.3)	(0.1,0.5)	(0.5,0.3)	(0.5,0.3)	(0.6,0.2)	(0.6,0.2)
e_9	(0.8,0.1)	(0.7,0.2)	(0.3,0.4)	(0.7,0.2)	(0.3,0.4)	(0.6,0.2)	(0.9,0.1)	(0.9,0.1)	(1,0)	(0.9,0.1)	(0.4,0.3)	(0.7,0.2)	(0.8,0.1)	(0.7,0.2)	(0.6,0.2)	(0.5,0.3)	(0.5,0.3)	(0.7,0.2)	(0.6,0.2)	(0.8,0.1)
e_{10}	(0.9,0.1)	(0.6,0.2)	(0.9,0.1)	(0.5,0.3)	(0.7,0.2)	(0.5,0.3)	(0.5,0.3)	(0.7,0.2)	(0.5,0.3)	(1,0)	(0.9,0.1)	(0.6,0.2)	(0.5,0.3)	(0.5,0.3)	(0.9,0.1)	(0.9,0.1)	(0.7,0.2)	(0.6,0.2)	(0.7,0.2)	(0.8,0.1)
e_{11}	(0.5,0.3)	(0.3,0.4)	(0.9,0.1)	(0.7,0.2)	(0.5,0.3)	(0.9,0.1)	(0.9,0.1)	(0.7,0.2)	(0.7,0.2)	(0.5,0.3)	(1,0)	(0.9,0.1)	(0.4,0.3)	(0.3,0.4)	(0.8,0.1)	(0.4,0.3)	(0.5,0.3)	(0.6,0.2)	(0.6,0.2)	(0.7,0.2)
e_{12}	(0.7,0.2)	(0.2,0.4)	(0.7,0.2)	(0.6,0.2)	(0.4,0.3)	(0.5,0.3)	(0.7,0.2)	(0.6,0.2)	(0.6,0.2)	(0.6,0.2)	(0.4,0.3)	(1,0)	(0.7,0.2)	(0.9,0.1)	(0.9,0.1)	(0.7,0.2)	(0.6,0.2)	(0.4,0.3)	(0.4,0.3)	(0.3,0.4)
e_{13}	(0.8,0.1)	(0.7,0.2)	(0.3,0.4)	(0.5,0.3)	(0.4,0.4)	(0.5,0.3)	(0.9,0.1)	(0.6,0.2)	(0.3,0.4)	(0.8,0.1)	(0.2,0.4)	(0.9,0.1)	(1,0)	(0.8,0.1)	(0.9,0.1)	(0.6,0.2)	(0.9,0.1)	(0.6,0.2)	(0.7,0.2)	(0.7,0.2)
e_{14}	(0.8,0.1)	(0.6,0.2)	(0.9,0.1)	(0.8,0.1)	(0.6,0.2)	(0.9,0.1)	(0.5,0.3)	(0.9,0.1)	(0.4,0.3)	(0.9,0.1)	(0.3,0.4)	(0.4,0.3)	(0.8,0.1)	(1,0)	(0.8,0.1)	(0.5,0.3)	(0.2,0.4)	(0.4,0.3)	(0.8,0.1)	(0.5,0.3)
e_{15}	(0.6,0.2)	(0.1,0.5)	(0.5,0.3)	(0.6,0.2)	(0.5,0.3)	(0.6,0.2)	(0.9,0.1)	(0.3,0.4)	(0.8,0.1)	(0.4,0.3)	(0.3,0.4)	(0.4,0.3)	(0.7,0.2)	(0.5,0.3)	(1,0)	(0.5,0.3)	(0.9,0.1)	(0.3,0.4)	(0.2,0.4)	(0.9,0.1)
e_{16}	(0.6,0.2)	(0.8,0.1)	(0.6,0.2)	(0.7,0.2)	(0.3,0.4)	(0.8,0.1)	(0.7,0.2)	(0.9,0.1)	(0.5,0.3)	(0.1,0.5)	(0.9,0.1)	(0.5,0.3)	(0.6,0.2)	(0.6,0.2)	(0.6,0.2)	(1,0)	(0.7,0.2)	(0.6,0.2)	(0.7,0.2)	(0.7,0.2)
e_{17}	(0.5,0.3)	(0.7,0.2)	(0.6,0.2)	(0.4,0.3)	(0.5,0.3)	(0.6,0.2)	(0.8,0.1)	(0.5,0.3)	(0.6,0.2)	(0.7,0.2)	(0.2,0.4)	(0.3,0.4)	(0.9,0.1)	(0.7,0.2)	(0.5,0.3)	(0.6,0.2)	(1,0)	(0.9,0.1)	(0.9,0.1)	(0.6,0.2)
e_{18}	(0.7,0.2)	(0.9,0.1)	(0.7,0.2)	(0.5,0.3)	(0.7,0.2)	(0.4,0.3)	(0.6,0.2)	(0.8,0.1)	(0.5,0.3)	(0.3,0.4)	(0.3,0.4)	(0.9,0.1)	(0.5,0.3)	(0.7,0.2)	(0.3,0.4)	(0.3,0.4)	(0.9,0.1)	(1,0)	(0.1,0.5)	(0.3,0.4)
e_{19}	(0.8,0.1)	(0.5,0.3)	(0.3,0.4)	(0.8,0.1)	(0.6,0.2)	(0.6,0.2)	(0.4,0.3)	(0.8,0.1)	(0.4,0.3)	(0.8,0.1)	(0.4,0.3)	(0.5,0.3)	(0.6,0.2)	(0.8,0.1)	(0.4,0.3)	(0.4,0.3)	(0.6,0.2)	(0.3,0.4)	(1,0)	(0.3,0.4)
e_{20}	(0.4,0.3)	(0.7,0.2)	(0.5,0.3)	(0.6,0.2)	(0.8,0.1)	(0.8,0.1)	(0.4,0.3)	(0.9,0.1)	(0.7,0.2)	(0.4,0.3)	(0.7,0.2)	(0.3,0.4)	(0.5,0.3)	(0.5,0.3)	(0.4,0.3)	(0.6,0.2)	(0.4,0.3)	(0.9,0.1)	(0.5,0.3)	(1,0)

Table 4 Hesitation degree matrix of initial trust relationships

	e_1	e_2	e_3	e_4	e_5	e_6	e_7	e_8	e_9	e_{10}	e_{11}	e_{12}	e_{13}	e_{14}	e_{15}	e_{16}	e_{17}	e_{18}	e_{19}	e_{20}
e_1	0	0.3	0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.1	0.3	0.3	0	0.1	0.4	0.1
e_2	0.2	0	0.2	0.1	0.2	0.3	0.1	0.1	0.2	0.1	0.3	0	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.1
e_3	0.1	0.2	0	0.3	0.1	0.2	0.1	0.2	0.3	0.1	0.1	0.4	0.3	0.1	0	0	0.1	0	0.1	0.2
e_4	0	0.1	0	0	0	0.1	0.2	0.3	0.1	0.2	0	0.2	0.2	0.1	0.1	0.3	0.1	0.2	0.4	0.2
e_5	0.1	0	0.2	0.1	0	0	0.2	0.3	0.2	0.3	0.2	0.2	0	0.3	0.2	0.3	0.2	0.2	0	0
e_6	0.3	0	0.3	0.2	0.1	0	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0	0	0.2	0.4	0.3
e_7	0.2	0.1	0.2	0	0.1	0.1	0	0.2	0.1	0.2	0.1	0.1	0.3	0.2	0.1	0.3	0.2	0.2	0.3	0.1
e_8	0.1	0.2	0.2	0.3	0.2	0	0.1	0	0.2	0.3	0.3	0.4	0.1	0.4	0.3	0.4	0.2	0.2	0.2	0.2
e_9	0.1	0.1	0.3	0.1	0.3	0.2	0	0	0	0	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1
e_{10}	0	0.2	0	0.2	0.1	0.2	0.2	0.1	0.2	0	0	0.2	0.2	0.2	0	0	0.1	0.2	0.1	0.1
e_{11}	0.2	0.3	0	0.1	0.2	0	0	0.1	0.1	0.2	0	0	0.3	0.3	0.1	0.3	0.2	0.2	0.2	0.1
e_{12}	0.1	0.4	0.1	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0	0.1	0	0	0.1	0.2	0.3	0.3	0.3
e_{13}	0.1	0.1	0.3	0.2	0.2	0.2	0	0.2	0.2	0.1	0.4	0	0	0.1	0	0.2	0	0.2	0.1	0.1
e_{14}	0.1	0.2	0	0.1	0.2	0	0.2	0	0.3	0	0.3	0.3	0.1	0	0.1	0.2	0.4	0.3	0.1	0.2
e_{15}	0.2	0.4	0.2	0.2	0.2	0.2	0	0.2	0.1	0.3	0.3	0.3	0.1	0.2	0	0.2	0	0.2	0.4	0
e_{16}	0.2	0.1	0.2	0.1	0.3	0.1	0.1	0	0.2	0.4	0	0.2	0.2	0.2	0.2	0	0.1	0.2	0.1	0.1
e_{17}	0.2	0.1	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.4	0.3	0	0.1	0.2	0.2	0	0	0	0.2
e_{18}	0.1	0	0.1	0.2	0.1	0.3	0.2	0.1	0.2	0.3	0.3	0	0.2	0.1	0.3	0.3	0	0	0.4	0.3
e_{19}	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.1	0.3	0.1	0.3	0.2	0.2	0.1	0.3	0.3	0.2	0.3	0	0.3
e_{20}	0.3	0.1	0.2	0.2	0.1	0.1	0.3	0	0.1	0.3	0.1	0.3	0.2	0.2	0.3	0.2	0.3	0	0.2	0

Table 5 The initial trust degree matrix

	e_1	e_2	e_3	e_4	e_5	e_6	e_7	e_8	e_9	e_{10}	e_{11}	e_{12}	e_{13}	e_{14}	e_{15}	e_{16}	e_{17}	e_{18}	e_{19}	e_{20}
e_1	1.00	0.15	0.76	0.76	0.70	0.26	0.30	0.50	0.58	0.60	0.50	0.50	0.48	0.61	0.26	0.17	0.60	0.61	0.38	0.48
e_2	0.15	1.00	0.30	0.61	0.66	0.59	0.50	0.37	0.37	0.58	0.00	0.52	0.50	0.17	0.02	0.50	0.37	0.66	0.15	0.61
e_3	0.76	0.30	1.00	0.53	0.24	0.15	0.50	0.30	0.00	0.76	0.69	0.22	0.00	0.76	0.60	0.66	0.58	0.69	0.39	0.10
e_4	0.76	0.61	0.53	1.00	0.69	0.58	0.66	0.00	0.50	0.20	0.69	0.30	0.30	0.70	0.45	0.25	0.33	0.20	0.28	0.30
e_5	0.70	0.66	0.24	0.69	1.00	0.69	0.45	0.06	0.17	0.25	0.30	0.00	0.54	0.26	0.20	0.00	0.20	0.25	0.66	0.76
e_6	0.26	0.59	0.15	0.58	0.69	1.00	0.33	0.69	0.40	0.50	0.69	0.50	0.30	0.66	0.17	0.76	0.66	0.26	0.02	0.41
e_7	0.30	0.50	0.50	0.66	0.45	0.33	1.00	0.58	0.76	0.30	0.69	0.50	0.59	0.30	0.69	0.25	0.50	0.30	0.10	0.48
e_8	0.50	0.37	0.30	0.00	0.06	0.69	0.58	1.00	0.60	0.25	0.33	0.13	0.45	0.52	0.00	0.43	0.20	0.50	0.58	0.66
e_9	0.58	0.37	0.00	0.50	0.17	0.40	0.76	0.60	1.00	0.60	0.33	0.45	0.41	0.33	0.58	0.20	0.30	0.37	0.26	0.61
e_{10}	0.60	0.58	0.76	0.20	0.25	0.50	0.30	0.25	0.60	1.00	0.60	0.40	0.50	0.60	0.59	0.43	0.50	0.17	0.61	0.48
e_{11}	0.50	0.00	0.69	0.69	0.30	0.69	0.69	0.33	0.33	0.60	1.00	0.59	0.00	0.00	0.41	0.59	0.01	0.17	0.26	0.50
e_{12}	0.50	0.52	0.22	0.30	0.00	0.50	0.50	0.13	0.45	0.40	0.59	1.00	0.69	0.59	0.59	0.37	0.17	0.59	0.15	0.00
e_{13}	0.48	0.50	0.00	0.30	0.54	0.30	0.59	0.45	0.41	0.50	0.00	0.69	1.00	0.70	0.69	0.40	0.80	0.30	0.45	0.37
e_{14}	0.61	0.17	0.76	0.70	0.26	0.66	0.30	0.52	0.33	0.60	0.00	0.59	0.70	1.00	0.50	0.30	0.22	0.33	0.70	0.20
e_{15}	0.26	0.02	0.60	0.45	0.20	0.17	0.69	0.00	0.58	0.59	0.41	0.59	0.69	0.50	1.00	0.30	0.60	0.00	0.00	0.59
e_{16}	0.17	0.50	0.66	0.25	0.00	0.76	0.25	0.43	0.20	0.43	0.59	0.37	0.40	0.30	0.30	1.00	0.45	0.17	0.33	0.45
e_{17}	0.60	0.37	0.58	0.33	0.20	0.66	0.50	0.20	0.30	0.50	0.01	0.17	0.80	0.22	0.60	0.45	1.00	0.80	0.66	0.26
e_{18}	0.61	0.66	0.69	0.20	0.25	0.26	0.30	0.50	0.37	0.17	0.17	0.59	0.30	0.33	0.00	0.17	0.80	1.00	0.00	0.53
e_{19}	0.38	0.15	0.39	0.28	0.66	0.02	0.10	0.58	0.26	0.61	0.26	0.15	0.45	0.70	0.00	0.33	0.66	0.00	1.00	0.06
e_{20}	0.48	0.61	0.10	0.30	0.76	0.41	0.48	0.66	0.61	0.48	0.50	0.00	0.37	0.20	0.59	0.45	0.26	0.53	0.06	1.00

Table 6 Hesitation degree matrix of initial trust degrees

	e_1	e_2	e_3	e_4	e_5	e_6	e_7	e_8	e_9	e_{10}	e_{11}	e_{12}	e_{13}	e_{14}	e_{15}	e_{16}	e_{17}	e_{18}	e_{19}	e_{20}
e_1	0.00	0.25	0.04	0.04	0.10	0.25	0.20	0.15	0.14	0.06	0.15	0.10	0.19	0.10	0.25	0.26	0.06	0.10	0.25	0.19
e_2	0.25	0.00	0.20	0.10	0.06	0.08	0.10	0.15	0.15	0.14	0.30	0.12	0.10	0.24	0.36	0.15	0.15	0.06	0.25	0.10
e_3	0.04	0.20	0.00	0.09	0.17	0.25	0.15	0.20	0.30	0.04	0.03	0.24	0.30	0.04	0.06	0.06	0.14	0.03	0.18	0.21
e_4	0.04	0.10	0.09	0.00	0.03	0.14	0.06	0.29	0.10	0.20	0.03	0.20	0.20	0.10	0.15	0.20	0.19	0.20	0.30	0.20
e_5	0.10	0.06	0.17	0.03	0.00	0.03	0.15	0.25	0.26	0.20	0.20	0.26	0.07	0.25	0.20	0.30	0.20	0.17	0.06	0.04
e_6	0.25	0.08	0.25	0.14	0.03	0.00	0.19	0.03	0.20	0.15	0.03	0.15	0.20	0.06	0.26	0.04	0.06	0.25	0.36	0.20
e_7	0.20	0.10	0.15	0.06	0.15	0.19	0.00	0.14	0.04	0.20	0.03	0.10	0.08	0.20	0.03	0.20	0.15	0.20	0.30	0.19
e_8	0.15	0.15	0.20	0.29	0.25	0.03	0.14	0.00	0.06	0.20	0.19	0.31	0.15	0.12	0.27	0.16	0.20	0.15	0.14	0.06
e_9	0.14	0.15	0.30	0.10	0.26	0.20	0.04	0.06	0.00	0.06	0.19	0.15	0.18	0.19	0.14	0.20	0.20	0.15	0.25	0.10
e_{10}	0.06	0.14	0.04	0.20	0.20	0.15	0.20	0.20	0.06	0.00	0.06	0.20	0.15	0.06	0.08	0.16	0.10	0.26	0.10	0.19
e_{11}	0.15	0.30	0.03	0.03	0.20	0.03	0.03	0.19	0.19	0.06	0.00	0.08	0.36	0.30	0.20	0.08	0.30	0.26	0.25	0.10
e_{12}	0.10	0.12	0.24	0.20	0.26	0.15	0.10	0.31	0.15	0.20	0.08	0.00	0.03	0.08	0.08	0.15	0.26	0.08	0.25	0.30
e_{13}	0.19	0.10	0.30	0.20	0.07	0.20	0.08	0.15	0.18	0.15	0.36	0.03	0.00	0.10	0.03	0.20	0.00	0.20	0.15	0.15
e_{14}	0.10	0.24	0.04	0.10	0.25	0.06	0.20	0.12	0.19	0.06	0.30	0.08	0.10	0.00	0.15	0.20	0.24	0.19	0.10	0.20
e_{15}	0.25	0.36	0.06	0.15	0.20	0.26	0.03	0.27	0.14	0.08	0.20	0.08	0.03	0.15	0.00	0.20	0.06	0.26	0.36	0.08
e_{16}	0.26	0.15	0.06	0.20	0.30	0.04	0.20	0.16	0.20	0.16	0.08	0.15	0.20	0.20	0.20	0.00	0.15	0.26	0.19	0.15
e_{17}	0.06	0.15	0.14	0.19	0.20	0.06	0.15	0.20	0.20	0.10	0.30	0.26	0.00	0.24	0.06	0.15	0.00	0.00	0.06	0.25
e_{18}	0.10	0.06	0.03	0.20	0.17	0.25	0.20	0.15	0.15	0.26	0.26	0.08	0.20	0.19	0.26	0.26	0.00	0.00	0.35	0.09
e_{19}	0.25	0.25	0.18	0.30	0.06	0.36	0.30	0.14	0.25	0.10	0.25	0.25	0.15	0.10	0.36	0.19	0.06	0.35	0.00	0.25
e_{20}	0.19	0.10	0.21	0.20	0.04	0.20	0.19	0.06	0.10	0.19	0.10	0.30	0.15	0.20	0.08	0.15	0.25	0.09	0.25	0.00

Table 7 The similarity matrix

	e_1	e_2	e_3	e_4	e_5	e_6	e_7	e_8	e_9	e_{10}	e_{11}	e_{12}	e_{13}	e_{14}	e_{15}	e_{16}	e_{17}	e_{18}	e_{19}	e_{20}
e_1	1.00	0.67	0.73	0.72	0.63	0.76	0.68	0.69	0.64	0.77	0.67	0.68	0.78	0.71	0.70	0.68	0.70	0.74	0.62	0.77
e_2	0.67	1.00	0.70	0.76	0.78	0.79	0.73	0.77	0.78	0.71	0.73	0.81	0.69	0.68	0.73	0.68	0.72	0.73	0.77	0.73
e_3	0.73	0.70	1.00	0.76	0.74	0.78	0.78	0.78	0.74	0.76	0.74	0.65	0.78	0.75	0.83	0.73	0.74	0.80	0.75	0.79
e_4	0.72	0.76	0.76	1.00	0.78	0.78	0.73	0.77	0.66	0.74	0.68	0.79	0.80	0.72	0.74	0.66	0.75	0.75	0.71	0.75
e_5	0.63	0.78	0.74	0.78	1.00	0.76	0.73	0.83	0.74	0.78	0.75	0.77	0.71	0.73	0.71	0.76	0.73	0.72	0.72	0.78
e_6	0.76	0.79	0.78	0.78	0.76	1.00	0.79	0.76	0.77	0.75	0.73	0.81	0.74	0.73	0.77	0.79	0.78	0.78	0.75	0.81
e_7	0.68	0.73	0.78	0.73	0.73	0.79	1.00	0.76	0.81	0.77	0.75	0.73	0.74	0.71	0.86	0.80	0.77	0.71	0.78	0.78
e_8	0.69	0.77	0.78	0.77	0.83	0.76	0.76	1.00	0.74	0.84	0.78	0.77	0.76	0.75	0.76	0.70	0.79	0.73	0.77	0.80
e_9	0.64	0.78	0.74	0.66	0.74	0.77	0.81	0.74	1.00	0.73	0.81	0.73	0.69	0.68	0.79	0.78	0.73	0.74	0.80	0.79
e_{10}	0.77	0.71	0.76	0.74	0.78	0.75	0.77	0.84	0.73	1.00	0.73	0.75	0.78	0.73	0.76	0.78	0.77	0.68	0.67	0.85
e_{11}	0.67	0.73	0.74	0.68	0.75	0.73	0.75	0.78	0.81	0.73	1.00	0.71	0.74	0.70	0.78	0.74	0.73	0.81	0.82	0.78
e_{12}	0.68	0.81	0.65	0.79	0.77	0.81	0.73	0.77	0.73	0.75	0.71	1.00	0.70	0.68	0.66	0.70	0.75	0.68	0.71	0.73
e_{13}	0.78	0.69	0.78	0.80	0.71	0.74	0.74	0.76	0.69	0.78	0.74	0.70	1.00	0.69	0.75	0.68	0.69	0.74	0.69	0.83
e_{14}	0.71	0.68	0.75	0.72	0.73	0.73	0.71	0.75	0.68	0.73	0.70	0.68	0.69	1.00	0.68	0.67	0.78	0.69	0.70	0.71
e_{15}	0.70	0.73	0.83	0.74	0.71	0.77	0.86	0.76	0.79	0.76	0.78	0.66	0.75	0.68	1.00	0.77	0.76	0.81	0.78	0.79
e_{16}	0.68	0.68	0.73	0.66	0.76	0.79	0.80	0.70	0.78	0.78	0.74	0.70	0.68	0.67	0.77	1.00	0.72	0.75	0.68	0.78
e_{17}	0.70	0.72	0.74	0.75	0.73	0.78	0.77	0.79	0.73	0.77	0.73	0.75	0.69	0.78	0.76	0.72	1.00	0.72	0.75	0.74
e_{18}	0.74	0.73	0.80	0.75	0.72	0.78	0.71	0.73	0.74	0.68	0.81	0.68	0.74	0.69	0.81	0.75	0.72	1.00	0.78	0.78
e_{19}	0.62	0.77	0.75	0.71	0.72	0.75	0.78	0.77	0.80	0.67	0.82	0.71	0.69	0.70	0.78	0.68	0.75	0.78	1.00	0.74
e_{20}	0.77	0.73	0.79	0.75	0.78	0.81	0.78	0.80	0.79	0.85	0.78	0.73	0.83	0.71	0.79	0.78	0.74	0.78	0.74	1.00

Table 8 Hesitation degree matrix of the similarity

	e_1	e_2	e_3	e_4	e_5	e_6	e_7	e_8	e_9	e_{10}	e_{11}	e_{12}	e_{13}	e_{14}	e_{15}	e_{16}	e_{17}	e_{18}	e_{19}	e_{20}
e_1	0.00	0.18	0.18	0.17	0.18	0.20	0.22	0.20	0.20	0.24	0.20	0.21	0.18	0.18	0.21	0.25	0.18	0.21	0.18	0.21
e_2	0.18	0.00	0.13	0.12	0.13	0.14	0.17	0.14	0.15	0.18	0.14	0.16	0.13	0.13	0.15	0.20	0.13	0.15	0.13	0.16
e_3	0.18	0.13	0.00	0.12	0.13	0.14	0.17	0.14	0.15	0.18	0.14	0.16	0.13	0.13	0.15	0.20	0.13	0.15	0.13	0.16
e_4	0.17	0.12	0.12	0.00	0.12	0.13	0.16	0.13	0.14	0.18	0.13	0.15	0.12	0.12	0.15	0.19	0.12	0.15	0.12	0.15
e_5	0.18	0.13	0.13	0.12	0.00	0.14	0.17	0.14	0.15	0.18	0.14	0.16	0.13	0.13	0.15	0.20	0.13	0.15	0.13	0.16
e_6	0.20	0.14	0.14	0.13	0.14	0.00	0.18	0.16	0.17	0.20	0.16	0.18	0.14	0.14	0.17	0.21	0.15	0.17	0.15	0.18
e_7	0.22	0.17	0.17	0.16	0.17	0.18	0.00	0.18	0.19	0.23	0.18	0.20	0.17	0.17	0.20	0.24	0.17	0.20	0.17	0.20
e_8	0.20	0.14	0.14	0.13	0.14	0.16	0.18	0.00	0.17	0.20	0.16	0.18	0.14	0.14	0.17	0.21	0.15	0.17	0.15	0.18
e_9	0.20	0.15	0.15	0.14	0.15	0.17	0.19	0.17	0.00	0.21	0.17	0.18	0.15	0.15	0.18	0.22	0.15	0.18	0.15	0.18
e_{10}	0.24	0.18	0.18	0.18	0.18	0.20	0.23	0.20	0.21	0.00	0.20	0.22	0.18	0.18	0.21	0.25	0.19	0.21	0.19	0.22
e_{11}	0.20	0.14	0.14	0.13	0.14	0.16	0.18	0.16	0.17	0.20	0.00	0.18	0.14	0.14	0.17	0.21	0.15	0.17	0.15	0.18
e_{12}	0.21	0.16	0.16	0.15	0.16	0.18	0.20	0.18	0.18	0.22	0.18	0.00	0.16	0.16	0.19	0.23	0.16	0.19	0.16	0.19
e_{13}	0.18	0.13	0.13	0.12	0.13	0.14	0.17	0.14	0.15	0.18	0.14	0.16	0.00	0.13	0.15	0.20	0.13	0.15	0.13	0.16
e_{14}	0.18	0.13	0.13	0.12	0.13	0.14	0.17	0.14	0.15	0.18	0.14	0.16	0.13	0.00	0.15	0.20	0.13	0.15	0.13	0.16
e_{15}	0.21	0.15	0.15	0.15	0.15	0.17	0.20	0.17	0.18	0.21	0.17	0.19	0.15	0.15	0.00	0.23	0.16	0.18	0.16	0.19
e_{16}	0.25	0.20	0.20	0.19	0.20	0.21	0.24	0.21	0.22	0.25	0.21	0.23	0.20	0.20	0.23	0.00	0.20	0.23	0.20	0.23
e_{17}	0.18	0.13	0.13	0.12	0.13	0.15	0.17	0.15	0.15	0.19	0.15	0.16	0.13	0.13	0.16	0.20	0.00	0.16	0.13	0.16
e_{18}	0.21	0.15	0.15	0.15	0.15	0.17	0.20	0.17	0.18	0.21	0.17	0.19	0.15	0.15	0.18	0.23	0.16	0.00	0.16	0.19
e_{19}	0.18	0.13	0.13	0.12	0.13	0.15	0.17	0.15	0.15	0.19	0.15	0.16	0.13	0.13	0.16	0.20	0.13	0.16	0.00	0.16
e_{20}	0.21	0.16	0.16	0.15	0.16	0.18	0.20	0.18	0.18	0.22	0.18	0.19	0.16	0.16	0.19	0.23	0.16	0.19	0.16	0.00

Table 9 The hybrid trust matrix in the first iteration

	c_1	c_2	c_3	c_4	c_5	c_6	c_7	c_8	c_9	c_{10}	c_{11}	c_{12}	c_{13}	c_{14}	c_{15}	c_{16}	c_{17}	c_{18}	c_{19}	c_{20}
e_1	1.00	0.42	0.74	0.74	0.67	0.52	0.49	0.59	0.61	0.68	0.58	0.59	0.63	0.66	0.49	0.43	0.65	0.67	0.50	0.62
e_2	0.42	1.00	0.51	0.68	0.72	0.69	0.61	0.57	0.57	0.64	0.40	0.66	0.59	0.44	0.42	0.59	0.54	0.69	0.48	0.67
e_3	0.74	0.51	1.00	0.64	0.50	0.48	0.64	0.55	0.41	0.76	0.71	0.45	0.44	0.76	0.71	0.69	0.66	0.74	0.58	0.46
e_4	0.74	0.68	0.64	1.00	0.73	0.68	0.70	0.42	0.58	0.48	0.68	0.56	0.56	0.71	0.60	0.45	0.55	0.48	0.52	0.53
e_5	0.67	0.72	0.50	0.73	1.00	0.72	0.59	0.47	0.48	0.52	0.54	0.41	0.62	0.51	0.46	0.41	0.47	0.48	0.69	0.77
e_6	0.52	0.69	0.48	0.68	0.72	1.00	0.56	0.72	0.59	0.62	0.71	0.65	0.53	0.69	0.49	0.77	0.72	0.53	0.44	0.61
e_7	0.49	0.61	0.64	0.70	0.59	0.56	1.00	0.67	0.78	0.53	0.72	0.61	0.66	0.51	0.76	0.52	0.63	0.51	0.47	0.63
e_8	0.59	0.57	0.55	0.42	0.47	0.72	0.67	1.00	0.67	0.54	0.56	0.48	0.61	0.63	0.40	0.56	0.51	0.61	0.67	0.73
e_9	0.61	0.57	0.41	0.58	0.48	0.59	0.78	0.67	1.00	0.66	0.57	0.59	0.55	0.51	0.68	0.48	0.52	0.55	0.55	0.70
e_{10}	0.68	0.64	0.76	0.48	0.52	0.62	0.53	0.54	0.66	1.00	0.66	0.57	0.64	0.66	0.67	0.59	0.63	0.44	0.64	0.66
e_{11}	0.58	0.40	0.71	0.68	0.54	0.71	0.72	0.56	0.57	0.66	1.00	0.65	0.42	0.39	0.60	0.66	0.41	0.51	0.56	0.64
e_{12}	0.59	0.66	0.45	0.56	0.41	0.65	0.61	0.48	0.59	0.57	0.65	1.00	0.69	0.64	0.62	0.52	0.48	0.64	0.45	0.39
e_{13}	0.63	0.59	0.44	0.56	0.62	0.53	0.66	0.61	0.55	0.64	0.42	0.69	1.00	0.70	0.72	0.54	0.75	0.53	0.57	0.59
e_{14}	0.66	0.44	0.76	0.71	0.51	0.69	0.51	0.63	0.51	0.66	0.39	0.64	0.70	1.00	0.59	0.49	0.52	0.52	0.70	0.46
e_{15}	0.49	0.42	0.71	0.60	0.46	0.49	0.76	0.40	0.68	0.67	0.60	0.62	0.72	0.59	1.00	0.53	0.68	0.43	0.44	0.69
e_{16}	0.43	0.59	0.69	0.45	0.41	0.77	0.52	0.56	0.48	0.59	0.66	0.52	0.54	0.49	0.53	1.00	0.58	0.47	0.51	0.61
e_{17}	0.65	0.54	0.66	0.55	0.47	0.72	0.63	0.51	0.52	0.63	0.41	0.48	0.75	0.52	0.68	0.58	1.00	0.76	0.71	0.52
e_{18}	0.67	0.69	0.74	0.48	0.48	0.53	0.51	0.61	0.55	0.44	0.51	0.64	0.53	0.52	0.43	0.47	0.76	1.00	0.44	0.65
e_{19}	0.50	0.48	0.58	0.52	0.69	0.44	0.47	0.67	0.55	0.64	0.56	0.45	0.57	0.70	0.44	0.51	0.71	0.44	1.00	0.42
e_{20}	0.62	0.67	0.46	0.53	0.77	0.61	0.63	0.73	0.70	0.66	0.64	0.39	0.59	0.46	0.69	0.61	0.52	0.65	0.42	1.00

Table 11 Global weights of DMs, intra-cluster weights and cluster weights

Cluster	DM	The global weight of DM	The intra-cluster weight of DM	The weight of cluster
C_1	e_1	0.0508	0.1451	0.3503
	e_3	0.0493	0.1469	
	e_{10}	0.0514	0.1488	
	e_{14}	0.0509	0.1427	
	e_{17}	0.0486	0.1451	
	e_{18}	0.0527	0.1376	
	e_{19}	0.0521	0.1339	
C_2	e_7	0.0495	0.2077	0.2509
	e_9	0.0499	0.1988	
	e_{12}	0.0521	0.192	
	e_{13}	0.0495	0.2039	
	e_{15}	0.0482	0.1977	
C_3	e_6	0.0511	0.2108	0.25
	e_8	0.05	0.198	
	e_{11}	0.0496	0.1979	
	e_{16}	0.0473	0.189	
	e_{20}	0.0508	0.2043	
C_4	e_2	0.0482	0.3312	0.1488
	e_4	0.0469	0.3421	
	e_5	0.0511	0.3267	

Table 13 Consensus degrees of individuals, clusters and the entire group

Cluster	DM	*ICD*	*CICD*	*CECD*	*GCD*
C_1	e_1	0.7772	0.8159	0.924	0.9189
	e_3	0.854			
	e_{10}	0.8051			
	e_{14}	0.7997			
	e_{17}	0.834			
	e_{18}	0.8351			
	e_{19}	0.8055			
C_2	e_7	0.8687	0.8284	0.9239	
	e_9	0.8203			
	e_{12}	0.7988			
	e_{13}	0.8224			
	e_{15}	0.829			
C_3	e_6	0.8527	0.8432	0.9465	
	e_8	0.8238			
	e_{11}	0.839			
	e_{16}	0.8251			
	e_{20}	0.8729			
C_4	e_2	0.8581	0.8643	0.8518	
	e_4	0.8627			
	e_5	0.8721			

e_1's initial preference matrix

	r_1	r_2	r_3
x_1	(0.2,0.6)	(0.3,0.4)	(0.7,0.2)
x_2	(0.4,0.3)	(0.8,0.1)	(0.3,0.4)
x_3	(0.2,0.4)	(0.9,0.1)	(0.4,0.3)
x_4	(0.5,0.3)	(0.1,0.5)	(0.5,0.3)

e_2's initial preference matrix

	r_1	r_2	r_3
x_1	(0.4,0.5)	(0.7,0.2)	(0.2,0.6)
x_2	(0.7,0.2)	(0.5,0.4)	(0.1,0.7)
x_3	(0.3,0.6)	(0.7,0.2)	(0.8,0.1)
x_4	(0.7,0.2)	(0.7,0.2)	(0.2,0.6)

e_3's initial preference matrix

	r_1	r_2	r_3
x_1	(0.6,0.2)	(0.4,0.3)	(0.9,0.1)
x_2	(0.9,0.1)	(0.5,0.3)	(0.6,0.2)
x_3	(0.7,0.2)	(0.9,0.1)	(0.5,0.4)
x_4	(0.6,0.4)	(0.5,0.4)	(0.3,0.4)

e_4's initial preference matrix

	r_1	r_2	r_3
x_1	(0.5,0.3)	(0.4,0.5)	(0.6,0.3)
x_2	(0.8,0.1)	(0.6,0.3)	(0.3,0.6)
x_3	(0.6,0.3)	(0.3,0.6)	(0.8,0.2)
x_4	(0.7,0.1)	(0.3,0.6)	(0.5,0.4)

e_5's initial preference matrix

	r_1	r_2	r_3
x_1	(0.5,0.2)	(0.8,0.1)	(0.3,0.6)
x_2	(0.6,0.4)	(0.5,0.3)	(0.5,0.4)
x_3	(0.5,0.2)	(0.3,0.5)	(0.6,0.3)
x_4	(0.9,0.1)	(0.6,0.4)	(0.3,0.6)

e_6's initial preference matrix

	r_1	r_2	r_3
x_1	(0.4,0.5)	(0.7,0.1)	(0.8,0.1)
x_2	(0.7,0.1)	(0.7,0.2)	(0.3,0.6)
x_3	(0.6,0.2)	(0.6,0.2)	(0.5,0.3)
x_4	(0.5,0.3)	(0.7,0.1)	(0.4,0.5)

e_7's initial preference matrix

	r_1	r_2	r_3
x_1	(0.8,0.1)	(0.3,0.5)	(0.4,0.3)
x_2	(0.7,0.1)	(0.4,0.4)	(0.5,0.2)
x_3	(0.8,0.1)	(0.6,0.2)	(0.4,0.3)
x_4	(0.5,0.2)	(0.8,0.1)	(0.3,0.5)

e_8's initial preference matrix

	r_1	r_2	r_3
x_1	(0.5,0.3)	(0.5,0.2)	(0.2,0.7)
x_2	(0.6,0.3)	(0.7,0.1)	(0.7,0.2)
x_3	(0.7,0.1)	(0.6,0.2)	(0.7,0.1)
x_4	(0.9,0.1)	(0.4,0.5)	(0.3,0.5)

e_9's initial preference matrix

	r_1	r_2	r_3
x_1	(0.6,0.3)	(0.8,0.1)	(0.2,0.5)
x_2	(0.6,0.2)	(0.3,0.6)	(0.6,0.1)
x_3	(0.7,0.2)	(0.8,0.1)	(0.4,0.2)
x_4	(0.5,0.4)	(0.7,0.1)	(0.1,0.8)

e_{10}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.5,0.2)	(0.3,0.3)	(0.5,0.3)
x_2	(0.4,0.3)	(0.8,0.1)	(0.7,0.1)
x_3	(0.5,0.2)	(0.5,0.2)	(0.5,0.2)
x_4	(0.8,0.1)	(0.4,0.4)	(0.2,0.6)

e_{11}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.6,0.2)	(0.9,0.1)	(0.3,0.5)
x_2	(0.5,0.3)	(0.5,0.4)	(0.7,0.2)
x_3	(0.7,0.1)	(0.8,0.1)	(0.6,0.1)
x_4	(0.2,0.6)	(0.6,0.3)	(0.7,0.1)

e_{12}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.4,0.4)	(0.6,0.2)	(0.2,0.5)
x_2	(0.6,0.2)	(0.9,0.1)	(0.1,0.7)
x_3	(0.6,0.3)	(0.2,0.5)	(0.6,0.1)
x_4	(0.7,0.1)	(0.7,0.1)	(0.5,0.4)

e_{13}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.7,0.2)	(0.4,0.5)	(0.6,0.3)
x_2	(0.8,0.2)	(0.8,0.1)	(0.6,0.2)
x_3	(0.4,0.4)	(0.8,0.1)	(0.5,0.3)
x_4	(0.7,0.1)	(0.3,0.5)	(0.9,0.1)

e_{14}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.3,0.5)	(0.5,0.3)	(0.5,0.5)
x_2	(0.1,0.9)	(0.6,0.4)	(0.6,0.3)
x_3	(0.9,0.1)	(0.5,0.3)	(0.4,0.5)
x_4	(0.6,0.3)	(0.3,0.4)	(0.4,0.3)

e_{15}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.7,0.1)	(0.4,0.5)	(0.8,0.1)
x_2	(0.6,0.1)	(0.4,0.4)	(0.6,0.1)
x_3	(0.8,0.1)	(0.8,0.1)	(0.7,0.1)
x_4	(0.4,0.3)	(0.6,0.3)	(0.2,0.6)

e_{16}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.7,0.1)	(0.9,0.1)	(0.7,0.1)
x_2	(0.4,0.4)	(0.5,0.2)	(0.5,0.2)
x_3	(0.5,0.2)	(0.4,0.2)	(0.3,0.3)
x_4	(0.5,0.2)	(0.7,0.1)	(0.1,0.5)

e_{17}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.3,0.5)	(0.4,0.4)	(0.5,0.2)
x_2	(0.4,0.5)	(0.7,0.1)	(0.7,0.2)
x_3	(0.8,0.1)	(0.5,0.4)	(0.9,0.1)
x_4	(0.5,0.5)	(0.7,0.1)	(0.4,0.5)

e_{18}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.5,0.3)	(0.8,0.1)	(0.8,0.1)
x_2	(0.6,0.3)	(0.4,0.3)	(0.4,0.3)
x_3	(0.6,0.3)	(0.9,0.1)	(0.8,0.1)
x_4	(0.3,0.4)	(0.4,0.3)	(0.6,0.1)

e_{19}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.5,0.4)	(0.7,0.2)	(0.2,0.6)
x_2	(0.8,0.1)	(0.4,0.3)	(0.9,0.1)
x_3	(0.9,0.1)	(0.8,0.1)	(0.7,0.2)
x_4	(0.3,0.4)	(0.8,0.1)	(0.5,0.3)

e_{20}'s initial preference matrix

	r_1	r_2	r_3
x_1	(0.6,0.1)	(0.7,0.1)	(0.5,0.3)
x_2	(0.7,0.2)	(0.8,0.1)	(0.6,0.2)
x_3	(0.5,0.2)	(0.8,0.2)	(0.5,0.2)
x_4	(0.4,0.3)	(0.3,0.5)	(0.3,0.6)