

Analysis and visualization of social media content

Tereza Pařilová

x146314@fi.muni.cz



Masaryk University
Faculty of Informatics



Project

- Research focusing on analysing the social media content and its **visualization**
 - Time series
 - Users' typology („Key players“)
 - Sentiment
- Results used in commercial sphere

Visualization

- Psychology of color perception

- + blue, red, green
- o purple, black
- - yellow, orange

- Visually impaired people (disorder of color perception)

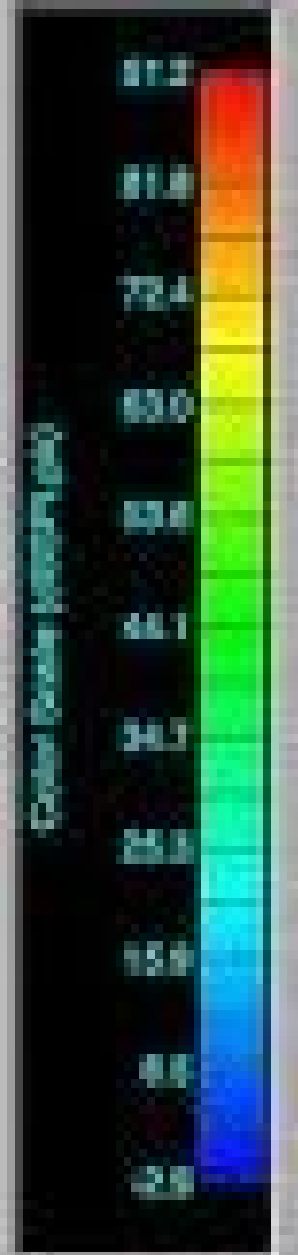
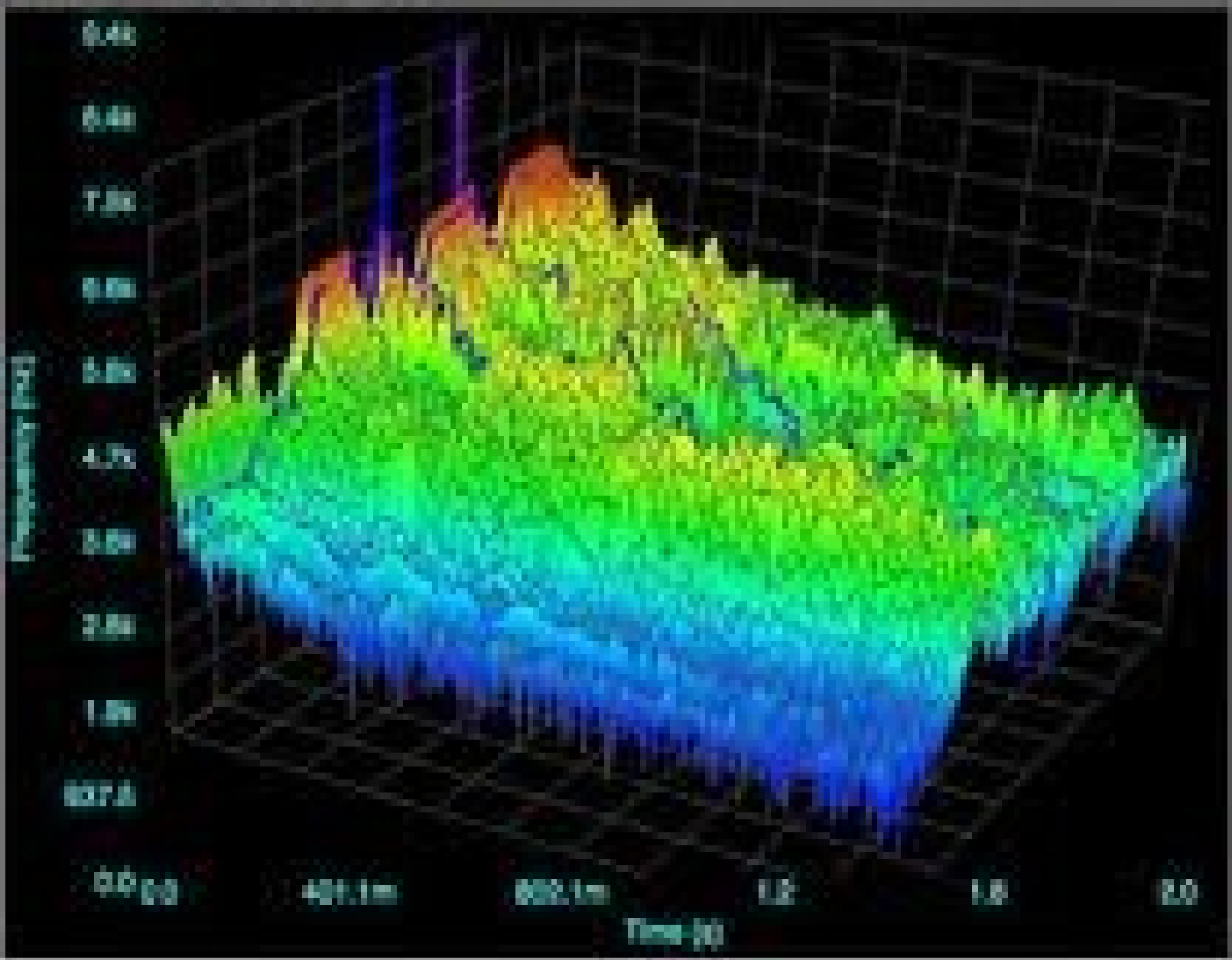


Normal perception

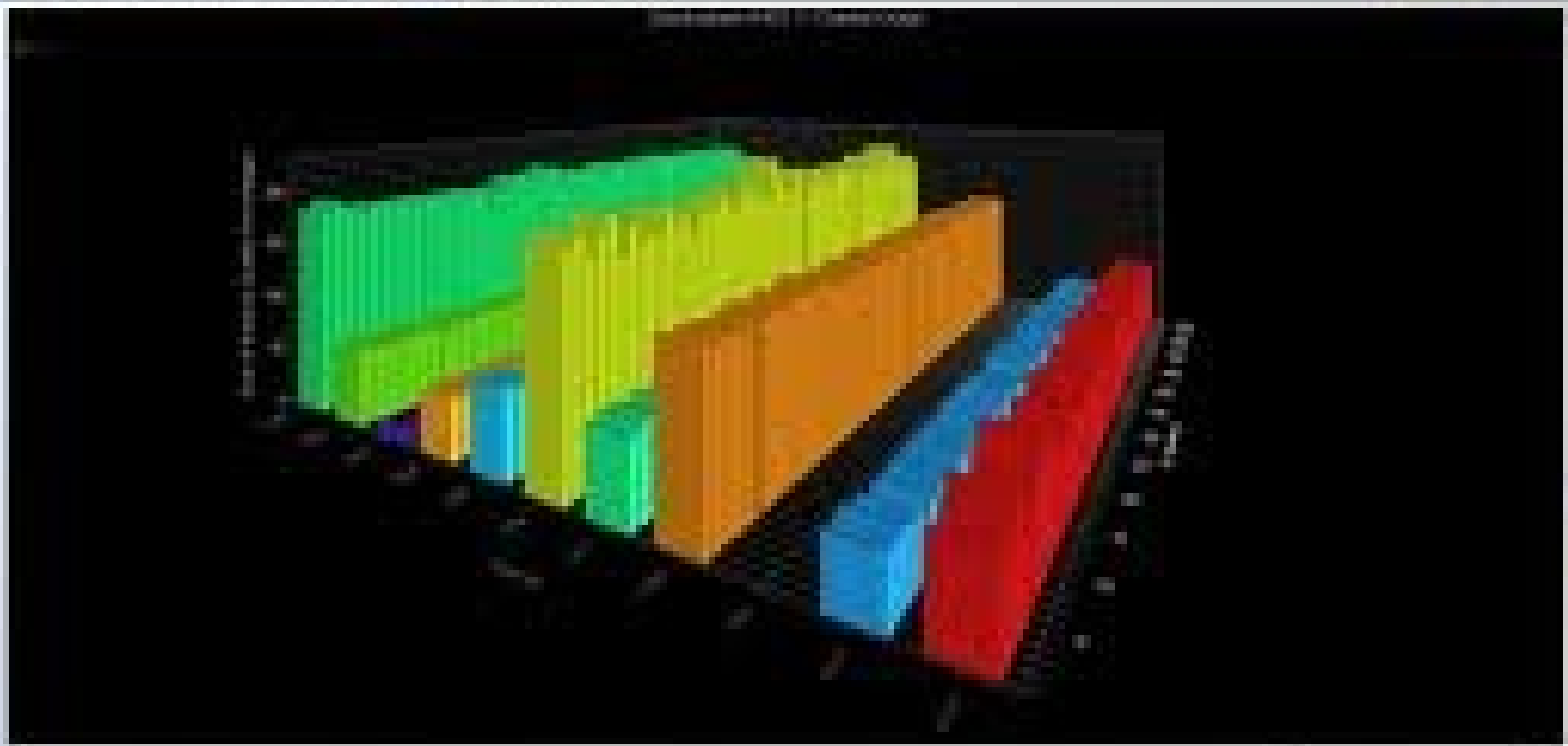


Disorder of perception

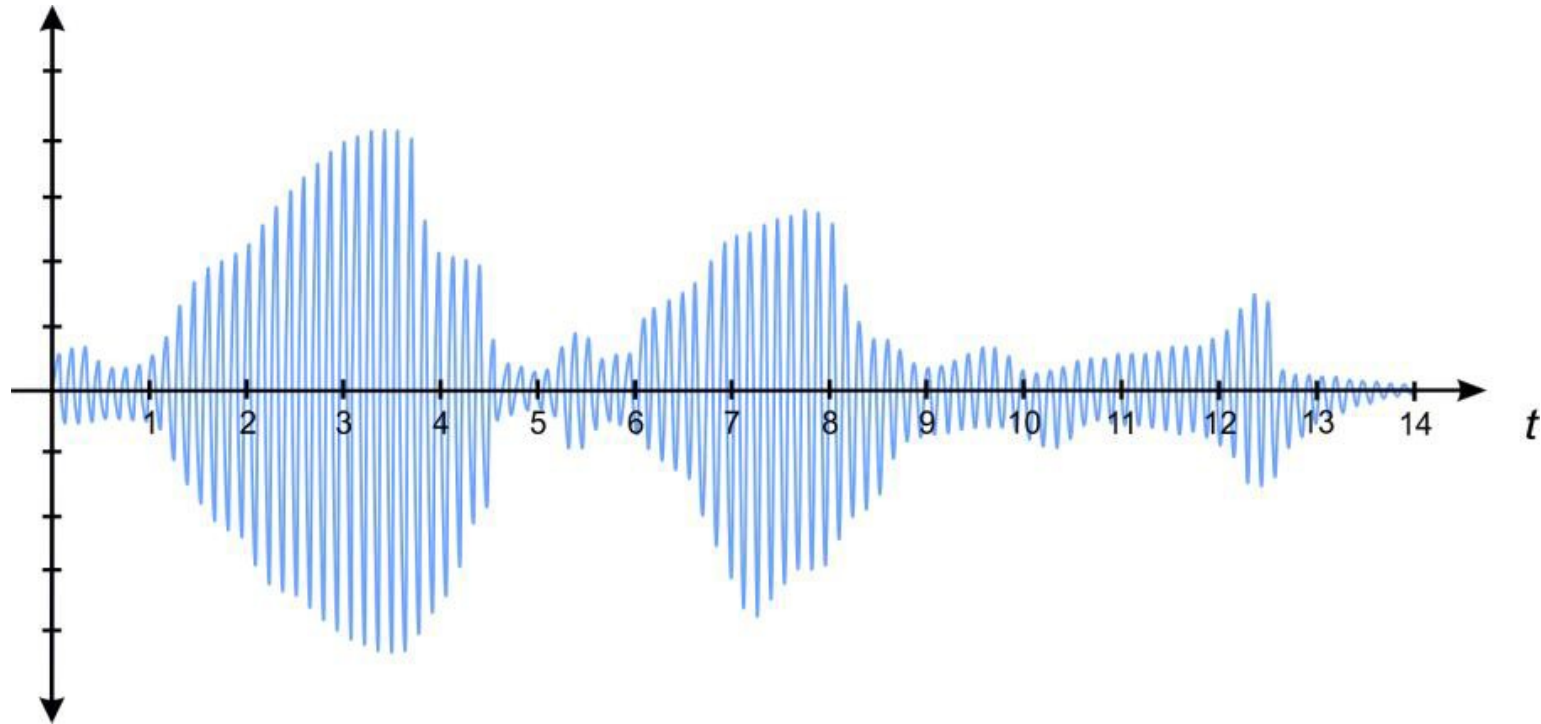
Spectrogram



Item	Category	Unit	Quantity	Price	Total	Item	Category	Unit	Quantity	Price	Total
Item 1	Category 1	Unit 1	100	10	1000	Item 2	Category 2	Unit 2	200	20	4000
Item 3	Category 3	Unit 3	300	30	9000	Item 4	Category 4	Unit 4	400	40	16000
Item 5	Category 5	Unit 5	500	50	25000	Item 6	Category 6	Unit 6	600	60	36000
Item 7	Category 7	Unit 7	700	70	49000	Item 8	Category 8	Unit 8	800	80	64000
Item 9	Category 9	Unit 9	900	90	81000	Item 10	Category 10	Unit 10	1000	100	100000
Item 11	Category 11	Unit 11	1100	110	121000	Item 12	Category 12	Unit 12	1200	120	144000
Item 13	Category 13	Unit 13	1300	130	169000	Item 14	Category 14	Unit 14	1400	140	196000
Item 15	Category 15	Unit 15	1500	150	225000	Item 16	Category 16	Unit 16	1600	160	256000
Item 17	Category 17	Unit 17	1700	170	289000	Item 18	Category 18	Unit 18	1800	180	324000
Item 19	Category 19	Unit 19	1900	190	361000	Item 20	Category 20	Unit 20	2000	200	400000
Item 21	Category 21	Unit 21	2100	210	441000	Item 22	Category 22	Unit 22	2200	220	484000
Item 23	Category 23	Unit 23	2300	230	529000	Item 24	Category 24	Unit 24	2400	240	576000
Item 25	Category 25	Unit 25	2500	250	625000	Item 26	Category 26	Unit 26	2600	260	676000
Item 27	Category 27	Unit 27	2700	270	729000	Item 28	Category 28	Unit 28	2800	280	784000
Item 29	Category 29	Unit 29	2900	290	841000	Item 30	Category 30	Unit 30	3000	300	900000
Item 31	Category 31	Unit 31	3100	310	961000	Item 32	Category 32	Unit 32	3200	320	1024000
Item 33	Category 33	Unit 33	3300	330	1089000	Item 34	Category 34	Unit 34	3400	340	1156000
Item 35	Category 35	Unit 35	3500	350	1225000	Item 36	Category 36	Unit 36	3600	360	1296000
Item 37	Category 37	Unit 37	3700	370	1369000	Item 38	Category 38	Unit 38	3800	380	1444000
Item 39	Category 39	Unit 39	3900	390	1513000	Item 40	Category 40	Unit 40	4000	400	1600000
Item 41	Category 41	Unit 41	4100	410	1671000	Item 42	Category 42	Unit 42	4200	420	1764000
Item 43	Category 43	Unit 43	4300	430	1839000	Item 44	Category 44	Unit 44	4400	440	1936000
Item 45	Category 45	Unit 45	4500	450	2025000	Item 46	Category 46	Unit 46	4600	460	2116000
Item 47	Category 47	Unit 47	4700	470	2213000	Item 48	Category 48	Unit 48	4800	480	2304000
Item 49	Category 49	Unit 49	4900	490	2401000	Item 50	Category 50	Unit 50	5000	500	2500000
Item 51	Category 51	Unit 51	5100	510	2600000	Item 52	Category 52	Unit 52	5200	520	2704000
Item 53	Category 53	Unit 53	5300	530	2809000	Item 54	Category 54	Unit 54	5400	540	2916000
Item 55	Category 55	Unit 55	5500	550	3025000	Item 56	Category 56	Unit 56	5600	560	3136000
Item 57	Category 57	Unit 57	5700	570	3249000	Item 58	Category 58	Unit 58	5800	580	3364000
Item 59	Category 59	Unit 59	5900	590	3481000	Item 60	Category 60	Unit 60	6000	600	3600000
Item 61	Category 61	Unit 61	6100	610	3721000	Item 62	Category 62	Unit 62	6200	620	3856000
Item 63	Category 63	Unit 63	6300	630	3969000	Item 64	Category 64	Unit 64	6400	640	4124000
Item 65	Category 65	Unit 65	6500	650	4225000	Item 66	Category 66	Unit 66	6600	660	4404000
Item 67	Category 67	Unit 67	6700	670	4489000	Item 68	Category 68	Unit 68	6800	680	4696000
Item 69	Category 69	Unit 69	6900	690	4761000	Item 70	Category 70	Unit 70	7000	700	4900000
Item 71	Category 71	Unit 71	7100	710	5041000	Item 72	Category 72	Unit 72	7200	720	5156000
Item 73	Category 73	Unit 73	7300	730	5329000	Item 74	Category 74	Unit 74	7400	740	5424000
Item 75	Category 75	Unit 75	7500	750	5613000	Item 76	Category 76	Unit 76	7600	760	5704000
Item 77	Category 77	Unit 77	7700	770	5901000	Item 78	Category 78	Unit 78	7800	780	6096000
Item 79	Category 79	Unit 79	7900	790	6193000	Item 80	Category 80	Unit 80	8000	800	6400000
Item 81	Category 81	Unit 81	8100	810	6491000	Item 82	Category 82	Unit 82	8200	820	6716000
Item 83	Category 83	Unit 83	8300	830	6805000	Item 84	Category 84	Unit 84	8400	840	7044000
Item 85	Category 85	Unit 85	8500	850	7125000	Item 86	Category 86	Unit 86	8600	860	7384000
Item 87	Category 87	Unit 87	8700	870	7451000	Item 88	Category 88	Unit 88	8800	880	7736000
Item 89	Category 89	Unit 89	8900	890	7789000	Item 90	Category 90	Unit 90	9000	900	8100000
Item 91	Category 91	Unit 91	9100	910	8129000	Item 92	Category 92	Unit 92	9200	920	8484000
Item 93	Category 93	Unit 93	9300	930	8561000	Item 94	Category 94	Unit 94	9400	940	8876000
Item 95	Category 95	Unit 95	9500	950	9005000	Item 96	Category 96	Unit 96	9600	960	9284000
Item 97	Category 97	Unit 97	9700	970	9451000	Item 98	Category 98	Unit 98	9800	980	9704000
Item 99	Category 99	Unit 99	9900	990	9881000	Item 100	Category 100	Unit 100	10000	1000	10000000



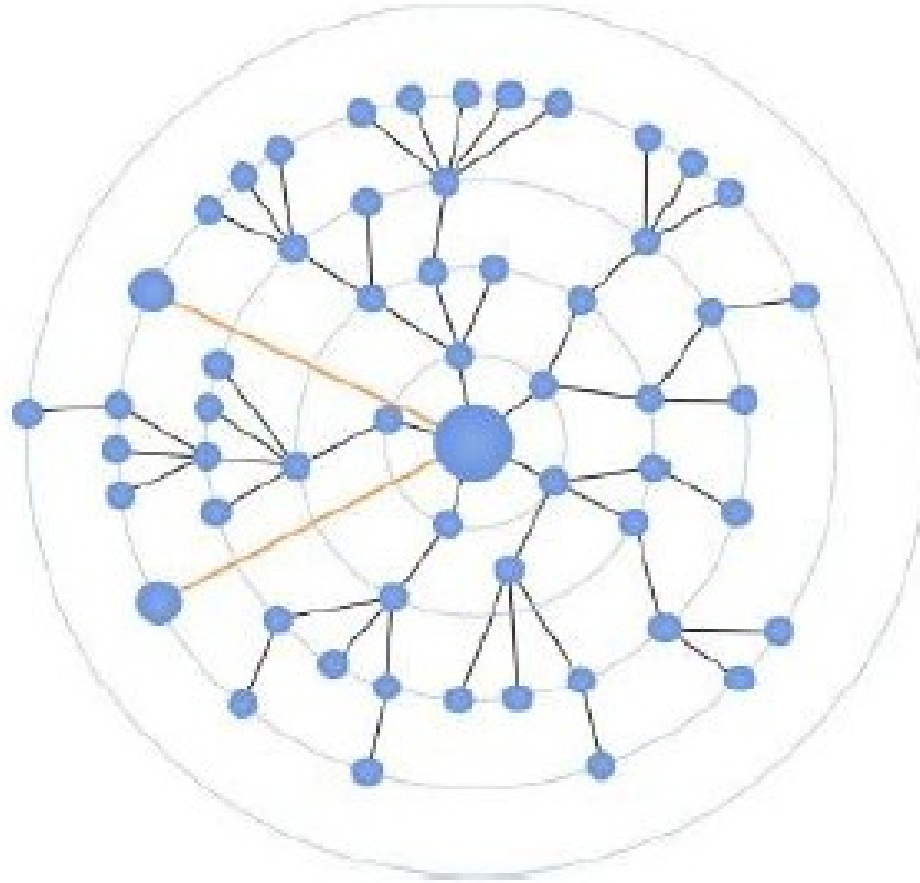
Specific graphs



Cummulation of users in specific time
(extent)

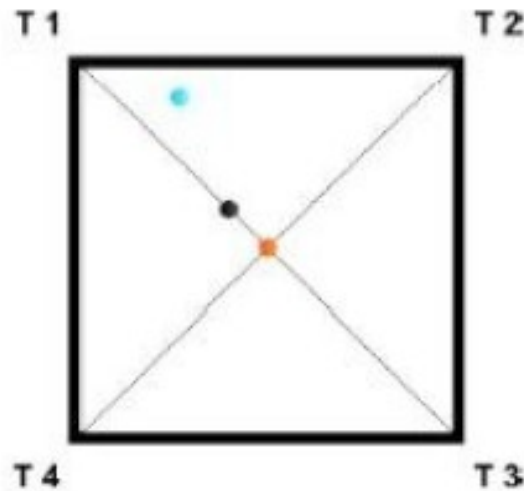
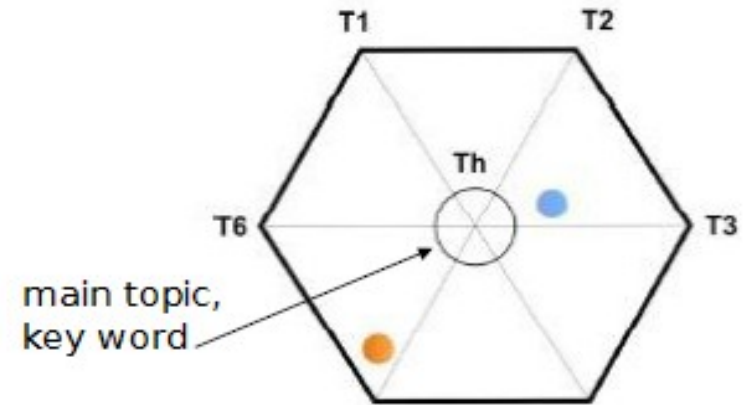
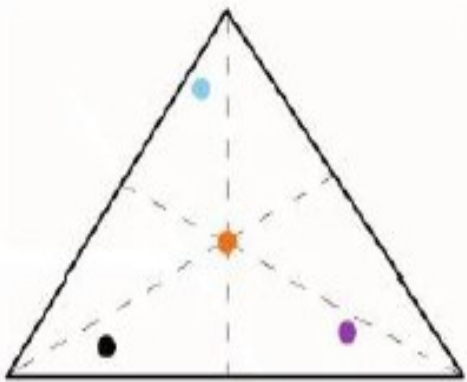
after the 1st round of elections

Clusters



Cummulation of contributions or users (grouping)
(e.g. Facebook – friendship list)

Polygons



Explain relationship between key words or topics discussed

Results of Sample Testing

- More than 70% of test participants find polygons useful for their work
- About 83% of test participants want to use clusters for visualizing their analysis results
- 98% of test participants think Specific graph illustrating cummulation of variables is very valuable
- A business oriented company is using our results and designs for commercial purposes.

Thank you for your attention.

