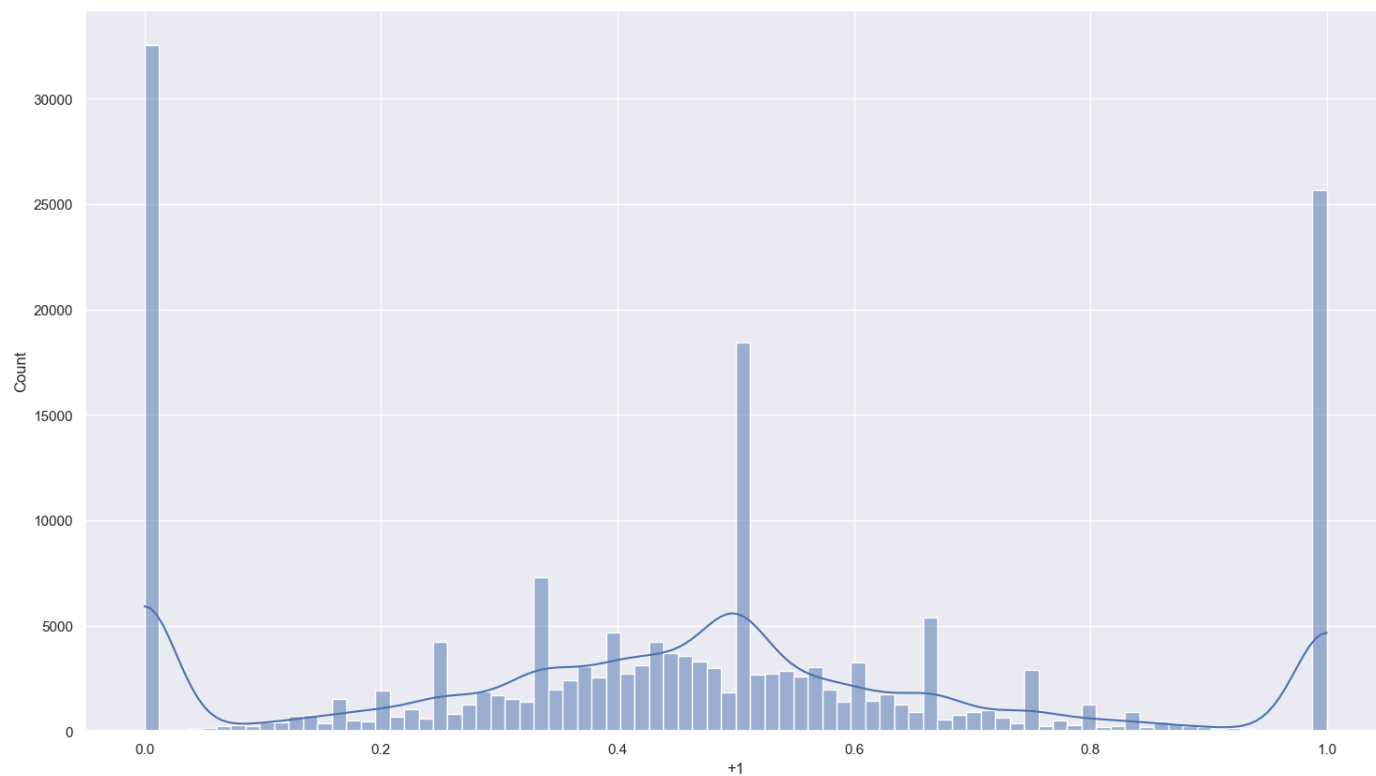
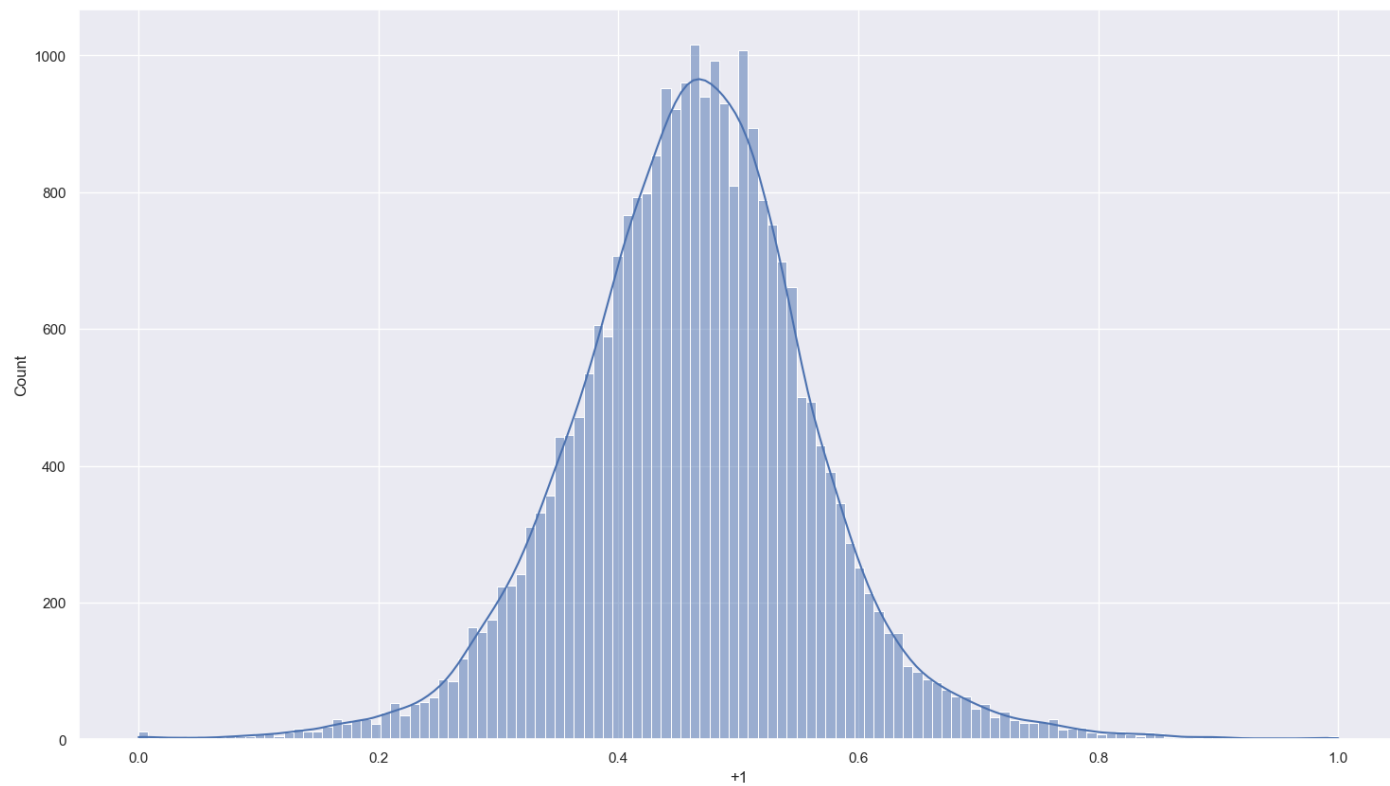


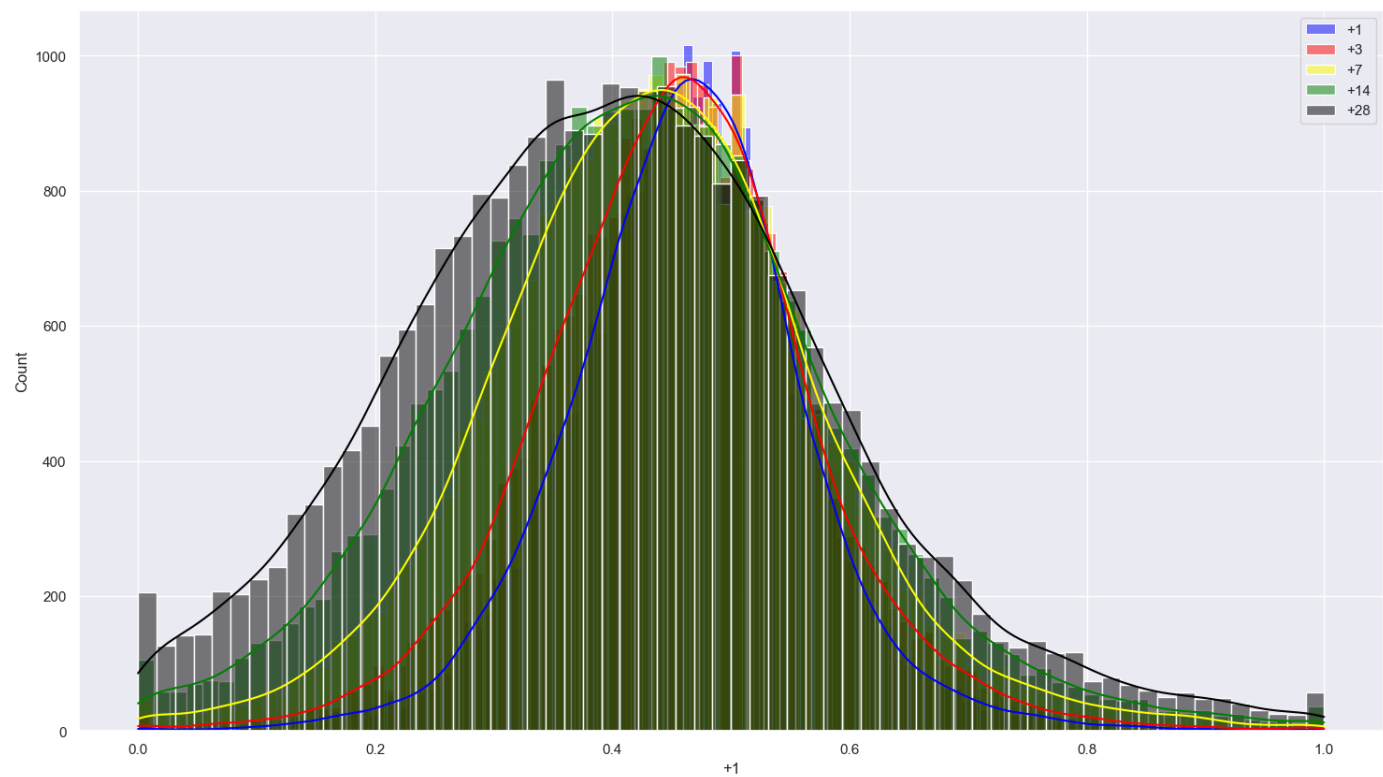
Plots for 100 files analysis  
By user (+1)



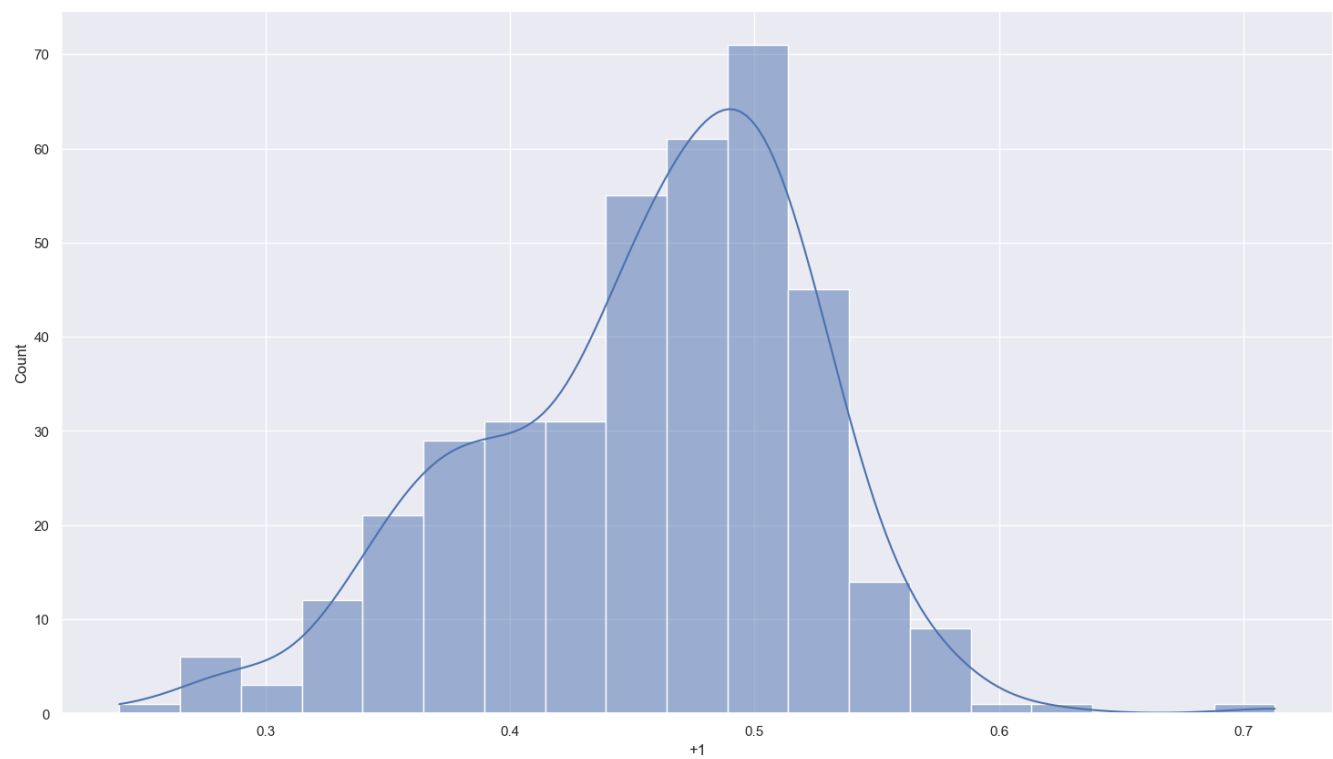
By user (+1), message count greater than 100



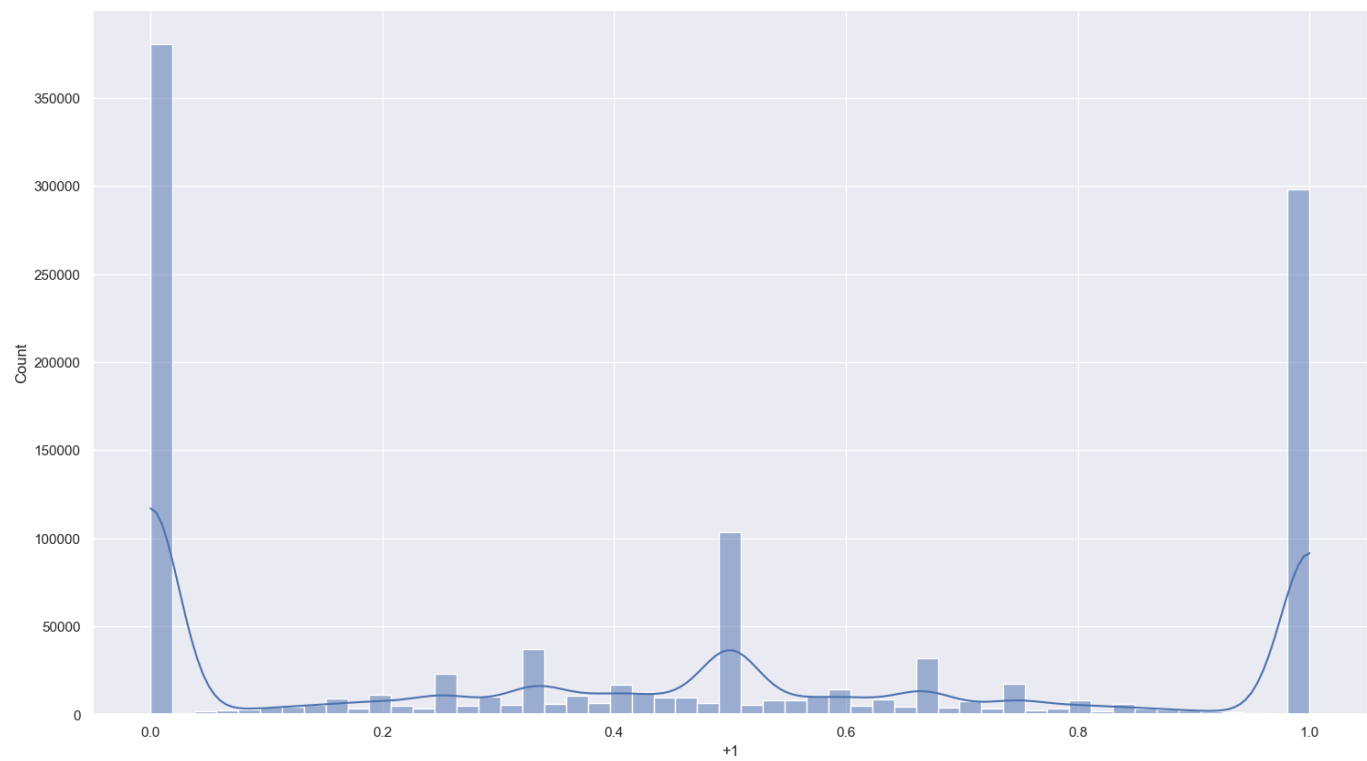
By user, all time, count greater than 100



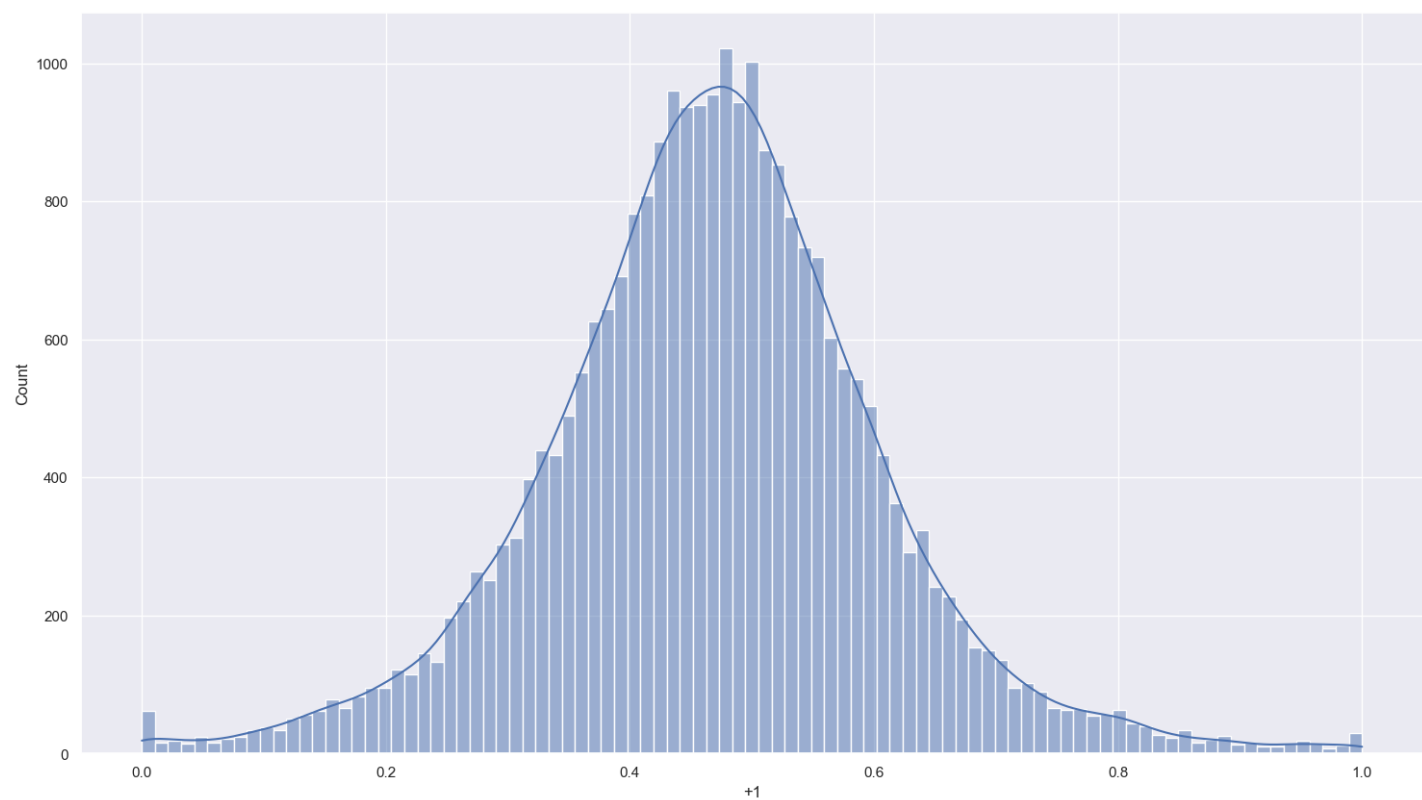
By symbol (+1)



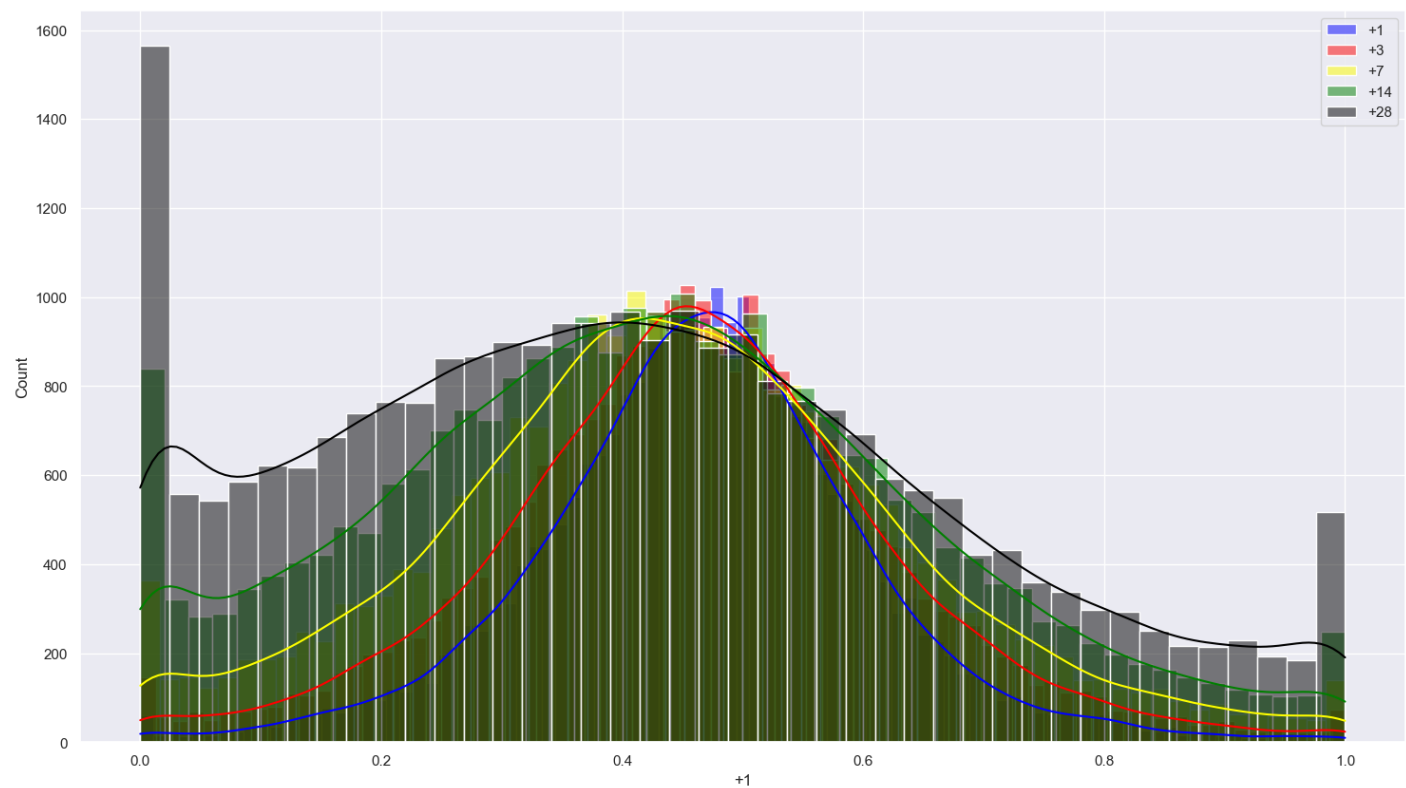
By user and symbol (+1)



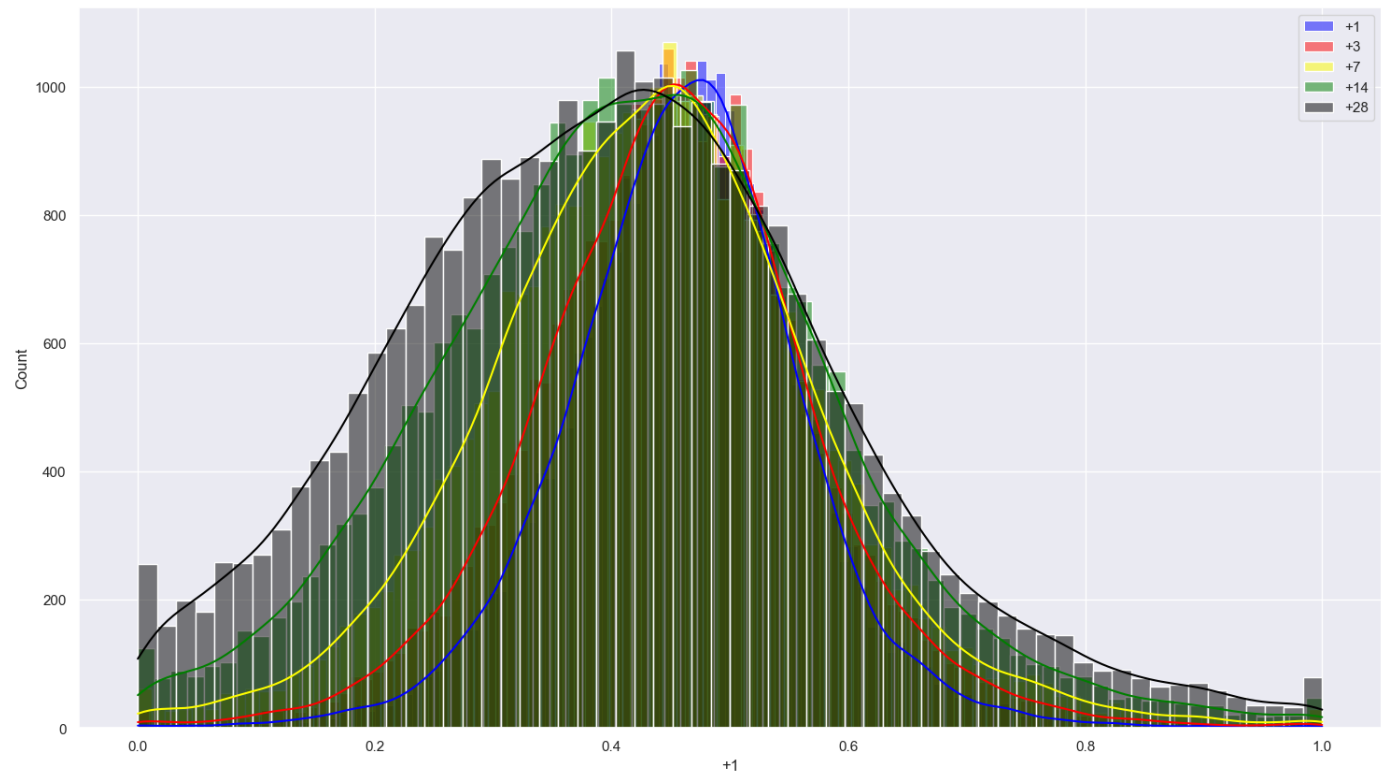
By user and symbol (+1) message count greater than 100



By user and symbol, all time, count greater than 100



Quarter plots  
Quarter 1

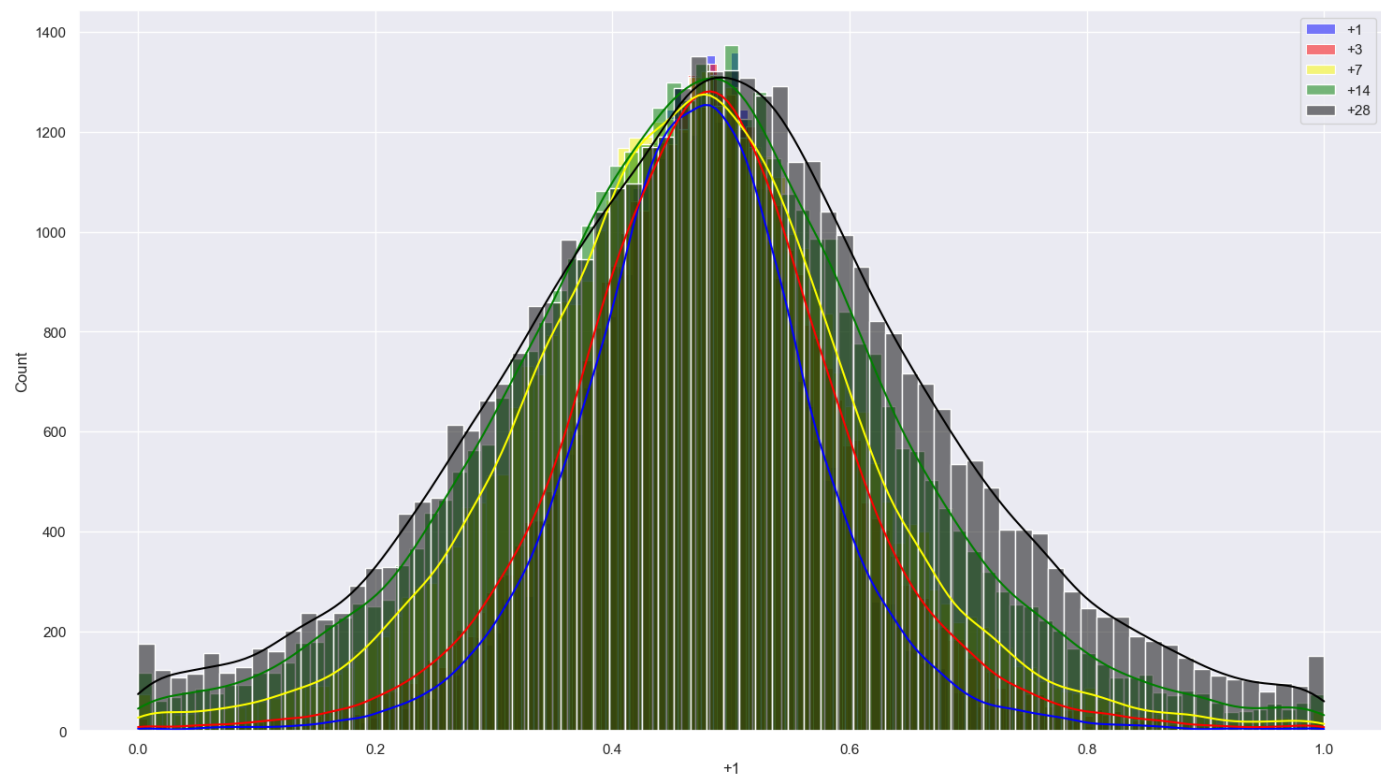


	Unnamed: 0	user_id	+1	+3	+7	+14	+28	message_count
count	21616.000000	2.161600e+04	21616.000000	21616.000000	21616.000000	21616.000000	21616.000000	21616.000000
mean	10807.500000	1.222410e+06	0.461511	0.453656	0.435248	0.420744	0.405990	693.220115
std	6240.146045	5.796076e+05	0.094383	0.113404	0.134896	0.158864	0.180610	1176.525391
min	0.000000	5.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000	150.000000
25%	5403.750000	8.388795e+05	0.404329	0.383444	0.349618	0.316442	0.279925	219.000000
50%	10807.500000	1.259832e+06	0.463819	0.454955	0.436237	0.421293	0.404884	355.000000
75%	16211.250000	1.560992e+06	0.519492	0.521645	0.517787	0.520352	0.519231	700.000000
max	21615.000000	3.013736e+06	0.996078	1.000000	1.000000	1.000000	1.000000	32033.000000

+ Code

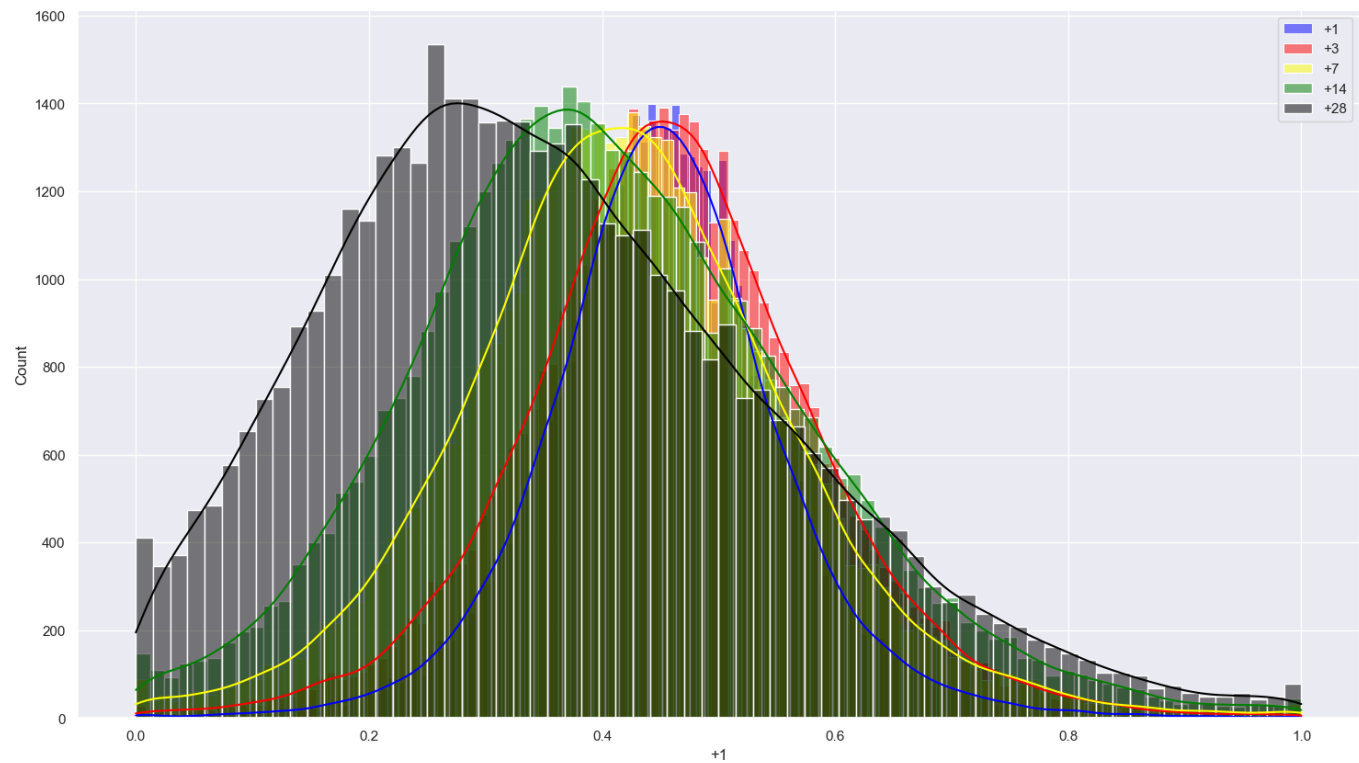
+ Markdown

Quarter 2



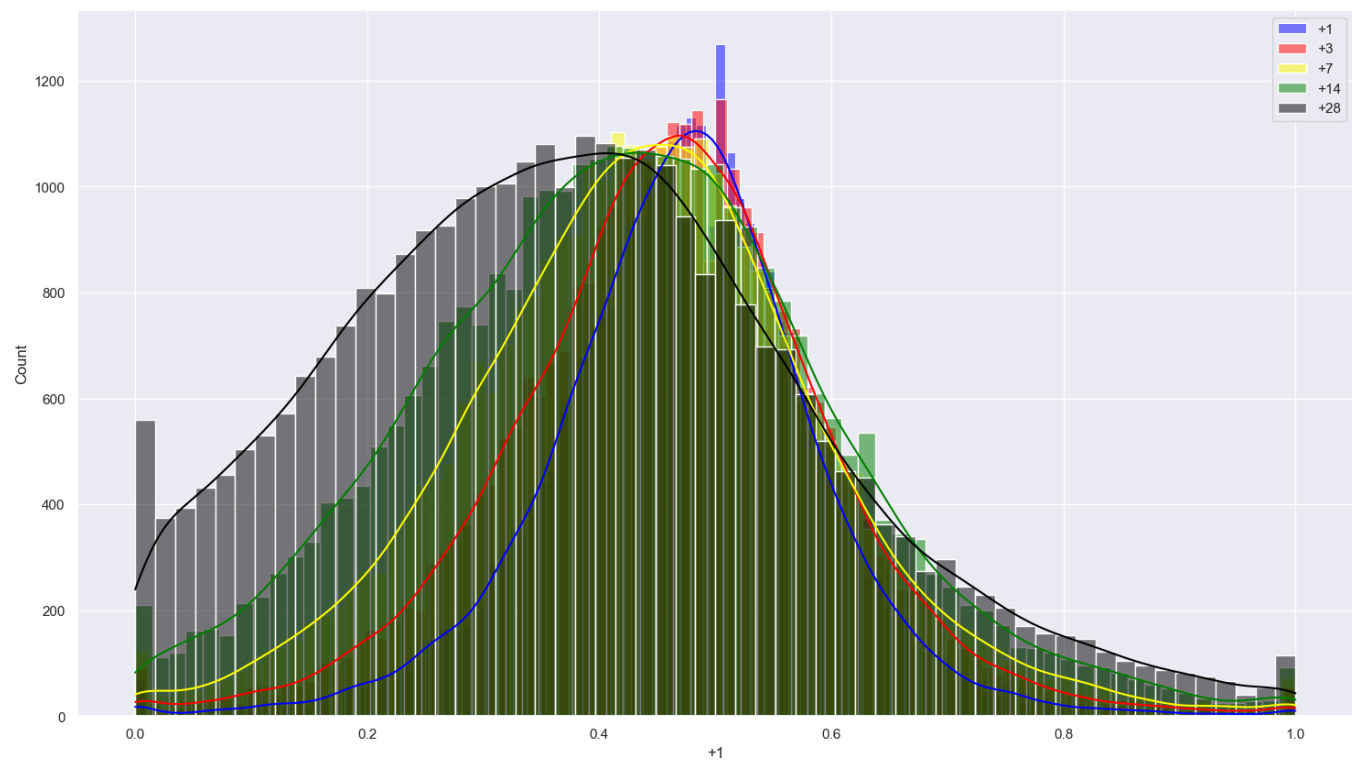
	Unnamed: 0	user_id	+1	+3	+7	+14	+28	message_count
count	40711.000000	4.071100e+04	40708.000000	40708.000000	40708.000000	40708.000000	40708.000000	40711.000000
mean	20355.000000	2.515098e+06	0.472398	0.479857	0.463709	0.471759	0.486733	457.462922
std	11752.397741	1.286751e+06	0.102688	0.119600	0.144168	0.167215	0.186658	733.036359
min	0.000000	5.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000	100.000000
25%	10177.500000	1.376328e+06	0.411599	0.408451	0.375787	0.367222	0.365817	146.000000
50%	20355.000000	3.001901e+06	0.472599	0.479508	0.465851	0.472660	0.486928	235.000000
75%	30532.500000	3.543720e+06	0.531818	0.549296	0.550459	0.574472	0.603432	466.000000
max	40710.000000	4.745714e+06	1.000000	1.000000	1.000000	1.000000	1.000000	23920.000000

Quarter 3



	Unnamed: 0	user_id	+1	+3	+7	+14	+28	message_count
count	44444.000000	4.444400e+04	44443.000000	44443.000000	44443.000000	44443.000000	44443.000000	44444.000000
mean	22221.500000	3.527390e+06	0.452901	0.459340	0.421250	0.407076	0.360344	430.850801
std	12830.022019	1.604221e+06	0.103309	0.128205	0.142389	0.166821	0.192563	658.694933
min	0.000000	1.543000e+03	0.000000	0.000000	0.000000	0.000000	0.000000	100.000000
25%	11110.750000	2.207640e+06	0.391847	0.381579	0.332491	0.294558	0.219774	145.000000
50%	22221.500000	3.950720e+06	0.451613	0.457096	0.417910	0.395419	0.338462	232.000000
75%	33332.250000	4.791125e+06	0.512073	0.535484	0.507071	0.511643	0.481132	451.000000
max	44443.000000	5.806075e+06	1.000000	1.000000	1.000000	1.000000	1.000000	25752.000000

Quarter 4



	Unnamed: 0	user_id	+1	+3	+7	+14	+28	message_count
count	32102.000000	3.210200e+04	31990.000000	31990.000000	31990.000000	31990.000000	31990.000000	32102.000000
mean	16050.500000	2.543678e+06	0.471808	0.459850	0.438577	0.422593	0.382027	408.065354
std	9267.193507	2.039699e+06	0.116551	0.138330	0.155645	0.178180	0.203127	625.225552
min	0.000000	5.000000e+00	0.000000	0.000000	0.000000	0.000000	0.000000	100.000000
25%	8025.250000	7.392950e+05	0.405303	0.377252	0.339877	0.302407	0.234161	143.000000
50%	16050.500000	1.418782e+06	0.475000	0.462154	0.439403	0.422014	0.373984	224.000000
75%	24075.750000	4.578809e+06	0.540295	0.542763	0.533006	0.534722	0.509224	426.000000
max	32101.000000	6.044275e+06	1.000000	1.000000	1.000000	1.000000	1.000000	24543.000000



Tables for the FA consistency among quarters

	user_id	qts	avg_mes	+1avg	+1min	+1max	+3avg	+3min	+3max	+7avg	+7min	+7max	+14avg	+14min
0	1223680	(1, 2)	17701.00	0.477281	0.380767	0.573794	0.476081	0.352270	0.599892	0.460354	0.296247	0.624460	0.441289	0.248668
2	617131	(1, 2, 3, 4)	9501.50	0.428329	0.394535	0.476573	0.398811	0.308144	0.459786	0.381897	0.326616	0.448763	0.342728	0.290512
6	543250	(1, 4)	24738.00	0.491346	0.484903	0.497790	0.517724	0.500201	0.535247	0.534563	0.517884	0.551241	0.534354	0.492203
8	1437561	(1, 2, 3, 4)	13274.25	0.557119	0.523776	0.584421	0.587110	0.506768	0.639881	0.632922	0.539743	0.709512	0.661962	0.448108
12	1603880	(1, 2, 3, 4)	7147.25	0.434490	0.357481	0.509259	0.471506	0.379729	0.577287	0.451634	0.389229	0.500000	0.514171	0.358061

	user_id	qts	avg_mes	+1gap	+3gap	+7gap	+14gap	+28gap
0	1223680	(1, 2)	17701.00	0.193027	0.247622	0.328213	0.385241	0.462964
2	617131	(1, 2, 3, 4)	9501.50	0.082037	0.151641	0.122147	0.102564	0.238781
6	543250	(1, 4)	24738.00	0.012887	0.035046	0.033356	0.084301	0.103648
8	1437561	(1, 2, 3, 4)	13274.25	0.060645	0.133113	0.169769	0.354101	0.416286
12	1603880	(1, 2, 3, 4)	7147.25	0.151779	0.197558	0.110771	0.229902	0.211270

