

Q2 2020 GitHub Developer Activity Series - Part 1

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Overview

This report is a collation of key GitHub metrics across 172 of the top public digital assets by market cap, recent transaction volume, and institutional interest. All statistics described in this report are collected from each asset's Target Repository. A few assets that would be included, such as Tezos, use alternative repositories and so are out of scope for this version of the report.

Adoption and viability of public digital assets benefit from an ecosystem of demand, use, and support. Developer activity and engagement is one facet of this ecosystem, which can be measured by the underlying open source code repositories. The number of bugs fixed, the number of code changes proposed, the number of developers who return to contribute, and other measures all help better understand the depth of community involvement.

For this report, a set of metrics are employed to measure the absolute activity during Q2 2020, and in certain cases the change in activity from Q1 2020 to Q2 2020. Some of the measures are useful in comparing engagement of a token versus peers. A glossary of definitions can be found in the Appendix.

Top 20 Assets by Market Capitalization

Below are the results for the overview metrics of developer activity in Q2 2020 for the Top 20 Assets by Market Capitalization. Percent change columns compare Q2 with Q1 2020.

Asset	Open Issues	Closed Issues	PPR	MPR	Con	nmits	Rel	eases	Release Size (MB)	T2C	De (To	ev. tal)		Dev. epeat)	Dev. (Casual)	Dev. (One)	Forks	OCIR
NAME	Total	Total	Total	Total	Q2	% ∆	Q2	% ∆	Total	Total	Q2	% ∆	Q2	% Δ	NAME	Total	Total	Total
Bitcoin	236	477	683	456	167	-80%	1	N/A	8.00	615	7565	-25%	474	36%	2367	4724	412	0.49
Ethereum	151	213	281	197	220	-39%	3	0%	31.22	273	7313	-29%	169	-13%	1976	5168	224	0.71
Ripple	65	20	97	11	61	9%	0	-100%	0.00	107	2642	39%	0	N/A	1133	1509	24	3.25
Bitcoin Cash	21	12	1	0	243	-49%	7	17%	53.74	1	1314	-56%	230	-14%	281	803	6	1.75
Cardano	1	3	3	2	6	-98%	0	-100%	0.00	10	313	-89%	0	-100%	48	265	5	0.33
Bitcoin SV	10	2	0	0	83	-48%	1	0%	4.71	0	1289	26%	0	-100%	655	634	4	5.00
Chainlink	6	6	529	436	1068	2%	8	N/A	145.46	525	2839	66%	789	64%	1443	607	28	1.00
Litecoin	8	12	5	0	3	-57%	1	N/A	6.11	8	325	-48%	0	N/A	47	278	34	0.67
Crypto.com	183	155	340	229	441	950%	5	N/A	4.22	329	1573	426%	505	4491%	829	239	3	1.18
Binance Coin	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
EOS	97	63	271	236	174	-79%	3	-79%	59.30	276	4528	-38%	150	-55%	2119	2259	46	1.54
Stellar	42	20	68	56	187	-36%	9	13%	45.24	66	1346	-9%	143	1%	634	569	19	2.10
Monero	103	71	183	128	123	-73%	1	-50%	11.63	159	3766	-24%	65	-34%	1071	2630	28	1.45
Vechain	4	2	8	6	6	-91%	1	-67%	1.98	8	304	-58%	0	N/A	182	122	6	2.00
Tron	75	60	118	95	224	-80%	0	-100%	0.00	114	3528	-11%	48	-90%	1493	1987	20	1.25
NEO	54	59	163	120	83	28%	1	N/A	0.67	163	1798	10%	103	69%	1048	647	8	0.92
Cosmos	2	2	0	0	1	-50%	0	N/A	0.00	0	128	-10%	0	N/A	22	106	5	1.00
Ethereum Classic	0	0	0	0	0	-100%	0	N/A	0.00	0	0	-100%	0	N/A	0	0	1	N/A
IOTA	8	6	43	40	62	-54%	1	-50%	149.82	43	716	-66%	8	-79%	498	210	3	1.33
Dash	33	46	160	132	0	-100%	1	-75%	7.02	142	785	-54%	77	-71%	313	395	18	0.72
Min	0.00	0.00	0.00	0.00	0.00	-100%	0.00	-100%	0.00	0.00	0.00	-100%	0.00	-100%	0.00	0.00	0.00	0.33
Max	236	477.	683.	456.	1068	950%	9.00	16.67%	149.82	615	7565.	426.1%	789	4490.9%	2367.	5168	412	5.00
Average	54.95	61.45	147.6	107.2	157.6	-2.43%	2.15	- 49.26%	26.46	141.95	2103.6	-2.59%	138.05	293.15%	807.95	1157.60	44.70	1.48

Digital Asset Overview Metric Totals

Below are the results for the overview metrics of developer activity in Q2 2020. Percent change columns compare Q2 with Q1 2020.

Asset	Open Issues	Closed Issues	PPR	MPR	Con	nmits	Rele	eases	Release Size (MB)	T2C		ev. otal)	_	ev. peat)	Dev. (Casual)	Dev. (One)	Forks	OCIR
NAME	Total	Total	Total	Total	Q2	% Δ	Q2	% Δ	Total	Total	Q2	% Δ	Q2	% Δ	NAME	Total	Total	Total
Ox	7	12	70	60	275	-79%	1	-93%	3.52	75	1327	-68%	132	-72%	552	643	8	0.58
Adex	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
aelf	20	30	223	103	921	-76%	2	0%	13.99	234	1892	19%	508	-47%	1000	384	8	0.67
Aeron	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Aeternity	66	29	59	43	50	-90%	4	-50%	13.28	46	1490	-51%	10	-97%	755	725	2	2.28
AION	2	1	20	16	102	-75%	1	-50%	36.16	19	272	-79%	87	-51%	120	65	5	2.00
AirSwap	0	0	1	1	2	-75%	0	N/A	0.00	1	37	-71%	0	N/A	0	37	1	N/A
Algorand	101	108	170	144	170	467%	7	N/A	101.97	172	2456	3264%	131	N/A	1432	893	11	0.94
Ambrosus	0	0	7	6	7	-50%	0	N/A	0.00	7	146	-62%	0	N/A	134	12	0	N/A
AppCoins	1	2	5	5	36	800%	0	N/A	0.00	5	265	-41%	32	N/A	84	149	6	0.50
Aragon	25	29	65	53	49	-27%	0	N/A	0.00	59	1241	-17%	30	36%	548	663	3	0.86
Ardor	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Ark	0	0	0	0	0	N/A	0	N/A	0.00	0	0	-100%	0	N/A	0	0	0	N/A
Augur	512	527	705	688	1804	N/A	0	N/A	0.00	707	2560	50%	1315	355%	926	319	4	0.97
Bancor	1	2	26	24	378	563%	0	N/A	0.00	32	324	-26%	116	N/A	116	92	10	0.50
Basic Attention Token	30	21	95	89	110	2100%	1	N/A	0.30	100	703	174%	137	N/A	412	154	1	1.43
Binance Coin	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Bitcoin	236	477	683	456	167	-80%	1	N/A	8.00	615	7565	-25%	474	36%	2367	4724	412	0.49
Bitcoin Cash	21	12	1	0	243	-49%	7	17%	53.74	1	1314	-56%	230	-14%	281	803	6	1.75
Bitcoin Diamond	4	12	0	0	0	-100%	0	N/A	0.00	0	40	-94%	0	N/A	4	36	1	0.33
Bitcoin Gold	3	3	2	1	2	-94%	0	N/A	0.00	1	151	-55%	0	N/A	29	122	1	1.00
Bitcoin SV	10	2	0	0	83	-48%	1	0%	4.71	0	1289	26%	0	-100%	655	634	4	5.00
Bitshares	18	26	70	66	286	-14%	0	-100%	0.00	75	818	-62%	190	-27%	327	301	12	0.69
BitTorrent	1	0	0	0	0	N/A	0	N/A	0.00	0	30	-38%	0	N/A	0	30	3	N/A

Asset	Open Issues	Closed Issues	PPR	MPR	Con	nmits	Rel	eases	Release Size (MB)	T2C		Dev. otal)		ev. peat)	Dev. (Casual)	Dev. (One)	Forks	OCIR
NAME	Total	Total	Total	Total	Q2	% ∆	Q2	% ∆	Total	Total	Q2	% ∆	Q2	% ∆	NAME	Total	Total	Total
Bluzelle	0	0	0	0	0	-100%	0	N/A	0.00	0	0	-100%	0	-100%	0	0	1	N/A
bnktothefuture	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Boscoin	0	0	0	0	0	-100%	0	-100%	0.00	0	0	-100%	0	-100%	0	0	0	N/A
Box Token	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Bytecoin	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Bytom	0	2	0	0	0	-100%	0	-100%	0.00	1	35	-96%	0	-100%	0	35	7	0.00
Cardano	1	3	3	2	6	-98%	0	-100%	0.00	10	313	-89%	0	-100%	48	265	5	0.33
Chainlink	6	6	529	436	1068	2%	8	N/A	145.46	525	2839	66%	789	64%	1443	607	28	1.00
Cindicator	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Civic	3	8	3	4	74	N/A	2	N/A	82.27	4	401	401%	32	N/A	255	114	0	0.38
Cortex	1	5	215	195	618	N/A	9	N/A	143.40	214	247	N/A	91	N/A	72	84	2	0.20
Cosmos	2	2	0	0	1	-50%	0	N/A	0.00	0	128	-10%	0	N/A	22	106	5	1.00
Credits	0	0	0	0	1	-50%	1	0%	6.39	0	58	-3%	0	N/A	18	40	8	N/A
Crypterium	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Crypto.com	183	155	340	229	441	950%	5	N/A	4.22	329	1573	426%	505	4491%	829	239	3	1.18
CyberMiles	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Dai	2	1	8	5	5	-87%	0	N/A	0.00	6	297	-37%	0	-100%	42	255	10	2.00
Dash	33	46	160	132	0	-100%	1	-75%	7.02	142	785	-54%	77	-71%	313	395	18	0.72
Decentraland	4	7	43	41	61	N/A	0	N/A	0.00	41	697	N/A	12	N/A	393	292	2	0.57
Decred	8	6	80	80	97	-69%	0	-100%	0.00	83	1206	-16%	73	9%	589	544	9	1.33
Dent	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
DigiByte	4	3	2	1	2	-97%	0	-100%	0.00	3	238	-73%	0	N/A	22	216	4	1.33
DigixDAO	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
District0x	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Dock	0	0	1	0	0	N/A	0	N/A	0.00	0	3	N/A	0	N/A	0	3	0	N/A
Dogecoin	3	2	1	0	0	-100%	0	N/A	0.00	0	101	-78%	0	N/A	0	101	13	1.50
Dragonchain	0	0	3	2	11	N/A	0	N/A	0.00	3	217	N/A	0	N/A	68	149	0	N/A
Eidoo	0	0	0	0	0	-100%	0	-100%	0.00	0	13	-94%	0	-100%	0	13	0	N/A
Elastos	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Enigma	0	0	0	0	0	-100%	0	N/A	0.00	0	5	-99%	0	-100%	0	5	0	N/A
Enjin	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
EOS	97	63	271	236	174	-79%	3	-79%	59.30	276	4528	-38%	150	-55%	2119	2259	46	1.54

Asset	Open Issues	Closed Issues	PPR	MPR	Con	nmits	Rele	eases	Release Size (MB)	T2C		Dev. otal)	_	ev. peat)	Dev. (Casual)	Dev. (One)	Forks	OCIR
NAME	Total	Total	Total	Total	Q2	% ∆	Q2	% ∆	Total	Total	Q2	% ∆	Q2	% ∆	NAME	Total	Total	Total
Ethereum	151	213	281	197	220	-39%	3	0%	31.22	273	7313	-29%	169	-13%	1976	5168	224	0.71
Ethereum Classic	0	0	0	0	0	-100%	0	N/A	0.00	0	0	-100%	0	N/A	0	0	1	N/A
Factom	7	4	11	5	8	-96%	1	N/A	3.36	7	360	-70%	0	-100%	146	214	0	1.75
FunFair	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Gas	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Genesis Vision	0	0	70	66	1854	-1%	0	N/A	0.00	70	497	-33%	192	-63%	238	67	0	N/A
GIFTO	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Gnosis	128	121	266	215	211	N/A	12	N/A	12.45	257	1244	N/A	327	N/A	594	323	2	1.06
GoChain	101	108	170	144	170	467%	7	N/A	101.97	172	2456	3264%	131	N/A	1432	893	11	0.94
Golem	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Grin	21	38	62	56	56	-79%	3	-40%	4.32	61	1165	-85%	28	-92%	673	464	7	0.55
Groestlcoin	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
GXChain	1	1	0	0	13	-93%	0	-100%	0.00	0	114	-87%	0	-100%	69	45	0	1.00
Holochain	6	2	22	12	132	-97%	3	-80%	5.99	16	787	-76%	64	-94%	320	403	5	3.00
Horizen	10	13	69	57	35	-39%	4	100%	28.14	64	533	48%	29	190%	385	119	4	0.77
Huobi Token	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
HyperCash	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
ICON	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
iExec rlc	0	0	16	16	49	-90%	0	-100%	0.00	16	443	-29%	0	-100%	337	106	1	N/A
Ignis	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
IOST	4	1	8	7	30	-98%	3	-85%	42.16	7	392	-86%	0	-100%	173	219	6	4.00
IOTA	8	6	43	40	62	-54%	1	-50%	149.82	43	716	-66%	8	-79%	498	210	3	1.33
IoTeX	40	61	125	116	111	-70%	3	-63%	8.86	124	1229	-30%	234	-58%	812	183	0	0.66
Komodo	0	0	33	30	172	-94%	0	N/A	0.00	33	941	-46%	52	-79%	479	410	4	N/A
KuCoinShares	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Kyber Network	1	0	44	42	82	-77%	0	-100%	0.00	43	642	-12%	91	-60%	323	228	4	N/A
LEO Token	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Lisk	226	255	184	178	1343	-51%	1	-67%	4.04	184	1487	-55%	599	-46%	638	250	1	0.89
Litecoin	8	12	5	0	3	-57%	1	N/A	6.11	8	325	-48%	0	N/A	47	278	34	0.67
Loom	1	1	32	18	18	-98%	0	N/A	0.00	19	285	-85%	5	-99%	140	140	4	1.00
Loopring	49	46	227	120	115	-65%	6	N/A	62.44	230	743	58%	177	90%	337	229	4	1.07
Mainframe	0	0	3	0	0	-100%	0	N/A	0.00	0	53	-97%	0	-100%	22	31	0	N/A

Asset	Open Issues	Closed Issues	PPR	MPR	Con	nmits	Rele	eases	Release Size (MB)	T2C		ev. otal)		ev. peat)	Dev. (Casual)	Dev. (One)	Forks	OCIR
NAME	Total	Total	Total	Total	Q2	% ∆	Q2	% ∆	Total	Total	Q2	% Δ	Q2	% ∆	NAME	Total	Total	Total
MakerDAO	2	1	8	5	5	-87%	0	N/A	0.00	6	297	-37%	0	-100%	42	255	10	2.00
Matrix Al Network	4	7	43	41	61	N/A	1	N/A	92.16	41	697	N/A	12	N/A	393	292	2	0.57
Medicalchain	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Metaverse ETP	2	0	2	3	14	-91%	2	100%	6.24	3	376	-26%	0	-100%	75	301	1	N/A
Mithril	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Moeda Loyalty Points	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
MonaCoin	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Monero	103	71	183	128	123	-73%	1	-50%	11.63	159	3766	-24%	65	-34%	1071	2630	28	1.45
Nano	10	2	128	117	116	-61%	2	-71%	7.92	123	1211	-51%	219	-40%	575	417	9	5.00
NavCoin	17	37	34	28	28	-66%	2	100%	14.69	32	310	-75%	16	100%	193	101	0	0.46
Neblio	3	1	5	4	15	-79%	1	N/A	5.40	4	228	-45%	0	-100%	106	122	0	3.00
Nebulas	3	1	1	0	0	-100%	0	N/A	0.00	1	173	-71%	0	-100%	58	115	4	3.00
NEM	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
NEO	54	59	163	120	83	28%	1	N/A	0.67	163	1798	10%	103	69%	1048	647	8	0.92
Nexus	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Nucleus Vision	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Nuls	8	0	33	28	88	-96%	2	100%	24.29	34	687	-40%	18	-97%	359	310	3	N/A
Numerair	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Nxt	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
OAX Foundation	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Obyte	1	1	10	10	107	-36%	0	N/A	0.00	10	486	-22%	36	-59%	287	163	1	1.00
Odyssey	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
OMG Network	55	62	119	98	85	-90%	14	N/A	36.34	118	2111	27%	97	-83%	1219	795	1	0.89
Ontology	8	4	59	52	56	0%	3	-25%	84.64	60	1016	-32%	17	1600%	445	554	9	2.00
OST Platform	4	1	8	7	30	-98%	3	-85%	42.16	7	392	-86%	0	-100%	173	219	6	4.00
Paxos Standard	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
PCHAIN	71	60	174	166	29	-86%	4	300%	95.96	178	1420	14%	217	101%	455	748	25	1.18
Peercoin	1	2	5	5	36	800%	1	-80%	7.95	5	257	-43%	30	N/A	80	147	6	0.50
PIVX	69	57	172	164	324	27%	4	300%	95.96	178	1424	6%	276	194%	408	740	23	1.21
po.et	0	0	0	0	0	-100%	0	-100%	0.00	0	0	-100%	0	-100%	0	0	0	N/A
Polymath	1	0	1	0	0	-100%	0	N/A	0.00	0	74	-95%	0	-100%	19	55	2	N/A
Populous	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A

Asset	Open Issues	Closed Issues	PPR	MPR	Con	nmits	Rele	eases	Release Size (MB)	T2C		ev. otal)		ev. peat)	Dev. (Casual)	Dev. (One)	Forks	OCIR
NAME	Total	Total	Total	Total	Q2	% ∆	Q2	% ∆	Total	Total	Q2	% Δ	Q2	% ∆	NAME	Total	Total	Total
Propy	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
pundi x	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
qash	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
QLC Chain	70	74	41	36	65	-63%	0	-100%	0.00	41	1201	69%	114	-42%	764	323	0	0.95
Qtum	5	1	23	21	64	-93%	1	-50%	15.17	22	747	-82%	6	-98%	277	464	5	5.00
Quantstamp	2	1	1	0	0	-100%	0	N/A	0.00	0	65	-92%	0	-100%	0	65	0	2.00
Quantum	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
QuarkChain	7	5	28	27	12	-59%	3	N/A	26.96	31	405	6%	27	29%	209	169	1	1.40
Raiden Network Token	109	89	211	182	174	-84%	10	67%	28.09	214	1833	-37%	168	-70%	1089	576	3	1.22
Raven Coin	7	5	14	12	23	-70%	2	0%	19.50	13	388	-64%	0	-100%	135	253	7	1.40
ReddCoin	5	21	0	0	25	N/A	3	N/A	19.18	0	138	126%	11	N/A	39	88	0	0.24
Refereum	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Republic Protocol	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Request Network	0	0	64	49	47	-66%	4	N/A	8.37	64	762	86%	31	-62%	505	226	0	N/A
Revain	5	21	705	688	224	-80%	1	0%	6.39	707	2218	-8%	38	-90%	959	1221	8	0.24
Ripple	65	20	97	11	61	9%	0	-100%	0.00	107	2642	39%	0	N/A	1133	1509	24	3.25
Ruff	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Salt	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Santiment Network Token	0	0	201	189	530	-23%	0	N/A	0.00	198	830	29%	401	0%	256	173	0	N/A
Siacoin	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	1	N/A
SingularityNET	1	1	4	0	0	-100%	0	-100%	0.00	0	169	-86%	0	-100%	65	104	0	1.00
Sirin Labs Token	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
SmartMesh	0	0	4	3	3	-93%	1	-75%	2.90	5	210	-77%	0	-100%	0	210	2	N/A
Sonm	0	0	4	3	3	-93%	1	-75%	2.90	5	210	-77%	0	-100%	0	210	2	N/A
Sreamr DATAcoin	0	0	105	91	382	-14%	1	0%	9.49	100	1254	21%	252	12%	707	295	0	N/A
Status	311	247	333	297	240	-34%	1	-80%	13.55	331	3401	-29%	591	-8%	1627	1183	15	1.26
Steem	12	5	13	2	0	-100%	1	0%	11.71	13	495	-68%	0	-100%	92	403	17	2.40
Stellar	42	20	68	56	187	-36%	9	13%	45.24	66	1346	-9%	143	1%	634	569	19	2.10
storj	30	26	52	50	382	-20%	7	N/A	38.57	63	3542	-22%	215	-54%	1885	1442	8	1.15
StormX	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Stratis	8	3	24	20	1	-100%	0	-100%	0.00	21	363	-86%	0	-100%	136	227	4	2.67
Syscoin	3	2	1	1	0	-100%	0	N/A	0.00	1	414	-67%	4	-89%	122	288	3	1.50

Asset	Open Issues	Closed Issues	PPR	MPR	Con	nmits	Rele	eases	Release Size (MB)	T2C		Dev. otal)		ev. peat)	Dev. (Casual)	Dev. (One)	Forks	OCIR
NAME	Total	Total	Total	Total	Q2	% ∆	Q2	% ∆	Total	Total	Q2	% ∆	Q2	% ∆	NAME	Total	Total	Total
Telcoin	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
TenX	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Tether	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Tezos	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
THEKEY	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Theta	3	8	3	4	74	-80%	2	0%	82.27	4	401	-38%	32	-87%	255	114	0	0.38
Time New Bank	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Tron	75	60	118	95	224	-80%	0	-100%	0.00	114	3528	-11%	48	-90%	1493	1987	20	1.25
True USD	0	0	98	82	74	-34%	0	N/A	0.00	101	764	75%	40	-33%	542	182	4	N/A
VeChain	4	2	8	6	6	-91%	1	-67%	1.98	8	304	-58%	0	N/A	182	122	6	2.00
Verge	7	7	4	1	3	-99%	0	-100%	0.00	5	272	-76%	0	-100%	55	217	6	1.00
Vertcoin	4	4	4	2	3	-99%	1	0%	6.53	3	312	-90%	0	-100%	8	304	3	1.00
Waltonchain	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Wanchain	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Waves	4	8	133	118	113	-90%	5	-29%	25.72	132	1598	-49%	58	-92%	1111	429	5	0.50
WAX	1	1	1	0	0	-100%	0	N/A	0.00	1	60	-97%	0	-100%	0	60	1	1.00
Wings	0	0	0	0	0	N/A	0	N/A	0.00	0	0	N/A	0	N/A	0	0	0	N/A
Zcash	70	45	103	71	194	62%	3	50%	18.21	89	2338	-8%	87	N/A	1132	1119	18	1.56
Zcoin	3	5	8	7	19	-94%	0	-100%	0.00	8	568	-60%	3	-99%	165	400	6	0.60
Zilliqa	12	9	87	80	101	-93%	7	600%	8.44	88	1064	-68%	75	-92%	535	454	3	1.33
Min	0.00	0.00	0.00	0.00	0.00	-100%	0.00	-100%	0.00	0.00	0.00	-100%	0.00	-100%	0.00	0.00	0.00	0.00
Max	512.	527.	705.	688.	1854	2100%	14.00	600%	149.82	707	7565	3264%	1315	4490%	2367	5168	412	5.00
Average	19.75	20.26	53.30	44.01	931	- 8.62%	1.25	-26.1%	11.83	52.43	638.3	29.23%	61.78	18.5%	284.54	292	7.39	1.41

Appendix

Developer Activity Overview Glossary

Metric	Description
Average Size of Release	A measure of a project's development team's ability to release efficient and clean software updates. Each release is compared to its predecessor to gather an average size across all releases. This metric is measured in megabytes.
Average Time-to- Close Pull Request (T2C)	A measure of a project's ability to efficiently close pull requests in a timely manner. In the case of this report, the period is one business quarter or approximately 90 days.
Closed Issues	The total number of Closed Issues in the defined period.
Commits	A commit is an approved change to a project's source code that the project's community and administrators agree is an improvement. This metric can be used as a benchmark since a forked project inherits all the code commits of its predecessors.
Developers (Casual)	A casual developer has contributed code for a minimum two days and maximum nine days in a month period.
Developers (One Time)	A one-time developer has contributed code one day in a month period.
Developers (Repeat)	A repeat developer has contributed code for a minimum 10 days in a month period.
Developers (Total)	The total amount of developers that have contributed to a project in the time. In the case of this report, the period is one-business quarter or approximately 90 days.
Minimum Merged Pull Request Requirement (MPR)	A measure of developer activity. It is calculated by adding all Pull Requests (requests to change the codebase) implemented by internal or external developers.
Minimum Proposed Pull Request Requirement (PPR)	A measure of developer activity. It is calculated by adding all Pull Requests (requests to change the codebase) proposed by internal or external developers, or by the users of the codebase.
Number of Forks	A fork is a copy of a repository that a developer manages. Forks let you make changes to a project without affecting the original repository. You can fetch updates from or submit changes to the original repository with pull requests. In open source projects, forks are often used to iterate on ideas or changes before they are offered back to the upstream repository.
	A project can only be forked once per developer account; therefore, it is difficult for nefarious actors to manipulate the metric.
Number of Releases	A measure of a project's software updates over a period.
Open Issues	The total number of Open Issues in the defined period.
Open-to-Close Ratio (OCIR)	A direct measure of developer effectiveness. It is calculated by dividing the total number of Closed Issues (issues with the codebase that have been fixed by the development team) by the total number of Open Issues (issues with the codebase that have not been fixed by the development team).
Target Repository	For the majority of Native Digital Assets, the Target Repository is the Client. This piece of software is what network participants use to send, receive, relay, and validate digital asset transactions. The Client also enforces the rules that define the key properties of these digital assets, such as inflation, divisibility, and transferability.
	For application tokens the Target Repository used is the core repository of the application itself, which is often in the form of a smart contract.

Source: Digital Asset Research

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