

Project Report on STA2101: Statistics and Probability

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Milestone-1: Dataset on Global Tech Gadget Consumption Data (2015-2025)

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Milestone-1: Dataset on Global Tech Gadget Consumption Data (2015-2025)

0.0.1 Abstract

Technology adoption has been evolving rapidly, shaping industries and consumer behaviors around the world. This data set provides information on **global gadget consumption trends** from **2015 to 2025**, covering **smartphones, laptops, gaming consoles, smartwatches and penetration rates of 5G**.

0.0.2 Use Cases

- Market research & consumer behavior analysis
- Forecasting future tech adoption trends
- Studying the impact of e-waste generation
- Understanding 5G penetration across different countries

Column Name	Description
Country	Country where data is recorded
Year	Year of observation
Smartphone Sales (Million)	Number of smartphones sold (in millions)
Laptop Shipments (Million)	Number of laptops shipped (in millions)
Gaming Console Adoption (%)	Percentage of population using gaming consoles
Smartwatch Penetration (%)	Percentage of population using smartwatches
Avg Consumer Spending (\$)	Average spending on tech gadgets
E-Waste Generation (MT)	E-waste generated in Metric Tons (MT)
5G Penetration (%)	Percentage of population with 5G access

0.0.3 Column Descriptions

Country	Year	SSs(Millions)	LSs(Millions)	GCA(%)	SP(%)	ACS(\$)	EWG	5G PR(%)
USA	2015	111.37	123.63	12.05	14.49	311.21	939.89	54.64
USA	2016	224.65	65.27	12.92	9.88	250.46	1361.42	53.61
USA	2017	102.12	26.75	19.63	17.35	2404.22	872.52	29.94
USA	2018	148.1	129.28	26.44	12.45	1883.37	1241.41	75.88
USA	2019	83.93	97.81	20.84	6.18	777.42	1939.39	76.26
USA	2020	300.49	100.59	28.16	17.68	593.73	136.97	58.45
USA	2021	328.38	64.96	26.18	18.71	1804.6	183.51	35.56
USA	2022	239.21	63.46	7.04	14.72	339.59	175	65.69
USA	2023	104.51	40.42	9.66	24.81	1602.85	1482.32	57.97
USA	2024	444.57	58.6	7.67	15.42	1107.74	1902.16	55.95
USA	2025	367.74	78.09	35.38	19.68	2611.6	923.74	33.02
China	2015	77.62	87.58	18.77	10.89	2018.37	1187.13	28.59
China	2016	93.38	137.35	21.03	23.74	1655	563.9	26.13
China	2017	499.89	99.05	22.01	5.32	1465.64	1037.5	12.43
China	2018	478.75	45.72	35.63	2.04	2653.45	1325.48	58.19
China	2019	254.1	130.87	16.48	19.44	1491.33	1825.14	13.12
China	2020	429.4	141.36	14.01	4.91	1727.35	1886.61	55.44
China	2021	250.08	117.16	19.03	7.44	1920.48	888.49	11.07
China	2022	137.11	28.04	12.11	17.71	2084.91	1455.58	32.98
China	2023	267.07	58.25	36.96	14.99	657.41	414.1	69.57
China	2024	279.7	149.21	8.97	15.41	1979.5	1162.67	27.24
China	2025	276.79	45.2	19.13	11.09	2445.38	281.04	3.67
India	2015	324.15	99.54	23.04	16.56	1016.61	1024.09	58.57
India	2016	432.38	103.99	13.68	15.47	1373.48	1575.08	19.32
India	2017	411.94	89.39	7.05	12.29	649.28	389.65	19.31
India	2018	234.01	114.65	26.77	5.95	369.56	1511.64	41.1
India	2019	177.82	115.12	36.48	7.1	2126.6	938.92	44.67
India	2020	177.61	101.7	28.29	20.73	1369.3	336.19	17.1
India	2021	367.68	103.96	28.35	23.52	2614.95	998.97	73.55
India	2022	102.28	44.12	21.45	8	2376.46	1414.84	12.84
India	2023	292.4	76.3	19.89	18.76	1949.03	1962.59	71.74
India	2024	252.77	30.57	33.58	16.57	806.79	496.94	23.76
India	2025	79.66	69.94	25.43	11.21	2783.15	1458.72	27.75
Germany	2015	484.23	107.09	35.51	7.1	780.8	170.48	70.31
Germany	2016	377.2	111.91	27.7	8.82	2707.97	869.76	56.29
Germany	2017	145.26	87.22	15.98	15.53	1006.76	621.83	3.49
Germany	2018	136.62	104.62	28.32	7.77	1122.06	1902.52	67.1
Germany	2019	322.77	65.04	25.8	3.33	1309.68	842.08	46.36
Germany	2020	214.97	79.49	36.14	23.23	1581.44	1348.62	48.75
Germany	2021	385.96	77.26	25.57	20.1	228.65	673.92	11.5
Germany	2022	177.97	26.7	5.49	17.47	2381.88	821.56	65.25
Germany	2023	225.73	98.82	37.82	20.04	2535.51	589.3	53.17
Germany	2024	123.54	32.81	6.47	17	1792.64	1317.18	36.14
Germany	2025	216.96	146.61	16.78	9.22	2804.31	744.28	21.97
UK	2015	444.2	102.1	17.26	12.12	483.61	716.4	29.99
UK	2016	453.75	27.25	8.54	18.72	449.1	826.85	51.02

Country	Year	SSs(Millions)	LSs(Millions)	GCA(%)	SP(%)	ACS(\$)	EWG	5G PR(%)
UK	2017	83.3	140.79	12.07	12.47	1185.36	1231.37	59.46
UK	2018	480.5	54.61	14.21	12.78	1050.9	871.4	7.75
UK	2019	463.34	29.73	10.88	21.93	2580.06	385.22	18.99
UK	2020	438.43	107.03	33.65	9.13	517.6	742.94	63.13
UK	2021	370.91	63.17	8.12	23.36	1001.54	1190.87	73.6
UK	2022	112.33	142.4	14.68	23.32	731.68	131.73	35.91
UK	2023	211.25	58.89	11.99	23.76	1918.65	278.39	68.4
UK	2024	258.61	46.53	30.99	11.38	816.45	495.75	22.45
UK	2025	380.98	115.64	36.81	5.65	2763.54	1511.48	47.23
France	2015	274.6	34.69	16.11	19.86	2211.6	269	47.31
France	2016	117.55	64.14	12.7	14.61	838.38	1589.3	65.64
France	2017	248.46	20.79	23.46	3.66	1275.42	1450.58	79.34
France	2018	335.8	47.83	23.91	23.57	2269.04	151.03	51.65
France	2019	388.74	71.46	28.46	14.92	2966.44	1833.82	56.83
France	2020	497.64	126.48	9.05	2.74	1574.43	620.9	70.17
France	2021	175.04	133.04	20.98	13.39	1175.56	415.64	37.29
France	2022	170.19	79.17	19.28	18.23	380.56	1113.36	53.06
France	2023	64	141.03	22.89	12.47	1863.44	734.12	59.01
France	2024	234.44	140.2	16.26	8.07	755.94	1270.77	47.55
France	2025	248.61	76.79	5.89	10.01	1878.9	958.76	70.19
Japan	2015	321.55	57.47	22.4	21.94	1311.28	788.59	71.85
Japan	2016	230.77	140.33	35.96	15.89	2025.31	234.75	45.11
Japan	2017	462.59	32.63	21.32	10.79	2989.54	898.48	22.91
Japan	2018	434.29	92.69	26.69	5.69	2784.25	1365.17	75.07
Japan	2019	114.85	62.89	13.91	8.99	372.31	1707.08	62.33
Japan	2020	334.36	145.02	39.47	11.8	1009.34	1517.56	8.26
Japan	2021	218.89	60.98	5.5	24.37	487.74	1454.07	2.99
Japan	2022	238.54	72.65	28.46	8.33	458.93	1118.76	58.11
Japan	2023	174.81	67.51	27	5.46	1026.01	1111.27	33.94
Japan	2024	104.79	63.99	8.78	10.06	2522.49	819.13	37.28
Japan	2025	373.42	97.39	29.27	22.31	912.69	393.45	54.59
S. Korea	2015	241.26	116.14	19.64	21.05	470.41	147.73	21.34
S. Korea	2016	111.02	21.29	16.48	6.36	1872.46	111.47	62.47
S. Korea	2017	296.16	80.02	29.15	14.79	1843.64	1116.37	34.04
S. Korea	2018	156.86	62.5	26.47	16.1	301.39	1576.45	25.62
S. Korea	2019	222.51	102.42	13.11	12.07	2149.04	1743.79	79.33
S. Korea	2020	450.75	92.5	30.57	13.17	1382.89	454.98	79.25
S. Korea	2021	157.06	23.41	10.6	24.49	1372.4	1753.39	41.23
S. Korea	2022	444.6	80.76	35.63	2.64	2891.9	142.36	55.94
S. Korea	2023	438.16	124.26	36.37	6.95	2390.63	1007.5	19.74
S. Korea	2024	474.94	110.49	19.74	21.89	1119.35	750.67	10.16
S. Korea	2025	148.42	107.51	13.3	21.52	1989.35	1835.76	39.8
Brazil	2015	487.73	95.83	31.67	11.78	2633.96	1681.23	69.94
Brazil	2016	275.85	103.08	14.34	21.31	1161.32	1635.14	55.96
Brazil	2017	327.88	87.59	6.58	22.57	2113.65	1957.62	11.21
Brazil	2018	329.09	142.58	16.16	5.26	2476.34	1348.88	27.93

Country	Year	SSs(Millions)	LSs(Millions)	GCA(%)	SP(%)	ACS(\$)	EWG	5G PR(%)
Brazil	2019	349.91	43.47	17.36	21.09	603.13	158.64	36.01
Brazil	2020	296.16	56.45	39.22	16.09	220.09	1913.13	56.91
Brazil	2021	397	125.19	12.59	22.75	1845.58	1250.45	67.93
Brazil	2022	82.81	118.43	16.92	8.27	2840.47	1022.45	24.53
Brazil	2023	92.85	81.79	19.4	20.42	1244.47	479.54	39.02
Brazil	2024	158.13	74.04	12.23	12.24	2832.17	1229.28	63.94
Brazil	2025	447.89	87.92	32.7	14.55	667.79	1859.55	8.41