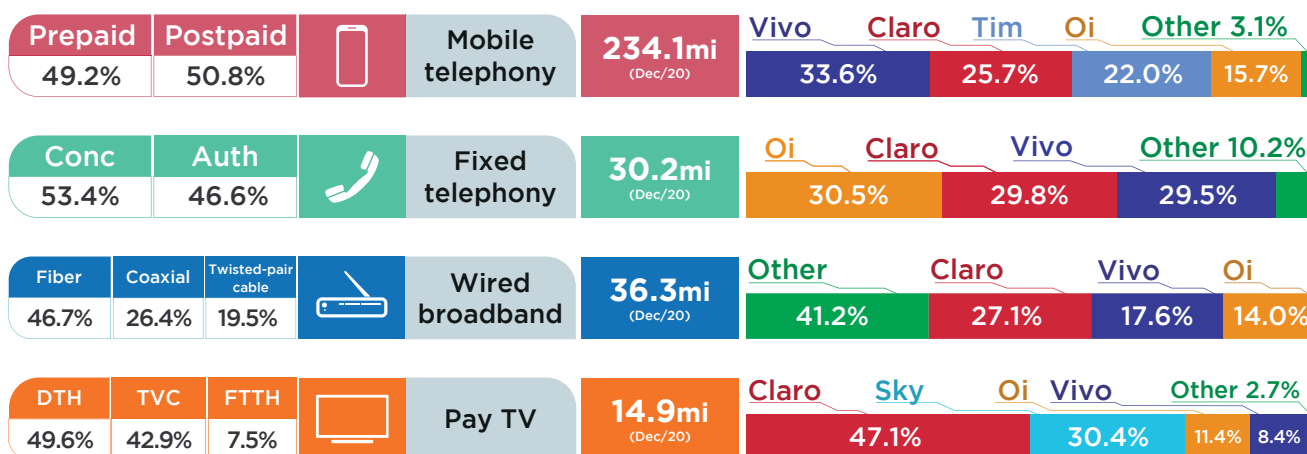


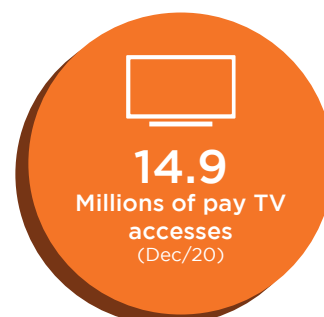
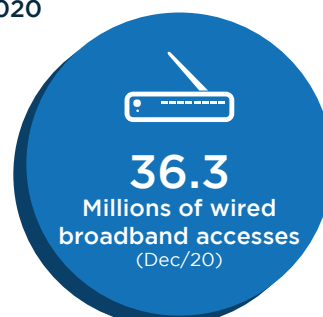
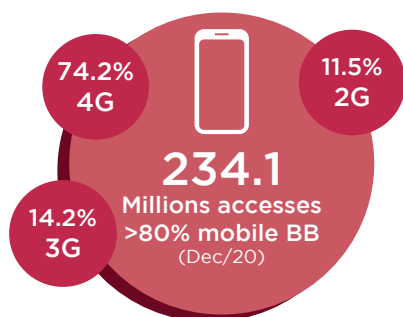


OVERVIEW OF TELECOMMUNICATION IN BRAZIL DECEMBER/2020



315.5 Millions

contract of telecom services in
Dec/2020



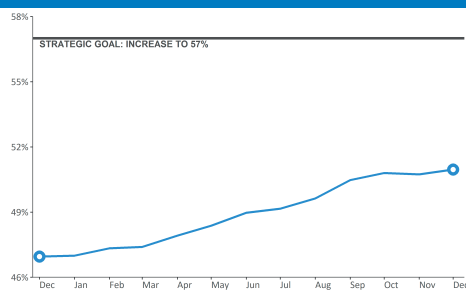
97.2 density of Mobile
Telephony per 100
inhabitants in Brazil

42.8 density of Fixed
Telephony per 100
households in Brazil

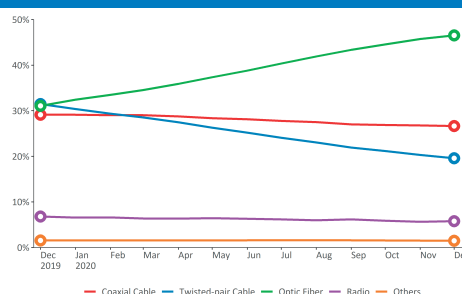
51.4 density of Fixed
broadband per 100
households in Brazil

21.0 density of Pay
TV per 100 households
in Brazil

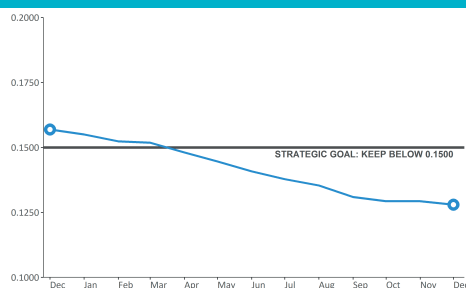
Density of Fixed Broadband



Technological Evolution of Broadband Internet



Market Concentration* of Fixed Broadband



Market Concentration* of Mobile Telephony



*Market Concentration is calculated using *Herfindahl-Hirschman Index (HHI)*.

MOBILE TELEPHONY, PER GROUP AND TECHNOLOGY

Group	Accesses	4G	3G	2G	Market Share
VIVO	78,532,350	55,949,840	9,372,849	13,209,661	33.6%
CLARO	60,201,237	43,356,125	14,773,716	2,071,396	25.7%
TIM	51,432,502	42,042,547	5,065,664	4,324,291	22.0%
OI	36,651,209	26,757,928	3,207,362	6,685,919	15.7%
OTHER	7,250,176	5,633,004	890,899	726,273	3.1%
TOTAL	234,067,474	173,739,444	33,310,490	27,319,121	100.0%
PERCENTAGE	100.0%	74.2%	14.2%	11.5%	

ON SERVICE ACCESSSES, FIXED TELEPHONY

Group	Accesses	Market Share
OI	9,227,438	30.5%
CLARO	8,994,548	29.8%
VIVO	8,925,919	29.5%
OTHER	3,079,437	10.2%
TOTAL	30,227,342	100.0%

ACCESSSES PER TYPE OF GRANTS, FIXED TELEPHONY

Type	Accesses	Percentual
As a public service concession	14,098,559	46.6%
As a private service	16,128,783	53.4%
TOTAL	30,227,342	100.0%

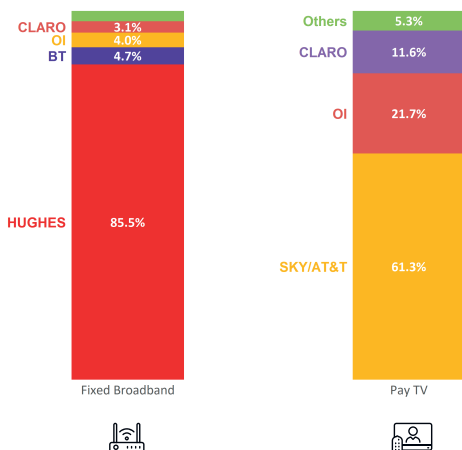
WIRED BROADBAND, PER GROUP AND TECHNOLOGY

Group	Accesses	Twisted-pair cable	Coaxial Cable	Optic Fiber	Radio	LTE	Satellite	Market Share
CLARO	9,844,148	76,962	9,283,409	459,127	14,444	0	10,206	27.1%
VIVO	6,393,321	2,901,558	0	3,491,763	0	0	0	17.6%
OI	5,095,101	2,639,963	0	2,426,038	15,947	0	13,153	14.0%
OTHER	14,977,013	1,459,106	314,657	10,594,025	2,101,956	200,454	306,815	41.2%
TOTAL	36,309,583	7,077,589	9,598,066	16,970,953	2,132,347	200,454	330,174	100.0%
PERCENTAGE	100.0%	19.5%	26.4%	46.7%	5.9%	0.6%	0.9%	

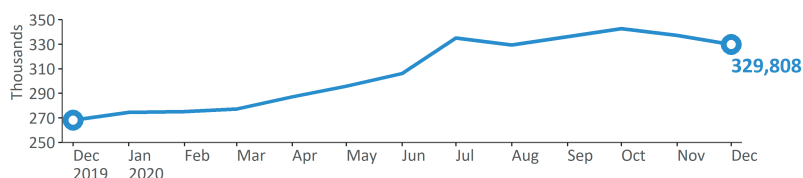
PAY TV, PER GROUP AND TECHNOLOGY

Group	Accesses	DTH	FTTH	MMDS	TVA	TVC	Market Share
CLARO	6,990,627	853,594	0	0	0	6,137,033	47.1%
SKY/AT&T	4,516,803	4,516,803	0	0	0	0	30.4%
OI	1,692,912	1,600,783	92,129	0	0	0	11.4%
VIVO	1,247,667	358,075	889,592	0	0	0	8.4%
OTHER	408,444	35,782	132,553	241	64	239,811	2.7%
TOTAL	14,856,453	7,365,037	1,114,274	241	64	6,376,844	100.0%
PERCENTAGE	100.0%	49.6%	7.5%	0.0%	0.0%	42.9%	

MARKET SHARE - SATELLITE



Number of satellite service accesses, Broadband Internet



Number of satellite service accesses, Pay TV

