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The Brazilian Mobile Telephoning Market and Its Indicators of Non-quality

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This article aims to scale the Brazilian mobile phone market as the number of active lines, carriers participation in the market and teledensity, as well as presenting the main non-quality indicators and rankings of carriers in relation to complaints registered by users. The methodology used was "survey" with documentary research, enabled through access to the database of the Brazilian National Telecommunications Agency—ANATEL, and Sindec Report developed by the Brazilian National Secretary of the Consumer—SENACON. The results obtained showed a Brazil of had a teledensity of 132.78 lines every 100 inhabitants, with 261 million mobile lines active, these 19 million enabled in 2012. The leadership of the company "Vivo" with 29.08% of marketshare and shows the lowest rate of complaints among the big four carriers (Vivo, TIM, Claro, and Oi Móvel) according to the data of Anatel. SENACON data already confirm the big four carriers among the 10 conglomerates more defendants in claims in Brazil. As the indicators of non-quality, the Act of Misappropriation was pointed to by users as the biggest problem in contracted services.

Keywords: quality, regulatory agency, Brazilian mobile telephony

Introduction

In the world there are 6.3 billion mobile phones in circulation, and in the global mobile-phone market, Brazil appears between the five biggest, behind countries like China, India, United States, and Indonesia. The growth observed in Brazil in 2012 as the number of cell phones, corresponds to 7.4% from 2011 (ITU, 2012).

The market growth has not been accompanied by improvements in operating infrastructure, being notorious dissatisfaction in society regarding the contracted services of mobile telephony in the country. According to Brazilian National Secretary of the Consumer—SENACON (2012), cellular telephony was the leader of claims in all Brazilian consumer protection institutes, where in the year 2012 registered 172,119 complaints, representing 9.17% of the total computed, with the major mobile phones carriers among the "top 10

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rank" business champions in complaints, with the operator Oi Móvel in first place, followed by Claro in second, Vivo in fifth, and TIM in seventh. These carriers are the four largest in market share (ANATEL, 2012).

Aware of this reality, the Brazilian National Telecommunications Agency—ANATEL, exercising its role as a regulatory body, has been operators charging the provision of quality services. Not having effective response requests in the year 2012 the ANATEL imposed in June a punishment at TIM, Oi Móvel, and Claro, suspending their sales in several Brazilian Federal States during 12 days (TELECO, 2012).

In addition to the sales suspension, other means of punishment used by ANATEL is through the application of fines in cash. Until 2012, the Agency recorded 4,974 penalties applied, these only 2,400 were paid by carriers, totaling an amount of USD 6.48 million dollars and leaving the Agency receive about USD 93.85 million dollars. The non-fulfillment of this obligations lead carriers restricting the issuance of clearance certificates of debt which creates impediment in the acquisition of government concessions to construction of new transmission stations, affecting plans for improvement (UOL, 2013).

In this context, using the ANATEL database as a means to make a case study of mobile operators in Brazil, this article objective is describe the Brazilian mobile phone market, in questions about your size, number of active lines, carriers' participation in the market and teledensity, as well as presenting all of non-quality indicators and rankings of carriers in relation to complaints registered by ANATEL and SENACON. The results displayed will serve to alert consumers about the deficiencies in the services contracted, causing seek alternatives on another carrier, or when there is no other option, stay aware of the frequent problems.

For both the organization of the present study begins with this introduction, followed by section two "Quality: Concept and Evolution", section three "The Quality Management Promoting Competitiveness", section four "ANATEL", and section five "Brazilian Mobile Phone Operators". The sections two, three, four, and five contain relevant concepts to this research. In continuity, section six presents "The Research Method", which is the methodological procedure used to develop this research. Section seven shows the "Results". Lastly, section eight shows the "Conclusions".

Quality: Concept and Evolution

Since 1950, the use of the concepts of quality within the production processes has enabled the evolution of organizations. Given that various authors have produced research on the topic, allowing the understanding of what really proves the quality (Diogenes, Sousa, Queiroz, Queiroz, & Hékis, 2013).

It was noticed during the time that the focus of quality has been expanding, seeking to reach not only the conformity of the product, but also the personal satisfaction of the clients, as shown in Table 1, entered the concepts of quality drawn up by Crosby (1990), Juran (1990), Feigenbaum (1994), Ishikawa (1993), and Deming (1993).

Table 1

Quality Concepts

Author	Quality concept
Crosby	Quality is defined in terms of compliance with the specifications.
Juran	Quality is the absence of deficiencies, that is, the fewer defects, the better the quality.
Feigenbaum	Quality means the best for certain conditions of the client. These conditions are: the real use and the selling price.
Ishikawa	Quality means continuous search of consumer needs, through: quality of product, service, business, people, and time.
Deming	Quality is compliance with current and future needs of the consumer.

Ratifying the quality concepts described by Ishikawa (1993) and Deming (1993), ABNT (2008) defined quality as a set of properties and characteristics of a product, process or service, with the ability to satisfy the needs expressed or implied. It is recognized that currently the quality of products/services is a preponderant factor in achieving customer satisfaction (Srivastav, 2010).

Organizations grow from achievements and maintaining customers. For both the preparation of products/services must be designed around the current concepts of quality, customer satisfaction (Diogenes et al., 2013).

In that context, the quest for quality and excellence in management has been considered as priority strategic objective in many global enterprises, ensuring quality as a competitive priority (Fuentes-Fuentes, Llorens-Montes, Molina-Fernandes, & Albacete-Saez, 2011).

The Quality Management Promoting Competitiveness

Powell (1995) believed that there is a positive relationship between quality management, competitiveness and management excellence.

According to Kaynak (2003) and S. Lagrosen and Y. Lagrosen (2003), quality management helps to improve the financial performance and operational practices, facilitating the company to create competitive advantage. Understanding this scenario global companies like Xerox, Ford, Motorola, and Federal Express, has been adopting two decades quality management processes (Powell, 1995; Rahman, 2004).

Commercial and financial globalization has reduced borders made possible by advances in technology in the service of creating new sales channels and logistics. With this increased scope of organizations acting doing extremely fierce competition is born. In this way, there is a constant and growing concern in the pursuit of customer satisfaction as a way to retain it (Levitt, 1990)

Quality management assists in the implementation of loyalty programs, because the act of customer loyalty to be influenced by the existence of products/services with quality, providing customer satisfaction. For Churchill and Peter (2003) loyalty programs can cause customers to consume more often goods or services offered by these companies.

Lee (2012) underscores that systematic efforts applied in order to achieve continuous improvement of quality increases business performance, providing the organization competitiveness needed to remain strong in the market.

ANATEL

ANATEL is one of 10 federally-created regulatory agencies supervise the provision of public services charged by the private sector, working in quality control and establishing rules for the sector. Established in 1997 the Agency has administrative and financial independence and is not subject to any government body. The ANATEL has the power of granting, regulation and supervision and must adopt measures necessary to take account of the interest of the citizen (ANATEL, 2011).

Its mission is to promote the development of telecommunications in the country, to give it a modern and efficient telecommunications infrastructure capable of providing adequate services to society, diverse and fairly priced throughout the national territory (ANATEL, 2011).

Brazilian Mobile Phone Operators

Brazilian mobile telephone operators recognized by ANATEL are allocated in two types "traditional operators" and "virtual operators". The basic difference is that traditional network suitable for operation and

has the rent virtual network of a traditional operator to enable its operation. In total there are nine operators in these eight are traditional (Vivo, Claro, Tim, Oi, CTBC, Sercomtel, Aeiou, and Nextel) and only one is virtual (Porto Seguro), as described in Table 2.

Table 2
Characterization of Brazilian Mobile Telephone Operators

(1) Operator:	Vivo S.A.
Description:	Formed by the merger of formerly State cellular companies in the country, was founded as a joint venture between Portugal Telecom and Telefónica in Spain, and is commanded by the latter, after having bought the position of first in July 2010. Its slogan is "Connected we live better".
Coverage:	All of Brazil.
(2) Operator:	Claro Serviços de Telecomunicações do Brasil S/A.
Description:	Result of the Union of six regional Operators: Americel, ATL, BCP Nordeste, BCP SP, Claro Digital e Tess. In September 2003 was announced the consolidation of all these operators under a single brand, of course. It is controlled by a Mexican company, Grupo América Móvil, one of the largest mobile telephony groups in the world that, from 2006, went on to adopt the course in 15 countries in Latin America. Its slogan is "Share every moment".
Coverage:	All of Brazil.
(3) Operator:	TIM—Telecom Itália Mobile.
Description:	Cell phone company based in Italy, active also in Brazil. In Europe is part of the Free Move alliance. The company is part of the Telecom Italia group, which also has operations in Argentina (Telecom Argentina), in Bolivia (Entel), Cuba (ETECSA) in addition to its operations in Italy. Its slogan is "You, without borders".
Coverage:	All of Brazil.
(4) Operator:	Oi Móvel.
Description:	Started its operation as a cell-phone in 2002 as an arm of the Telemar Group was the first operator of Brazil using GSM technology, the first ending with the fine for change of operator and second selling unlocked handsets. Its slogan is "Simple like this".
Coverage:	All of Brazil.
(5) Operator:	CTBC—Companhia de Telecomunicações do Brasil Central.
Description:	Offer services only to companies in Paraná, Rio de Janeiro, and Distrito Federal. CTBC was founded by Alexandrino Garcia, who acquired the telephone company then Teixeirinha. It is one of the Algar group companies. Its slogan is "CTBC. Proudly from here".
Coverage:	Brazilian States: Goiás, Minas Gerais, Mato Grosso do Sul, and São Paulo.
(6) Operator:	SERCOMTEL—Serviço de Comunicações Telefônicas de Londrina.
Description:	Practice areas: fixed telephony, mobile telephony GSM, and 3 g, the latter by Sercomtel Celular. It is the only public operator in the country. Its slogan is "1st quality service".
Coverage:	Cities from North, Northeast, and South of Paraná State.
(7) Operator:	UNICEL—aeiou.
Description:	Since May of 2011 the market disappeared: styrofoam leaving a debt of more than 100 million reais for the auction held by ANATEL payments among the years of 2005-2007. Currently it is under legal lock for performance in the market.
Coverage:	Metropolitan area of São Paulo City.
(8) Operator:	Nextel Telecomunicações S.A.
Description:	American company that started its operations in Brazil in 1997. His head is to serve corporate clients with the "Radio Trunking". The operation with telephone lines is still in an early stage. Its slogan is "Your world. Now".
Coverage:	Main cities of 11 Brazilian state more Distrito Federal State.
(9) Operator:	Porto Seguro Telecom.
Description:	The first operator in Brazil to work with mobile virtual network, which in turn was granted by TIM. The operator belongs to insurance Porto Seguro, aimed initially with this mobile network operation reduce existing connections in more monitoring of 500 mil tracked vehicles via mobile telephone network. The Telecom Datora is the responsible for the operation, traffic management, issuing bills, and interconnection agreements.
Coverage:	All of Brazil.
Coverage.	All Of Brazil.

Research Method

As to the nature, this research is classified as applied. In relation to the objectives, this research is descriptive and exploratory. As for the approach this is classified as quantitative using the method "survey".

The development of the survey took place in two steps. The first matched the bibliographical research, in which it was necessary to review the existing literature and define the scope for the search, creating products such as the theoretical foundation and identification of the assumption of the research. The second was the documentary analysis phase, in which it was necessary to verify the common indicators of quality not existing in the database consulted, making possible the formation of the results.

The documentary analysis phase covered the data concerning the year of 2012, available in the Portal in the section "ANATEL Dados" and the Sindec Report published by the SENACON in the same year.

Results

The results described in this section have been divided into two subsections: "Brazilian Mobile Phone Market Dimensions: Active Lines, Involvement of Operators in the Market and Teledensity" and "Non-quality Indicators".

Brazilian Mobile Phone Market Dimensions: Active Lines, Involvement of Operators in the Market and Teledensity

The year 2012 has finalized with 261,775,433 million active lines in Brazilian territory. 29.08% of these lines are linked to Vivo operator, 24.92% to Claro, 26.87% to TIM, 18.81% to Oi Móvel, 0.28% to CTBC, 0.03% to Sercomtel, 0.0031% to Porto Seguro, and 0.000013% to Nextel. Unicel (aeiou) is blocked by government to sell mobile phone lines, so there are no active lines. The numbers presented in Table 3 qualifying the carrier Vivo as the largest operator in number of activated lines, followed by TIM in second, Claro in third, Oi Móvel in fourth, CTBC in fifth, Sercomtel in sixth, Porto Seguro in seventh, Nextel in eighth, and Unicel (aeiou) in ninth.

Table 3

Active Lines in 2012

	Vivo	Claro	Tim	Oi Móvel	CTBC	Serco.	Unic.	Porto	Nextel	Total
Jan.	72,885,253	60,761,283	65,126,458	45,655,354	673,411	77,281	0	0	0	245,179,040
Feb.	73,916,795	61,066,484	65,916,842	45,965,200	675,627	77,100	0	0	0	247,618,048
Mar.	74,783,713	61,595,980	67,217,384	46,469,208	683,604	76,482	0	0	0	250,826,371
Apr.	75,264,525	61,938,763	68,024,647	46,976,184	701,821	76,204	0	0	0	252,982,144
May	75,538,746	62,688,017	68,536,385	47,402,971	705,940	76,875	0	0	0	254,948,934
June	75,719,728	62,966,248	68,873,683	47,771,900	725,438	74,070	0	0	0	256,131,067
July	76,181,210	45,038,477	68,672,340	47,661,864	744,798	73,496	0	2,000	0	238,374,185
Aug.	76,487,040	45,235,624	69,395,736	47,969,389	747,328	72,488	0	8,000	0	239,915,605
Sep.	76,805,554	45,368,493	69,408,234	48,375,988	743,917	72,099	0	8,300	0	240,782,585
Oct.	76,279,692	45,587,534	69,460,373	48,833,698	733,089	71,186	0	8,300	0	240,973,872
Nov.	75,979,811	64,353,443	69,534,884	49,362,112	736,831	68,051	0	8,300	0	260,043,432
Dec.	76,137,268	65,238,342	70,343,480	49,237,532	740,968	69,507	0	8,300	36	261,775,433

Vivo operator started 2012 as champion in activation of lines, with 1,331,653 enabled lines in January and 1,031,542 million in February, registering January to September a gradual growth in the amount of activated

lines between 0.24% and 1.86%. In the months of October and November, the carrier noted a reduction in lines of -0.68% as compared to September, and -0.39% compared to October. He finished with a 2012 resume growth of 0.21% in December. Vivo was the carrier with more activated lines in the months of January, February, and July.

The Claro operator registered from January to June a gradual growth in the amount of activated lines between 0.44% and 1.21%. In July recorded the biggest loss of lines throughout the year, between all operators, with remarkable reduction of -28.7% corresponding to 17,927,711 million lines. In the last five months of the year to clear recorded a recovery also noted, accounting for successive booms of 0.44%, 0.29%, 0.48%, and 41.6%, surpassing the incredible loss of July with an increase of 18,765,909 million lines in your network. Finalized 2012 with growth of 1.38% in December. Claro was the carrier with more activated lines in the months of May, November, and December.

The operator TIM grew gradually in the amount of active lines between 0.02% and 1.97% for almost all year, just in the month of July showed a decrease of -0.29%, which corresponds to removing -201.343 thousand lines in your network. In March the carrier enabled 1,300,542 million lines, his best result in the whole year. Finalized 2012 with growth of 1.16% in December. TIM was the carrier more activated lines in the months of March, April, and August.

The operator Oi Móvel recorded a gradual growth by June in the number of active lines between 0.68% and 1.10%. His first low in number of rows was noted in July, with a reduction of -110.036 thousand lines, corresponding to -0.23% over the month of June. Resumed gradual growth covering August until November between 0.65% and 1.08%. He finished 2012 with reduction -124.580 lines in its network, corresponding to -0.25% in relation to November. The mobile operator that more Oi Móvel activated lines in the months of June, September, and October.

The operator CTBC recorded gradual growth until August in the number of active lines between +0.33% and +2.98%. His first low in number of rows was noted in September, with a reduction of -3.411 thousand lines, corresponding to -0.46% over the month of August. Again in October noted a reduction of lines, with lows of -10,828 thousand lines in the network, corresponding to -1.46% over the month of September. Resumed the growth in the number of lines in November, with percentage growth of 0.51% compared to October. Finalized 2012 with growth of 0.56% in December.

The Sercontel recorded low in their workforce in the months of February, March, April, June, July, August, September, October, and November, with percentages of reduction ranging from -0.23% to -4.40%. Only in the months of January, May, and December the carrier recorded increases in their activations, with percentage growth ranging from +0.02% to +2.14%. Finalized 2012 with growth of +2.14% in December.

The operator Porto Seguro began operations in July with activation of 2,000 thousand lines. In August turned over 4,000 thousand lines, totaling 6,000 thousand. In September recorded the most activation 375 lines, since then have not noticed growth in your network.

Nextel started his carrier activation of mobile phone lines in December, with only 36 active lines. The highlight of Nextel in Brazil, is in radio communication.

In general, the mobile phone market presented January until June a gradual growth between +0.46% and +1.30% in the activation of mobile lines. The only significant low in July, where it was registered a -6.93% reduction in active lines, corresponding to the exclusion of 17,756,882 million lines in use. The gradual growth resumed as of August, aiming to increase percentages between +0.65% and +7.91%, highlighting the month of

November, with the addition of 19,069,560 million active lines. The year 2012 has finalized with percentage growth of +0.67%, in number of rows qualified for November. The numbers presented in Table 4, justify the results.

Table 4
Monthly Increase of Telephone Lines in 2012

	Vivo	Claro	Tim	Oi Móvel	CTBC	S.Tel	Porto	Next	Total
Jan.	1,331,653	381,781	1,043,309	171,272	19,506	16	0	0	2,947,537
Jan.	(+1.86%)	(+0.63)	(+1.63%)	(+0.38%)	(+2.98%)	(+0.02%)	.02%)		(+1.22%)
Feb.	1,031,542	305,201	790,384	309,846	2,216	-181	0	0	2,439,008
reo.	(+1.42%)	(+0.50)	(+1.21%)	(+0.68%)	(+0.33%)	(-0.23%)	U	U	(+0.99%)
Mar.	866,918	529,496	1,300,542	504,008	7,977	-618	0	0	3,208,323
wiai.	(+1.17%)	(+0.87%)	(+1.97%)	(+1.10%)	(+1.18%)	(-0.80%)	O	U	(+1.30%)
Apr.	480,812	342,783	807,263	506,976	18,217	-278	0	0	2,155,773
Apı.	(+0.64%)	(+0.56%)	(+1.20%)	(+1.09%)	(+2.66%)	(-0.36%)	O	Ü	(+0.86%)
May	274,221	749,254	511,738	426,787	4,119	671	0	0	1,966,790
way	(+0.36%)	(+1.21%)	(+0.75%)	(+0.91%)	(+0.59%)	(+0.88%)	U	U	(+0.78%)
June	180,982	278,231	337,298	368,929	19,498	-2,805	0	0	1,182,133
June	(+0.24%)	(+0.44%)	(+0.49%)	(+0.78%)	(+2.76%)	(-3.65%)	O	O	(+0.46%)
July	461,482	-17,927,771	-201,343	-110,036	19,360	-574	2.000	0	-17,756,882
July	(+0.61%)	(-28.47%)	(-0.29%)	(-0.23%)	(+2.67%)	(-0.77%)	2.000	U	(-6.93%)
Aug.	305,830	197,147	723,396	307,525	2,530	-1,008	6.000	0	1,541,420
rug.	(+0.40%)	(+0.44%)	(+1.05%)	(+0.65%)	(+0.34%)	(-1.37%)	(+300%)	U	(+0.65%)
Sep.	318,514	132,869	12,498	406,599	-3,411	-389	300	0	866,980
ьср.	(+0.42%)	(+0.29%)	(+0.02%)	(+0.85%)	(-0.46%)	(-0.54%)	(+3.75%)	U	(+0.36%)
Oct.	-525,862	219,041	52,139	457,710	-10,828	-913	0	0	191,287
Oct.	(-0.68%)	(+0.48%)	(+0.08%)	(+0.95%)	(-1.46%)	(-1.27%)	(0.00%)	U	(+0.08%)
Nov.	-299,881	18,765,909	74,511	528,414	3,742	-3,135	0	0	19,069,560
IVOV.	(-0.39%)	(+41.6%)	(+0.11%)	(+1.08%)	(+0.51%)	(-4.40%)	(0.00%)	U	(+7.91%)
Dec.	157,457	884,899	808,596	-124,580	4,137	1,456	0	36	1,732,001
Dec.	(+0.21%)	(+1.38%)	(+1.16%)	(-0.25%)	(+0.56%)	(+2.14%)	(0.00%)	50	(+0.67%)

As shown in Table 5, in total in 2012 the mobile phone market absorbed 19,543,930 million new lines, corresponding to a growth of 8.07% from 2011, these lines 80.53% are prepaid and 19.47% postpaid. CTBC was the carrier that has grew more in the year, with an increase of 13.31% in their lines. Sercomtel was the only company showed reduction in their active lines in -10.04%. Among the four largest carriers (Vivo, Claro, TIM, and Oi Móvel) who else grew up was TIM, with 9.77% increase in their lines. Already the Live recorded lower growth rate, noting an increase of 6.41% in the year. TIM was the carrier that activated the greater number of lines in 2012, with 6,260,331 enabling millions of rows.

Table 5
Annual Increase of Telephone Lines in 2012

Vivo	Claro	Tim	Oi Móvel	CTBC	Sercomtel	Porto Seguro	Nextel	Total
4,583,668	4,858,840	6,260,331	3,753,450	87,063	-7,758	8,300	26	19,543.930
(+6.41%)	(+8.05%)	(+9.77%)	(+8.25%)	(+13.31%)	(-10.04%)	8,300	36	(+8.07%)

As shown in Table 6, the Vivo operator started the year of 2012 having mobile phone market share of 29.73%, remaining at the home of 29% throughout the year, giving it the lead in the market. TIM is in second place with a 26.87% stake, keeping the level of 26% during almost every year, except in September, which recorded a drop to 17.53%, soon recovered to level 26% in October and held in November and December. The Claro is in the third place with a 24.92 % stake, keeping the level of 24% during the year, registering 0.75 falls from July to October to the level of 17%, recovered to the level of 24% in November and held in December. Oi

Móvel lies in the fourth place with 18.81%, remaining at the level of 18% all the year. CTBC is in the fifth place with 0.28%, remaining at between 0.27% and 0.29% all year. Sercomtel is in the sixth place with 0.03% and remained stable throughout the year. The Porto Seguro, Nextel, and Unicel (aeiou) have participation respectively, almost null, null, and void in the market, because the few active lines under its operation in the market.

Table 6

Percentage of Participation of Operators in Mobile Telephone Brazilian Market

	Vivo	Claro	Tim	Oi Móvel	CTBC	Sercomtel	Unicel	Porto Seguro	Nextel
Jan.	29.73	24.78	26.56	18.62	0.27	0.03	0	0	0
Feb.	29.85	24.66	26.62	18.56	0.27	0.03	0	0	0
Mar.	29.81	24.56	26.80	18.53	0.27	0.03	0	0	0
Apr.	29.75	24.48	26.89	18.57	0.28	0.03	0	0	0
May	29.63	24.59	26.88	18.59	0.28	0.03	0	0	0
June	29.56	24.58	26.89	18.65	0.28	0.03	0	0	0
July	29.71	17.56	26.78	18.59	0.29	0.03	0	0	0
Aug.	29.66	17.54	26.91	18.60	0.29	0.03	0	0	0
Sep.	29.67	17.53	17.53	18.69	0.29	0.03	0	0	0
Oct.	29.42	17.58	26.79	18.83	0.28	0.03	0	0	0
Nov.	29.22	24.75	26.74	18.98	0.28	0.03	0	0	0
Dec.	29.08	24.92	26.87	18.81	0.28	0.03	0	0	0

In Brazil the registered in 2012 had a teledensity (see Table 7), is of 132.78 rows each 100 inhabitants. Among the regions, the Midwest registers biggest had a teledensity, 158.55 lines.

Table 7
Teledensity in 2012

Region	Active lines	Teledensity (per 100 habitants)
Midwest	23,090,648	158.55
North-east	64,477,685	116.07
North	19,606,997	120.91
South-east	116,358,565	141.2
South	38,241,538	134.58
Brazil	261,775,433	132.78

Non-quality Indicators

Among the 15 kinds of non-quality in the provision of service by the Brazilian mobile telephony operators presented (see Table 8), were recorded by the users complaint ANATEL in 2012 between January and October (period computed by the agency), the misappropriation was the most cited, above the triple registered in each of the 15 reasons. Then non-quality indicators with higher frequency of complaints were "other reasons" on second, "additional services" in third, "service plans" in fourth, "service repair" in fifth, "repair" in sixth, "attendance" in seventh, "cancellation service" in eighth, "Deals" in ninth, and "blocking services" in tenth, completing the Top 10 complaints registered by ANATEL, as shown in Table 9.

Table 8

Origins of Non-quality

Origin	Description
Charges	Undue collection of contracted services.
Additional services	No additional services run as: internet access, SMS sending, etc.
Service plans	Not full availability of contracted services.
Attendance	Difficulty contact customer service telephone exchange.
Canceling	Difficulty in effecting the cancellation of contracted services.
Repair	Difficulty in effecting the repair/replacement of mobile phones and modems.
Habilitation	Problems on activation/operation of the contracted services.
Promotions	Full availability benefits not promoted by promotions.
Blocking	Blocking of services contracted by virtue of non-recognition.
Unblocking	Unlock the contracted services because of delay/non-recognition of payment.
Pre-paid card	Problems for prepaid reloading via card system.
Complete callings	Break (fall line) constant during phone calls.
Access code	Problems in qualification of the chips via access code PIN and PUK.
Coverage area	Problems in the area of coverage of operators leaving the mobile devices outside of the network.
Other reasons	Other issues that do not fit the 14 previously described natures.

Table 9
Number of Complaints Due the Offender During 2012

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.
Charging	38,758	33,710	38,246	33,456	37,976	31,510	38,210	43,847	37,624	44,962
Additional services	8,612	6,591	7,989	6,982	7,761	7,047	9,932	12,999	11,524	11,626
Service plans	6,684	5,060	5,837	4,988	5,905	4,684	4,925	6,193	5,180	5,984
Attendance	6,047	4,999	5,650	4,679	5,048	3,890	4,345	5,758	5,308	6,200
Canceling	5,197	4,361	5,322	4,751	5,516	4,189	4,656	5,297	5,203	5,887
Repair	4,252	3,648	3,989	3,833	5,351	3,933	5,018	7,700	7,210	7,073
Habilitation	4,258	3,465	4,327	3,793	4,758	4,063	4,778	5,269	4,299	4,879
Promotions (Deals)	3,766	3,280	3,432	3,510	4,432	3,542	3,520	5,270	3,403	3,524
Blocking	3,191	3,104	3,336	3,102	3,603	3,307	3,706	4,303	3,560	4,626
Unblocking	2,530	1,957	-	-	-	-	-	-	-	-
Pre-paid card	-	-	2,212	-	-	-	-	3,510	3,173	3,558
Complete callings	-	-	-	-	2,432	-	-	-	-	-
Access code	-	-	-	1,980	-	2,087	-	-	-	-
Coverage area	-	-	-	-	-	2,916	-	-	-	-
Other reasons	9,025	8,098	9,308	8,315	11,161	9,514	11,284	14,066	11,498	13,727
Total	92,320	78,633	89,648	79,389	93,943	77,766	93,290	114,212	97,982	112,046

The index presented in Table 10 is the result of the division between the numbers of complaints by the number of active lines, multiplied by 1,000. Oi Móvel, in all months registered by ANATEL in 2012 (Jan.-Oct.), pointed out have highest rates of complaints.

Already the Ranking is shown in Table 11, the four major carriers stand out negatively, being among the 10 conglomerates with the largest number of complaints registered, and again the Oi Móvel appeared the first place.

Table 10
Ranking of Complaints in the ANATEL Call Center Until October/2012

Position	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.
1st	0.534	0.476	0.474in	0.413	0.595	0.503	0.549	0.641	0.565	0.627
181	(Oi)									
2md	0.469	0.403	0.467	0.380	0.424	0.344	0.438	0.499	0.413	0.467
2nd	(Claro)									
21	0.310	0.260	0.294	0.266	0.298	0.240	0.320	0.440	0.348	0.413
3rd	(Tim)									
1+b	0.238	0.200	0.252	0.242	0.246	0.202	0.227	0.277	0.258	0.297
4th	(Vivo)									
5th	0.190	0.161	0.187	0.144	0.188	0.175	0.197	0.186	0.198	0.226
Sui	(CTBC)									
6th	0.052	0.013	0.026	0.039	0.039	0.041	0.054	0.014	0.014	0.042
oui	(S.tel)									

Table 11

Economic Conglomerates More Defendants in SENACON in 2012

Position	Conglomerate	No. of complaints	Sector
1°	Oi Móvel	120,374	Telephoning
2°	Claro/Embratel	102,682	Telephoning
3°	Itaú	97,578	Banking
4°	Bradesco	61,257	Banking
5°	Vivo/Telefônica	44,022	Telephoning
6°	Sky	33,520	Cable TV
7°	Tim/Interlig	32,286	Telephoning
8°	Santander	31,936	Banking
9°	Ponto Frio/Casas Bahia	28,531	Retail Sales
10°	Ricardo Eletro/Insinuante/City Lar/Eletro Shopping	26,808	Retail Sales

Conclusions

The increase of 19 million lines in 2012 at the level presented in ally had a teledensity in the country of 132 hits every 100 habitants confirms the growing expansion of the mobile phone market. The popularity of cell phones, sold at affordable prices and the ease in enabling a phoneline, made zero cost these days, makes the Brazilian consumer activate your lines often, already considering a disposable product.

The gap between the Oi Móvel (the 4th largest) and CTBC (5th largest) in amount of active lines, assumes the continuation of the mobile phone market monopolization by the four major (Vivo, Claro, TIM, and Oi Móvel) of the Vivo with a higher market share, followed closely by TIM and Claro and Oi Móvel a less stage.

Vivo, the market leader, has demonstrated the best results as the provision of its services and is in fourth place in the ranking of claims. TIM, the second carrier with the largest number of active lines, is coming soon in front of occupying the 3rd placing. Of course, the third-largest carrier, comes in second place in the rankings and in 1st place is Oi Móvel, the fourth largest in the market. It is interesting highlight the inverse relationship between market share and complaints ranking position, noting that the higher the market share, the lower the number of complaints registered.

However, even if on a smaller scale, it has been pointed out problems in the services provided by all carriers. In general, numbers of 15 kinds of flaws pointed out by users in the use of contracted services, predominantly prevails improper billing, leading often to a halt, since operators effect the inclusion of

Customer Credit Protection Service—SPC (resulting in the impediment in granting credit on the part of companies all over the Brazil), and before the fact, if feeling charged improperly and without effective debt correction response by carriers, clients activate lawsuits requiring in most cases punitive damages.

The term "sustainable growth" is well away from the understanding on the part of the operators. The growth of contrast enabled lines of stagnation in the evolution of operational infrastructure was detected by ANATEL. In retaliation, the Agency acted rigidly by enabling blocking new lines, which impacted not only increasing but also in the reduction of active lines. To return to normalcy has been operators required formatting an infrastructural expansion plan, providing for improvements in the sector, which so far is not being perceived by users.

The dissatisfaction on the part of Brazilian society with regard to the services provided by mobile phone operators is fait accompli. It is very common that users report informally their negative experiences in the use of contracted services. This framework recognized by competent organs ANATEL and SENACON, coming to encourage the formalization of those complaints, for that have support their actions in trying to promote the improvement of services provided by carriers.

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