

The Global Domain Name Market in 2018

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1. Introduction

The publication of ICANN statistics as at 31/12/18 allows a quantified assessment of 2018, a period of moderate upswing after the "set-down" of 2017.

The data on which this study is based come from ICANN reports (Transactions - registries), from information provided by registries in certain frameworks such as the Council of European National Top-Level Domain Registries (CENTR) or the Asia Pacific Top-Level Domain Association (APTLD) or via their websites, and research conducted by Afnic. In some cases, we have also relied on specialized sites such as NTLDSTATS.COM.

Our figures may vary slightly from those reported by other sources, in particular due to the lack of precise data for certain country code Top-Level Domains (ccTLDs).

A supplement to the annual review of the market for domain names in France

This study supplements our **Annual review of the French domain name market** published at the beginning of each year. It helps put into perspective the specific trends of the French market by comparing local data with global data.

For the record:

- the growth of the French market as a whole was 2.1% in 2018 compared with 3.2% in 2017 [for the .FR these same figures were 4.4% in 2018 against 5.2% in 2017];
- the market shares of the various segments were, at the end of 2018, 37% for the .FR, 45% for the .COM, 12% for the "Other Legacy TLDs" and 2% for the "new TLDs".

We refer the reader to this document for more information on the French market. It can be downloaded for free from the Afnic website:

- in French: https://www.afnic.fr/medias/documents/etudes/Le_FR_en_2018.pdf
- in English: https://www.afnic.fr/medias/documents/etudes/The_FR_in_2018.pdf

Definitions

APTLD: Asia Pacific Top-Level Domain Association.

CENTR: Council of European National Top-level Domain Registries.

ICANN: Internet Corporation for Assigned Names and Numbers.

TLD (Top-Level Domain): top-level domain. .FR and .ORG are top-level domains.

ccTLD (country-code Top-Level Domain): top-level domain corresponding to a territory or country. The ccTLD for France is the .FR, but there are other French ccTLDs such as .RE (Réunion Island), .PM (Saint-Pierre and Miquelon) etc.

gTLD (generic Top-Level Domain): generic TLD, not attached to a particular country or territory. .COM, .NET, .ORG are gTLDs.

Legacy gTLD: generic TLD created before 2014. These are "legacy" TLDs such as .COM, .NET, .ORG or more recent (2001-2004) such as .INFO, .BIZ, .MOBI, etc.

nTLD (new Top-Level Domain): generic TLD created after 2014. NTLDs are divided into several sub-segments such as geoTLDs (regions, cities, etc.), Community TLDs (community-based), .BRANDs (TLD suffix corresponding to major brands) or generic nTLDs (common dictionary terms).

Penny TLD: TLD that is free or sold at a very low price.

2. Executive summary

At the end of 2018, the global domain name market represented some **330 million domain names**, including:

- 176 million legacy TLDs (.COM, .NET, .ORG, etc.),
 - 27 million nTLDs created from 2014 onwards,
 - and 126 million ccTLDs (so-called "geographic" domains).¹
- **Overall market growth in 2018 was 4.0%**, an improvement compared with the 1.2% in 2017. An upswing is therefore observed in 2018 after the turbulent period of 2015-2017, but the pace of growth remains well below the levels recorded in the early years of the decade. 2019 should continue this trend of moderate growth.
 - nTLDs resumed growth in 2018, with a 15% increase in stock. Their market share is still marginal (8%), compared with that of the .COM (43%) and ccTLDs (38%). The Other Legacy segment suffered the most with a loss of 6% in stock.
 - The disposals therefore continued between the nTLDs and Other Legacy TLDs, but the sometimes low retention rates of the former show that there is also a tendency for holders not to renew defensively filed domain names deemed useless in a context where the proliferation of TLDs renders ineffective or overpriced any protection strategy based on mass filings.
 - Regional ccTLD dynamics continued to be mixed, with constant catch-up in Africa (+9%) and Latin America (+6%), while North America (+1%) and Europe (-1%) seem destined for some stagnation. Asia-Pacific (+12%) recorded this good performance due to a sharp increase in .TW (Taiwan), which may result in a poor performance in 2019.
 - Among the nTLD segments, the Communities suffered from the collapse of the ".pyc" ("Russian"), the Geographics are stable and the Generics increased by 13% in stock. The .CORPs are experiencing an explosion (+414%) because of three of them who may deserve to be reclassified as Generic. The number of .CORPs has been on a downward trend for two years, with a net balance of -9 TLDs in 2018 (-14 in 2017).
 - Three-quarters of the new TLDs have fewer than 5,000 names in the portfolio, while only 1% exceed 500,000. For many of them (except the .CORP), the low volumes are a serious handicap for the balance of their accounts and the financing of their development.
 - The change in the utilization rate of nTLDs taken as a whole continues to be encouraging, having continuously improved since 2015. However the share of unused and renewed

¹ 32 million "penny" ccTLD have been withdrawn from this total, for reasons explained later in this study.

names is tending to decrease, which no doubt betrays a tendency among holders to manage their renewals more strictly.

- The study of the distribution of domain names in the various ICANN regions shows that ccTLDs are leaders in every region except North America, dominated by the .COM.
- These data highlight the difficulty for new entrants to impose themselves faced with "cultural prisms" in one case prioritizing the notions of region and proximity, and in the other case a global approach that overrides any reductive specific feature implied by the TLD chosen.
- The strategies of the major players were structured in 2018 by phenomena such as the overall slowdown in growth relative to the levels of the first half of the decade; cash stress experienced by many nTLD players; the race for critical size to achieve economies of scale and synergies; the growing presence of financial groups that can support ambitious external growth strategies.
- We have therefore seen a proliferation of buybacks, mergers, and changes in back-end registries, but it is difficult to say whether the profitability and sustainability objectives of the players concerned will be achieved in a context where create operations tend to decrease while the retention rates need to be monitored.
- China still holds significant market opportunities, but in the medium term many players base their hopes on the next ICANN round, whose due date is still relatively distant. In the shorter term, the players are oscillating between the temptation to increase their tariffs (at the expense of volumes) or to boost their volumes (to the detriment of profitability). Entrepreneurial strategies tend to give way to purely financial approaches that bring certain players back to reality.
- As we already noted in 2018, the fact remains that the registry - registrar system will no doubt have to change in the future, by increasingly favoring the emergence of specialized or "proximity" resellers, who will take care of marketing nTLDs to the relevant niche markets. The transformation is not an obvious one for every player and remains slow to enter the mores, registrars often considering themselves as wholesalers whose role is not to build and facilitate dealer networks optimized for this or that target. Current and future nTLDs cannot, however, be successful without the changing of the retail system.
- At the registry level, the services related to "Data", the improvement of the DNS infrastructures, Cybersecurity, "Blockchains" and the Internet of Things remained the main areas for development and diversification, to which were added in 2018 the problems and solutions for managing digital identities.

3. Global trends

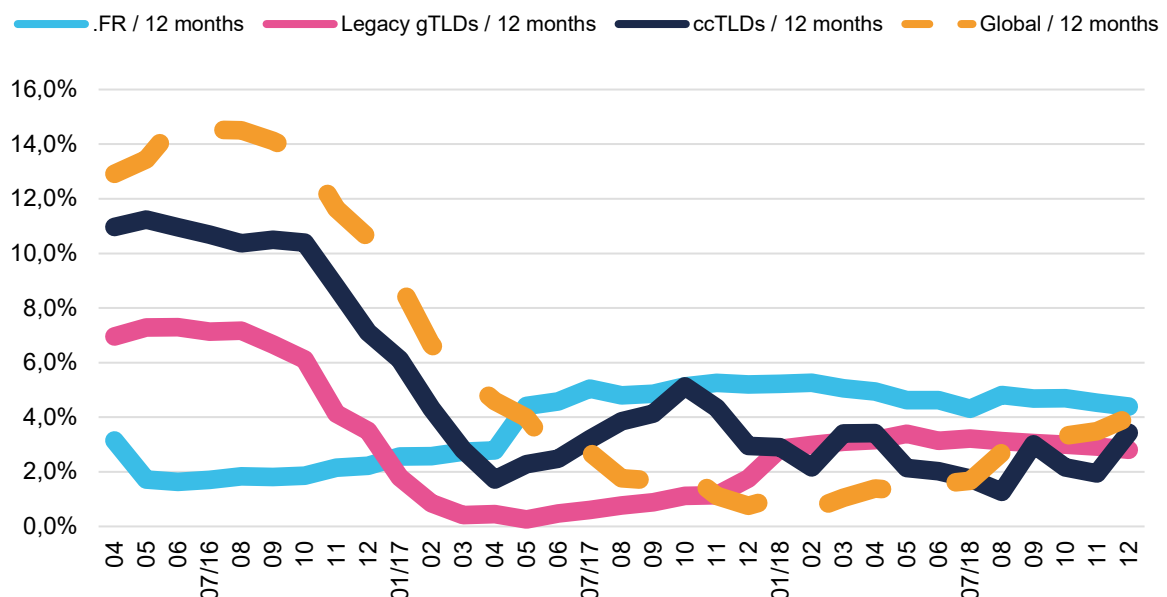
The domain name market (excluding the penny TLDs) represented 330 million names worldwide at year-end December 2018, up 4.0% from 2017 (317 million). After a noticeable slowdown, the bottom of which seems to have been reached during the 1st quarter of 2018, overall growth picked up again in 2018.

3.1. An upswing ahead?

The chart below shows the end of the "bell" phenomenon which reflects the sharp acceleration in growth in 2015/2016 before a depression in 2017/2018 following the delete operations of the names up for renewal.

The continuous improvement in the growth rate throughout 2018 makes it possible to hope for a market upswing, stronger than the sudden accelerations linked to one-off campaigns for mass filings.

Change in growth rates 2016-2018



The new TLDs are not included on this chart because the large variations in their amplitude would overwrite the other curves. They represented +146% in 2016, -15% in 2017 and +15% in 2018. The bottom of the cycle was reached in March 2018 (-20%) after which this segment saw its situation improve and return to growth from August 2018 onwards.

3.2. Contrasting performances

Table 1 below shows the main indicators for each market segment between 2016 and 2018.

	Stock (m ND)			Variations (%)			Market share (%)		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
.COM	131	135	142	3.7%	2.8%	5.2%	42%	43%	43%
Other Legacy TLDs *	37	36	34	2.8%	-1.9%	-6.0%	12%	12%	10%
nTLDs	28	24	27	146.2%	-14.6%	15.4%	9%	8%	8%
Total gTLDs **	197	195	204	12.8%	-0.6%	4.3%	62%	62%	62%
ccTLDs ***	118	122	126	7.1%	2.9%	3.4%	38%	38%	38%
TOTAL	315	317	330	10.6%	0.8%	4.0%	-	-	-
Penny ccTLDs ****	23	25	32	16.4%	17.1%	20.2%	-	-	-

m ND: Year-end data expressed in millions of Domain Names.

* Other Legacy TLDs: generic TLDs created before 2012, such as .AERO, .ASIA, .BIZ, .NET, .ORG, .INFO, .MOBI, etc.

** Total gTLDs: measures all the domain names managed under a contract with ICANN. This includes the new TLDs, some of which are not, strictly speaking, "generic".

*** ccTLDs or "country code Top-Level Domains", i.e. domains corresponding to territories, such as the .FR for France. The data presented no longer include "Penny TLDs" ie ccTLDs retailed at very low prices, if not free of charge. These ccTLDs are subject to very large upward and downward movements that do not reflect actual market developments and bias aggregate data.

**** Penny ccTLDs: estimated volume of names filed in these "low cost" or free domains.

With 142 million names, .COM remains the heavyweight of this market. Its market share increased by 0.5 points in 2018, rising from 42.6% to 43.1%, as a result of a growth rate that increased sharply in 2018 (5.2% vs. 2.8% in 2017).

The Other Legacy TLDs suffered particularly badly in 2018, losing 6% in stock after the 2% of 2017. These figures show that negative factors weigh on these TLDs, factors that we shall explain later in our study.

New TLDs gained 15% in stock after losing 15% in 2017. These relatively large variations in amplitude denote the impact of some aggressively marketed TLDs such as the "penny ccTLDs", which we cannot yet remove from our statistics as these aggressive strategies may only be punctual, linked to launch periods.

The country code Top-Level Domains (ccTLDs), which had a good year in 2016 and a significant slowdown in 2017, resumed the path to moderate growth in 2018.

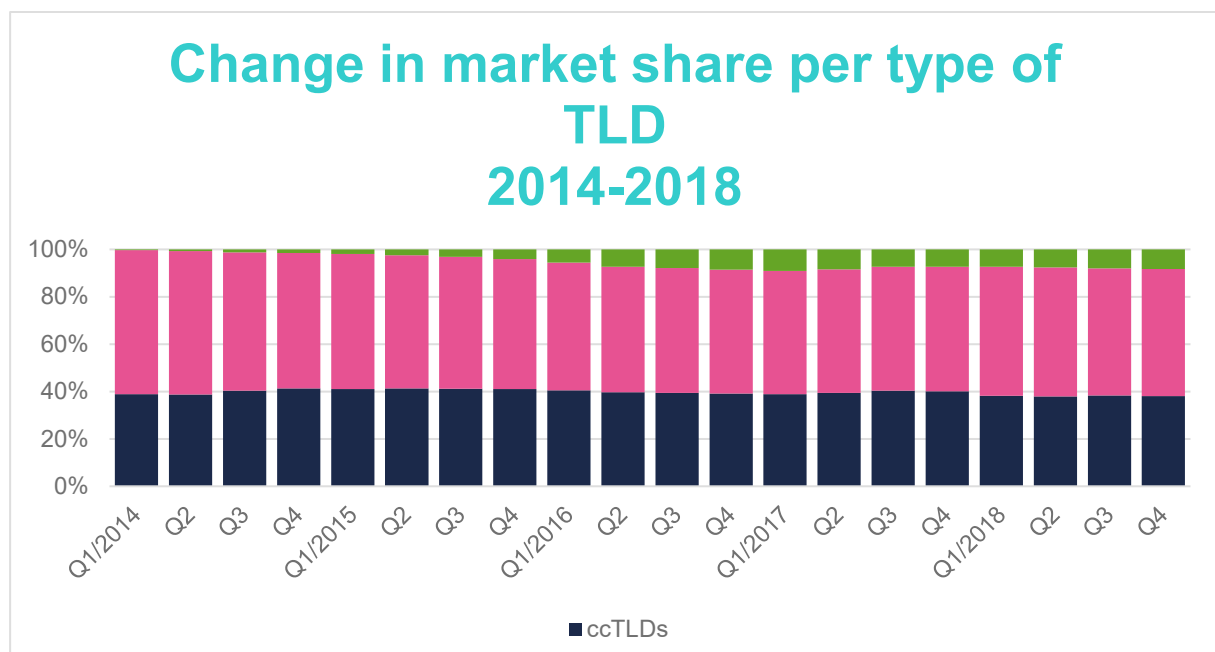
The market shares are relatively static overall, the main change to note being that of the Other Legacy TLDs which lost 2 points in favor of the other segments.

If 2017 could be considered a set-down year after the euphoria of 2015/2016, 2018 was undeniably a period of resumed growth, on bases that one can hope are more solid because they are less related to domaining practices.

3.3. nTLDs, from loss of momentum to fresh impetus?

The chart below shows a quarterly view of the change in market share of the various segments since the introduction of the first nTLDs in January 2014. Note the strong growth of nTLDs up to Q1 2017, before a period of decline in Q2 and Q3 2017 and stabilization at the end of the year and Q1 2018. 2018 saw a recovery in the momentum of gains in market share, even if they remain modest overall with less than 10% for all of the 1,300 new TLDs created since 2014.

At the same time, the ccTLDs were fairly stable in their market shares, even if the trend was slightly downward in 2018. This being said, this segment combines so many different situations in terms of eligibility conditions or marketing strategies, that it is impossible to make a judgement on this overall performance.



3.4. A market dominated by the .COM in 2018

The same data expressed in net balance highlight the weight of the different segments in the overall performance of the market in 2018. It can be seen that the .COM alone accounts for 56% of the net balance, while ccTLDs contributed 33% and nTLDs 29%. These figures are inflated by the under-performance of the Other Legacy TLDs, which reduces accordingly the basis for calculating the various contributions as percentages.

The data in absolute value are more interesting to locate the orders of magnitude from 2016 to 2018. For example, the net balance was 30 million names in 2016, before falling to 2 million in 2017 due to delete operations. The figure of 13 million in 2018 is one of the signs of a return to normal, but we can see that the net balance of the gTLDs is 82% due to the good performance of the .COM (7/8.5).

	Net balances (millions of DN)			Weight in the total		
	2016	2017	2018	2016	2017	2018
.COM	4.7	3.7	7.0	16%	156%	56%
Other Legacy TLDs	1.0	-0.7	-2.2	3%	-31%	- 17%
nTLDs	16.6	-4.1	3.7	55%	-172%	29%
<i>Total gTLDs</i>	22.3	-1.1	8.5	74%	-47%	67%
ccTLDs (excluding "Penny")	7.8	3.5	4.2	26%	147%	33%
TOTAL	30.1	2.4	12.7	-	-	-

These data are useful for giving an idea of the relative positions and dynamics of the major market segments - Legacy, ccTLD and nTLD - but they do not explain them. Now let's take a closer look at each of these three segments to try to better understand the phenomena at work in 2018.

4. Legacy TLDs in 2018

There are now 18 "Legacy TLDs", or "traditional" domains created before 2012: AERO, ASIA, BIZ, CAT, COM, COOP, INFO, JOBS, MOBI, MUSEUM, NAME, NET, ORG, POST, PRO, TEL, TRAVEL, XXX.

The stocks of these Legacy TLDs vary considerably, from the few names of the .POST to the 142 million of the .COM.

In order to present relevant summary tables and indicators, we shall only distinguish the six most important in terms of volume, aggregating the other 12 in an "Others" line.

	Stocks (thousands)			Create operations (thousands)			"M" (thousands) (*)		
	2017	2018	Var.	2017	2018	Var.	2018	% 2018	% 2017
.BIZ	2 138	2 240	5%	562	811	44%	1 430	67%	66%
.COM	135 027	142 049	5%	33 324	35 476	6%	106 573	79%	77%
.INFO	6 980	5 539	-21%	3 136	1 504	-52%	4 036	58%	67%
.MOBI	544	480	-12%	67	54	-18%	425	78%	71%
.NET	14 951	14 288	-4%	3 029	2 762	-9%	11 527	77%	74%
.ORG	10 835	10 663	-2%	2 023	1 953	-3%	8 709	80%	80%
Others	1 133	1 162	3%	291	328	13%	834	74%	65%
TOTAL	171 608	176 422	3%	42 431	42 888	1%	133 534	78%	77%

* "M" refers to the number of domain names retained in 2018. This figure is obtained by a fairly simple equation: $M = \text{Stock at 31/12/2018} - \text{Create operations 2018}$.

This is because the stock of a TLD at the end of 2018 is mathematically constituted by the names of the stock as at 31/12/2017 retained in the portfolio to which have been added the domain name creations of 2018. It is therefore possible to deduce a "retention rate" based on these data from the various registries at ICANN [% R] for the names that were in stock at the end of 2016.

$Rr R 2018 = M / \text{Stock 2017}$

This "retention rate" should not be confused with the Renewal Rate, which only concerns the names that were up for renewal during the year in question. Names filed for several years are "retained" but not "renewed".

In 2018, the global Legacy stock grew by 3% while create operations appreciated by only 1%. The explanation lies in the retention rate which gained 1 point, rising from 77% in 2017 to 78% in 2018.

4.1. Contrasting situations

The data presented above show that the situations of the main Legacy TLDs are quite contrasting. They most often follow promotional campaigns that have their effects in terms of create operations in the first year, and in terms of delete operations the following year.

The case of .INFO was emblematic of this situation in 2018. After 2017, a year marked by an excellent performance in China, which caused an explosion in the number of its create operations by 68%, the TLD saw the same create operations halved in 2018 compared with 2017 and its retention rate lose 9 points, resulting a loss of 21% in stock. These variations could seem worrying for the health of the suffix if one only considered 2018, but put back in their context they seem rather natural.

The .BIZ in 2018 was in the same situation as the .INFO the previous year: in May 2018 it recorded create operations for 382,000 domain names or 10 times its monthly average. The campaign explains the strong growth of its create operations, just as it will probably result in 2019 in phenomena similar to those experienced today by .INFO.

Beside these large TLDs which maintain their business with campaigns, others are experiencing real difficulties. For example, .MOBI whose create operations have been declining for several years: 500,000 in 2013, 161,000 in 2014, 113,000 in 2015, 131,000 in 2016, 67,000 in 2017 and 54,000 in 2018. These TLDs are threatened by the scarcity of demand, often because of the multiplication of possible choices, which "vampirise" their potential prospects while encouraging the rights holders to practice highly targeted defensive strategies on TLDs considered critical in relation to their business.

The case of .NET is something else, although similar dynamics are at work. Verisign has been steadily increasing .NET prices for several years and at least a portion of the "losses" of create operations are due to these price increases. However, the retention rate is improving, which suggests that .NET is still a choice TLD that holders prefer to keep.

4.2. Improved retention rates

Most of the retention rates in 2018 showed sometimes very significant improvements, as in the case of .MOBI. .INFO was an exception with its loss of 9 points, but this can be explained by the performance in China in 2017.

This general trend towards improved retention rates is linked to the end of the 2017/2018 wave of delete operations caused by the massive create operations in 2016 (with a time lag linked to the redemption and "pending delete" periods).

This is a good sign for these extensions that are starting out in 2019 on a sound basis, at least those whose promotional campaigns were not too aggressive.

	2012	2013	2014	2015	2016	2017	2018	Var. 17/18 (in pts)
.BIZ	76.6%	75.3%	66.8%	68.3%	76.2%	66.4%	66.9%	0.5
.COM	78.2%	78.0%	77.5%	77.4%	78.2%	77.4%	78.9%	1.5
.INFO	46.2%	51.2%	61.2%	65.3%	76.6%	66.9%	57.8%	-9.1
.MOBI	68.7%	69.6%	58.1%	68.6%	76.6%	70.8%	78.2%	7.4
.NET	77.4%	76.6%	76.6%	76.7%	79.6%	73.9%	77.1%	3.2
.ORG	78.6%	78.4%	78.2%	78.4%	82.2%	79.6%	80.4%	0.8
Others	74.3%	69.1%	64.5%	81.4%	82.5%	64.8%	73.6%	8.8
TOTAL	76.1%	76.4%	76.4%	76.8%	78.5%	76.6%	77.8%	1.2

Change in Retention Rates for Legacy gTLDs 2012-2018

4.3. Implications in terms of naming strategies

We have already noted that the improvement in retention rates could be linked to the end of "purges", that is to say that the names remaining in the portfolio are intended to be kept in increasing proportions.

There are mainly four reasons for keeping a domain name:

- (a) because it is used and therefore important for its holder;
- (b) because the holder wants to keep the name even if they are not using it at present (current project, conviction that the name will gain value, etc.)
- (c) because it corresponds to a brand that the holder wants to protect (defensive domain registration)
- (d) because the holders are lackluster in the management of their domain names and renew the names without questioning the merits of the operation.

Among all these reasons, (a) and (b) are the strongest because they are related to uses or to a perception of value. (c) and (d) are the weakest and very sensitive to price changes as to the appearance of new TLDs that may need to be filed. This leads to disposals in a context where budgets are not infinitely expandable. The sums spent on defensive filings deposits in Legacy TLDs are allocated to other defensive registration in the nTLDs, and the holders who have managed their portfolios in a rather loose manner are forced to adopt optimization strategies. It is more than likely that the Legacy TLDs (except the .COM) suffer from these disposal strategies that dry up their create operations and force them either to practice aggressive promotional campaigns to temporarily maintain their stocks, or to assume a certain decline while looking for ways to retain their current holders.

The good health of the .COM in terms of create operations (+6% in 2018) can be explained by the existence of campaigns, but it is more probably due to a refocusing of users on the TLDs they know best. It is these TLDs (.COM and the main ccTLDs) that are still the subject of

sustained create operations and generally enjoy high retention rates. The consequence is that the domainers, when they are not Chinese, tend to favor the TLDs that are well-established at the expense of newcomers with a higher risk profile.

These different phenomena (the refocusing of create operations, the disposals of retained names, a relative loss of interest in defensive filings and speculative operations, largely explain the decline of the "Other Legacy TLDs", the difficulties of many nTLDs in finding their market, and the relative good health of the .COM and the main ccTLDs.

5. ccTLDs (country-code Top-Level Domains)

ccTLDs as a whole confirmed their growth momentum, with +3.4% in stock against +2.9% in 2017. Performance deteriorated between the peak of October 2017 (+5%) and the trough of August 2018 (+1.8%) before recovering during Q4 2018.

5.1. Dynamics very different from one region to another

The study of regional dynamics shows, however, that the situations differ according to geographical area. In North America, the performance characteristics mainly reflect that of the .US, which is slowly returning to growth in 2018 after the 2017 "purge".

Latin America saw its growth increase significantly in 2018, moving from a balanced situation in 2017 to a growth rate of 6%. This phenomenon is mainly due to the .BR (+250,000 names) and .MX (+165,000 names).

Even excluding penny TLDs, Africa posted strong growth of 9% compared with 6% in 2017, which illustrates the rapid development of the Internet, probably related to catch-up effects.

Asia-Pacific is the region with the highest score, with growth of 12% against 2% in 2017, despite the poor performances of .CN (China), .CC (Cocos Islands) and .NU (Niue Islands) which according to our estimates respectively lost 480,000, 270,000 and 150,000 names. These losses were largely offset by the explosion of .TW (Taiwan), which gained nearly 4,100 names following a promotional campaign.

Europe finally is the only region to have lost stock, even if the loss remains very limited (-1%). The biggest variations are in gain, those of .FR (+139,000 names) and .PT (Portugal, +111,000 names) and in losses, those of .DE (Germany, - 110,000 names), .EU (-158,000 names), .SE (Sweden, -205,000 names), .RO (Romania, -238,000 names) and .RU (Russia, - 350,000 names).

<i>Data excl. penny CcTLDs</i>	Stock (millions)			Variations (%)		Market share (%)			
	2016	2017	2018	2017	2018	2016	2017	2018	18/17
North America	4.8	4.8	4.9	-0.4%	0.9%	4.1%	4.0%	3.9%	- 0.1
Latin America	7.7	7.7	8.2	0.0%	5.9%	6.5%	6.3%	6.5%	+0.2
Africa	1.4	1.5	1.6	5.9%	8.6%	1.2%	1.2%	1.3%	+0.1
Asia-Pacific	34.6	35.3	39.4	2.1%	11.5%	29.3%	29.1%	31.3%	+2.2
Europe	69.5	72.2	71.7	3.9%	-0.7%	58.9%	59.4%	57.0%	-2.4
TOTAL	118.1	121.6	125.7	2.9%	3.4%	-	-	-	-

Although losing 2.4 points of market share, the European market is still dominant with 57% of domain names filed in ccTLDs (excluding the "pennies"), followed by the Asia-Pacific region (31%).

The other three regions do not account for more than 12% all three combined, which shows the low numbers of ccTLDs and their significant potential, which translates into high growth in Africa and Latin America.

5.2. Influence of gTLDs-like and penny-ccTLDs

To avoid bias due to their high volatility, we have excluded from our global tracking these TLDs made specific by the innovative marketing strategies of their registries. But this does not detract from the interest of following the sample over time.

It should be recalled that these ccTLDs have been "diverted" from their original purpose, i.e. marketed not as national TLDs, but as generic TLDs, against a backdrop of semi-gratuity where the highly attractive price replaces the potential lack of any "generic" meaning of the ccTLD.

The most well-known gTLDs-like are .TV (Tuvalu Islands - "Television"), .ME (Montenegro - "Me / Myself"), .CO (Colombia - "Commercial"), .NU (Niue Island - "New" in Swedish) or even the .LA (Laos - "Los Angeles"). We have added the .VC (Cape Verde - Venture Capitalist).

The penny ccTLD identified this year, subject to an inventory, are the .CC (Cocos Islands), .CF (Central African Republic), .GA (Gabon), .GQ (Equatorial Guinea), .IO (British Indian Ocean Territory), .ML (Mali), .PW (Palau Islands), and .TK (Tokelau Islands).

If we make a distinction between the three ccTLD segments based on the marketing strategies of their registries, the "true ccTLDs", the quasi-gTLDs and the penny ccTLDs, we obtain the data collected in the table below.

		2015	2016	2017	2018
ccTLDs	Stock	106.3	113.8	117.3	121.7
	Variation	7.9	7.5	3.6	4.4
	Var. (%)	8%	7%	3%	4%
Quasi-gTLDs	Stock	3.9	4.3	4.3	4.1
	Variation	0.4	0.4	0	-0.2
	Var. (%)	12%	11%	-1%	-5%
Penny CcTLDs	Stock	30.8	23.1	25.2	31.6
	Variation	9.0	-7.7	2.1	6.4
	Var. (%)	41%	-25%	9%	26%
TOTAL	Stock	141.1	141.2	146.7	157.5
	Variation	17.4	0.1	5.6	10.8
	Var. (%)	14%	0%	4%	7%

The proportions did not significantly change in 2018, with "quasi-gTLDs" undergoing a slight decrease, showing that they are also likely to be victims of competition from the new TLDs.

"Classic" ccTLDs saw their market share erode to 77% from 79% in 2017, with 2018 being a mild recovery after the 2017 'low'.

"Penny-ccTLDs" saw their stock increase sharply (26%), but this should not necessarily be interpreted as an "improvement" for this segment, which is subject to high volatility. This is why we have excluded them from our market trend analyzes, although in 2018 they accounted for nearly 60% of the net change in all types of ccTLDs combined.

Penny ccTLDs are only found in Africa and Asia-Pacific, as shown in the table below.

Data <i>Penny CcTLDs</i>	Stock (millions)			Variations (%)		Market share (%)			
	2016	2017	2018	2017	2018	2016	2017	2018	18/17
Africa	1.9	4.3	8.8	122%	105%	8%	17%	28%	+11
Asia-Pacific	21.2	20.9	23.0	-1.0%	10%	92%	83%	72%	-11
TOTAL	23.1	25.2	31.6	9.0%	26.2%	-	-	-	-

Although Asia-Pacific dominates thanks to the .TK, it is Africa which enjoyed the strongest expansion dynamic among these TLDs, the use of which is problematic. These domain names most often point to content generated automatically in order to capture traffic by taking advantage of the law of large numbers. The question that arises is how long will these bubbles will last before exploding, due the loss of interest among those who used them to create cheap addresses on the fly, but who will not continue to do so if prices were to increase.

6. nTLDs

It should be recalled that the only thing new Top Level Domains often have in common is that they are "new". This is not enough to qualify them because this feature will disappear over time (and of course at the next ICANN round). Too often, observers refer to the success or failure of "new TLDs" without taking time to group them into segments that make sense and allow for a more nuanced approach.

6.1. Definition of new TLD "segments"

This is why we have created different market segments, corresponding to the most frequent approaches in specialist circles. It is obvious that these TLDs are still "young", such that the uses made of them may lead to revisions of this segmentation which is still highly biased by the "nature" of the nTLDs and the conditions for being eligible to hold them:

- ✓ **Community:** domain name filings reserved for the members of a community, and if applicable, with use being community-centric.
- ✓ **Geographic:** nTLDs of a geographical character designating a city or region.
- ✓ **Generic:** nTLDs consisting of generic terms.
- ✓ **Corporate or Brand TLDs:** TLDs corresponding in general to flagship brands, filed by private entities for internal use or extended to their customers, excluding all other users.

Our nTLD segmentation attempts to reflect the purpose of TLDs rather than their "ICANN status", since the latter are difficult to qualify and have sometimes been adopted for tactical reasons (such as the privileges granted to "Community" nTLDs). There is currently no "official" nTLD nomenclature, so our segmentation is liable to change based on information made public by the registries or ICANN.

An additional complexity factor is the degree of restriction required by each registry. Access to a ".CORP" can be relatively "open" (if the only condition to be met is, for example, being a client of the delegate) when the registration of a Generic TLD may equally as well be subject to conditions. NTLDSTATS.COM, which provides a nomenclature, is based on a framework that ranges from "Unrestricted" to "Restricted" through "Semi-restricted" and "Brand". However, while this approach may explain the data on volumes (or their absence) according to eligibility conditions, it does not teach us anything about the purpose and market positioning of nTLDs.

The differences in dynamics observed for each of our segments show that the typology used is relevant today. But it remains susceptible to change, as shown by the appearance in 2018 of a handful of .CORP TLDs with very high volumes. Undoubtedly nTLD families will continue to refine in the future, requiring periodic revisions of the classification of these top level domains in order to keep as close as possible to market realities.

6.2. Performance of new TLD "segments"

	Stocks (thousands)			Create operations (thousands)			Retention		
	2017	2018	Var.	2017	2018	Var.	R. 2017	% R. 2018	% R. 2017
Community TLDs	142	63	-56%	4	3	-13%	60	42%	NA
Geographic	1 019	1 038	2%	230	196	-15%	842	83%	87%
Generic	22 427	25 289	13%	13 141	16 972	29%	8 317	37%	35%
Corporate	208	1 069	414%	127	913	619%	156	75%	47%
TOTAL	23 796	27 458	15%	13 502	18 084	-	9 374	39%	37%

2018 saw the segment of "Community" TLDs undergo an abrupt correction, mainly because of the ".pyc" ("Russian") which sank from 125,000 names to 46,000. The other domains of this segment are mostly losing stock, but the decline remains limited. The create operations are down by 13% and the turnover rate is low, 42%, due to delete operations made under the ".pyc".

Geographical TLDs as a whole posted moderate growth of 2%, the dynamic of create operations not being very encouraging (-15%) and the renewal rate is down, although still above 80%. The best performances in this segment were achieved by .TIROL (+54,000 names) and .COLOGNE (+51,000). The "worst" by .KIWI (- 182,000) and .LONDON (- 18,000). The under-performance of .KIWI, which lost nearly 90% of its stock in one year, weighs heavily on aggregated geo-TLD data. The retention rates still remain at 83%, which is by far the best of the four segments.

The generic TLDs, which represent 92% of the names registered as nTLDs, saw a growth of 13% and an increase in their create operations of 29%. Their very low turnover rate, 37%, slightly improved but nevertheless demonstrates the existence within this segment of large players oriented low-cost and which could eventually be considered as "Penny TLDs". Here, the "Top 3" in 2018 were represented by .TOP (+1,821,000 names), .CLUB (+466,000) and .SITE (+421,000). At the other end of the spectrum is .WIN (-575,000 names), .WANG (-461,000) and .XYZ (-337,000).

The .CORP (or .BRAND) segment is the one that "exploded" in 2018, but this variation is actually due to only three TLDs (out of 624) whose classification among the .CORP segment could be subject to revision. They are the .APP (+361,000 names), the .ICU (+290,000) and the .FUN (+152,000). Together, these TLDs represent 93% of the change in the segment in 2018.

*The table below shows the change in **the number of TLDs** in each segment since the launch of 2014.*

	Number in					Variations (net balance)			
	2014	2015	2016	2017	2018	2015	2016	2017	2018
Community TLDs	7	12	12	12	12	+5	-	-	-
Geographic	50	58	62	63	63	+8	+4	+1	-
Generic	334	441	488	495	500	+107	+47	+7	+5
Corporate	74	306	647	633	624	+232	+341	-14	-9
TOTAL	465	817	1 209	1 203	1 199	352	392	-6	-4

nTLDs with at least 1 portfolio name as at 31/12 of each year.

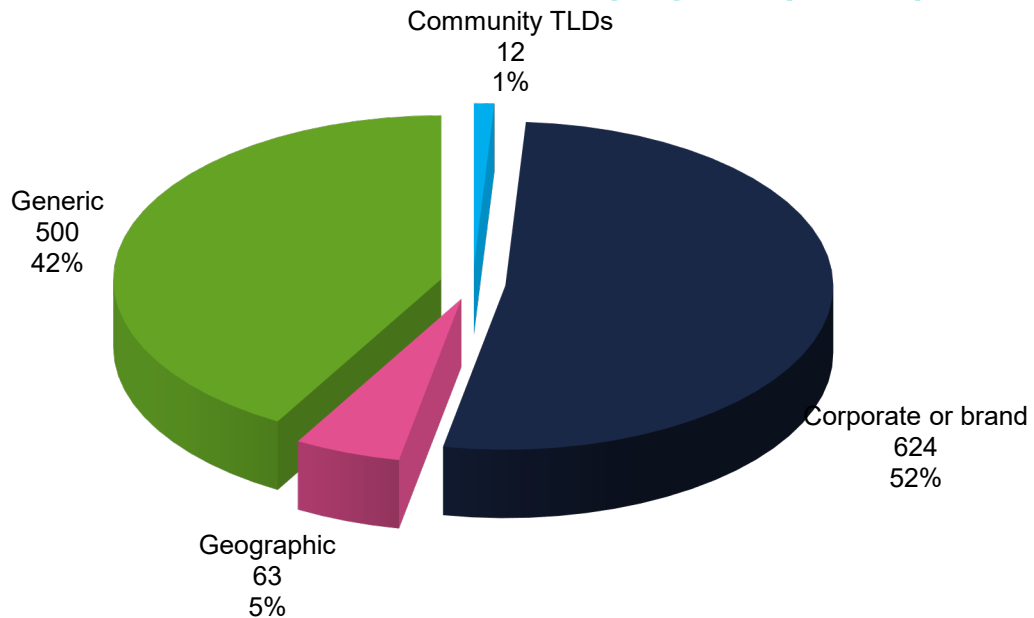
After 2014-2015, which saw the creation and activation of most of the nTLDs (+465, +352, +392), 2017 and 2018 were marked by the first delete operations, which were essentially .CORP domains abandoned by their owners. Since this segment obeys specific dynamics, it is impossible to deduce from these delete operations that they were consecutive to "commercial failures". These are more likely to be reorientations in the digital strategies of the groups concerned, changes of flagship brands making the .CORP obsolete, or simply defensive create operations from the beginning that their delegates do not want to continue to finance, because they don't know how to use them.

It is likely that the overall number of nTLDs will continue to decline steadily in the future, hitting the .CORP in particular. In fact, the other three segments are open to third parties, which makes buy backs from other registries possible. In addition, in the event of a default with no buyback, ICANN rules provided for a precautionary deposit allowing TLDs to continue to operate for 3 years. For this reason, the first nTLD delete operations will appear in the Community, geo-TLD and generic segments with some delay.

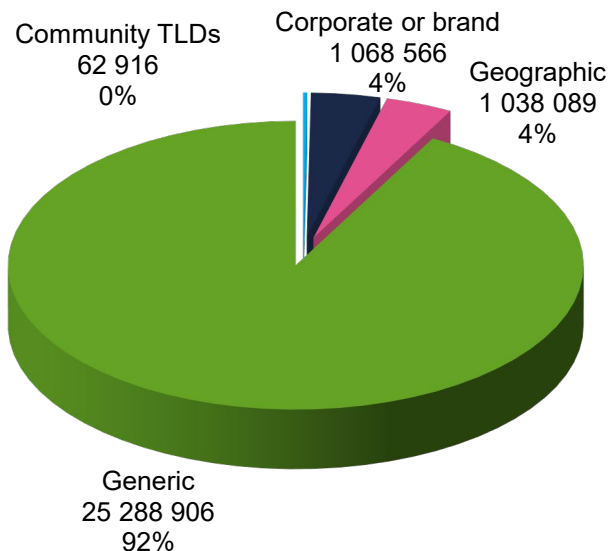
6.3. Distribution of new TLDs in volumes of domain name registrations

The distribution in volume of domain name registrations does not reflect the number of TLDs in each segment, as shown in the two graphs below. With 500 TLDs (42% of the total), generic nTLDs represent 94% of domain name registrations; with 624 TLDs (53% of the total) .CORP only represent 1% of domain name filings.

Distribution of nTLDs by type (2018)



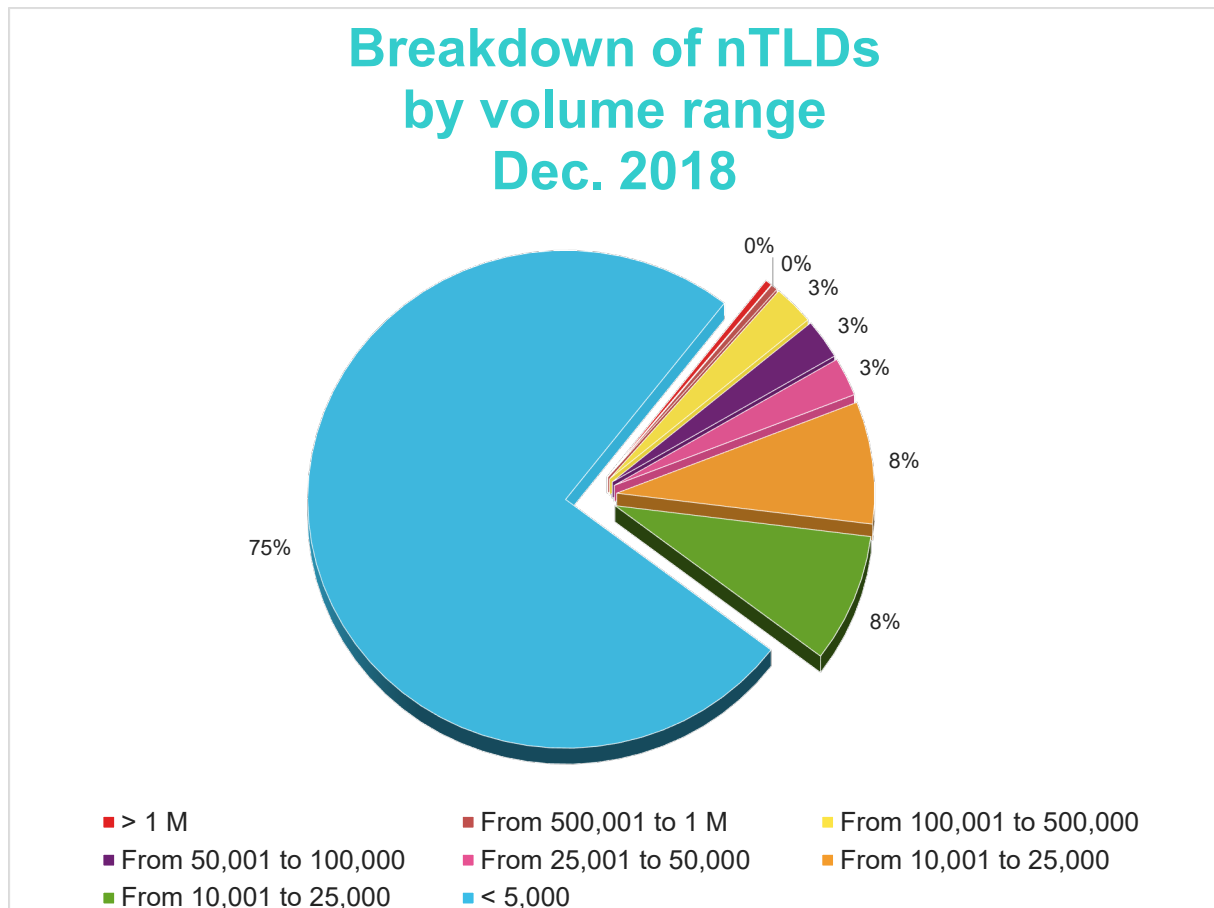
Distribution of nTLDs by volume (2018)



These two diagrams sufficiently illustrate the variety of economic models and strategies of each segment. The .CORPs generally respond to internal needs, while the Community and

Geographic nTLDs target customers meeting membership or location criteria. Finally, generic nTLDs can develop global ambitions as well as focus on niche markets, depending on the potential represented by their terms.

The graph below shows the breakdown of nTLDs by volume range. We can see that the "Less than 5,000 names" represent a little more than 75% of the total, while the "More than 500,000" represent only 1%.



If we take into account ICANN's fees (\$ 25,000 minimum fixed cost) and the various costs related to the management of a TLD (staff, technical operator, promotion, etc.) and that we estimate a hypothetical average budget of \$100,000 per year, it can be seen that the equilibrium threshold for a TLD marketing its domain names at around \$20 is 5,000 names (10,000 for a \$10 fee close to that of .COM).

Excluding the .CORPs which obey very different forms of logic, one obtains 287 TLDs of less than 5,000 names (ie 50% of TLDs excluding .CORP) and 478 TLDs with less than 10,000 names (83% of TLDs excluding .CORP).

This means at present that 50% of the new TLDs are potentially "loss making" if they sell below the \$ 20 threshold and 83% if they sell below the \$ 10 threshold. Even if these estimates are relatively rough, orders of magnitude show that quite a large number of TLDs must be in a fairly precarious situation at the moment. The tension on costs (ICANN and others) will grow as time goes by. Registries are placed in a particularly uncomfortable situation, because they cannot develop their TLD without the requisite means, but these expenses may strangle them quickly enough in case of failure of promotional campaigns.

Some have engaged in recent years in low-cost strategies that translate into exceptional volumes for such "young" top level domains. But 1,000,000 domain names "sold" for 1 cent only generate \$ 10,000 in fact, which is one-tenth of the annual budget we took as a working hypothesis, or the equivalent of 1,000 names sold for \$ 10 apiece.

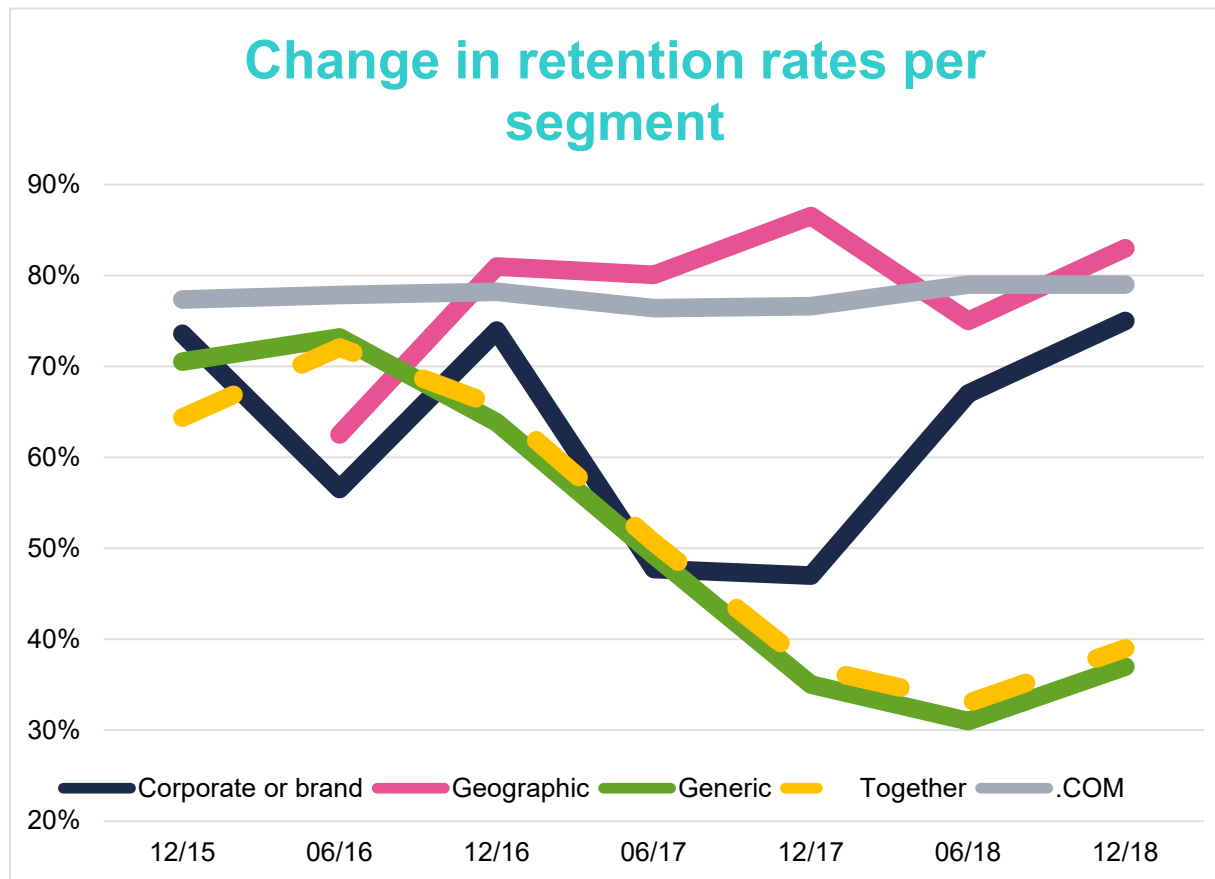
High volumes can therefore be indicators of success, but also the reflection of particularly risky strategies based on the fact that holders attracted by very low prices at the time of creation will agree to renew their names at more "normal" prices in the following years.

6.4. Change in retention rates² per segment

Retention rates are therefore a key factor for analyzing the success of a TLD and its chances of sustainability.

Unsurprisingly, you can see that the Generics rate is the lowest, albeit rising in 2018 (37% vs. 30% in 2017). But this rate remains an average, as we shall soon see.

After a "purge" in 2017, the .CORP rate has returned to its 75% level. Geographic nTLDs are the better off with more than 80% of the names renewed from one year to the next.



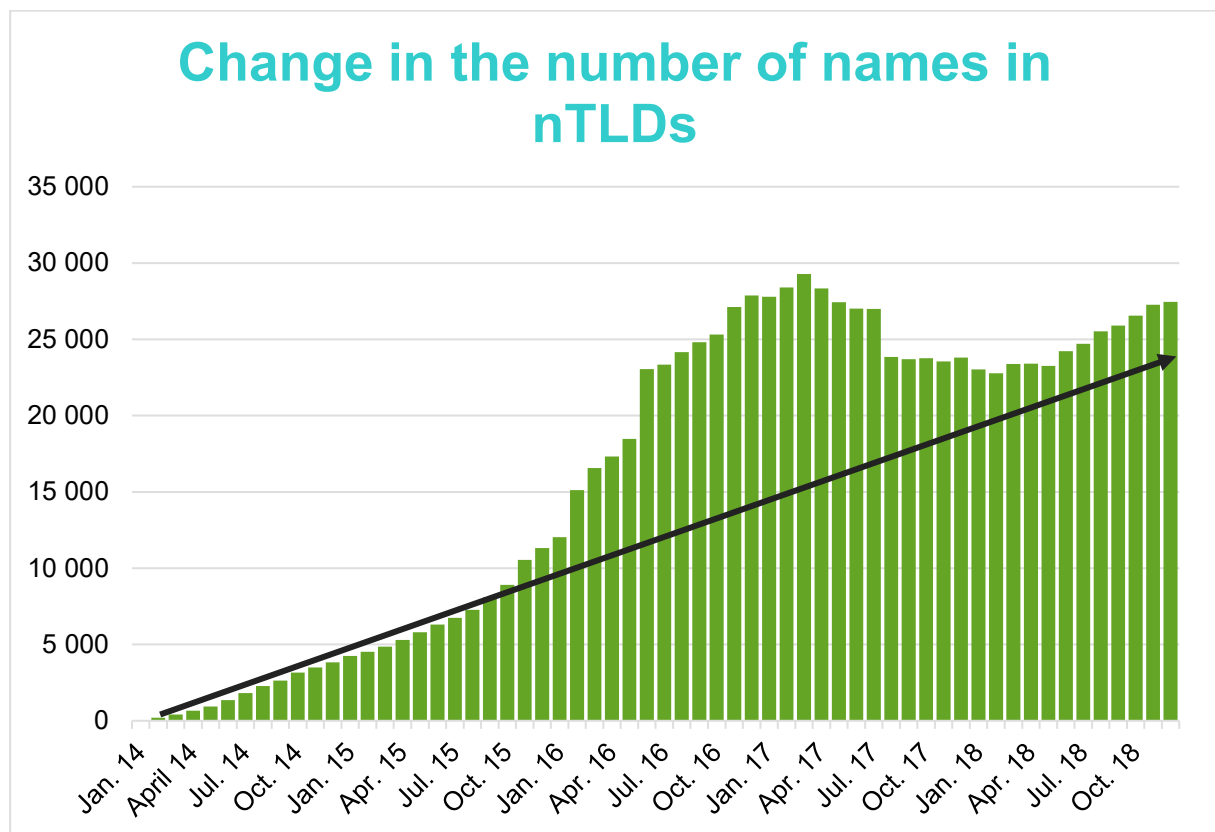
(The .COM rate is added as a comparison.)

² We make a difference between the Retention Rate, which includes all the names "kept" from one year to the next, and the Renewal Rate, which takes into account only "renewed" names. A name registered for 5 years will be "retained" for 5 consecutive years and renewed once, at its expiration date.

6.5. Global change in the stock of new TLDs

The all-time peak of nTLDs was reached in March 2017, after which the waves of create operations in November 2015, February 2016 and June 2016 resulted in delete operations that weighed heavily on the overall volume. The stall of August 2017 (create operations of June 2016 expiring with the offset related to the redemption grace period and pending delete period) is visible.

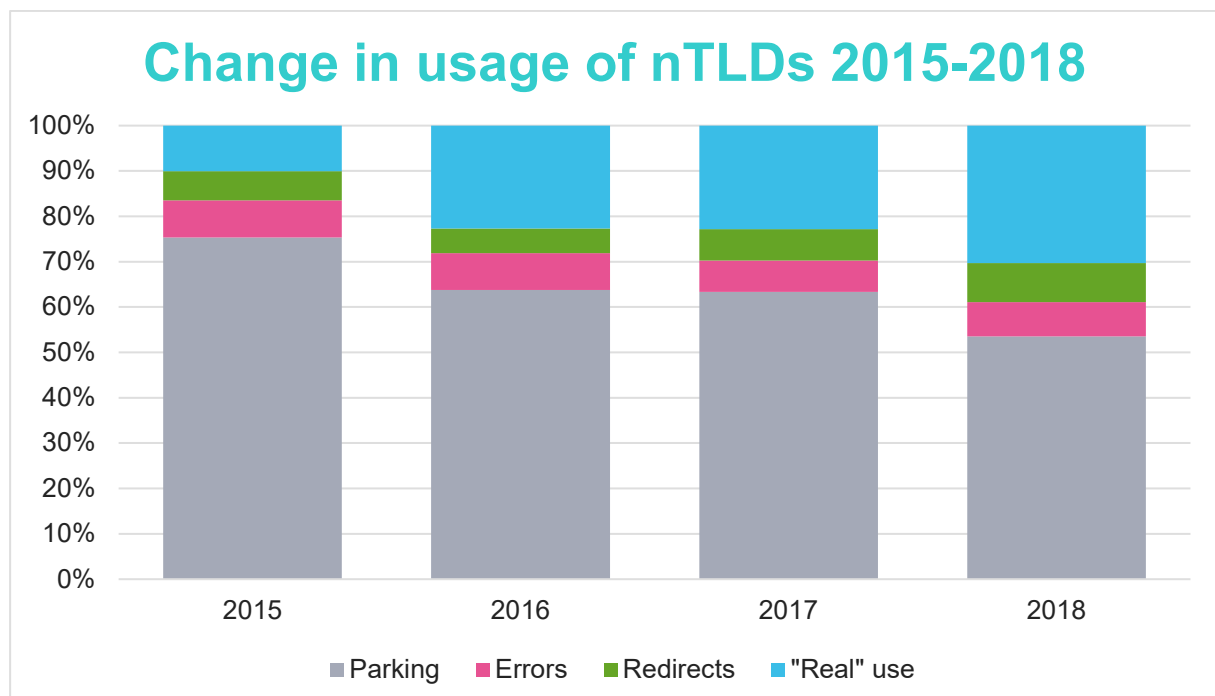
The decline continued throughout 2017, reaching a low in February 2018, after which volumes began to rise again, first slowly and then steadily from June 2018.



6.6. The Utilization Rate, an indicator of the longevity of nTLDs

The retention rate can be cyclically affected by the impact of previous promotional campaigns. It is therefore interesting to study the rate of use of TLDs, which is a valuable indicator for anticipating future developments in renewals. Common sense leads to the fact that names exploited and/or valuable for their holders will be renewed more willingly than unused names having no value other than defensive.

We have calculated these rates based on the data presented by the website NTLDstats.com in its "parking" section. By eliminating all of the "parked" names, redirects and HTTP errors, we obtain a number of domain names that are fairly likely to be actually used. This utilization rate "deduced" from the rest is, of course, only a rough estimate, which should be used in terms of magnitude and trends without giving too much importance to precise values.



Source: nTLDstats.com. Data as at 31/12.

Based on our calculations, the results of which are presented above, the utilization rate globally doubled between 2015 and 2016, rising from 10% to 20%. In 2017, the dynamics were broken and the utilization rate remained at about the same level as in 2016. It improved again in 2018 from just over 20% to 30%, and almost 40% if redirects are included.

Given these figures, some may rightly consider that a utilization rate close to 25% three years after the opening of nTLDs is relatively low; but here again one must be wary of averages. Indeed, as nTLDstats.com shows, some large "penny nTLDs" have very low utilization rates that suggest that the same rates should be higher in more modest namespaces in terms of volume.

6.7. "Leaders" still fragile

The "leaders" were selected according to a volumetric criterion: the reference sample group included all nTLDs having or having had, 500,000 domain names or more in stock on 31/12 of any year since 2014.

It is true that these leaders are largely TLDs marketed on the basis of aggressive marketing strategies, or are otherwise "low cost". But they are nevertheless important to study in order to understand some mechanisms of market operation.

The table below shows that these 13 extensions alone accounted for 58% of the names filed in the 1,199 nTLDs on 31/12/18, and two-thirds of the names created during the past year. The stocks of both categories, sample group and non-sample group, grew at the same pace in 2018, 15-16%, while the create operations of the sample group continued to soar (44%) while those of the non-sample group "only" increased by 18%. The difference can be explained in terms of retention rates: 24% for sample group members, 48% for the non-sample group members.

	Stocks (thousands)			Create operations (thousands)			%Retention	
	2017	2018	Var.	2017	2018	Var.	2017	2018
.TOP	2 137	3 957	85%	1 083	3 402	214%	22%	26%
.XYZ	2 641	2 305	-13%	1 671	1 633	-2%	14%	25%
.LOAN	2 397	2 219	-7%	1 594	2 135	34%	91%	4%
.CLUB	1 215	1 681	38%	810	1 319	63%	44%	30%
.ONLINE	776	1 154	49%	506	871	72%	46%	37%
.SITE	538	959	78%	405	789	95%	22%	32%
.VIP	915	852	-7%	476	124	-74%	78%	80%
.SHOP	517	663	28%	298	470	58%	NA	37%
LT	345	627	82%	315	426	35%	70%	58%
.WORK	176	534	203%	143	473	230%	41%	35%
.WIN	1 037	462	-55%	450	215	-52%	47%	24%
.BID	484	242	-50%	311	155	-50%	28%	18%
.WANG	618	157	-75%	325	33	-90%	30%	20%
Total Top 500K	13 798	15 811	15%	8 386	12 045	44%	30%	24%
Others	9 999	11 648	16%	5 117	6 044	18%	50%	48%
Total nTLDs	23 796	27 459	15%	13 503	18 090	34%	43%	34%
% Top 11 / total nTLDs	58%	58%		62%	67%			

Source: ICANN reports
 Sample group consisting of nTLDs holding or detaining
 more than 500,000 names in their portfolio as at 31/12 of one year since 2014.

Data from each TLD of the sample group shows that the averages are always misleading, with "24%" masking the 4% of .LOAN as well as the 80% of .VIP.

The matrix table below highlights the different dynamics found among the TLDs of our sample group.

Two grew quickly in 2018 (.TOP, .SITE); two others suffered on the create operations but improved their renewal rates (.VIP, .XYZ); three others showed a marked decline with the deterioration of the two indicators (.WIN, BID, .WANG). The latter saw their create operations progress while losing retention points.

These different profiles show the strategy at work in terms of marketing, from active low-cost campaigns (last category) to a focus more on customer loyalty and less on volumes of create operations (.VIP, .XYZ). In the case of the three TLD suffixes that are declining, the data may indicate "exits" from promotional campaigns that have not resulted in the expected results in terms of loyalty.

	Create operations decreasing	Create operations increasing
Retention rate increasing	.VIP .XYZ	Others (Outside sample group) .TOP .SITE
Retention rate decreasing	.WIN .BID .WANG	.LOAN .CLUB .ONLINE LT .WORK

(Excluding .SHOP)

The nTLD segment therefore still needs to be analyzed by putting into proper perspective the impact of the "leaders", who are subject to strong fluctuations due to their marketing strategies, just as ccTLDs should be considered without the penny ccTLDs that distort the overall performance characteristics.

The finding revealed by the table above contradicts the gloom or pessimism that can be seen in certain specialized publications about new TLDs. In fact, this segment is highly concentrated and its leaders are trees that hide the forest: they are not representative of all these new entrants who are essentially continuing to progress, even if their growth is slower than their promoters had hoped.

7. The distribution of domain names in the world at year-end 2018

The analysis of the development of the major segments of the domain name market, Legacy TLDs, ccTLDs, and nTLDs, can be completed by studying the distribution of stocks of these same segments in the major regions of the world.³

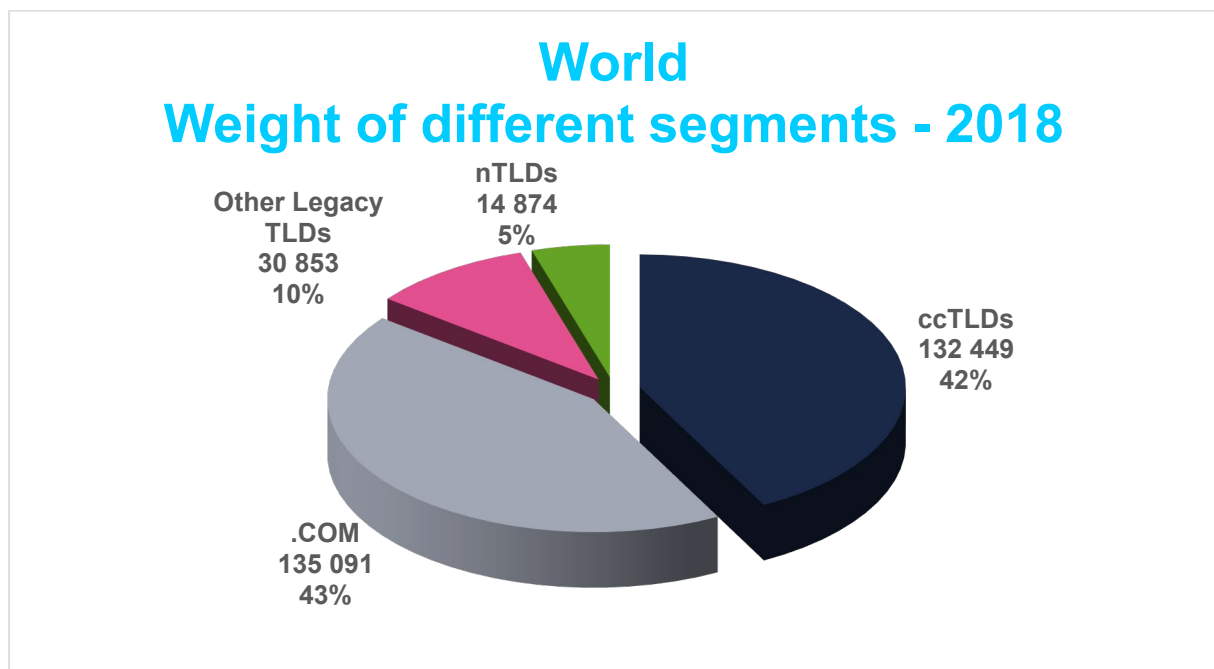
By convention, we have used the ICANN nomenclature for reference, even though it can sometimes be open to discussion.

In 2017, we focused on presenting, for each major segment of domain names (.COM, Other Legacy, ccTLD, nTLD), the proportion of different ICANN regions. This approach highlighted North America's weight for .COM and Other Legacy TLDs, Europe for the ccTLDs, and Asia Pacific for nTLDs.

In 2018, we present the opposite view, that is, the proportion of each major segment in the different ICANN regions.

7.1. Overview

In 2018, .COM was the market leader with 43% market share, followed by ccTLDs (excluding Penny) with 42%. The other two segments, Other Legacy and nTLD, accounted for 10% and 5% of worldwide filings, respectively.

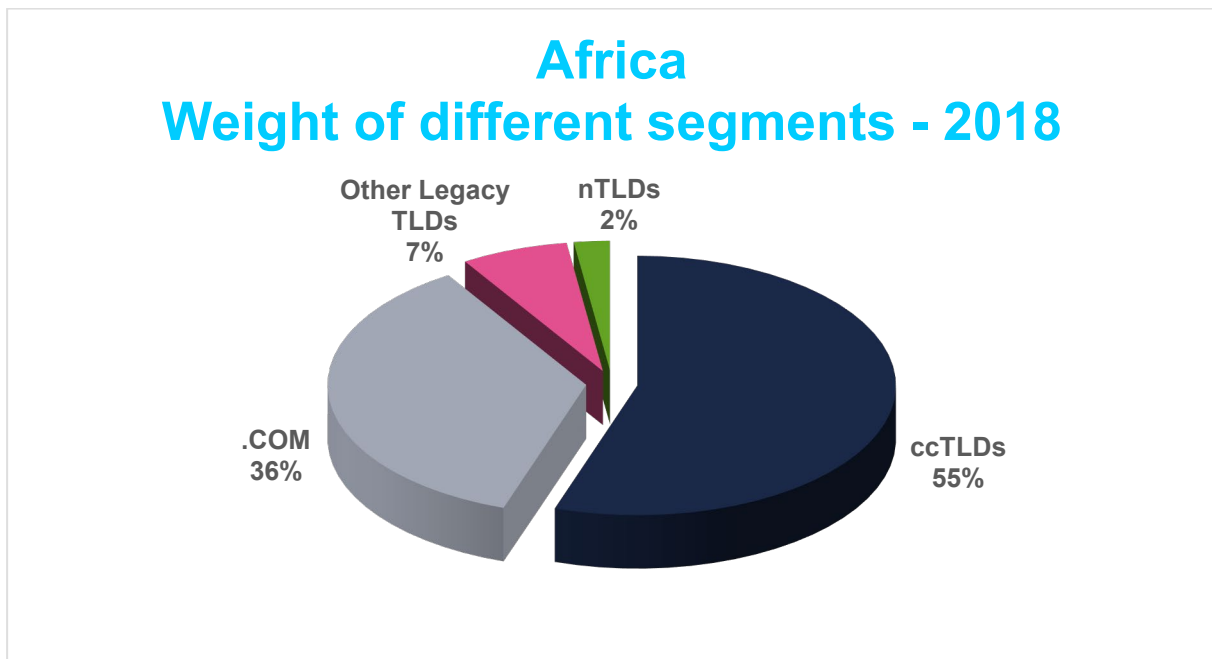


³ For the .COM, Legacy and nTLDs the distribution of names by regions of holders has been estimated by ZookNic.

As we shall see, these global data conceal significant regional disparities.

7.2. Weight of segments in Africa

In Africa, local ccTLDs are leaders, with a 55% market share, while the .COM comes in second place. Other Legacy TLDs account for 7% (instead of 10% globally) and nTLDs remain marginal with 2%.

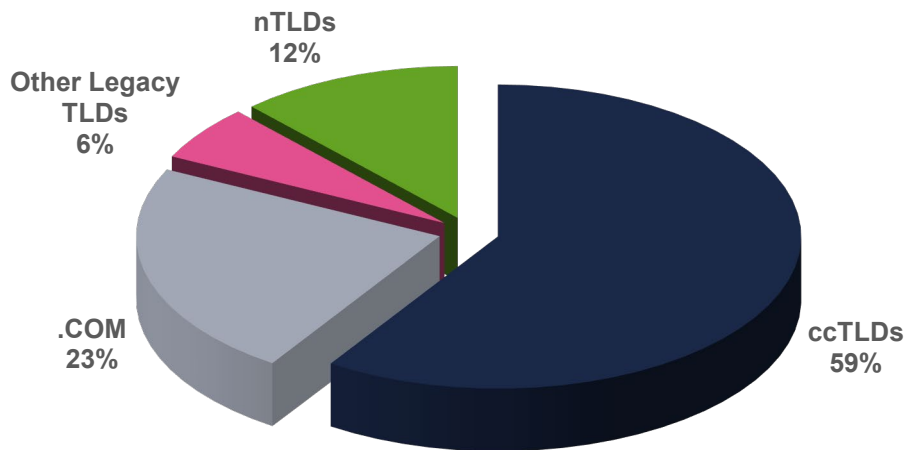


These figures contradict the idea that African users give priority to .COM over local ccTLDs on the grounds that they are more expensive, more demanding in terms of eligibility, less automated etc. In actual fact, these brakes may exist but are not sufficient to ensure that the .COM in Africa has the leading position it holds worldwide.

7.3. Weight of segments in Latin America

The state of the market is even more pronounced in Latin America than in Africa. ccTLDs are the absolute leader with almost 60% market share, while .COM holds only 23%, Other Legacy TLDs 6% and nTLDs 12% (this is due to the presence of holders with large portfolios especially in Panama).

Latin America Weight of different segments - 2018

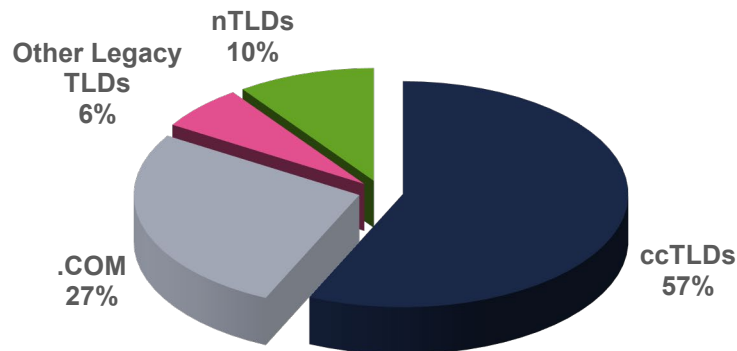


In addition to the anomalies related to the concentration of nTLDs in favor of structures located in the region, the figures suggest that there is a strong preference in Latin America and Africa for local ccTLDs, which also benefits local economies of the region as opposed to .COM and the other Legacy TLDs whose profits are cashed by registries mostly located in the United States.

7.4. Weight of segments in Asia-Pacific

The situation in Asia-Pacific is about the same as in Africa and Latin America: ccTLDs are the market leaders (57% market share), followed by .COM (27%), Other Legacy TLDs (6%) and nTLDs (10%).

Asia-Pacific Weight of different segments - 2018

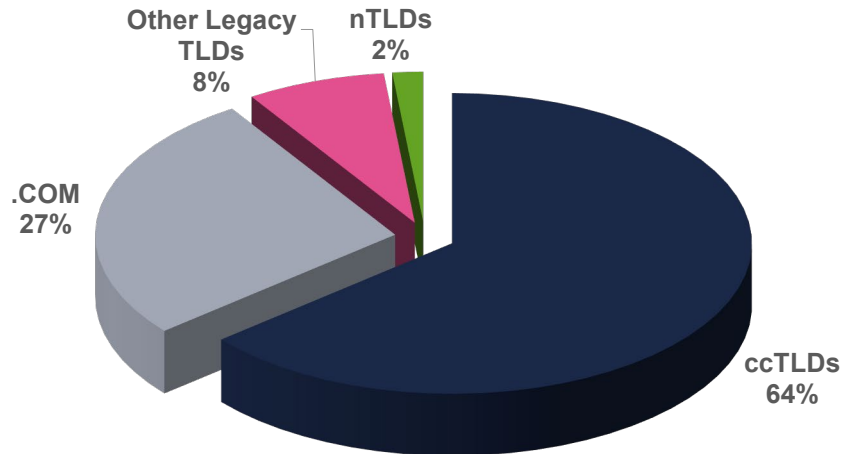


Two factors may explain the situation in the region. On the one hand, the constant efforts of the Chinese Authorities to create a "national preference" for the benefit of the .CN to the detriment of "non-accredited" domains. On the other hand, the presence in China of a certain number of *domainers* having invested heavily in nTLDs, which explains why this share of the market is double that of the segment globally.

7.5. Weight of segments in Europe

We saw last year that Europe accounted for 54% of the names filed in ccTLDs. The reverse view is that ccTLDs have a 64% market share in Europe, the largest of all the ICANN regions. .COM is at 27% as in Asia Pacific, but Other Legacy TLDs fall to 8% and nTLDs to 2%.

Europe Weight of different segments - 2018



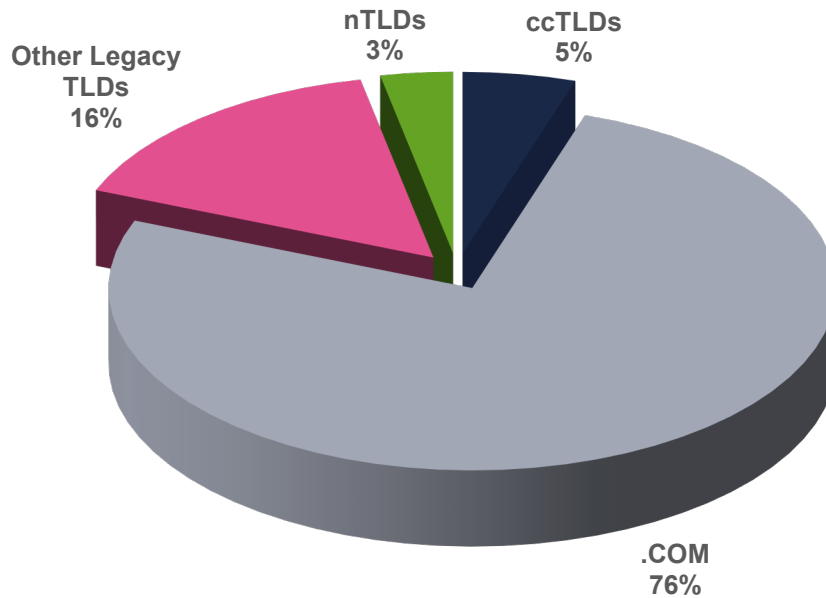
Europe remains the region with the strongest predilection for country-code TLDs, while leaving the Other Legacy TLDs aside, and struggling to mobilize on nTLDs. This observation probably also reflects the power of the retail networks and their own cultural prisms (because they put forward what they think customers will buy).

7.6. Weight of segments in North America

How can we explain that the .COM is world leader when it is "only" a challenger of ccTLDs in all the regions we have studied?

The answer is simple: it crushes all the other segments in the North America region, which weighs 33% of the world market (against 36% for Europe).

North America Weight of different segments - 2018



While the national preference is for ccTLDs in four of the ICANN regions, they are quite marginal in North America (and even more so in the United States than in Canada). The .COM holds three quarters of the market and the Other Legacy TLDs have a market share of 16% significantly above their weight worldwide. Finally, nTLDs only represent 3%.

Thus, in the same way that North America is the region which weighs the most for the .COM, that latter is the most vital TLD in North America. It is understandable why the fate of this TLD is critical in the eyes of Washington, and why there is no risk that its management entrusted to Verisign will change technical operator for a long time.

7.7. Summary tables

The three tables below are intended to summarize the data on the distribution of TLD segments per major ICANN region.

Distribution (in thousands) of domain names of different TLD segments per ICANN region

	ccTLDs (*)	.COM	Other Legacy TLDs	nTLDs	Total
Africa	1 841	1 197	224	75	3 337
Latin America and the Caribbean	8 946	3 462	886	1 797	15 091
Asia-Pacific	44 684	21 230	4 982	7 794	78 670
Europe	71 754	30 144	8 428	1 857	112 183
North America	5 224	79 058	16 353	3 351	103 986
TOTAL	132 449	135 091	30 853	14 874	313 267

(*) Excluding "Penny" TLDs. There may be some discrepancies with the data cited above, due to the existence of names for which the country of the holder is not known.

Weight of each segment in the regional total (2018)

	ccTLDs	.COM	Other Legacy TLDs	nTLDs	Total
Africa	55%	36%	7%	2%	100%
Latin America and the Caribbean	59%	27%	6%	12%	100%
Asia-Pacific	57%	27%	6%	10%	100%
Europe	64%	27%	8%	2%	100%
North America	5%	76%	16%	3%	100%
TOTAL	42%	43%	10%	5%	

Weight of regions in the total of each segment (2018)

	ccTLDs	.COM	Other Legacy TLDs	nTLDs	Total
Africa	1%	1%	1%	1%	1%
Latin America and the Caribbean	7%	3%	3%	12%	5%
Asia-Pacific	34%	16%	16%	52%	25%
Europe	54%	22%	27%	12%	36%
North America	4%	59%	53%	23%	33%
TOTAL	100%	100%	100%	100%	

7.8. Lessons learnt

One of the greatest lessons of this study is that .COM, which seems so "inevitable" in the world, is actually a minority in every region of the world except North America where it originated and has developed with the Internet, to the point where it embodies it.

While ccTLDs make sense for regions whose populations are attached to feelings of belonging, to national specifics that translate into a high level of interest in ccTLDs, US users immediately "think globally" on the scale of the Internet, and largely prefer generic-type TLDs. This is of course true for the United States and less for Canada, where the .CA holds a local market share of more than 33%.

Should we conclude that the future belongs to ccTLDs backed by the loyalty of the citizens of their respective countries, or that otherwise the .COM has a bright future ahead of it if we consider that it still has huge sources of growth to explore, particularly in Africa and Latin America?

This rule of thumb explains in part the decline of the Other Legacy TLDs, which are strongest in the region dominated by .COM, without being able to really penetrate the other regions. As for nTLDs, apart from the speculative waves originating in China, they seem to have a hard time finding their place between their two main competitors, ccTLDs and .COM.

This is probably one of the issues related to the retail networks, registrars being all the more inclined to offer TLD suffixes that they know they can sell. The tests attempted using promotional campaigns can achieve short-term successes, but have difficulty in radically changing the mentalities of the various regions.

More than ever, domain names are central to identity issues on the Internet. They are obviously not chosen at random. One of the main lessons learned from the "1st round" of the new gTLDs is that the market is not reinventing itself as fast as operators would like, because we are dealing here with complex notions of recognition and trust that are built over time, which cannot be decreed.

8. Highlights of 2018 and early 2019

The market changes observed since 2015 continued in 2018, but increased in intensity due to the combination of several factors: the overall slowdown in growth relative to the levels of the first half of the decade; cash stress experienced by many nTLD players; the race for critical size to achieve economies of scale and synergies; the growing presence of financial groups with the resources to support ambitious external growth strategies.

8.1. A particularly active market for technical registry operators

This market was marked in 2018 by a dual process of concentration and intensification of competition for ccTLD management contracts.

In terms of concentration, the main highlights were:

- the purchase of **KeyDrive** (the parent company of **Key Systems** and of **KS Registry**) by **CentralNic**, which had already recovered the nTLDs of KS Registry (and thus from **Open Registry**) at the end of 2017.
- the purchase of **ICM Registry** (.XXX, .PORN, .ADULT, .SEX, etc.) by **MMX**. It may be looking for a solid financial base through the .XXX, but the bet was fairly risky. Indeed, of the 150,000 .XXX registered to date, 90,000 were registered during the initial sunrise period that allowed them to "block" the domain names until 2021. As market conditions have changed dramatically, it is likely that the defensive reflex will be weaker in 2021 than in 2011, with a very low renewal rate of these 90,000 names that by definition are not used. Create operations are relatively modest in an increasingly competitive environment, the DNS "Red Light District" not necessarily attracting those who prefer TLDs that are more commonplace and more difficult to "blacklist".

Many TLDs changed hands and/or back-end registries in 2018:

- **CentralNic** finalized the acquisition of the .SK (Slovakia) and recovered the .FANS.
- **Afilias** was awarded the management of the .PR (Puerto Rico) and .AU (Australia) while losing the .IN (India) in favor of **Neustar**. But the company has also added to its portfolio the .IO (British Indian Ocean Territories).
- **CIRA** (.CA registry) has taken over the .SX (St. Martin, Netherlands Antilles).
- **Afnic** has been awarded the technical management of the .MUSEUM.
- .AI (Antigua) has opted for the **CoCCA solution**.
- **DotXYZ** bought .MONSTER in order to relaunch it as a generic, while also recovering .BABY.

- **Donuts** has taken over .FAN (which had been managed by CentralNIC).
- **ZDNS** (Chinese operator) has obtained the technical management of the .ET (Ethiopia).
- The .VU (Vanuatu) has changed back-end registry, but it is not yet known.
- **Nominet** has recovered some of the nTLDs of the **Amazon** Company hitherto managed by **Neustar**.

2018 was therefore particularly rich in transactions at the TLD level, whether in the context of outright buybacks or in the selection of new operators.

This trend is likely to intensify in the future, as the situation of some nTLDs becomes increasingly critical from a financial point of view. Some players, such **Famous Four Media**, an affiliate of **Domain Ventures Partners** (the registry for 16 nTLDs) or **ASIAMIX** (who owned the .FAN and .FANS), have already disappeared from the market.

8.2. Growing cash requirements are increasingly driving the strategies of the main players in the market

Although public data is scarce, there is no doubt that many nTLD registries are experiencing cash-flow strains associated with low levels of create operations combined with renewal rates that are often too low to ensure high TLD stability (this observation mainly concerns the "pure generics", thus excluding the geoTLDs and .CORP). The case of Famous Four Media is exemplary because as we saw above, the .LOAN had suffered from an extremely low renewal rate (4%), which testifies to its great fragility despite the dynamics of its create operations. This example could indicate that the "near-free" model is now reaching its limits.

Towards a revision of "low cost" strategies?

In the absence of high demand, most nTLDs wanting to make volume have opted for low cost schemes or operating on the basis of large rebates. Thus, in the summer of 2018, the registry for the .CLUB published figures indicating that in 2017 it had passed on 70% of its revenues to registrars (\$ 6.5M out of \$ 9.3M).

But this strategy which makes it possible to quickly develop the stock of managed names has pernicious consequences in the medium/long term:

- by financially asphyxiating the registry and depriving it of the means necessary for its sustainable development;
- by creating with its resellers a relationship based on opportunism, which exposes the registry to serious miscalculations if it is forced to modify its tariff policy (consider the case of **Uniregistry** in 2017 and **Donuts** in 2019).

It can be said, without too much risk of being mistaken, that this same pattern is found at the level of the "low cost" registrars and their customers in the event of a hike in prices, which constitutes in the long term a trap for this kind of player.

The generic nTLD registries sector is generally in a fairly tense situation, which is reflected either by upswings or by takeovers by groups of investors capable of injecting new financial resources into companies in difficulty or anticipating they will be. Thus the acquisition of Donuts by an investment fund after the failure of probable IPO projects.

Registrars affected by investor buybacks

Registrars cannot escape the double phenomenon of consolidation and recapitalization observed for nTLD registries. In their case, however, it is difficult to say whether these strategic moves are related to financial problems or simply the desire of their shareholders to negotiate an "exit" against a background in which the future of the market is not very legible. A third motivation may of course be to finance development projects by being backed by financial groups capable of providing the necessary means to participate in the concentration process at work for years.

For many players who have not reached a critical size to achieve substantial economies of scale, concentration offers only one alternative: be absorbed by a larger fish or have the capital needed to achieve external growth operations to remain independent for some time yet – and sell for more if the opportunity arises.

In this respect, we note the existence of rumors about **Endurance** (which combines several registrars including **Domain.com** and **BuyDomains**) who are said to be looking for buyers. Finally, there is a fairly large number of registrar transactions, some of which are world and/or French market leaders:

- acquisition by **SIRIS Capital** of **WEB.COM** (a group including **Network Solutions**, **Register.com**, **NameJet** or **SnapNames**;
- take-over of **Fabulous.com** by **DirectNIC**;
- acquisition by **ComLaude** of the Scottish registrar **Demys**, notably present on the **.SCOT** and principal registrar of **.CORP** in Scotland;
- purchase by **CentralNic** of **GlobeHosting**, an American structure specializing in the Romanian and Brazilian markets; recovery by **CentralNic** of the portfolio owned by **AlpNames** failing registrar;
- merger of **Clarivate**, the parent company of **MarkMonitor** with **Churchill Capital Corp.** The group should soon be listed on the stock exchange under the acronym **CCC**;
- acquisition by **Tucows** of **Ascio** from **CSC**, which apparently focuses on large accounts;
- acquisition of **Gandi** by **Montefiore Investments**;
- acquisition of **NameSilo** by the investor **Brisio Innovation**.

Two sources of oxygen for the market: China and the future ICANN "round"

Faced with a slowdown in growth in what were once the most dynamic markets (North America, Europe), players are increasingly turning to the Chinese market and we see increasing "accreditations" of TLDs by the Beijing authorities:

- **MMX** has accredited four additional TLDs;
- **Afilias** has obtained authorization to market 20 of its TLDs;
- **Radix** has been accredited for **.HOST**, **.SPACE**, **.PRESS**, and **.WEBSITE**;
- **DotAsia** has been accredited for ... **.ASIA**.

The eyes of many players, however, are also focused on ICANN, in the hope that the California-based organization will soon initiate the next round of new TLDs. Although the results of the 1st Round were half-hearted, a breath of fresh air is being demanded with increasing insistence by players relying in particular on the prospects offered by the **.CORP** market. As a result, there are more and more publications or alliances anticipating the moment when things will start seriously:

- publication by **Afnic** of a [Issue Paper on the management of .CORP](#);
- publication of another White Paper by **Neustar**, on the same topic ;
- announced partnership between **Nominet** and **Valideus**;
- communication from **SIDN** on this subject whereas for the moment the registry (.NL) does not manage any **.CORP**.

Repositioning among ccTLD registries

ccTLD registries are also facing a downturn in the market. Although they are generally better equipped to deal with them than their nTLD counterparts, they are encouraged by market conditions to consider strategies to diversify their sources of revenue, with their own constraints.

In 2018, several ccTLD registries carried out reorganizations and/or diversifications corresponding to strategic options:

- **IIS.SE** (Sweden) has put its "registrar" subsidiary **.SE Direkt** on sale.
- **SWITCH** (Swiss) sold its registrar subsidiary **SwitchPlus** to **Combell Group** (Belgium).
- **DENIC** (Germany) has outsourced its "off-core business" activities to a subsidiary **"DENIC Services"** which markets its escrow and anycast services.

- **Nominet** (UK) has created a "Cyberdivision" to house its "Cyberdefence" activities and set up in the United States.

- **CIRA** (Canada) continued the development of its anycast services, adding to its client portfolio .CL (Chile) and .SG (Singapore), while using the services of the **CZNIC** (Czech Republic) to diversify and extend its DNS infrastructure.

In the first two cases, these operations had been foreseeable for a long time, since they responded to a logic based on making a clear distinction between registry activities (corresponding to "monopoly" situations for each TLD) and those of marketing and distribution of domain names, which are subject to competition.

It is probably a similar logic that forced **DENIC** to place its non-core activities in a financially independent structure, in order to maintain a high level of legibility on its financial flows.

In the context of **Nominet**, the creation of a division certainly responds to a build-up in these activities, perhaps as a first step to future outsourcing similar to that which DENIC has adopted.

The ccTLD registries are thus living in a paradoxical situation. Like most of their peers, they have had to pursue revenue diversification strategies since 2013, justified by the slowdown in market growth. But because these strategies pay off, the pressures of their respective ecosystems lead them to clearly separate the "new services" from the traditional services in which they have a monopoly. The diversification scheme adopted to counter a fall in the income of the registries seems to have found its limits in this case.

New entrants

Players hitherto foreign to the domain name market are starting to pay close attention to it, moving up the value chain to offer their customers Internet addresses along with their traditional services. This is the case of various companies renowned in their respective business sectors, which positioned themselves on the registrar business in 2018, in particular:

- **Wix.com**, accredited during Q3 2018.

- **CloudFlare** proposes, as registrar, classic "Legacy TLDs" and **Donuts nTLDs**.

The market for domain names remains fluid and this phenomenon is likely to increase as registries of nTLDs in difficulty are bought out by companies wishing to enter the market. Other movements are thus taking place on the outskirts of our market but which could ultimately impact it, such as the acquisition of **Weebly** by **Square** for \$ 365 million.

8.3. Diversification strategies and new products

The diversification strategies identified in 2017 remained relevant in 2018, while seeing emerging new themes, including the management of digital identity.

"Data": tangible perspectives clouded by the GDPR

Data in the broad sense of the term have become increasingly important as the downturn in the market is driving up the cost of acquisition - and retention - of customers. It is increasingly important to anticipate consumer expectations and respond to them as and when they arise. Since the core business of market players is precisely to manage databases, "Data" is one of the choice potential sources of revenue through new business models.

But the entry into force of the GDPR (General Data Protection Regulation) in May 2018 raises uncertainty about some models that depend on access to WHOIS data. This is for instance the case of the **DomainTools** company, which is looking for a second wind with its "Iris 3.0" solution and launching a "domain name risk assessment model", relying solely on the "intrinsic" characteristics of the names assessed, even if they have not (yet) been used for fraudulent purposes.

The logic leads to explore other data related to domain names, including usage data collected via "webcrawlers", by identifying patterns in both the WHOIS data that are still available and in the profile of the websites visited. These analyzes also make it possible, as **Afnic** and the .NZ registry (New Zealand) are experimenting to better qualify the registrants of domain names.

Finally, other players are positioning themselves on "subsidiary bases" such as the Uniform Dispute Resolution Policy (UDRP), by proposing research systems in the tens of thousands of decisions rendered since 1999.

Sell more and better

Domain name suggestion systems have been around for a while, but their interest is growing as the most "obvious" names have already been filed. Many players are interested in this type of service or are positioning themselves on it, as did **Verisign** in 2018 with the **NameStudio** tool. **Donuts** for its part has opted for a solution proposed on an own brand basis to its registrars, and covering a broader scope than their TLDs alone.

Another interesting effort worth mentioning is the **Domain Connect** service of SIDN (.NL registry) distributed as an open code allowing .NL registrars to invite their customers to quickly interface their domain names with various internet platforms: Office 365®, WordPress®, Google®, WP-Engine®, Hubspot®. The idea is that by simplifying the use of domain names as much as possible, the renewal rate of the domains will be increased accordingly.

Major maneuvers around the Internet of Things

The issue of the IoT is not new and several registries including **Afnic** and **Nominet** have been worked on it for several years. But the market still seems fairly broken up between players who do not communicate much about it. In reply to that observation, **Switch** (.CH registry) strived in 2018 to build around it an ecosystem of IoT players in Switzerland through its "Switch IoT Day". The main theme this year seems to have been the prospect of a partnership between the **Switch Foundation** and the **Open Network Infrastructure Association (ONIA)**.

Blockchains in the spotlight

Are *blockchains* becoming the "must have" for registries? After Donuts invested in a specialized company on the issue, **Nominet** seems convinced and in 2018 proposed services of this kind to their customer **MMX** as part of the .LUXE TLD suffix.

A patent application has also been filed in the United States by the **Shenzhen Graduate School**, entitled *"Systems and Methods for Managing Top-Level Domain Names Using Consortium Blockchain"*. Although the concrete applications (beyond the obvious marketing benefits) are still subject to caution, talk about this theme may very well continue in the future.

DNS infrastructures designed in connection with cybersecurity logic

Although all of the players are working to improve their DNS infrastructure, the Czech registry **CZNIC** distinguished itself by developing its own "modular router" *turris mox* financed by a crowd funding operation that went go-live in 2018.

Work is generally done to optimize performance, but also to increase the robustness and resilience of DNS infrastructures in a context of increasing environmental danger (increases in the number, power and variety of attacks).

This is evidenced by other initiatives of **CZNIC**: publication of the book *Cybersecurity* designed to better inform the public about these issues; the launch of a national project making **CZNIC** the national coordinator of the actions taken to improve the safety of children on the Internet; and finally the participation of the **Brno University of Technology**, of **CESNET** and of **CZNIC** in the European project **SPARTA**.

Note also the launch by **Alphabet**, the parent company of **Google**, of *Intra*, designed to protect its customers against the "manipulation" of DNS.

Finally, as we saw earlier, **Nominet** (.UK registry) has created a "Cyberdivision" to house its "Cyberdefence" activities and is using it as a spearhead for its development across the Atlantic.

The revelation in early 2019 of the massive attacks that took place in late 2018 was an opportunity for market players to carry out awareness-raising about the importance of signing DNSSEC names, of locking when they are strategic and, in general, of addressing domain name security as an integral part of the enterprise security policy. Often, discussions about domain name protection touch on the related theme of the protection of digital identity.

Digital identity management and protection, a growing field

Digital identity management is not a new topic either, but the intensification of articles about it and the emergence of new offers are bringing it back to the spotlight.

To the *MojeID* system promoted by **CZNIC** and which already has several hundreds of thousands of users, has been added in recent months the *ID4me* solution from **DENIC** (the registry for the .DE). Other registries are launching initiatives based on "EIDs" such as **DK Hostmaster** to identify all holders of .DK (Denmark) domain names. The operation is being closely watched by **SIDN** which underlines the interest of the approach and discusses its partnership with **IRMA** to show "a unique privacy-enabled identity platform that lets users share only as much personal data as strictly necessary". The intention is eventually to establish an identification of holders of .NL domain names via this system.

9. Conclusions and outlooks

We completed our report on the domain name market in 2017 with a prediction for 2018, and this prediction has proven fairly accurate:

2018 promises to be a year of "recovery" for the market, which should experience better growth than in 2017 simply because of the absence of massive delete operations following the 2015/2016 filings. On the other hand, it will also be a "test" year for many new TLD registries.

In the end, growth has resumed but at a pace still far from the one we experienced before 2017. The consolidation process has continued, fueled by the difficult situation of certain players and the capital contributions made for the benefit of other players engaged in external growth operations.

It remains to be seen whether these buyers have the capacity to restore profitability and ensure the sustainability of the assets of which they have taken control.

In terms of profitability, the gain in size should allow them to generate synergies and achieve economies of scale that can significantly lower the breakeven point of the TLDs, registries or registrars absorbed. Price hike projects are increasing, including among the Legacy TLDs, but these measures may only accelerate the decline of the TLDs concerned by encouraging holders to clean up their portfolios of their last defensive names.

As for sustainability, it proves to be less certain since demand remains low and renewal rates are more than once giving food for thought.

The Chinese market still plays its role of El Dorado, but it is these same Chinese players who have been accustomed since 2015 to register domain names "for nothing". It may be difficult to bring this market back to world standards in terms of prices.

The next ICANN round expected by many players will not take place until at least 2021 and the first TLDs will come into production at least one year later. From 2019 to 2022 or 2023, there will be at least three to four years during which we shall still see failures and takeovers. That of Donuts, an emblematic player among the nTLD registries, has fairly strong symbolic power.

The challenge for the entire domain name market is to move out of a "binary" mode dominated by the .COM in North America and ccTLDs in the other regions. Unable to find effective solutions, future entrants (.CORP aside) risk being more or less asphyxiated between these well-established competitors, the benefits of the diversity that they bring risk not being sufficiently perceived by users or being prohibitively priced, which hampers their commercial development.

To this strategy of value based on high prices, which has not produced convincing results, logically answered a strategy of low-cost or quasi-free domain names relying on subsequent renewals. The players who took this path saw its limits and its dangers in 2018.

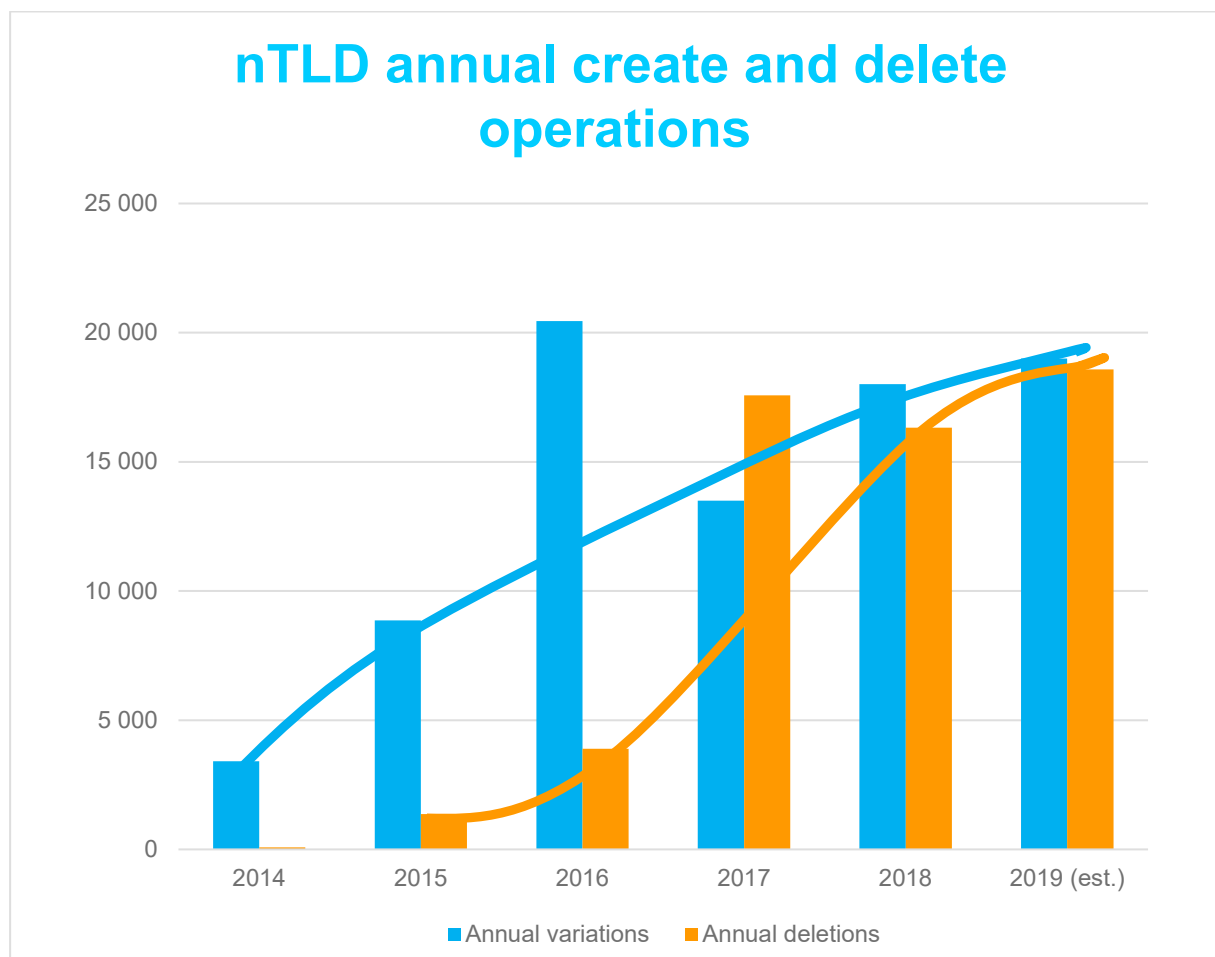
A more obvious solution to state than to make would be to conceive the existence of "niche" nTLDs, viable even if they do not reach extraordinary volumes. Technical registry operators have an important role to play in this direction, as do registrars.

The low demand for nTLDs is an abnormal phenomenon considering that during the same period .COM create operations have soared by 6%. The problem is no doubt due to a certain

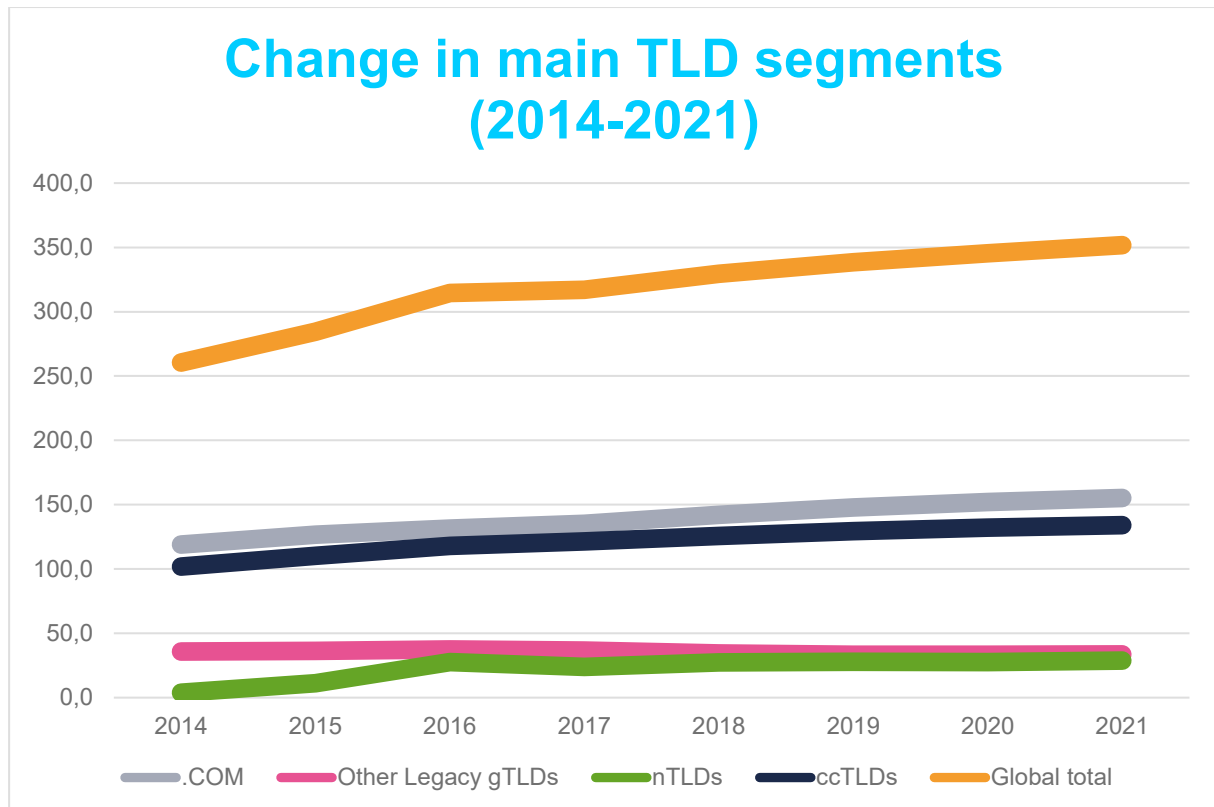
inadequacy of the ICANN registrar model as it currently stands, which prevents small TLDs from easily accessing the niches they covet.

Being an ICANN registrar requires technical and administrative means and skills that are not available to all. Structures having taken the step want, and it is normal, to make their investments profitable. It is unlikely that their priority is to provide opportunities for a few hundred or thousands of names to nTLDs by building and running reseller networks that may directly touch the "targets". However, an nTLD needs to be referenced by registrars in order to be disseminated; it depends on them for its survival. Part of the asphyxiation of this market segment is therefore paradoxically the registrars themselves, taken collectively at the global level.

The study of nTLD creation and deletion volumes since 2014 shows that create operations tend to settle down while delete operations follow with a year's lag the variations in registrations from previous years. If our forecasts are correct, 2019 will be even more tense than 2018 for the nTLD segment.



As for the other segments, there is no reason to think that in 2019 they will break from the trend followed in 2018. Unless some extraordinary event occurs, the Other Legacy TLDs should continue to slowly decline, periodically revived by promotional campaigns resulting in peaks of delete operations the following year. The .COM should continue its momentum, as well as the ccTLDs that enjoy with it the perception of "safe havens" among users who know nothing about nTLDs and do not care about learning.



2019 should therefore see a rather moderate growth in the domain name market, especially if the dynamic growth of create operations of .COM in 2018 was in fact backed by "aggressive" promotional campaigns - which we can only know when the names fall.

Domain-related topics (Data, Cybersecurity, IoT, digital identities, and so on) will certainly continue to serve to tempt the taste for innovation of the market players, while constantly reminding them that domain names are not an end in themselves, but effective means for ensuring and optimizing the presence on the Internet of those who wish to exist on it in order to share, trade and help build a better future.