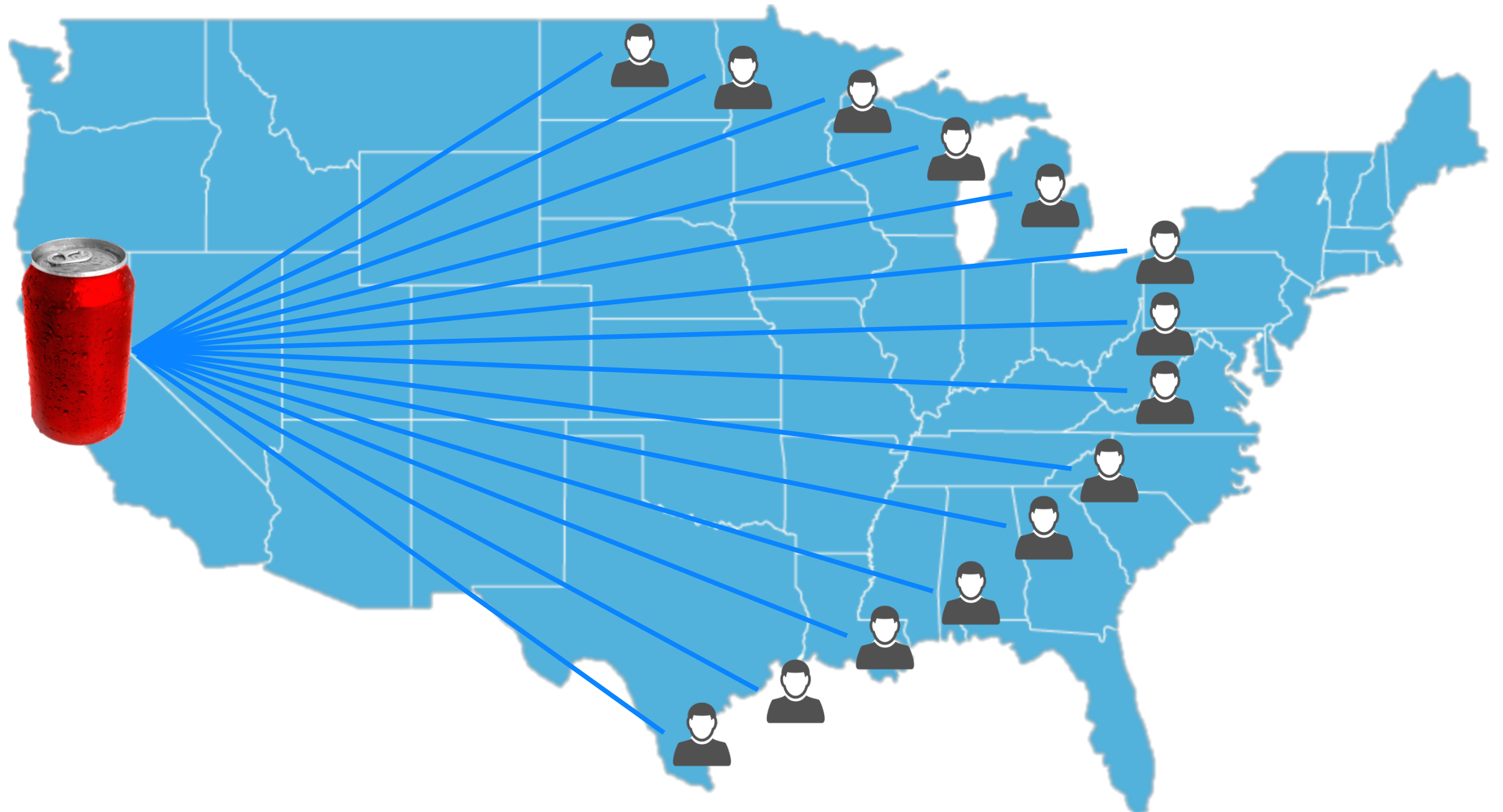


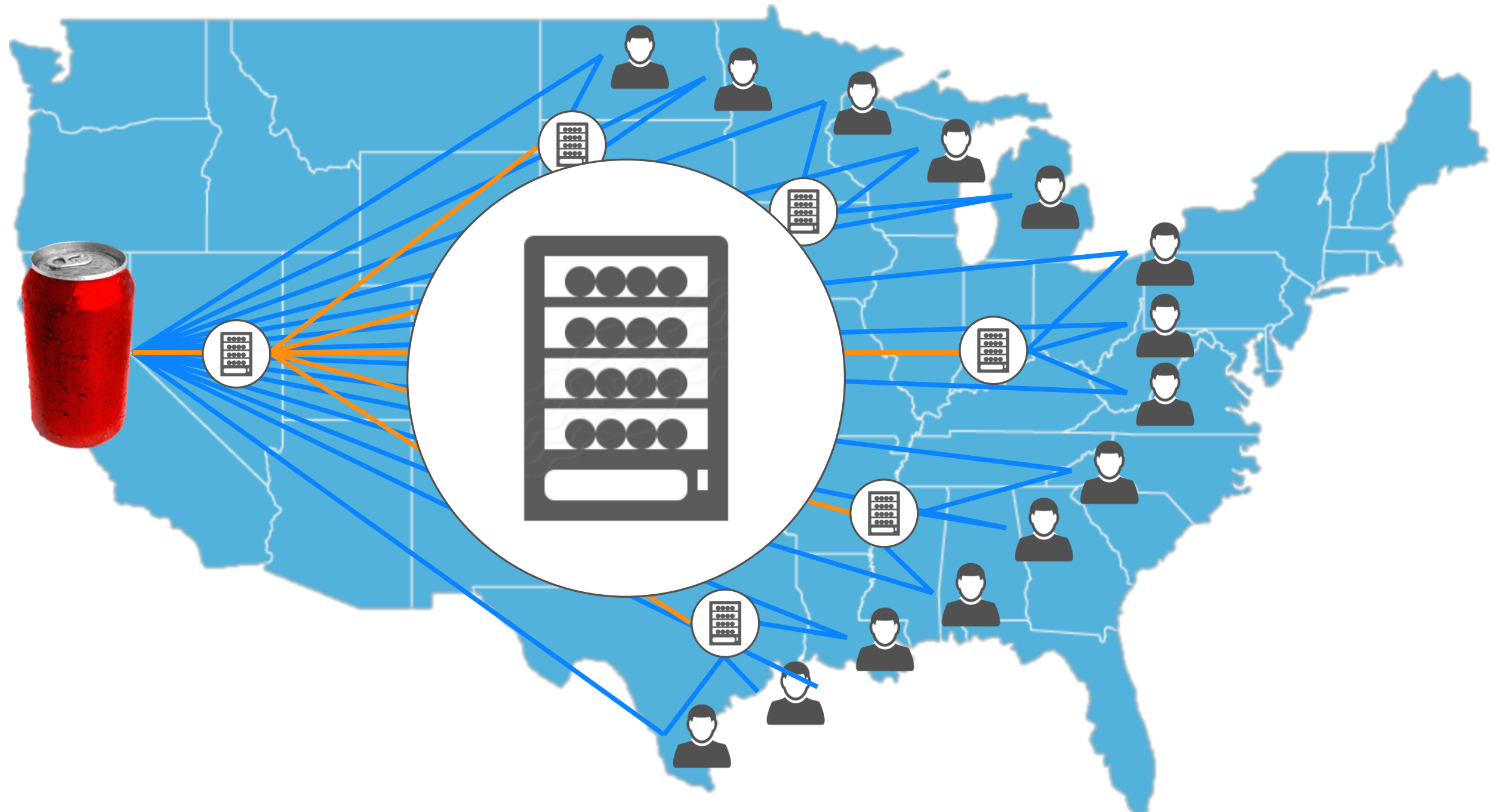
Estado del Internet según Akamai: situación global y de Costa Rica



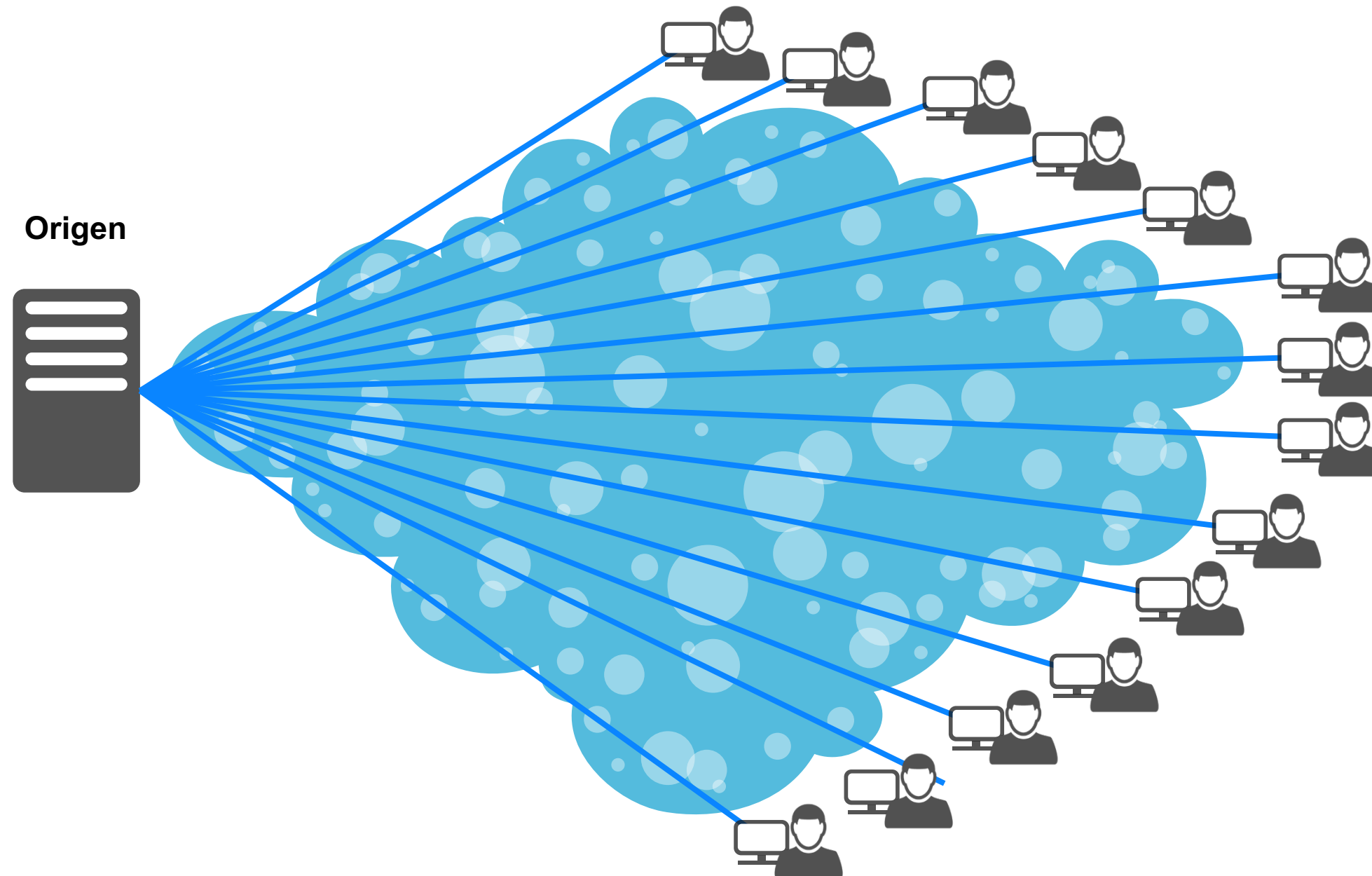
Analogía: distribuyendo bebidas desde su ciudad



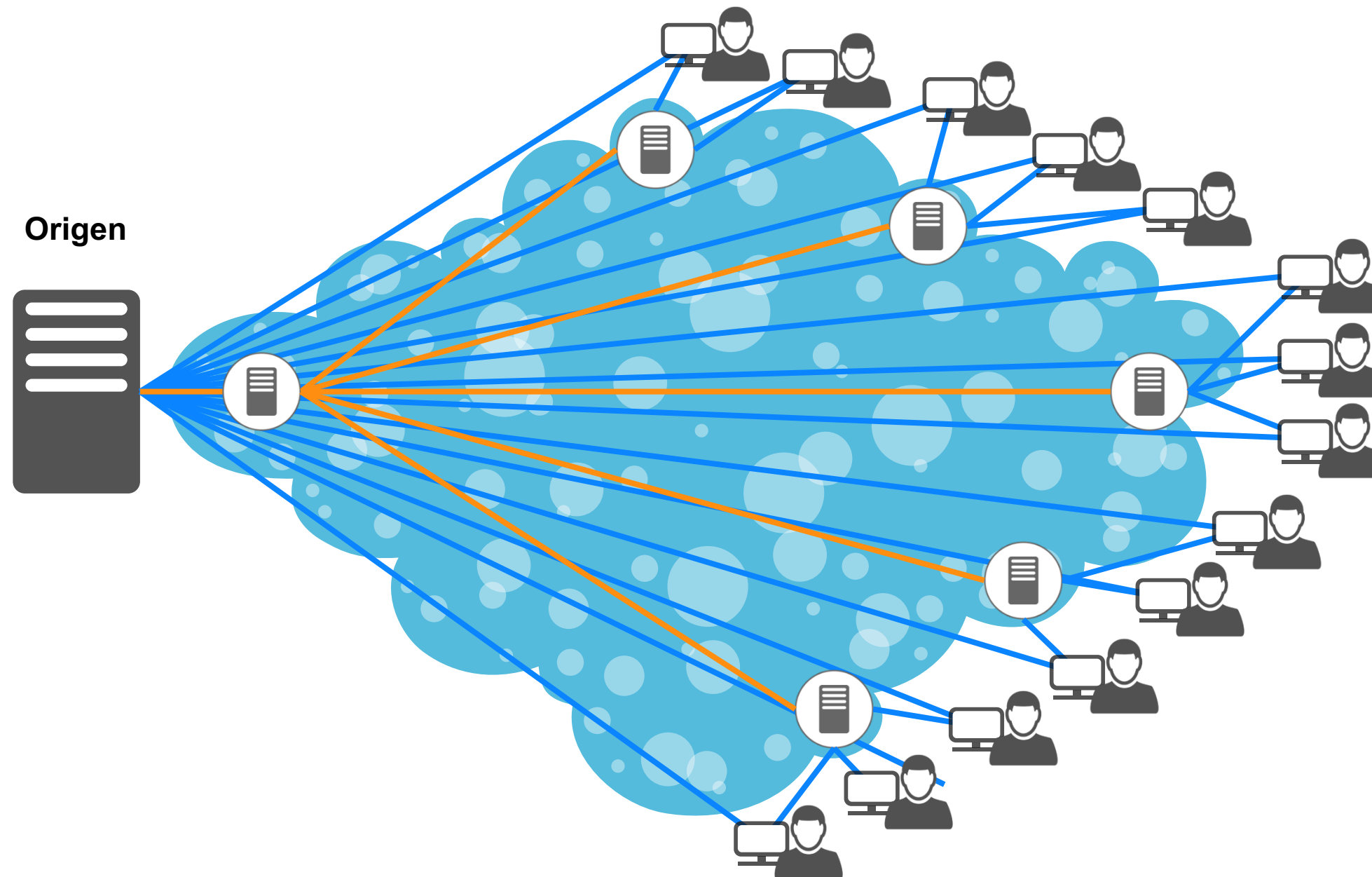
Analogía: distribuyendo bebidas desde su ciudad



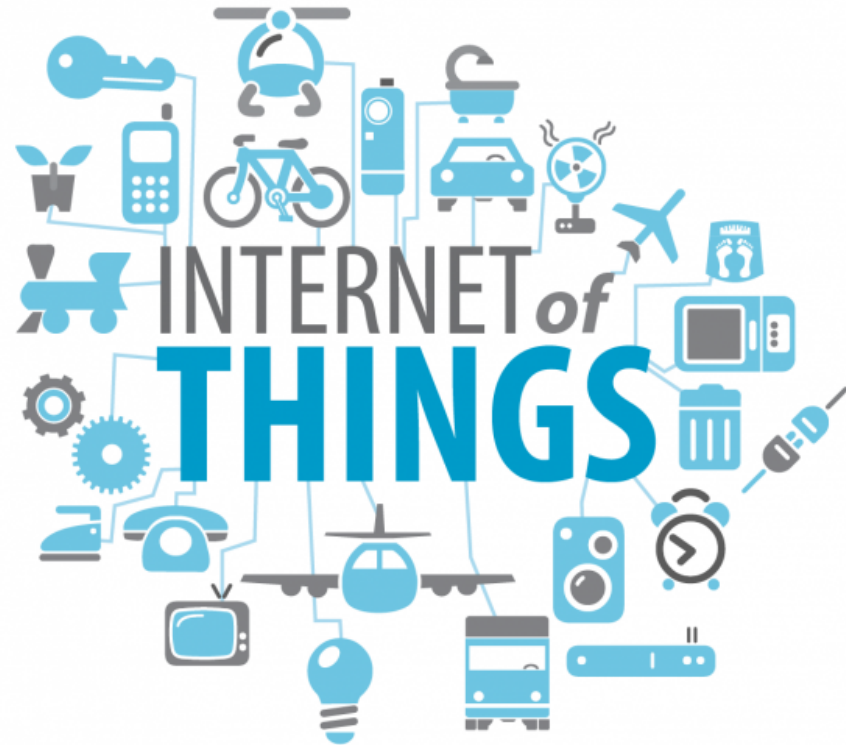
Distribuyendo contenido desde el perímetro de Internet



Distribuyendo contenido desde el perímetro de Internet



Internet en la actualidad



- Mejor video en Internet que TV
- Carga instantánea de páginas y apps



- 20000 mill. dispositivos
- 10% teléfonos inteligentes

Akamai en números

- ~30% tráfico web
- Picos de tráfico:
 - 2008: 1 Tbps por primera vez
 - 2017: **61 Tbps**
- Solicitudes por segundo: +35M
- Contenido en un año: **95 Exabytes**

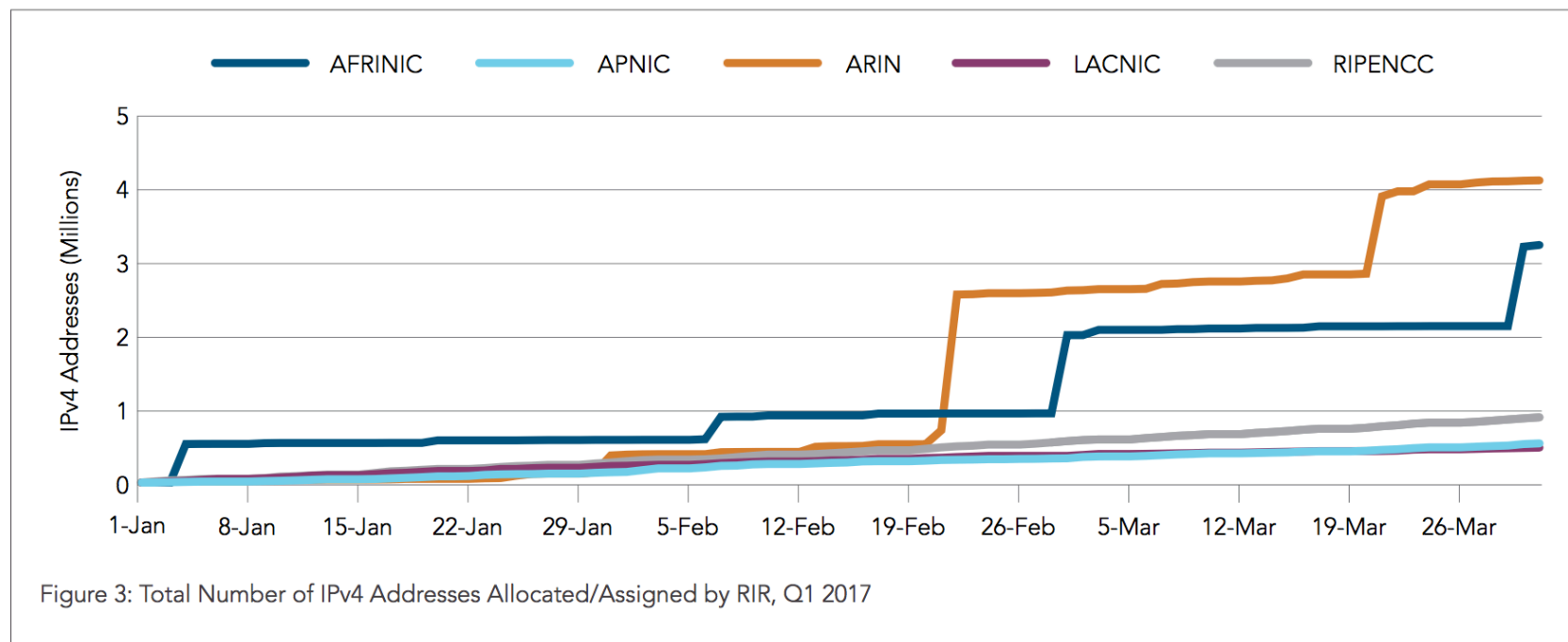
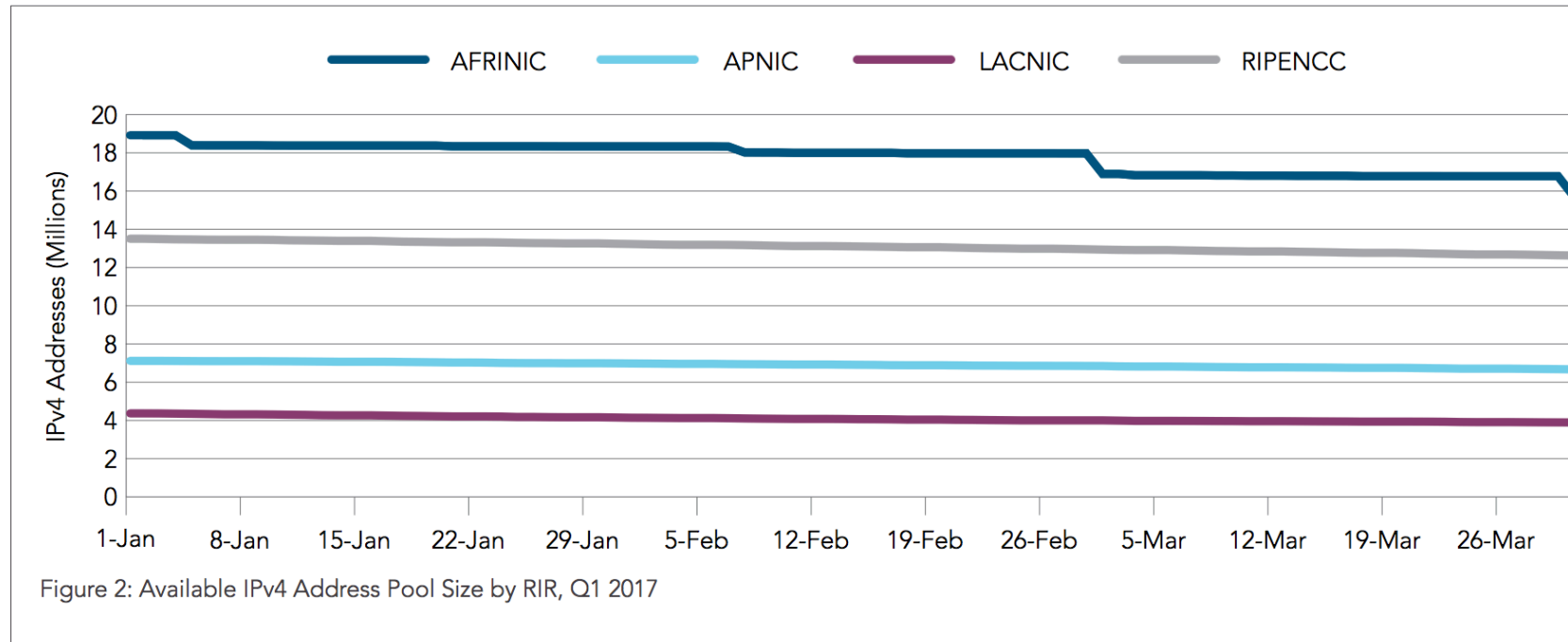
PLATAFORMA:

+240K
Servidores

+3700
Ubicaciones

133
Países

IPv4 disponibilidad y asignación



IPv6 % - Principales países

	Country/Region	Q1 2017 IPv6 %
1	Belgium	38%
2	Greece	25%
3	United States	22%
4	Switzerland	21%
5	Trinidad and Tobago	21%
6	Germany	20%
7	India	17%
8	Estonia	16%
9	Brazil	13%
10	United Kingdom	13%

Country/Region	Network Provider	Q1 2017 IPv6 %
United States	Comcast Cable	43%
United States	AT&T	44%
India	Reliance Jio INFOCOMM Ltd	79%
United States	Verizon Wireless	82%
United States	Time Warner Cable	27%
United States	T-Mobile	82%
Germany	Deutsche Telekom	32%
United Kingdom	Sky Broadband	62%
United States	Cox Communications	25%
Brazil	NET Serviços de Comunicação S.A.	22%
Canada	Rogers Cable	41%
Belgium	TELENET	55%
United States	Sprint Communications	43%
Canada	Telus Communications	44%
Japan	KDDI Corporation	34%
France	Orange	12%
Germany	Kabel Deutschland	49%
France	Proxad/Free	26%
Australia	Telstra Direct	18%
Pan-European	Liberty Global B.V. (UPC)	16%

Datos globales - Top 10

	Country/Region	Q1 2017 Avg. Mbps
–	Global	7.2
1	South Korea	28.6
2	Norway	23.5
3	Sweden	22.5
4	Hong Kong	21.9
5	Switzerland	21.7
6	Finland	20.5
7	Singapore	20.3
8	Japan	20.2
9	Denmark	20.1
10	United States	18.7

	Country/Region	Q1 2017 Peak Mbps
–	Global	44.6
1	Singapore	184.5
2	Macao	132.0
3	Mongolia	131.1
4	Hong Kong	129.5
5	South Korea	121.0
6	Jersey	108.4
7	Qatar	107.9
8	Thailand	106.6
9	Israel	99.1
10	Sweden	95.3

Top 10 vs Costa Rica – Promedio de velocidad de conexión

[state of the internet] Graph Visualization

Average connection speed ▾

Q3 2007 ▾

TO

Q1 2017 ▾

DENMARK ✕

FINLAND ✕

HONG KONG ✕

JAPAN ✕

NORWAY ✕

SINGAPORE ✕

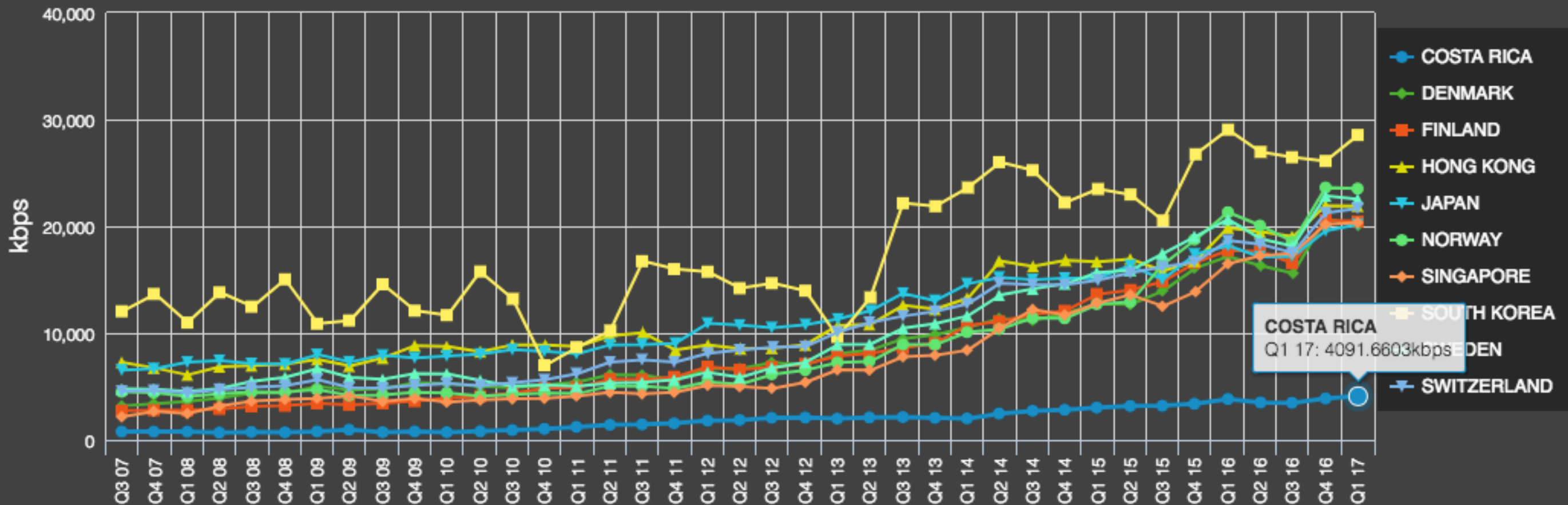
SOUTH KOREA ✕

SWEDEN ✕

SWITZERLAND ✕

COSTA RICA ✕

Average connection speed



Adopción de 4, 10 y 15 Mbps - Top 10

	Country/Region	% Above 4 Mbps
–	Global	82%
1	Guernsey	98%
2	South Korea	98%
3	Andorra	97%
4	Thailand	97%
5	Malta	97%
6	Macao	97%
7	Bulgaria	96%
8	Isle of Man	96%
9	Netherlands	95%
10	Israel	95%

	Country/Region	% Above 10 Mbps
–	Global	45%
1	South Korea	85%
2	Switzerland	75%
3	Japan	73%
4	Singapore	72%
5	Thailand	72%
6	Hong Kong	71%
7	Netherlands	70%
8	Romania	70%
9	Norway	69%
10	Belgium	68%

	Country/Region	% Above 15 Mbps
–	Global	28%
1	South Korea	69%
2	Switzerland	56%
3	Norway	54%
4	Hong Kong	54%
5	Japan	52%
6	Singapore	51%
7	Sweden	49%
8	United States	48%
9	Romania	47%
10	Denmark	46%

Costa Rica vs Top 10 - 4Mbps

[state of the internet] Graph Visualization

4 Mbps Broadband

Q3 2007

TO

Q1 2017

DENMARK

FINLAND

HONG KONG

JAPAN

NORWAY

SINGAPORE

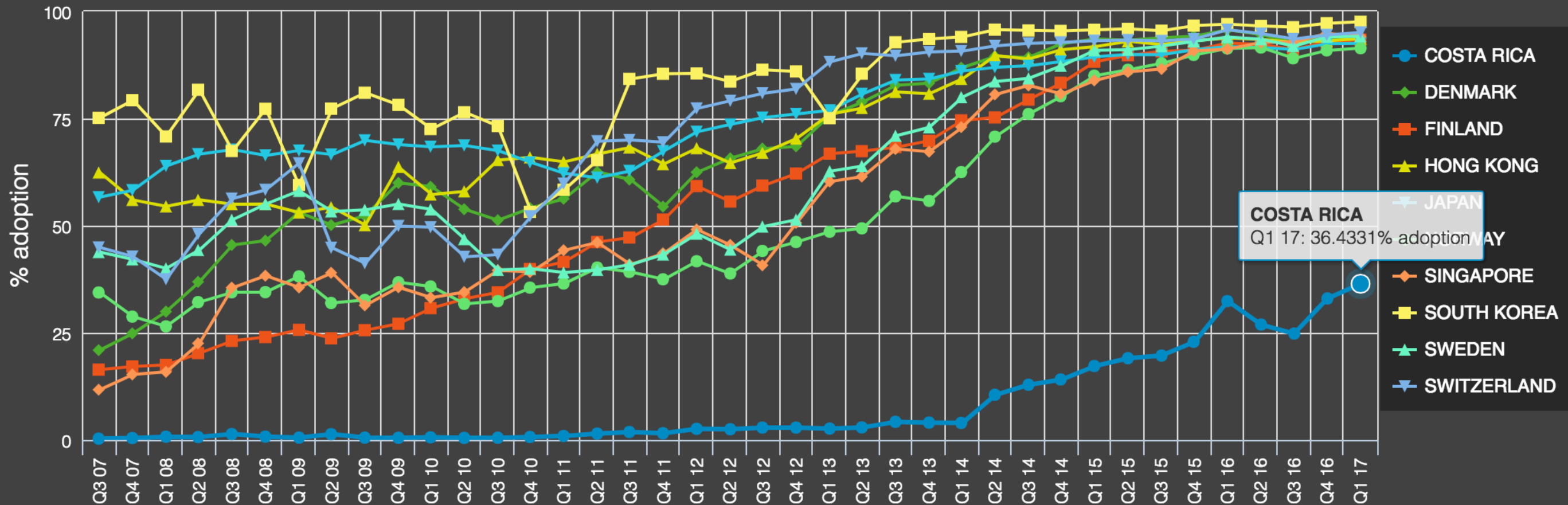
SOUTH KOREA

SWEDEN

SWITZERLAND

COSTA RICA

4 Mbps Broadband



Costa Rica vs Top 10 -10 Mbps

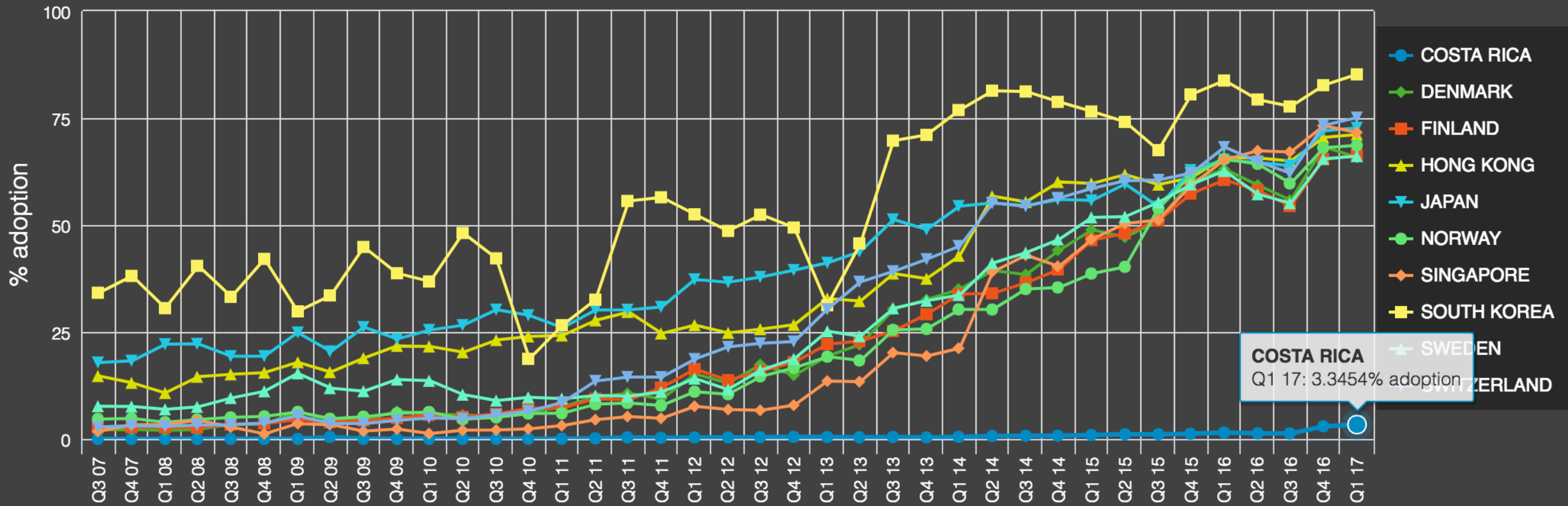
[state of the internet] Graph Visualization

10 Mbps Broadband ▾

Q3 2007 ▾ TO Q1 2017 ▾

DENMARK x FINLAND x HONG KONG x JAPAN x NORWAY x SINGAPORE x SOUTH KOREA x
 SWEDEN x SWITZERLAND x COSTA RICA x

10 Mbps Broadband



Costa Rica vs Top 10 -15 Mbps

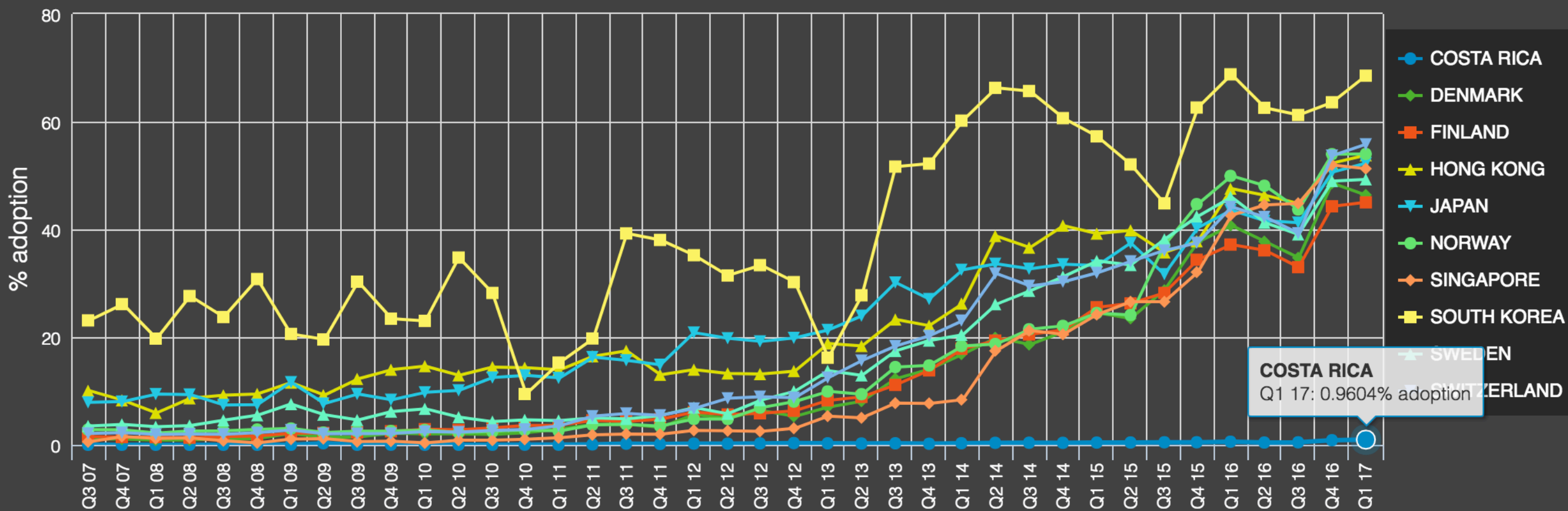
[state of the internet] Graph Visualization

15 Mbps Broadband ▾

Q3 2007 ▾ TO Q1 2017 ▾

DENMARK ✕ FINLAND ✕ HONG KONG ✕ JAPAN ✕ NORWAY ✕ SINGAPORE ✕ SOUTH KOREA ✕
SWEDEN ✕ SWITZERLAND ✕ COSTA RICA ✕

15 Mbps Broadband

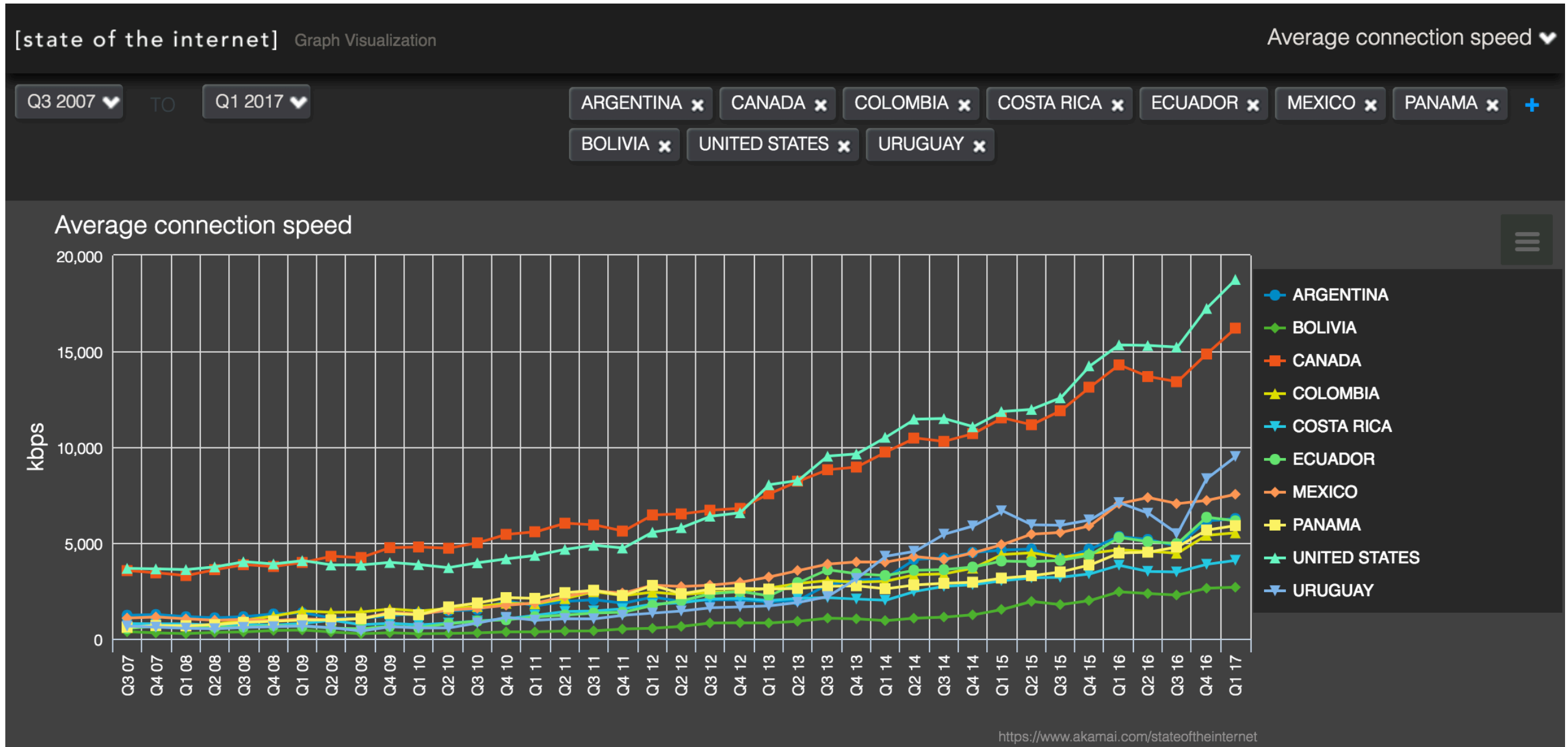


América

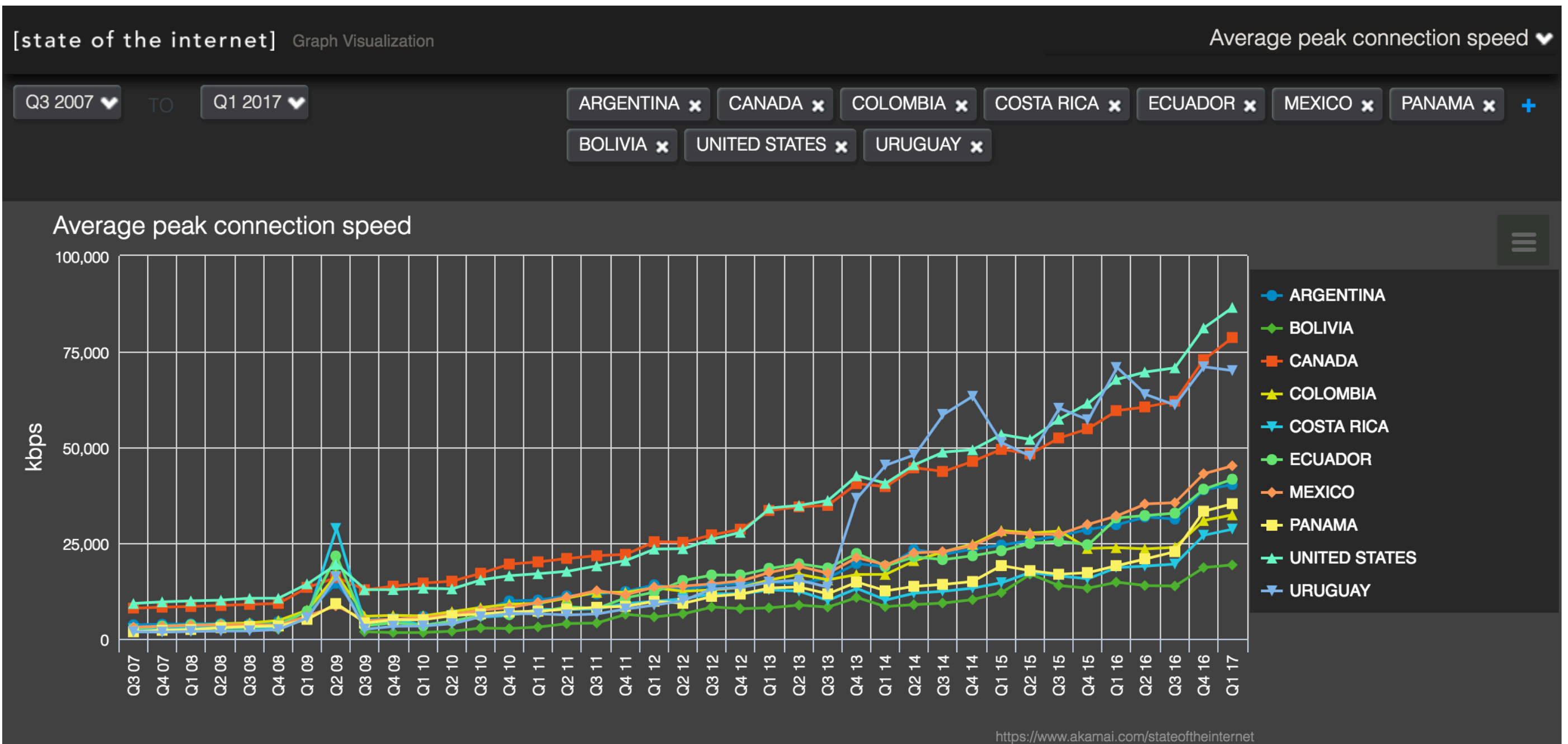
Global Rank	Country/Region	Q1 2017 Avg. Mbps
10	United States	18.7
20	Canada	16.2
57	Uruguay	9.5
60	Chile	9.3
76	Mexico	7.5
79	Brazil	6.8
90	Argentina	6.3
91	Peru	6.2
92	Ecuador	6.2
94	Panama	5.9
99	Colombia	5.5
112	Costa Rica	4.1
132	Bolivia	2.7
144	Venezuela	1.8
148	Paraguay	1.4

Global Rank	Country/Region	Q1 2017 Peak Mbps
16	United States	86.5
24	Canada	78.7
36	Uruguay	70.0
47	Chile	65.5
82	Peru	47.5
84	Brazil	46.5
87	Mexico	45.2
96	Ecuador	41.7
99	Argentina	40.3
105	Panama	35.3
107	Colombia	32.4
116	Costa Rica	28.6
133	Bolivia	19.3
141	Venezuela	14.6
146	Paraguay	10.1

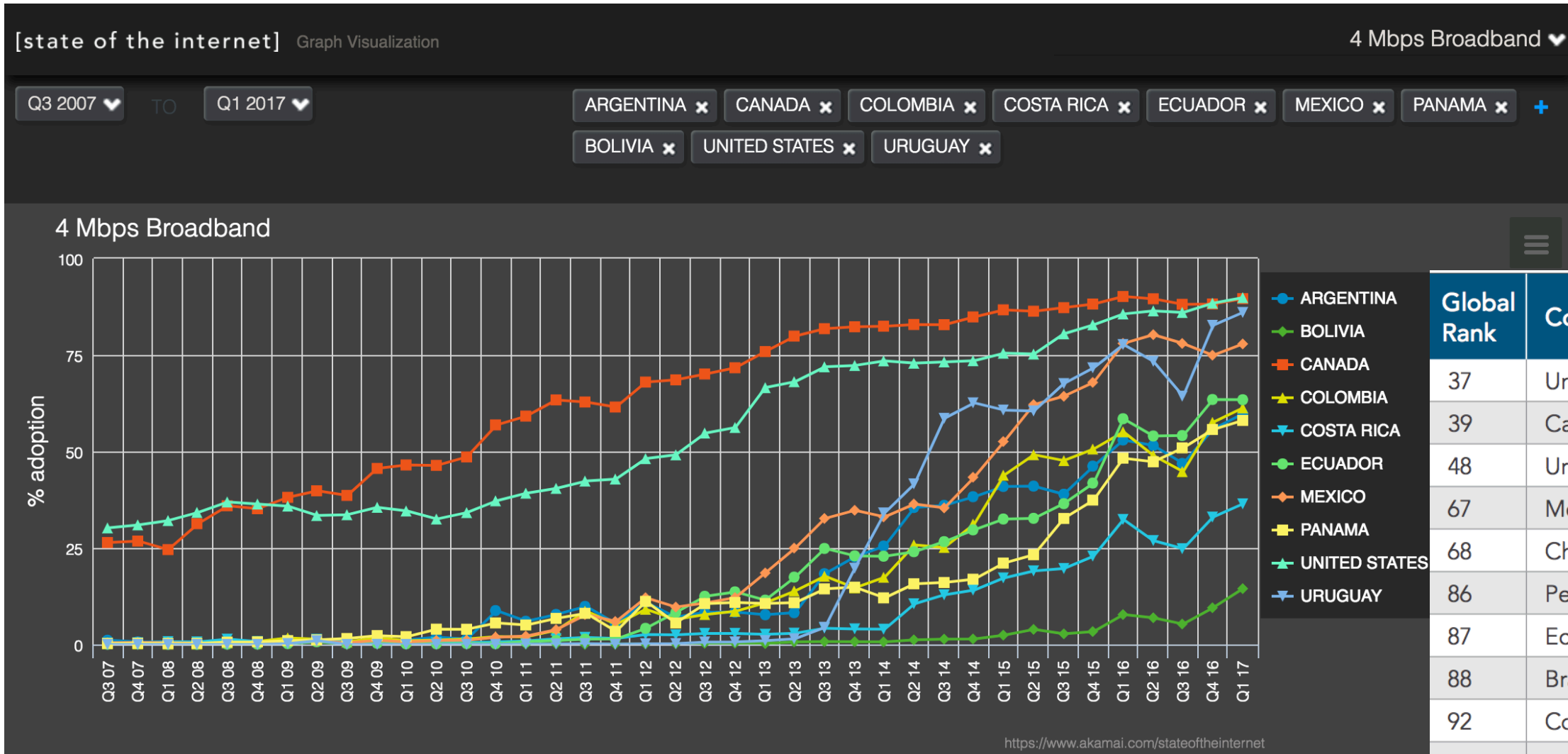
Promedio de velocidad de conexión



Promedio de picos (máximos) de conexión

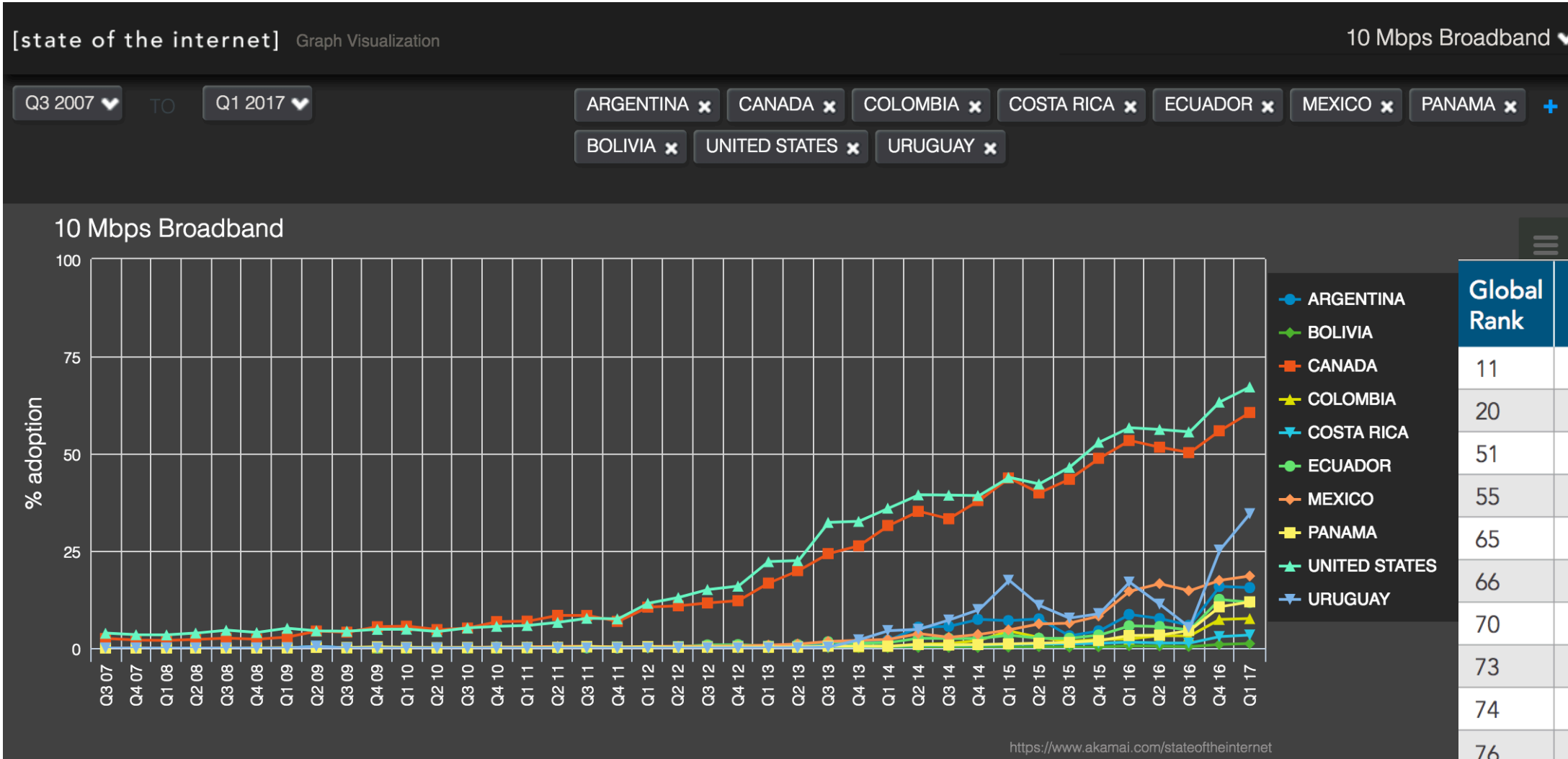


Adopción de Ancho de Banda – 4 Mbps



Global Rank	Country/Region	% Above 4 Mbps	QoQ Change	YoY Change
37	United States	90%	1.6%	4.9%
39	Canada	90%	1.6%	-0.6%
48	Uruguay	86%	4.0%	11%
67	Mexico	78%	3.9%	-0.2%
68	Chile	78%	4.7%	-7.9%
86	Peru	64%	9.4%	-1.0%
87	Ecuador	63%	-0.1%	8.4%
88	Brazil	63%	6.8%	43%
92	Colombia	61%	6.5%	11%
94	Argentina	60%	7.2%	13%
97	Panama	58%	4.2%	20%
110	Costa Rica	36%	10%	12%
120	Bolivia	14%	52%	86%
126	Venezuela	3.6%	9.1%	-16%
-	Paraguay	2.8%	3.9%	-66%

Adopción de Ancho de Banda – 10 Mbps



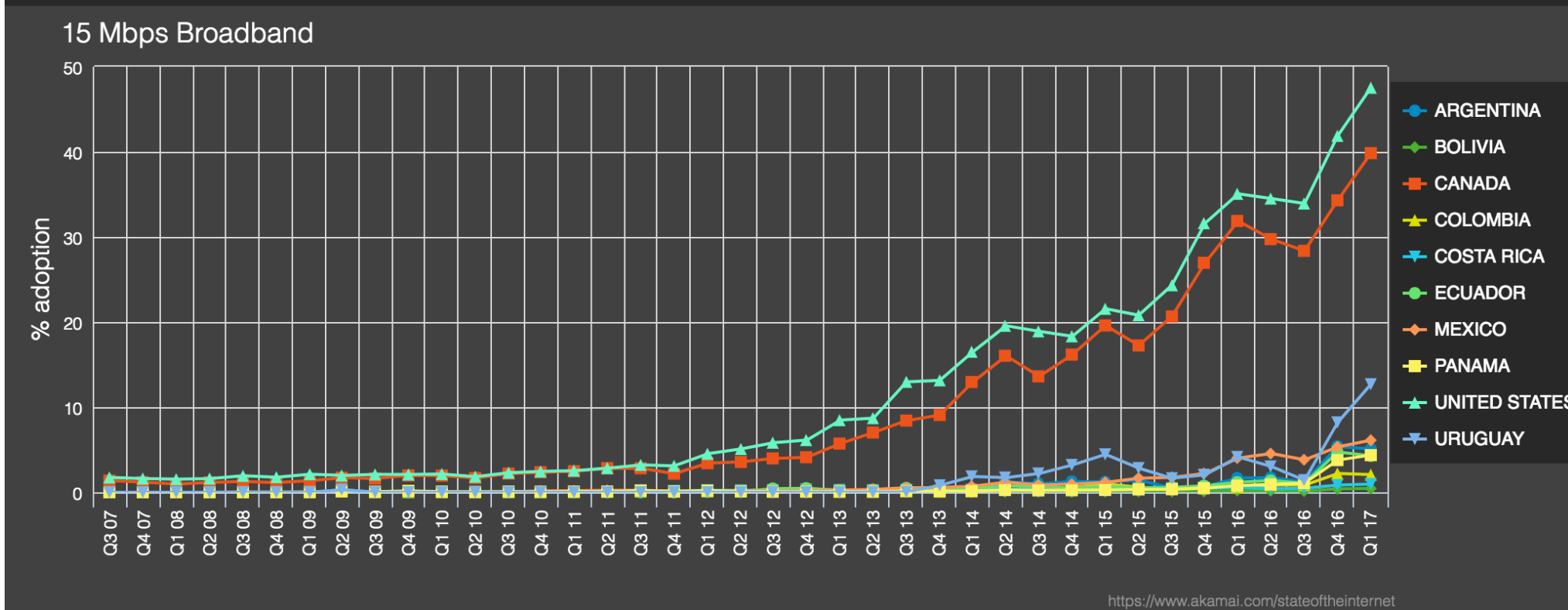
Global Rank	Country/Region	% Above 10 Mbps	QoQ Change	YoY Change
11	United States	67%	6.2%	19%
20	Canada	61%	8.4%	13%
51	Uruguay	35%	37%	104%
55	Chile	30%	14%	95%
65	Mexico	19%	6.3%	27%
66	Brazil	18%	15%	381%
70	Argentina	16%	-1.9%	80%
73	Peru	13%	40%	187%
74	Panama	12%	12%	270%
76	Ecuador	12%	-6.2%	106%
82	Colombia	7.6%	2.9%	226%
-	Costa Rica	3.3%	14%	123%
-	Bolivia	1.1%	20%	99%
-	Venezuela	0.2%	18%	-24%
-	Paraguay	0.2%	16%	-56%

Adopción de Ancho de Banda – 15 Mbps

[state of the internet] Graph Visualization 15 Mbps Broadband ▾

Q3 2007 ▾ TO Q1 2017 ▾

ARGENTINA ✕ CANADA ✕ COLOMBIA ✕ COSTA RICA ✕ ECUADOR ✕ MEXICO ✕ PANAMA ✕ +
BOLIVIA ✕ UNITED STATES ✕ URUGUAY ✕



Global Rank	Country/Region	% Above 15 Mbps	QoQ Change	YoY Change
8	United States	48%	14%	36%
16	Canada	40%	16%	25%
50	Chile	15%	18%	243%
54	Uruguay	13%	55%	206%
65	Mexico	6.1%	15%	52%
66	Brazil	5.8%	16%	451%
68	Argentina	5.1%	-5.6%	206%
72	Peru	4.4%	60%	211%
73	Ecuador	4.3%	-9.4%	263%
75	Colombia	2.1%	-6.0%	259%
-	Panama	4.4%	15%	465%
-	Costa Rica	1.0%	13%	66%
-	Bolivia	0.4%	11%	117%
-	Venezuela	0.1%	4.8%	-42%
-	Paraguay	0.1%	20%	-55%

Conectividad Móvil

Country/Region	Q1 2017 Avg. Mbps
AMERICAS	
Argentina	5.1
Bolivia	4.0
Brazil	5.2
Canada	10.3
Chile	7.2
Colombia	6.7
Costa Rica *	3.7
Ecuador *	4.5
Mexico *	7.5
Panama	4.2
Paraguay	7.5
Peru	8.3
United States	10.7
Uruguay	4.6
Venezuela	2.8

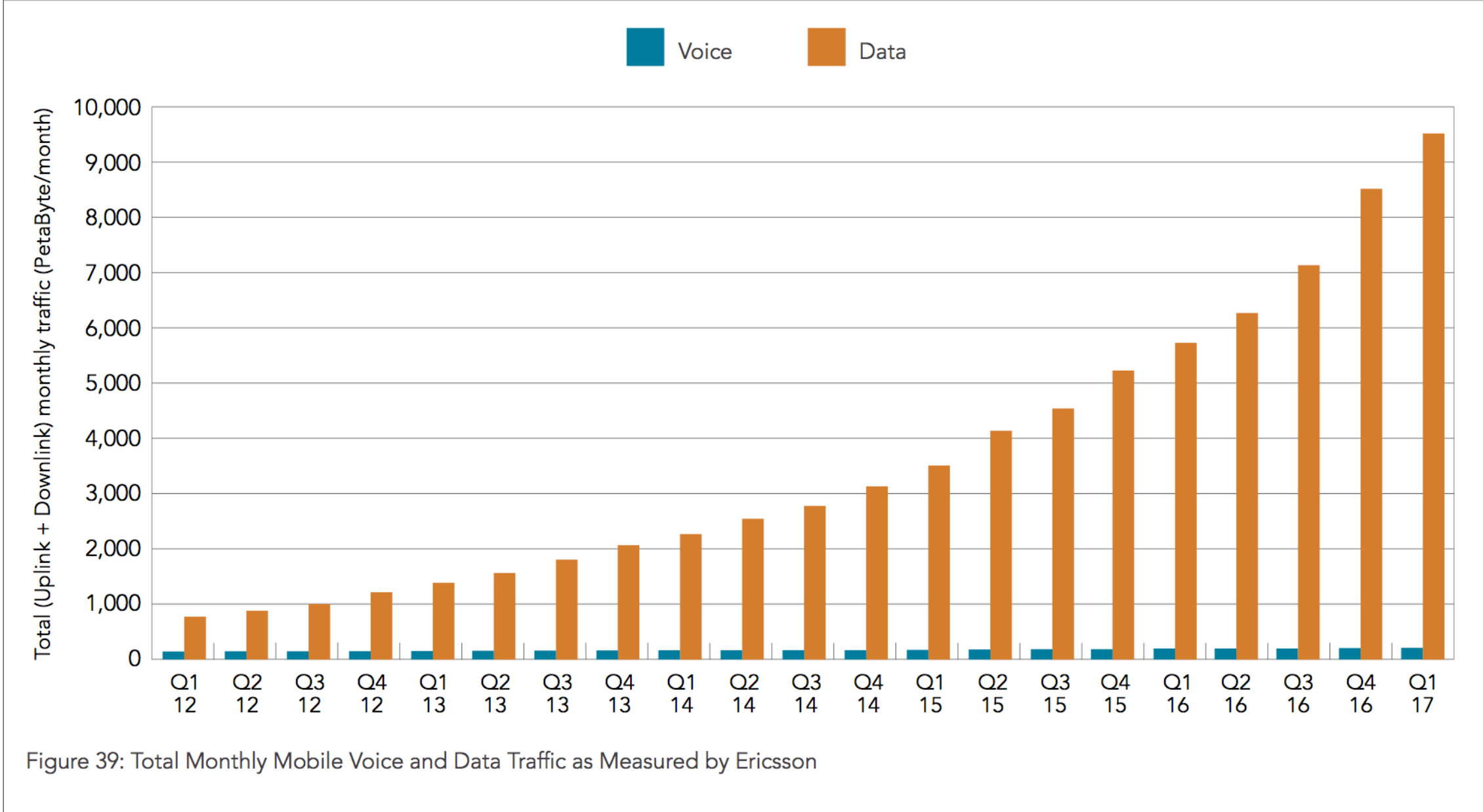
1er Trimestre 2017

Más alta - 26.0 Mbps Reino Unido

Más baja - 2.8 Mbps Venezuela

Crecimiento del 12% con respecto al trimestre anterior.

Tráfico Móvil (Global)



Resumen América

Region	Unique IPv4 Addresses	Average Connection Speed (Mbps)	Average Peak Connection Speed (Mbps)	% Above 4 Mbps	% Above 10 Mbps	% Above 15 Mbps
AMERICAS						
Argentina	8,611,149	6.3	40.3	60%	16%	5.1%
Bolivia	496,224	2.7	19.3	14%	1.1%	0.4%
Brazil	47,684,097	6.8	46.5	63%	18%	5.8%
Canada	15,748,996	16.2	78.7	90%	61%	40%
Chile	4,413,226	9.3	65.5	78%	30%	15%
Colombia	9,059,108	5.5	32.4	61%	7.6%	2.1%
Costa Rica	534,098	4.1	28.6	36%	3.3%	1.0%
Ecuador	792,343	6.2	41.7	63%	12%	4.3%
Mexico	13,325,374	7.5	45.2	78%	19%	6.1%
Panama	579,828	5.9	35.3	58%	12%	4.4%
Paraguay	374,806	1.4	10.1	2.8%	0.2%	0.1%
Peru	1,068,857	6.2	47.5	64%	13%	4.4%
United States	142,764,621	18.7	86.5	90%	67%	48%
Uruguay	1,192,344	9.5	70.0	86%	35%	13%
Venezuela	2,643,008	1.8	14.6	3.6%	0.2%	0.1%

Nuestra presencia en Costa Rica

- 8 localidades
- 68 servidores

Telefonica

 movistar

u finet

 ice

 CABLETICA

 racsa ice

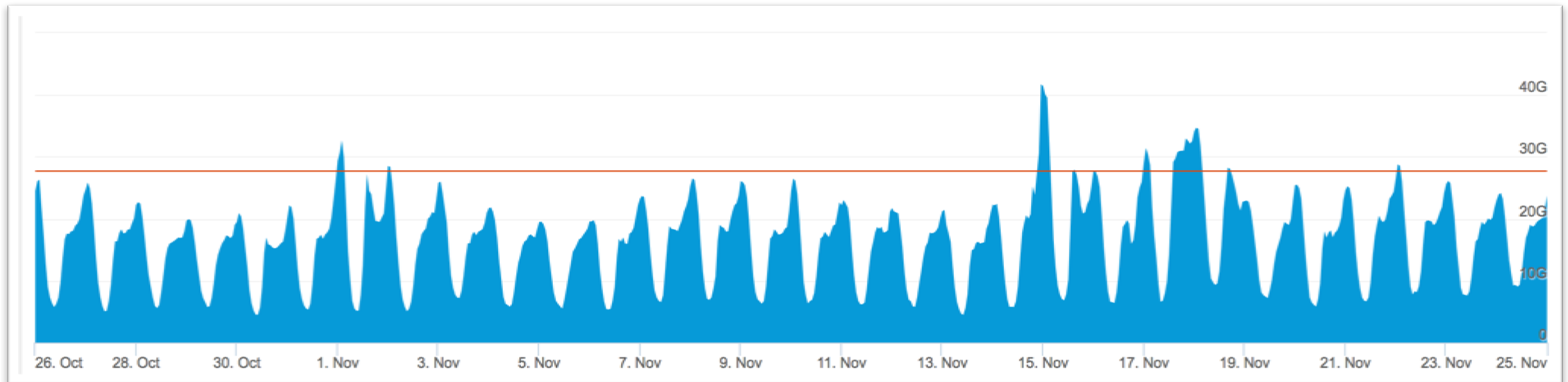
tigo

 telecable
Lo que más te conviene

 n!cr
NIC Costa Rica

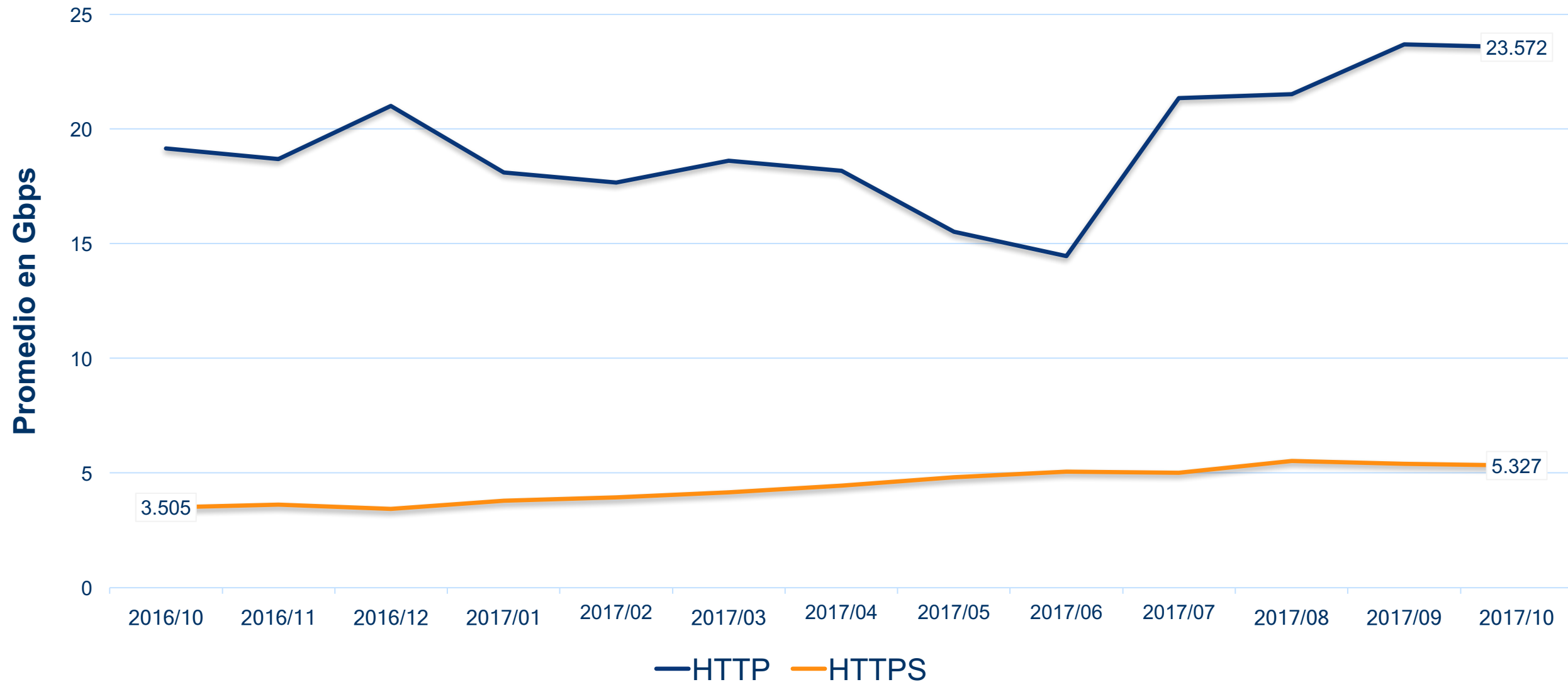
Datos generales

- Picos de tráfico: 66.812 Gbps
- Capacidad de servicio: 28.602 Gbps
- Tráfico HTTP en Costa Rica: 61,25%
- Tráfico seguro (HTTPS) en Costa Rica: 0%



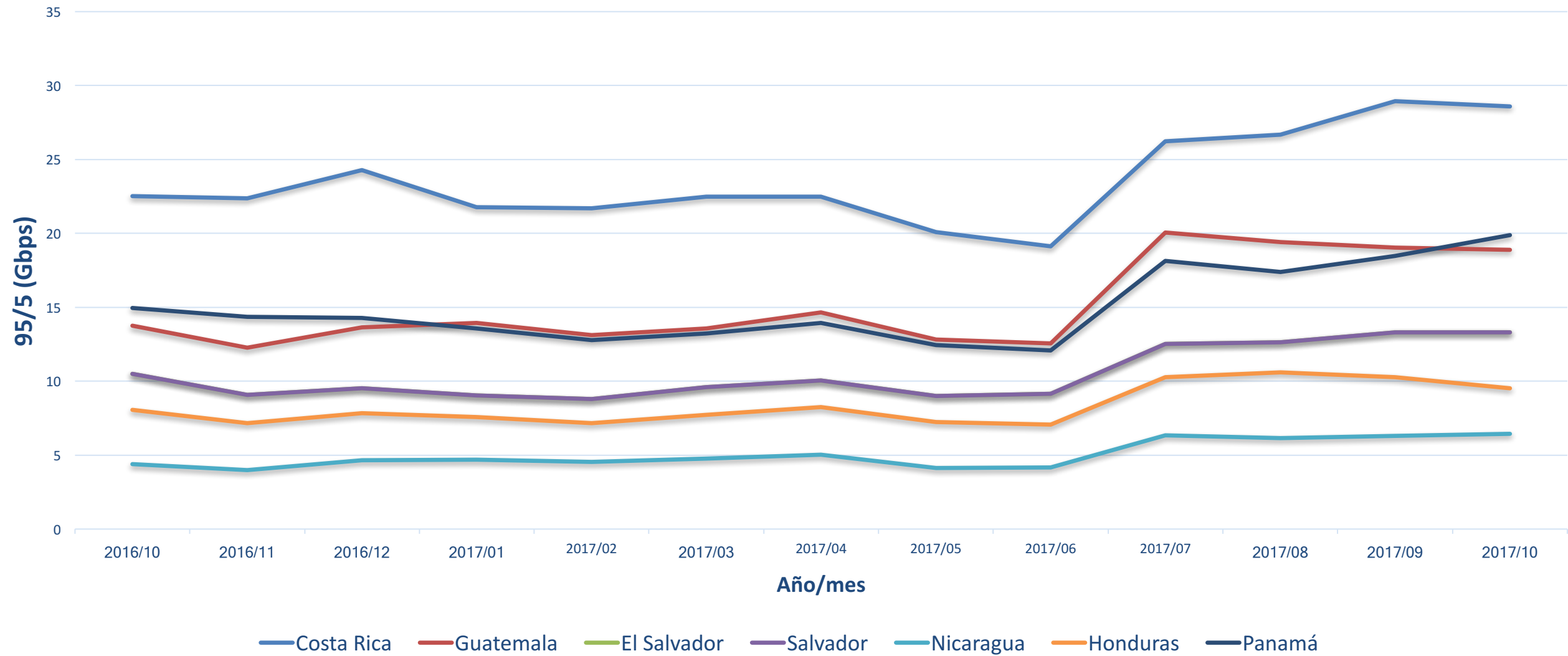
¿Hacia donde vamos?

Tráfico HTTP vs HTTPS

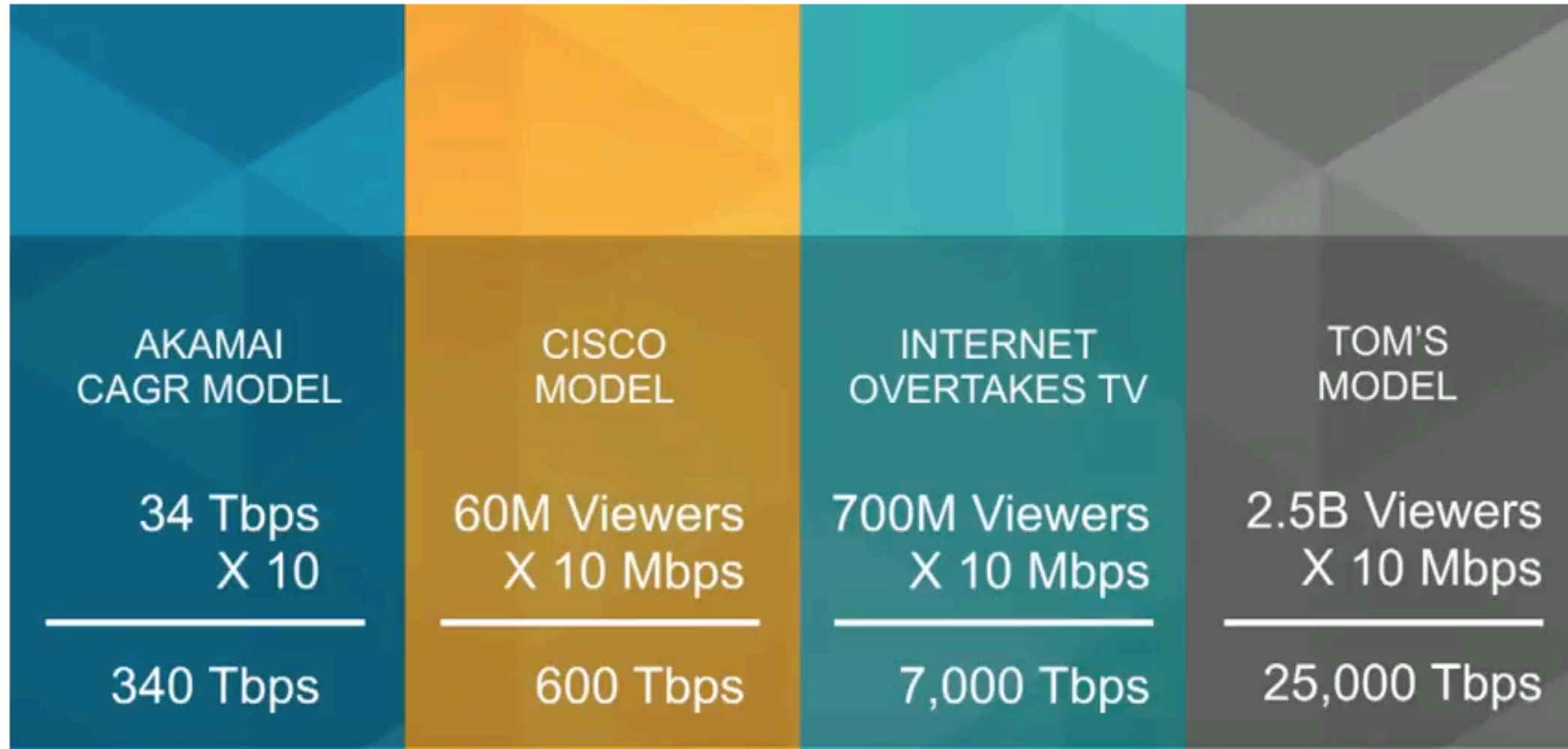


Costa Rica vs Centroamérica

Comportamiento en el último año



Proyecciones al 2020



Seguridad



