Preistorie,
Istorie,
Prezent,
Viitor

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Preistorie|Originile Internetului

- Dorinta de a comunica (si la distanta)
- Primele instrumente: limbajul si vorbirea
- Forma de comunicare: scrisa

  efecte ⬇

  scrierea pe pietre, peretii pesterilor, papirus ☺
- Comunicarea la distanta?
  - Semnale cu foc
  - Codul morse
- Secolul 19: electricitatea si telegraful

Istoric|Originile Internetului

1837 Charles Babbage proiecteaza "primul computer"

1863 Jules Verne:

"photo-telegraphy allowed any writing, signature or illustration to be sent faraway - every house was wired"

1891 – Ada Lovelace – primul program pentru masina analitica a lui Babbage

1936 Alan Turing – descrie masina Turing

1939 HP este fondat (Bill Hewlett, David Packard)

3

Istoric|Originile Internetului

1961-1972: primele incercari de comunicare prin schimbare de pachete

1961: Kleinrock – propune un model teoretic

1964: Baran – implementare de comunicare intre computere ale armatei americane

1967: ARPAnet este proiectat de Advanced Research Projects Agency

1969: primul nod operational ARPAnet,
        retea de 4 calculatoare

4

Istoric|Originile Internetului

1972:

- demonstratie publica a tehnologiilor ARPAnet
- NCP (Network Control Protocol) primul protocol host-host
- Primul program de posta electronica (e-mail)
- Se introduce simbolul @
- ARPAnet are 15 noduri

Istoric|Originile Internetului

1972-1980: Apare conceptul de *Internetworking*. Apar retele aflate in proprietate privata.

1973: DARPA (Defense Advanced Research Projects Agency) – retele interconectate; Robert Metcalf (Hardvard) dezvolta tehnologia Ethernet care permite transferul de date pe cablu coaxial

1974: Cerf si Kahn – propun protocolul de comunicare TCP(Transmission Control Protocol)

1978: suita de protocolae TCP/IP este standardizata via documentele RFC (Request For Comments)

La sfirsitul anilor '70: arhitecturi de retea proprietare: DECnet, SNA, XNA

1979: ARPAnet are 200 de noduri

Istoric|Originile Internetului

1980-1990: noi protocoale, creste numarul de retele, Internet

1983: este folosit TCP/IP

1982: este definit SMTP (Simple Mail Transfer Protocol)

1983: apare DNS (translatarea din numele hostului in adresa IP)

1985: apare protocolul FTP(File Transfer Protocol)

1986: coloana vertebrala a **Internetului**

1988: se introduce mecanismul de control al congestiei pentru TCP

Istoric&Prezent|Originile Internetului

1990 ->2000->2017: World Wide Web, noi aplicatii comerciale ale retelelor

Inceputul anilor '90:
- **World Wide Web**

Dupa sfirsitul anilor '90 -> prezent :
- Retele mondiale
- Retele fara fir – *wireless*
- Aplicatii comerciale ale Internetului
  instant messaging, P2P file sharing
  retele sociale, video-streaming,
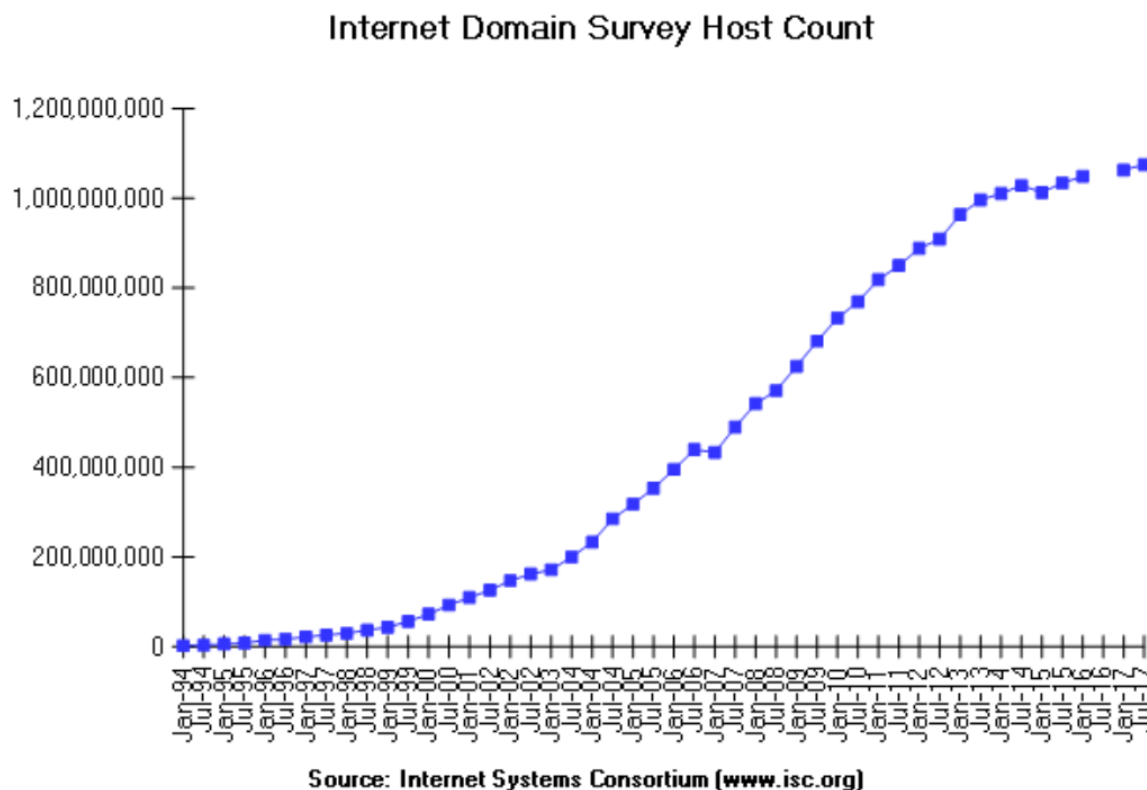 cloud-computing,
  …

Prezent

Internet Domain Survey Host Count

Source: Internet Systems Consortium (www.isc.org)

Figura. Cresterea numarului de *host*-uri din Ianuarie 1994 până în Iulie 2017
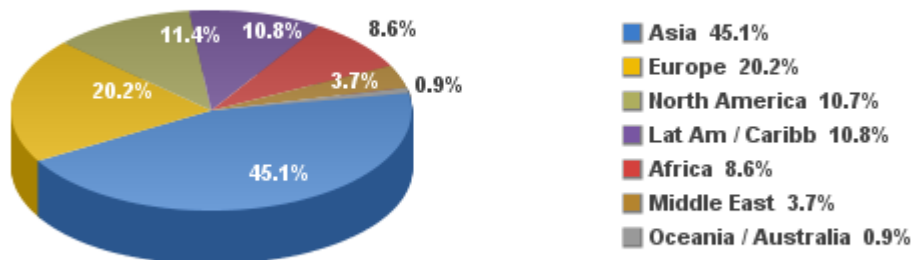Sursa: https://www.isc.org/network/survey/

Trecut

WORLD INTERNET USAGE AND POPULATION STATISTICS
December 31, 2013

World Regions	Population (2014 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000-2014
Africa	1,125,721,038	4,514,400	240,146,482	21.3 %	5,219.6 %
Asia	3,996,408,007	114,304,000	1,265,143,702	31.7 %	1,006.8 %
Europe	825,802,657	105,096,093	566,261,317	68.6 %	438.8 %
Middle East	231,062,860	3,284,800	103,829,614	44.9 %	3,060.9 %
North America	353,860,227	108,096,800	300,287,577	84.9 %	177.8 %
Latin America / Caribbean	612,279,181	18,068,919	302,006,016	49.3 %	1,571.4 %
Oceania / Australia	36,724,649	7,620,480	24,804,226	67.5 %	225.5 %
WORLD TOTAL	7,181,858,619	360,985,492	2,802,478,934	39.0 %	676.3 %

Tabel. **Statistici privind utilizarea internetului în raport cu numărul de persoane aflate în principalele zone geografice ale lumii**

Internet Users in the World
Distribution by World Regions - 2013 Q4

- Asia 45.1%
- Europe 20.2%
- North America 10.7%
- Lat Am / Caribb 10.8%
- Africa 8.6%
- Middle East 3.7%
- Oceania / Australia 0.9%

8.6% 10.8% 11.4% 3.7% 0.9% 20.2% 45.1%

Source: Internet World Stats - www.internetworldstats.com/stats.htm
Basis: 2,802,478,934 Internet users on Dec 31, 2013
Copyright © 2014, Miniwatts Marketing Group

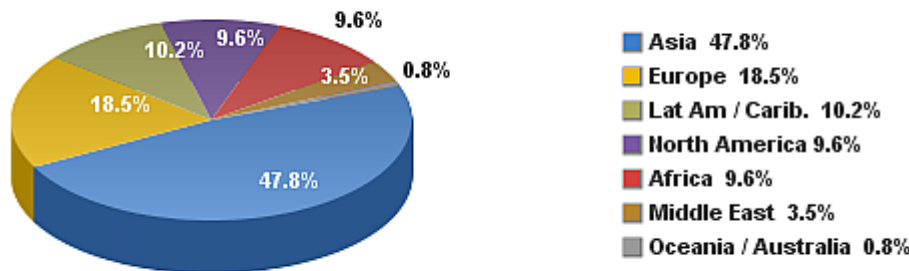Figura. **Utilizatorii de Internet în lume - împărţirea pe zone geografice**
Decembrie 2013 | Sursa:
http://www.internetworldstats.com/

Trecut

WORLD INTERNET USAGE AND POPULATION STATISTICS JUNE 30, 2015 - Mid-Year Update					
World Regions	Population (2015 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000-2015
Africa	1,158,355,663	4,514,400	313,257,074	27.0 %	6,839.1%
Asia	4,032,466,882	114,304,000	1,563,208,143	38.8 %	1,267.6%
Europe	821,555,904	105,096,093	604,122,380	73.5 %	474.8%
Middle East	236,137,235	3,284,800	115,823,882	49.0 %	3,426.1%
North America	357,172,209	108,096,800	313,862,863	87.9 %	190.4%
Latin America / Caribbean	617,776,105	18,068,919	333,115,908	53.9 %	1,743.6%
Oceania / Australia	37,157,120	7,620,480	27,100,334	72.9 %	255.6%
WORLD TOTAL	7,260,621,118	360,985,492	3,270,490,584	45.0 %	806.0%

Tabel. **Statistici privind utilizarea internetului în raport cu numărul de persoane aflate în principalele zone geografice ale lumii**

Internet Users in the World
Distribution by World Regions - 2015 Q2

9.6%
10.2% 9.6%
9.6%
3.5% 0.8%
18.5%
47.8%

- Asia 47.8%
- Europe 18.5%
- Lat Am / Carib. 10.2%
- North America 9.6%
- Africa 9.6%
- Middle East 3.5%
- Oceania / Australia 0.8%

Source: Internet World Stats - www.internetworldstats.com/stats.htm
Basis: 3,270,490,584 Internet users on June 30, 2015
Copyright © 2015, Miniwatts Marketing Group

Figura. **Utilizatorii de Internet în lume - împărţirea pe zone geografice**
Iunie 2015 | Sursa:
http://www.internetworldstats.com/

Prezent

WORLD INTERNET USAGE AND POPULATION STATISTICS JUNE 30, 2017 - Update					
World Regions	**Population (2017 Est.)**	**Population % of World**	**Internet Users 30 June 2017**	**Penetration Rate (% Pop.)**	**Growth 2000-2017**
Africa	1,246,504,865	16.6 %	388,376,491	31.2 %	8,503.1%
Asia	4,148,177,672	55.2 %	1,938,075,631	46.7 %	1,595.5%
Europe	822,710,362	10.9 %	659,634,487	80.2 %	527.6%
Latin America / Caribbean	647,604,645	8.6 %	404,269,163	62.4 %	2,137.4%
Middle East	250,327,574	3.3 %	146,972,123	58.7 %	4,374.3%
North America	363,224,006	4.8 %	320,059,368	88.1 %	196.1%
Oceania / Australia	40,479,846	0.5 %	28,180,356	69.6 %	269.8%
WORLD TOTAL	7,519,028,970	100.0 %	3,885,567,619	51.7 %	976.4%

Tabel. **Statistici privind utilizarea internetului în raport cu numărul de persoane aflate în principalele zone geografice ale lumii**
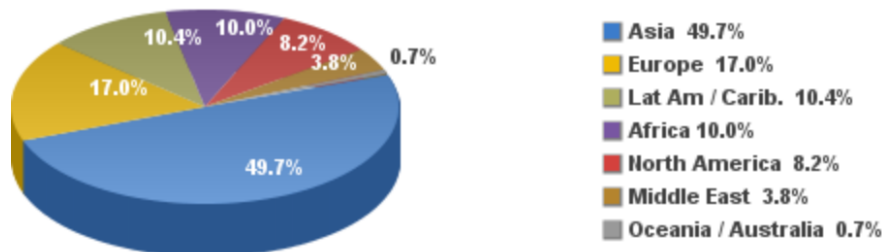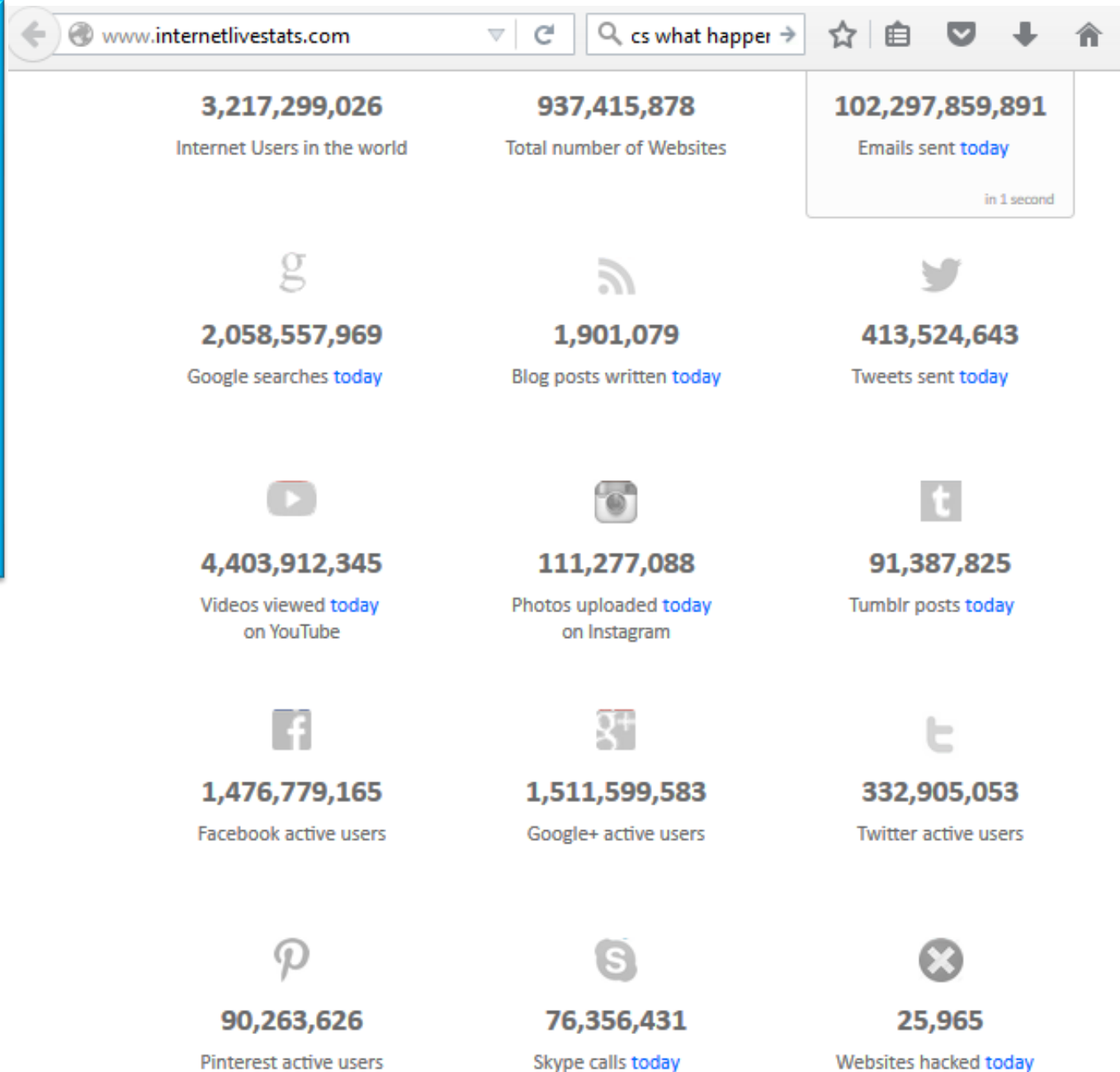

Internet Users in the World by Regions - June 30, 2017

- Asia 49.7%
- Europe 17.0%
- Lat Am / Carib. 10.4%
- Africa 10.0%
- North America 8.2%
- Middle East 3.8%
- Oceania / Australia 0.7%

Source: Internet World Stats - www.internetworldstats.com/stats.htm
Basis: 3,885,567,619 Internet users in June 30, 2017
Copyright © 2017, Miniwatts Marketing Group

Figura. **Utilizatorii de Internet în lume - împărţirea pe zone geografice**
Iunie 2017 | Sursa:
http://www.internetworldstats.com/

2015

www.internetlivestats.com   cs what happer

3,217,299,026
Internet Users in the world

937,415,878
Total number of Websites

102,297,859,891
Emails sent today

in 1 second

2,058,557,969
Google searches today

1,901,079
Blog posts written today

413,524,643
Tweets sent today

4,403,912,345
Videos viewed today
on YouTube

111,277,088
Photos uploaded today
on Instagram

91,387,825
Tumblr posts today

1,476,779,165
Facebook active users

1,511,599,583
Google+ active users

332,905,053
Twitter active users

90,263,626
Pinterest active users

76,356,431
Skype calls today

25,965
Websites hacked today

2016

3,468,643,766
Internet Users in the world

1,087,545,138
Total number of Websites

194,664,106,358
Emails sent today

4,185,464,645
Google searches today

3,895,390
Blog posts written today

545,202,217
Tweets sent today

9,797,549,361
Videos viewed today
on YouTube

55,114,064
Photos uploaded today
on Instagram

86,170,014
Tumblr posts today

1,743,554,973
Facebook active users

470,992,398
Google+ active users

306,403,939
Twitter active users

153,697,670
Pinterest active users

169,728,710
Skype calls today

59,331
Websites hacked today

2017

👤
3,740,598,070
Internet Users in the world

🌐
1,262,366,871
Total number of Websites

✉
119,009,122,882
Emails sent today

g
2,734,631,737
Google searches today

📡
2,565,004
Blog posts written today

🐦
338,568,356
Tweets sent today

▶
3,091,021,847
Videos viewed today
on YouTube

📷
35,067,825
Photos uploaded today
on Instagram

t
56,247,908
Tumblr posts today

f
2,005,803,147
Facebook active users

g+
549,353,139
Google+ active users

t
309,511,199
Twitter active users

P
287,879,708
Pinterest active users

S
121,275,661
Skype calls today

✕
43,584
Websites hacked today

Prezent

Cursul de **Reţele de Calculatoare** – Saptamânile 1-15-

Viitor

Cursul de **Reţele de Calculatoare** – Saptamâna 16-

Resurse

- Internet Society: http://www.isoc.org
- FNC – Federal Networking Council:
http://www.nitrd.gov/fnc/Internet_res.html
- InternetWorld Stats: http://www.internetworldstats.com
- Internet Systems Consortium: http://www.isc.org
- Internet Assigned Numbers Authority (IANA): http://www.iana.org/
- Cisco Systems: http://www.cisco.com
- http://www.nethistory.info
- http://www.caida.org/
- http://news.netcraft.com/archives/web_server_survey.html
- http://www.swivel.com/
- https://www.facebook.com/Grovo/info   :)
- http://www.internetlivestats.com/
- http://www.worldometers.info/
- http://www.internetsociety.org/globalinternetreport/?gclid=CN6a2Y2 wqMgCFUfkwgodZ8gL9A