



## **2008 International Internet Trends Study**

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## **The Number of Web Sites Promoting Anorexia and Bulimia Has Increased 470% Since 2006, According to Optenet Research**

### **1. Executive summary**

Optenet, a leading global IT security company and a provider of intelligent, integrated content security solutions, today announced the results of a report showing that adult content on the Internet – including pro-anorexia and bulimia, racism, violence and child pornography – has significantly increased since the end of 2006.

The report utilizes Optenet's unique traffic analysis and classification engine, which combines artificial intelligence with traditional content filtering technology to categorize Web site content. The report tracks Internet content trends since the end of 2006, based on a random sampling of nearly three million Web sites from around the world. Key findings include:

- Pro-anorexia and bulimia Web sites have increased by 470 percent;
- Pages associated with violent content increased 125 percent;
- Web sites promoting racism experienced a 70 percent increase;
- Pro-drug Web sites increased by 62 percent; and
- Content related to child pornography increased 18 percent.

The Optenet study showed that although pornography as a total percentage of Internet content has actually decreased slightly since 2006, it still is by far the largest category of content on the Internet, representing 35 percent of all Web sites. Online shopping represents the second biggest category (10.5 percent), followed by travel (7 percent), advertising sites (6 percent) and sports (4.5 percent).

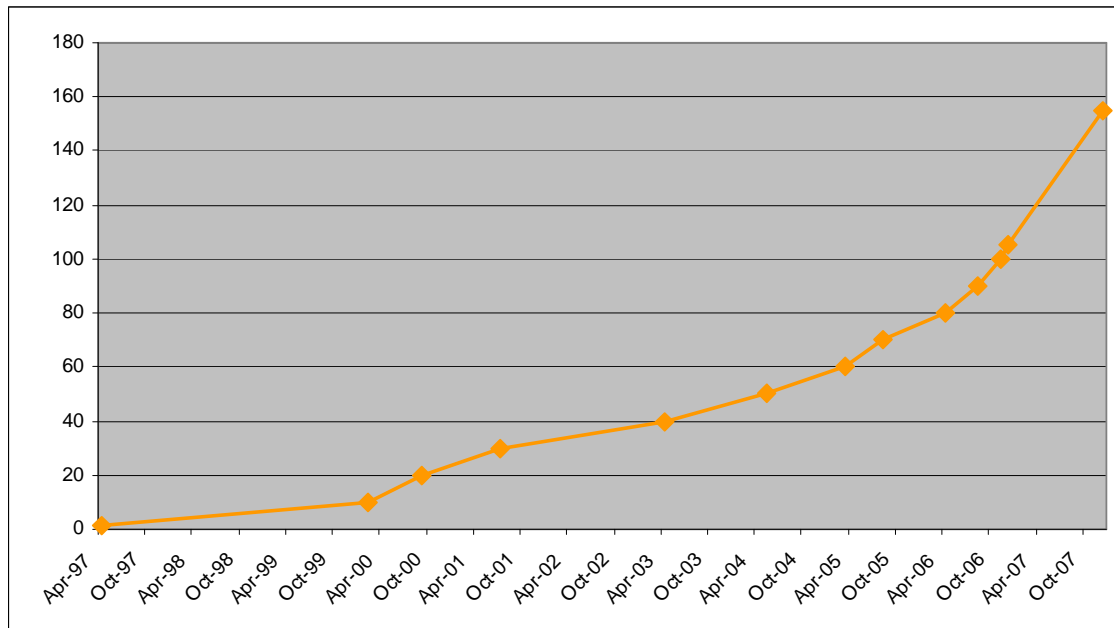
Originally launched 10 years ago as an Internet service provider dedicated to creating a safer Web experience for minors, Optenet transformed into a Web content security vendor that provides products and technology to service providers and enterprises.

## 2. Methodology

Currently, there are many formulas for classifying content found on the Web. Optenet has been studying the behavior of information stored on the Web and categorizing it for more than 10 years using a method that combines the most advanced artificial intelligence techniques. This system is made up of automatic online search systems and semantic analyzers that pre-classify with high effectiveness an average of 100,000 URLs per day. Through this pre-classification, a rigorous revision and categorization process of content is established according to its makeup in a dynamic database. Currently, the Optenet database filter consists of URL generations, which multiplies exponentially the classification capability, increasing the reach of the process to hundreds of millions of pages.

Using this process and source of knowledge as a base, Optenet conducted a study, selecting a random sample of nearly three million URLs classified by its technology in 2007, and compared the sample with a similar one from the same period in 2006.

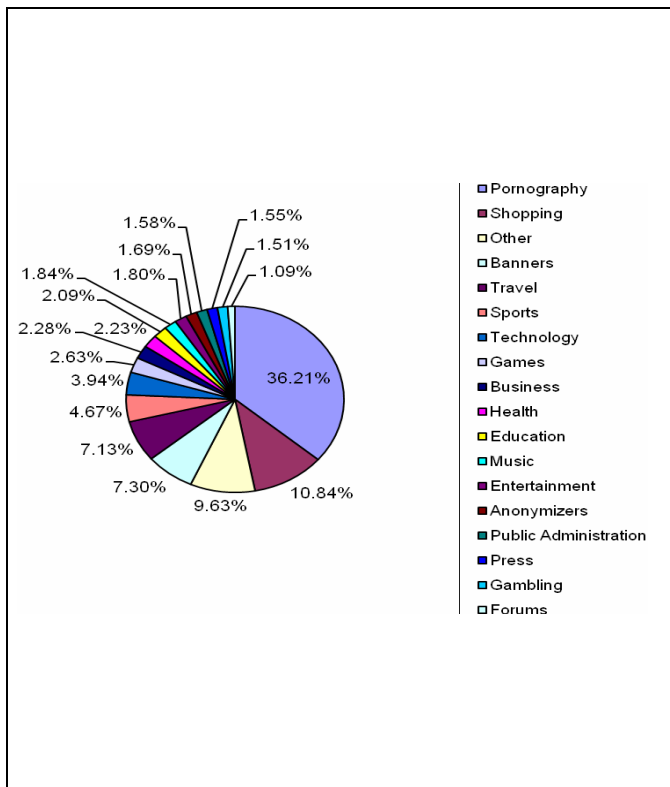
## 3. More than 155 million Web pages in 2007



### ***Graph 1: Growth of Web sites worldwide (1997-2007)***

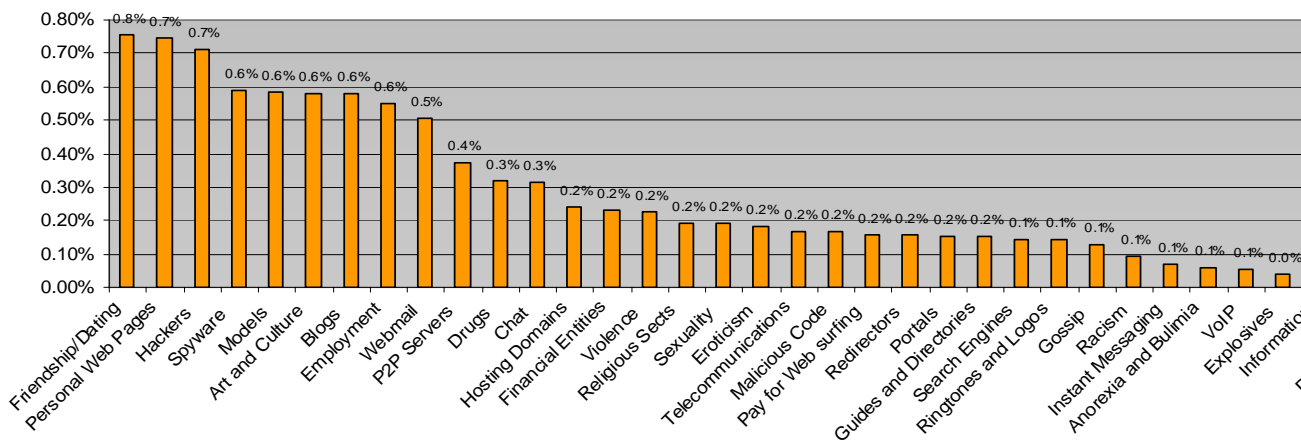
The growth of the Internet is unstoppable. The number of Web sites worldwide surpassed 155 million at the end of 2007 due to, in large part, the appearance of blogs and personal Web pages.

#### 4. 2007 Classification of content



**Graph 2: Volume of content by category**

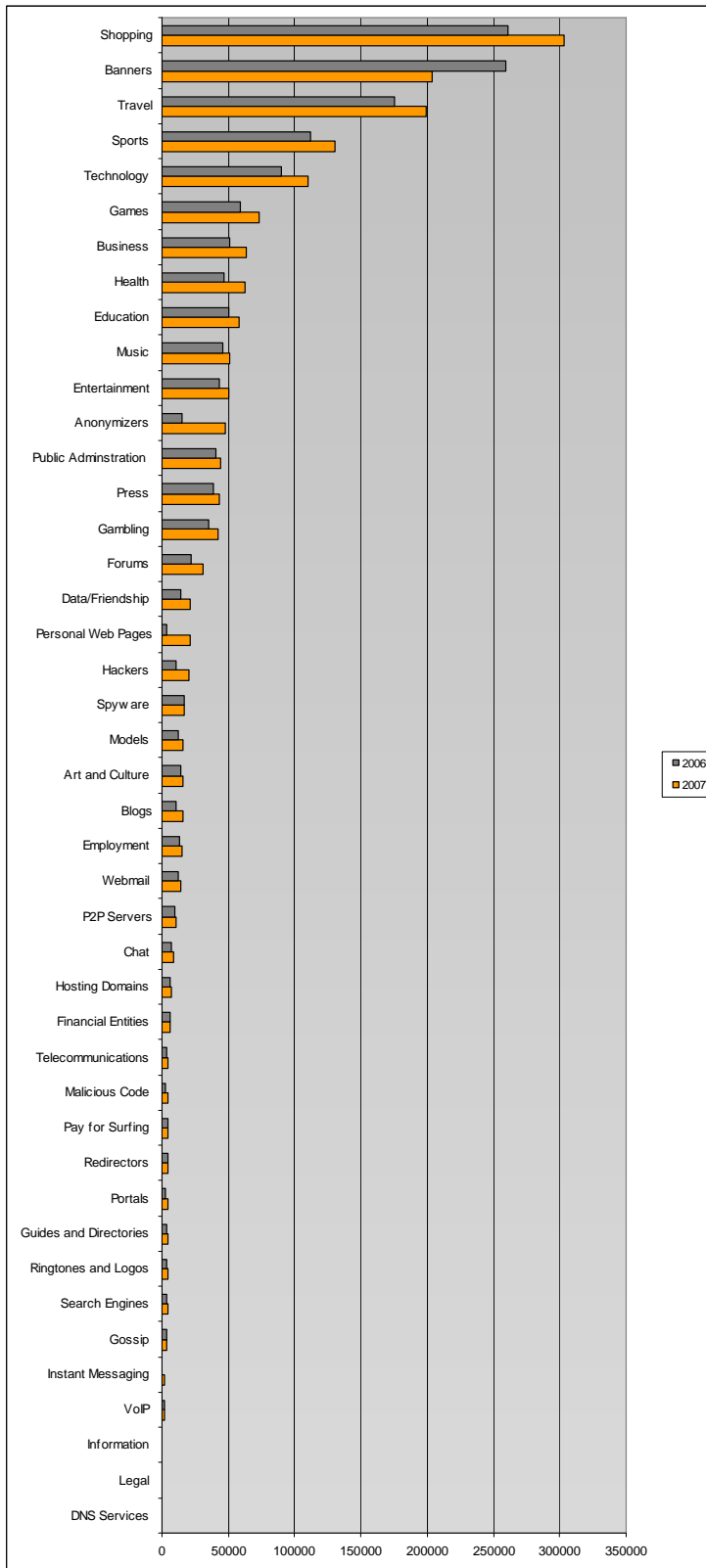
More than 36% of all Web content is pornography. E-commerce represents nearly 11% of Web content, followed by travel and advertising (7%).



**Graph 3: Volume of other content (9.63% of total)**

The graph above shows percentage volumes of other content.

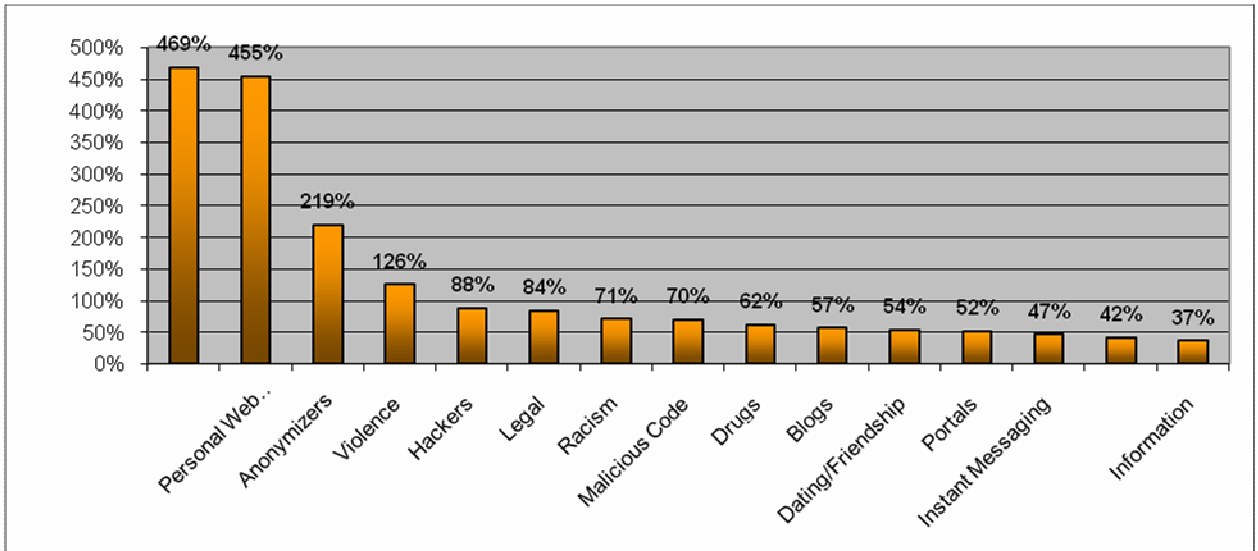
## 5. Change in content (2006-2007)



**Graph 4. Growth of content, 2006-2007, excluding URLs with controversial content**

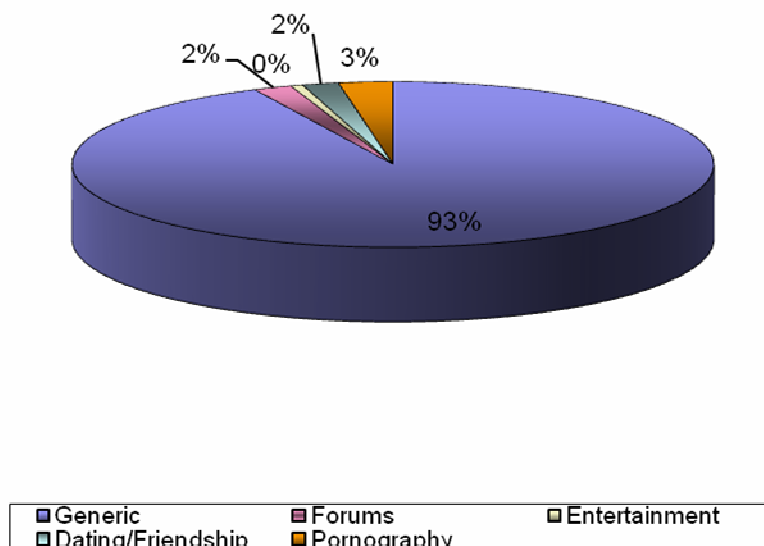
A comparison of content filtered by Optenet during 2006 and 2007 reveals percentage increases in all categories except in advertising and pornography, which decreased by 21.27% and 8.88%, respectively.

One of the most noteworthy increases was experience by personal Web pages, which increased by over 455% with respect to 2006. Web sites featuring anonymizers (219.45%), hackers (87.79%) and malicious code (69.87%) experienced sharp increases.



**Graph 5: Largest percentage changes by category**

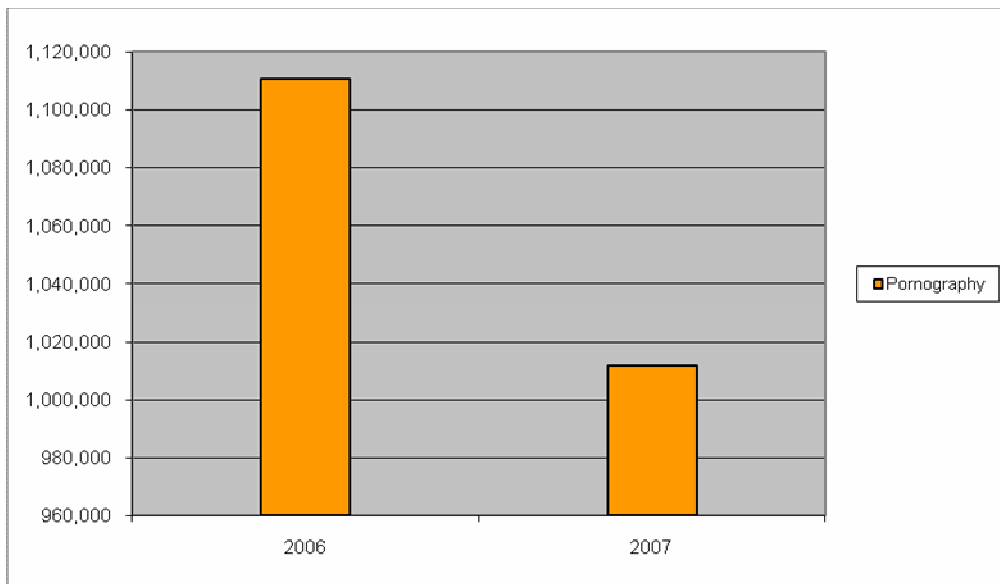
The graph above shows the content that has experienced the highest percentage growth from 2006-2007.



**Graph 6: Personal Web page content**

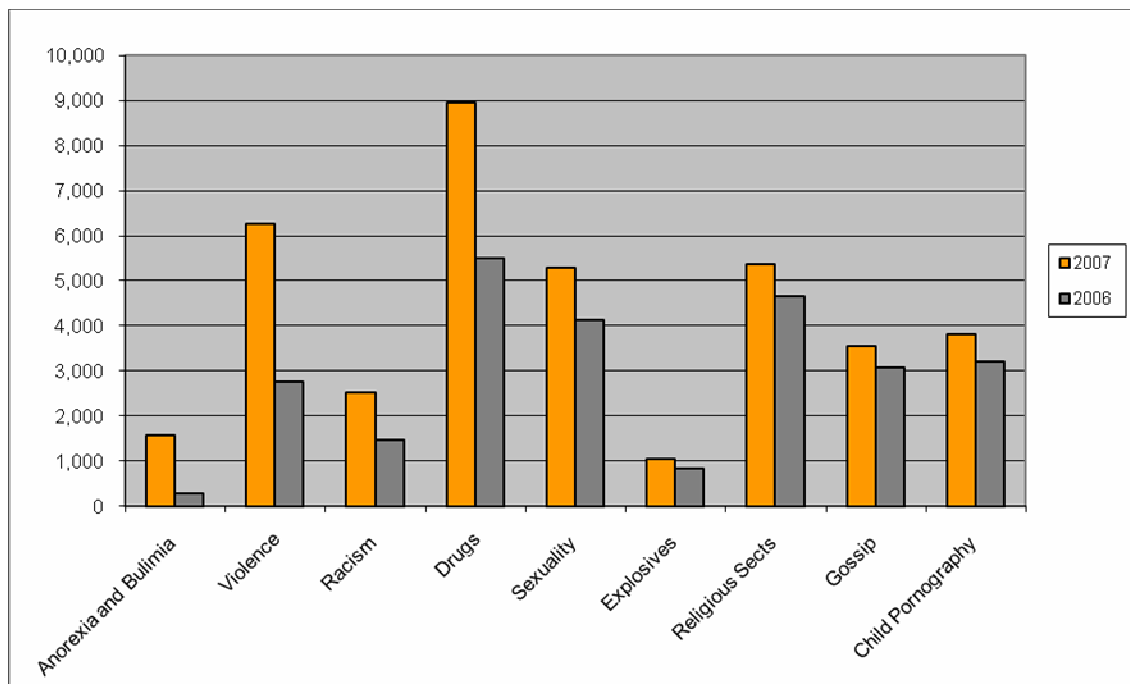
The vast majority of content found on personal Web pages, 93%, is of a generic nature.

## 6. Controversial content: pornography and anorexia



**Graphic 7: Evolution of pornography from 2006-2007**

Adult content on the Internet has become more and more common. The anonymity of Web users, the absence of uniform legal criteria between countries and the ease of disseminating and even buying all types of information online, has made the internet a platform for propagating materials that incite physical violence or – as in the case of child pornography – psychological.



### ***Graph 8: Evolution of other controversial content***

Of particular concern is the growth is the 470% increase in pro-anorexia and pro-bulimia content between the end of 2006 and 2007. Similarly, child pornography has increased as a category by an alarming 18.54%.

## **9. Appendix**

### **Categories filtered by Optenet**

1. **Public Administration**
2. **Anonymizers (proxy web servers)**
3. **Pro-anorexia and Pro bulimia**
4. **Art and Culture**
5. **Gambling**
6. **Banks and Financial Entities**
7. **Banners**
8. **Blogs**
9. **Search Engines**
10. **Chat**
11. **Malicious Code**
12. **Explosives (bomb making)**
13. **Shopping**
14. **Webmail**
15. **Sports**
16. **DNS Services**
17. **Drugs**
18. **Business**
19. **Education**
20. **Employment**
21. **Dating/Friendship**
22. **Entertainment**
23. **Forums**
24. **Guides and Directories**
25. **Hackers**
26. **Hosting**
27. **Information**
28. **Technology**
29. **Games**
30. **Legal**
31. **Ringtones and Logos**
32. **Models**
33. **Music**



34. **Pay for Surfing**
35. **Personal Pages**
36. **Pornography**
37. **Eroticism**
38. **Portals**
39. **Press**
40. **Racism**
41. **Redirectors**
42. **Gossip**
43. **Health**
44. **Religious Sects**
45. **P2P Servers**
46. **Instant Messaging Servers**
47. **Sexuality**
48. **Spyware**
49. **Telecommunications**
50. **Travel**
51. **Violence**
52. **VoIP**

\* In many cases, a Web page can belong to two or more categories.

## Data from graphs:

***Graph 2: Volume of content by category***

Category	Volume
Pornography	36.21%
Shopping	10.84%
Other	9.63%
Banners	7.30%
Travel	7.13%
Sports	4.67%
Technology	3.94%
Games	2.63%
Business	2.28%
Health	2.23%
Education	2.09%
Music	1.84%
Entertainment	1.80%
Anonymizers	1.69%
Public Administration	1.58%
Press	1.55%
Gambling	1.51%
Forums	1.09%

**Graph 3: Volume of other content**

Category	Volume
Anorexia and Bulimia	0.06%
Personal Web Pages	0.75%
Violence	0.22%
Hackers	0.71%
Legal	0.03%
Racism	0.09%
Malicious Code	0.17%
Drugs	0.32%
Blogs	0.58%
Friendship/Dating	0.76%
Portals	0.15%
Instant Messaging	0.07%
Telecommunications	0.17%
Information	0.04%
Models	0.58%
Chat	0.32%
Sexuality	0.19%
Search Engines	0.14%
Explosives	0.04%
Eroticism	0.18%
Guides and Directories	0.15%
Employment	0.55%
Religious Sects	0.19%
Gossip	0.13%
Ringtones and Logos	0.14%
Webmail	0.51%
Hosting Domains	0.24%
VoIP	0.05%
Art and Culture	0.58%
Financial Entities	0.23%
P2P Servers	0.37%
DNS Services	0.02%
Pay for Web surfing	0.16%
Spyware	0.59%
Redirectors	0.16%

**Graph 4: Content Growth 2006-2007, excluding controversial URLs**

Category	2007	2006	Change
Personal Web Pages	20,889	3,763	455.12%
Anonymizers	47,291	14,804	219.45%
Hackers	19,964	10,631	87.79%
Legal	868	471	84.29%
Malicious Code	4,600	2,708	69.87%
Blogs	16,129	10,293	56.70%
Data/Friendship	21,123	13,682	54.39%
Portals	4,315	2,838	52.04%
Instant Messaging	1,875	1,276	46.94%
Telecommunications	4,632	3,260	42.09%
Information	1,001	733	36.56%
Forums	30,455	22,409	35.91%
Models	16,293	12,086	34.81%
Health	62,371	46,821	33.21%
Chat	8,831	6,831	29.28%
Search Engines	4,018	3,228	24.47%
Business	63,558	51,176	24.19%
Games	73,472	59,402	23.69%
Technology	110,102	89,839	22.55%
Gambling	42,057	34,982	20.22%
Sports	130,345	111,603	16.79%
Guides and Directories	4,212	3,624	16.23%
Shopping	302,867	261,046	16.02%
Employment	15,404	13,356	15.33%
Education	58,354	50,614	15.29%
Entertainment	50,143	43,587	15.04%
Gossip	3,554	3,090	15.02%
Ringtones and Logos	4,023	3,499	14.98%
Travel	199,338	175,273	13.73%
Webmail	14,117	12,449	13.40%
Hosting Domains	6,701	5,930	13.00%
VoIP	1,520	1,349	12.68%
Art and Culture	16,157	14,354	12.56%
Press	43,241	38,582	12.08%
Music	51,498	46,011	11.93%
Financial Entities	6,475	5,901	9.73%
Public Administration	44,243	40,573	9.05%
Banners	203,893	258,993	-21.27%
P2P Servers	10,398	9,739	6.77%
DNS Services	599	583	2.74%
Pay for Surfing	4,452	4,351	2.32%
Spyware	16,522	16,424	0.60%
Redirectors	4,371	4,358	0.30%

**Graph 5: Largest percent increase by category**

Category	Change
Anorexia and Bulimia	469.42%
Personal Web Pages	455.12%
Anonymizers	219.45%
Violence	125.63%
Hackers	87.79%
Legal	84.29%
Racism	70.73%
Malicious Code	69.87%
Drugs	62.36%
Blogs	56.70%
Dating/Friendship	54.39%
Portals	52.04%
Instant Messaging	46.94%
Telecommunications	42.09%
Information	36.56%

**Graph 7: Change in controversial content 2006-2007**

Category	2006	2007	Change
Anorexia and Bulimia	278	1,583	469.42%
Violence	2,774	6,259	125.63%
Racism	1,483	2,532	70.73%
Drugs	5,508	8,943	62.36%
Sexuality	4,137	5,290	27.87%
Explosives	854	1,062	24.36%
Religious Sects	4,656	5,358	15.08%
Gossip	3,090	3,554	15.02%
Child Pornography	3,210	3,805	18.54%
Pornography	1,110,429	1,011,813	-8.88%

### **About Optenet**

Optenet is a global IT security company that provides intelligent, integrated content security solutions to service providers and large enterprises worldwide. Optenet's technology protects 75 million end users around the globe, including the customers of many of the world's leading ISPs and mobile operators, as well as employees of global enterprise organizations. For more information, visit [www.optenet.com](http://www.optenet.com).