

Fundamentals of SEO and Web Marketing

01

Introduction



Introduction

Expansion of the Internet. Web Sales

Search Engine

Contents

Introduction.	3	Search Engine	54
Expansion of the Internet. E-Commerce	5	Main Properties of Search Engines.	
Conclusion	13	Indexing, Relevance, Ranking.	56
Internet Marketing	14	Types of Search Engines.	
Internet Marketing Tools	14	The World's TOP Search Engines	59
Website	16	Google.	61
Search Engine Marketing	28	Baidu.	62
Online Advertising	32	Bing	64
E-mail Marketing	35	Yahoo!	65
SMM. Social Networks, Forums, Chats, Messengers,		Conclusion	66
Reviews and Rating Websites.	36		
Viral Marketing	41		
Gamification and Monetization. Online Games.	45		
Mobile Marketing. SMS Marketing	48		
Formation of Public Opinion. PR	49		
Social Video marketing	50		
Other Classifications of Internet Marketing Tools	51		
Conclusion	53		



Introduction

Greetings. Today you begin to study the subject called "**Fundamentals of SEO and Web Marketing**".

In the previous courses (such as "Usability and Ergonomics of Web Pages", «Content Management Systems for Web Sites" and others) you have already learned the basic principles of website development. Now we'll consider not just the creation of a web-resource, but also the execution of its "tasks", which include:

- User inducement;
- "Answers" to visitors' questions;
- Sales;
- Stimulating customer loyalty;
- User retention;
- And much more.

Solving these tasks and ensuring they are executed are essentially the main objectives of our course.



Let's start from the beginning.

The first question you must be able to answer is whether you should create a website on the Internet at all.

It seems that the answer is simple: yes, it necessarily should exist. But imagine a situation, in which you are working in a small company specializing in bakery, and the maximum you can produce is 1000 buns per day. Over the years, you sell your products in a small shop and you already have some loyal customers. Your company fully pays off. So here is the question: is it worth to invest in business development and access the online market if you will not be able to produce more goods than it is now? Or it will simply cost you.

Well, not every company or business needs the website and representation on the Internet.



Expansion of the Internet. E-Commerce

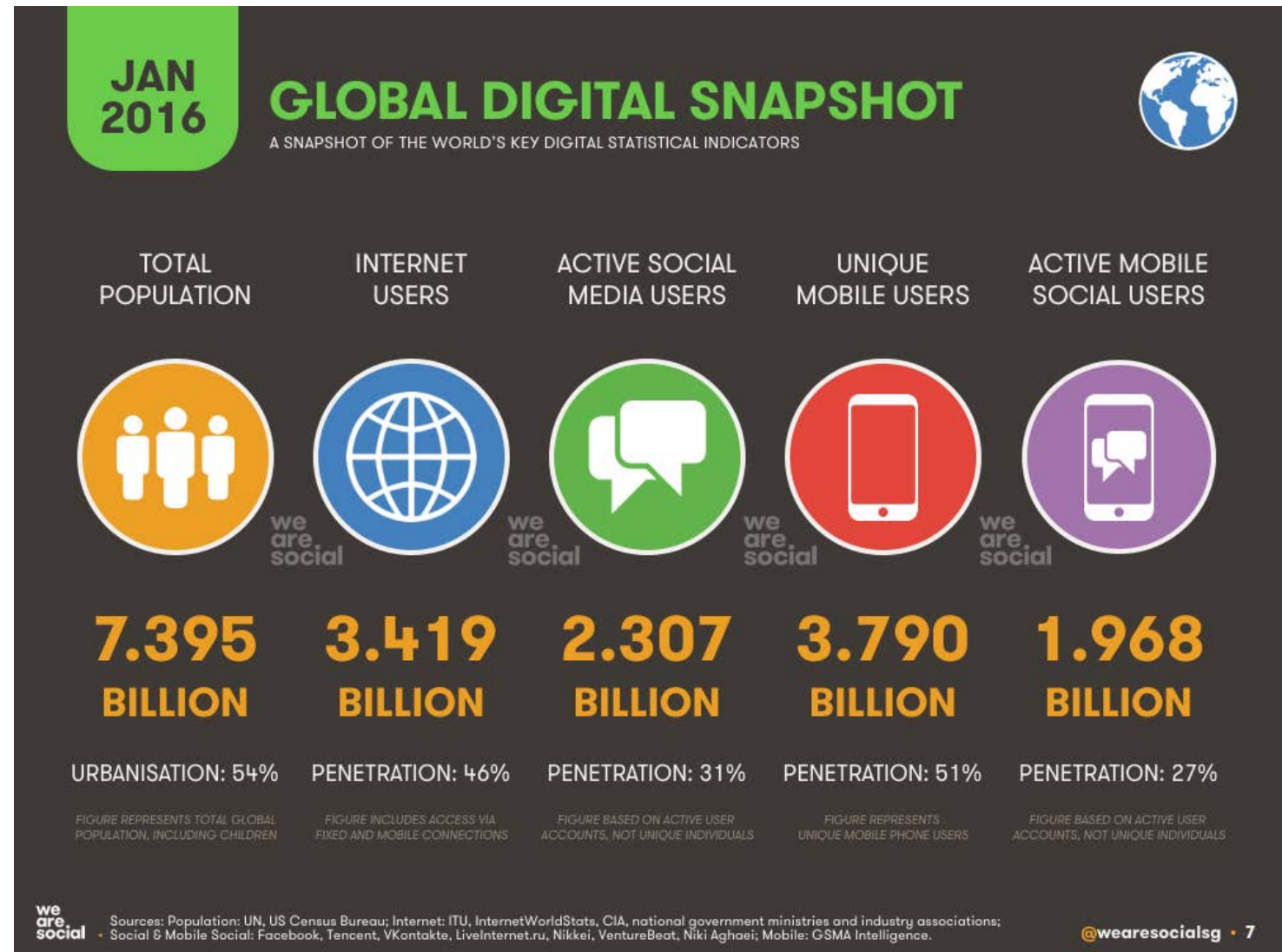
The next global issue that comprises the basis of our course is the representation and sales on the Internet.

To begin with, let's take a look at the statistics of the World Wide Web use.



As of the beginning of 2016, 46% of the world population has access to the Internet, which is about 3.42 billion people, just as the population of:

- 2.5 Chinas;
- or 2.8 Indias;
- or 10.7 United States;
- or 23.75 Russias;
- or 95 Canadas.

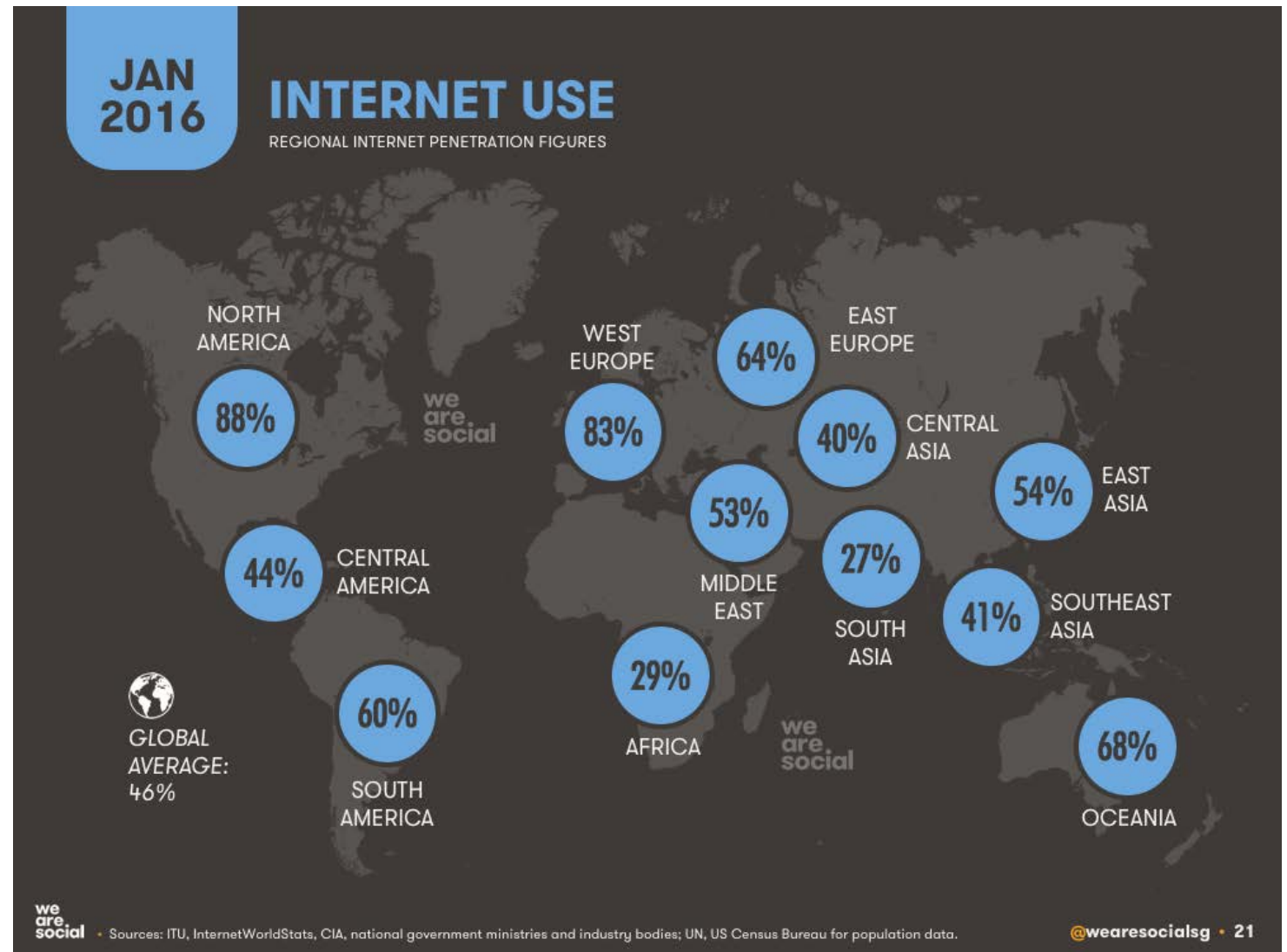


The number of unique mobile Internet users is already exceeds 50% of the world's population: 3.79 billion devices. Of them, 1.97 billion are the users of social networks.

In comparison with 2015, it can be seen that the highest growth dynamics is shown by the users of social networks from the mobile devices.



The percentage of Internet access in different countries is presented on the next slide. It generally reflects the development degree of different regions of the world, considering regional features of the continents.



The highest percentage of internet penetration by all segments of the population is observed in Iceland (98%), while the lowest percentage is in North Korea (0.03%, most of whom are the foreigners with their own mobile devices).

JAN 2016

INTERNET RANKINGS

BASED ON INTERNET PENETRATION IN COUNTRIES WITH NATIONAL POPULATIONS OF 50,000 PEOPLE OR MORE

HIGHEST INTERNET PENETRATION

#	COUNTRY	%	USERS
01	ICELAND	98%	324,518
02	BERMUDA	97%	68,280
03	NORWAY	96%	5,047,528
04	DENMARK	96%	5,452,151
05	ANDORRA	96%	82,148
06	UAE	96%	8,807,226
07	NETHERLANDS	95%	16,143,879
08	LUXEMBOURG	95%	541,206
09	FAROE ISLANDS	95%	47,762
10	SWEDEN	94%	9,216,226

LOWEST INTERNET PENETRATION

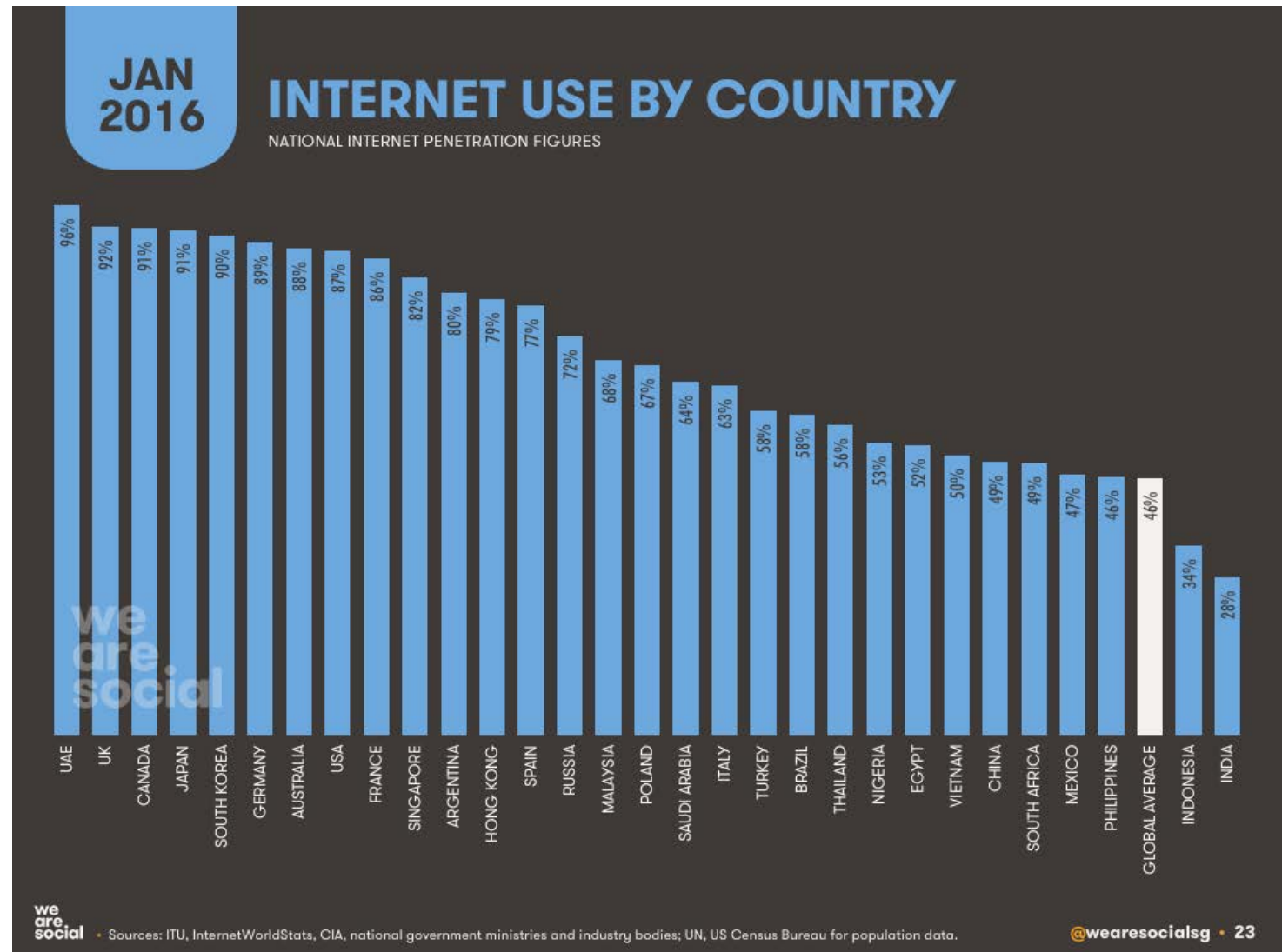
#	COUNTRY	%	USERS
214	NORTH KOREA	0.03%	7,200
213	NIGER	2.0%	395,990
212	CHAD	2.5%	356,678
211	CONGO (DEM. REP.)	3.0%	2,381,254
210	ETHIOPIA	3.7%	3,700,000
209	GUINEA-BISSAU	3.8%	70,000
208	SIERRA LEONE	4.0%	260,000
207	CENTRAL AFRICAN REP.	4.4%	217,279
206	SOMALIA	4.6%	500,000
205	BURUNDI	4.6%	526,372

we are social

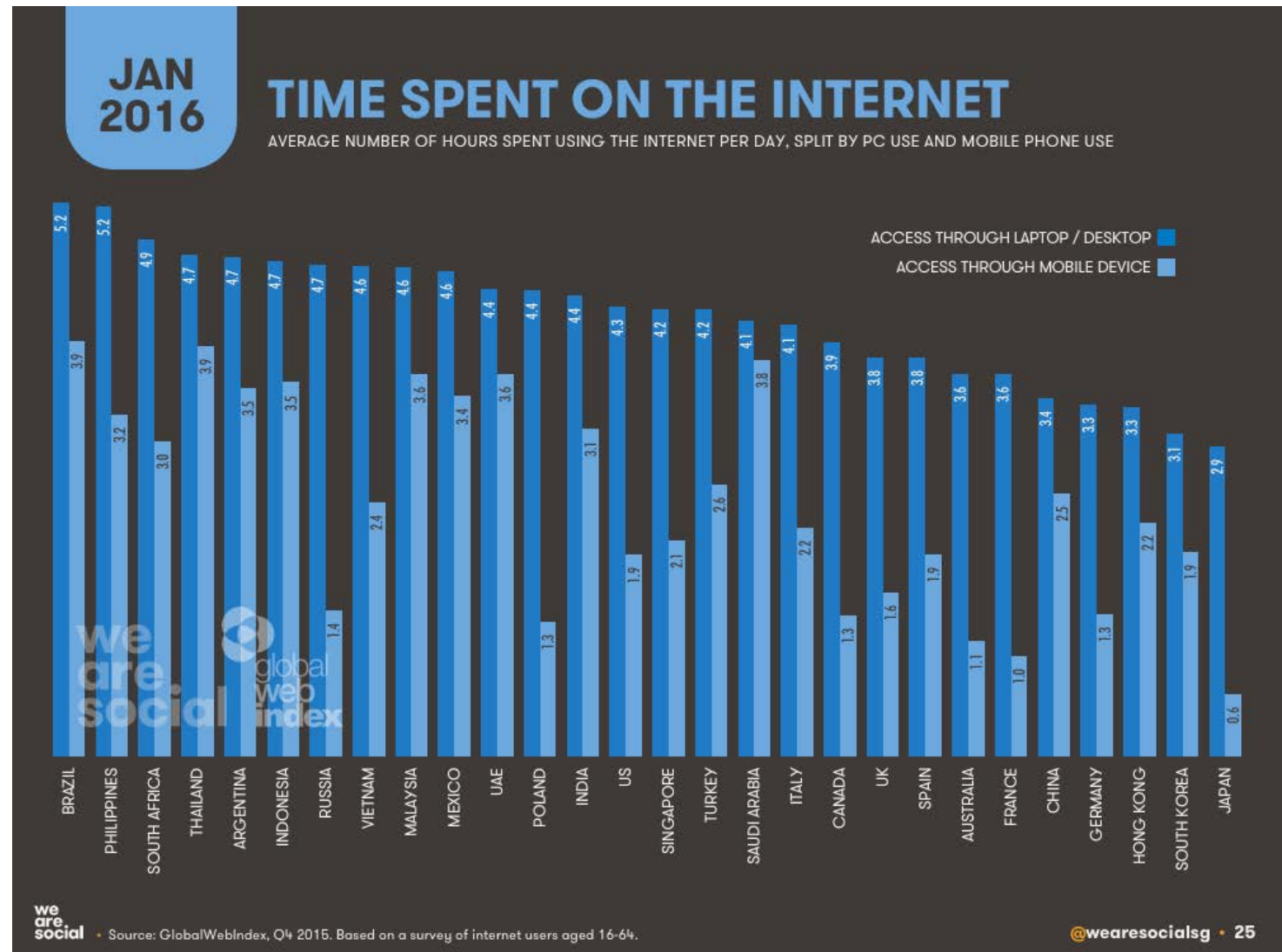
Sources: ITU, InternetWorldStats, CIA, national government ministries and industry bodies; UN, US Census Bureau for population data.

@wearesocialsg • 24

Only two of the 30 countries with the richest economy in the world have Internet access rate below world's average.



Brazil and the Philippines are the countries with the most time spent daily on the Internet, averaging from 3 to 5.2 hours a day (with a mobile device/desktop).



One of the most interesting figures for us is the percentage of online sales among users. As we can see, roughly about 50% of all Internet users are spending money online on various purchases each month.



Conclusion

So, if you think that you should introduce your business to a worldwide network, the answer is clear: yes, it's worth it!

To understand which tasks you should face in order to represent your company on the Internet and decide what methods should be used, you should first understand the concept of web marketing (Internet marketing).



Internet Marketing

Internet Marketing Tools

INTERNET MARKETING is a complex of measures on the promotion and sales of goods and services on the market with the help of Internet network technologies. To promote products and services on the Internet, you must have a website containing various information about your goods or services, as well as the tools, using which the consumer would be able to place the order and pay for it.

Nowadays, Internet marketing is an independent activity related to the e-business. The global Internet network has a lot of websites that provide marketing services (website promotion

in search engines, contextual advertising configuration, PR, etc.).

You need to know a number of tools that are used by web marketing to fulfill its tasks.

Let's take a closer look at the basic web marketing tools.

There are many ways of dividing these tools by type, but in my opinion, the most correct of them will be shown below.



Let's try to guess the first and most important tool. How do you think, what is crucial in a qualitative representation of yourself on the Internet? What is this?

If you do not want to guess for a long time, then I invite you to the next page.



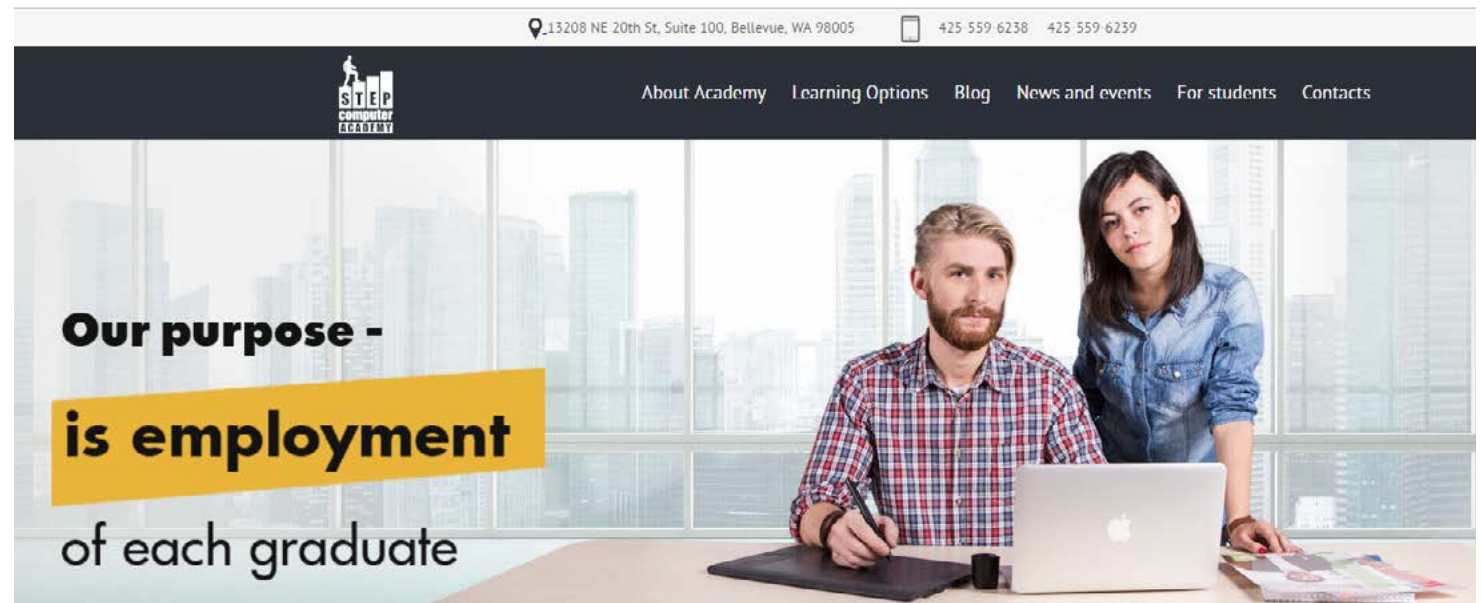
Website

So, the first and most important web marketing tool is your **WEBSITE**.

The creation of a website, its placement on the Internet and its thought-out use offer the owner unlimited opportunities in successful competition on the market and in sales as a consequence.

For example

You may already know how to develop your own website.

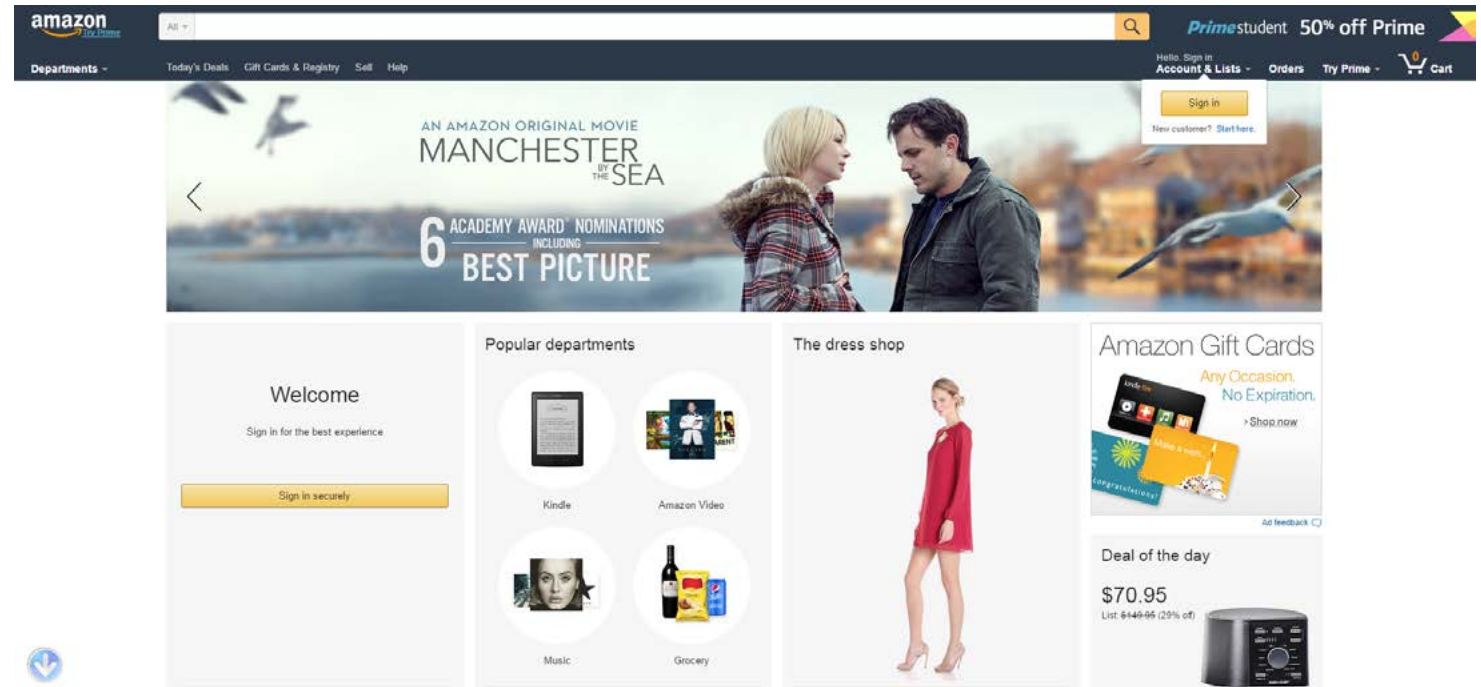


Learning Options



Internet Marketing
Introduction
Fundamentals of SEO and Web Marketing

Or perhaps, a running project that generates millions.



Or even billions.

facebook

Email or Phone

Password

[Log In](#)

[Forgot account?](#)



Thanks for stopping by!

We hope to see you again soon.

Sign Up

It's free and always will be.

Birthday

Month

Day

Year

[Why do I need to provide my birthday?](#)

☒ Female ☐ Male

By clicking Create Account, you agree to our [Terms](#) and that you have read our [Data Policy](#), including our [Cookie Use](#). You may receive SMS Notifications from Facebook and can opt out at any time.

Create Account

[Create a Page for a celebrity, band or business.](#)

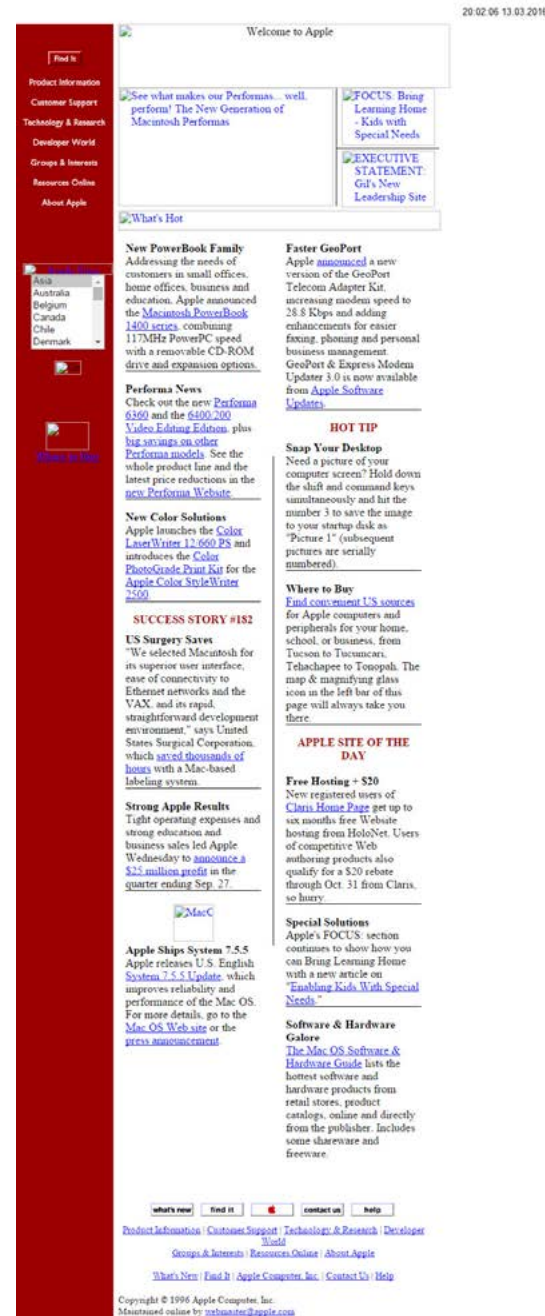
Experience has proven that the creation of a high-quality resource that is planned to be developed for more than a year usually takes a considerable amount of time, somewhere between several months up to several years.

But it is necessary not only to create a project, but also to ensure its operation and development. It is also necessary to monitor trends in the market, follow some new "features" that are gaining popularity among users, or even to completely remodel the project in case of any difficulties in operation, company reorientation, or change of technical solutions.

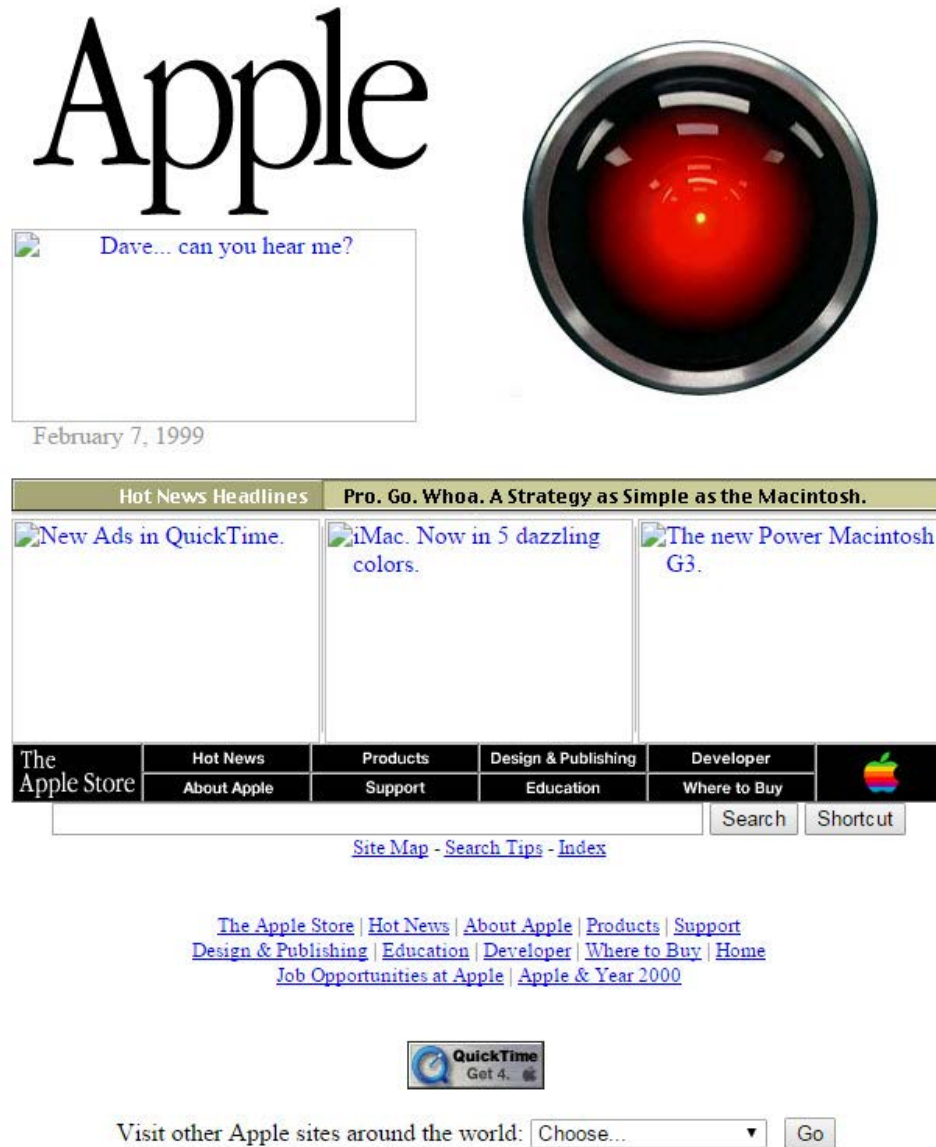
As an example, let's consider a website that was visited by most of us at least once in our lifetime, which is the website of the most popular apple products selling company on the Internet: <http://www.apple.com/>.



It began its journey through the world wide web back in 1996. As we can see, it consisted mostly of text and looked like this.



In 1999, the website has undergone significant changes.



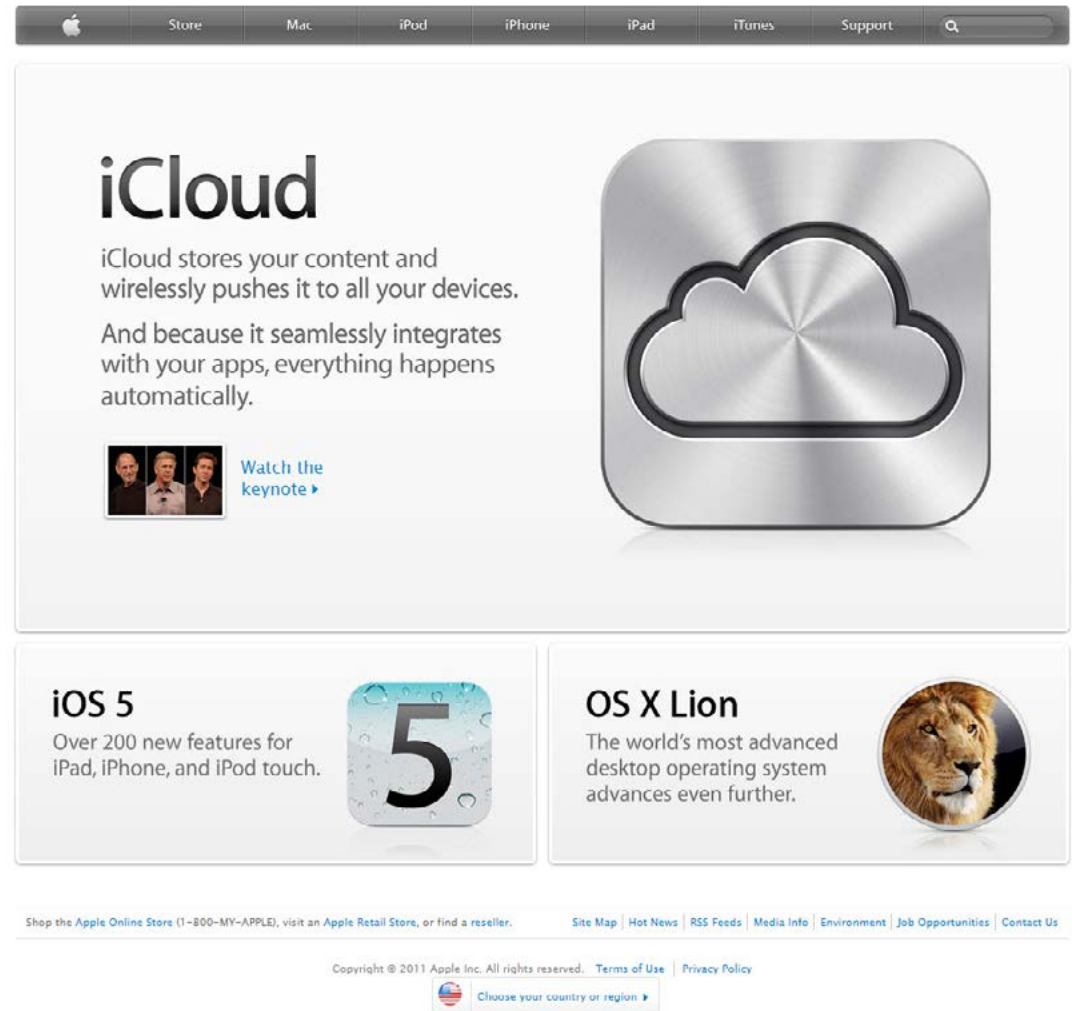
The next changes came in 2001, after which the website has gained a large navigation menu and a breakdown into sections.



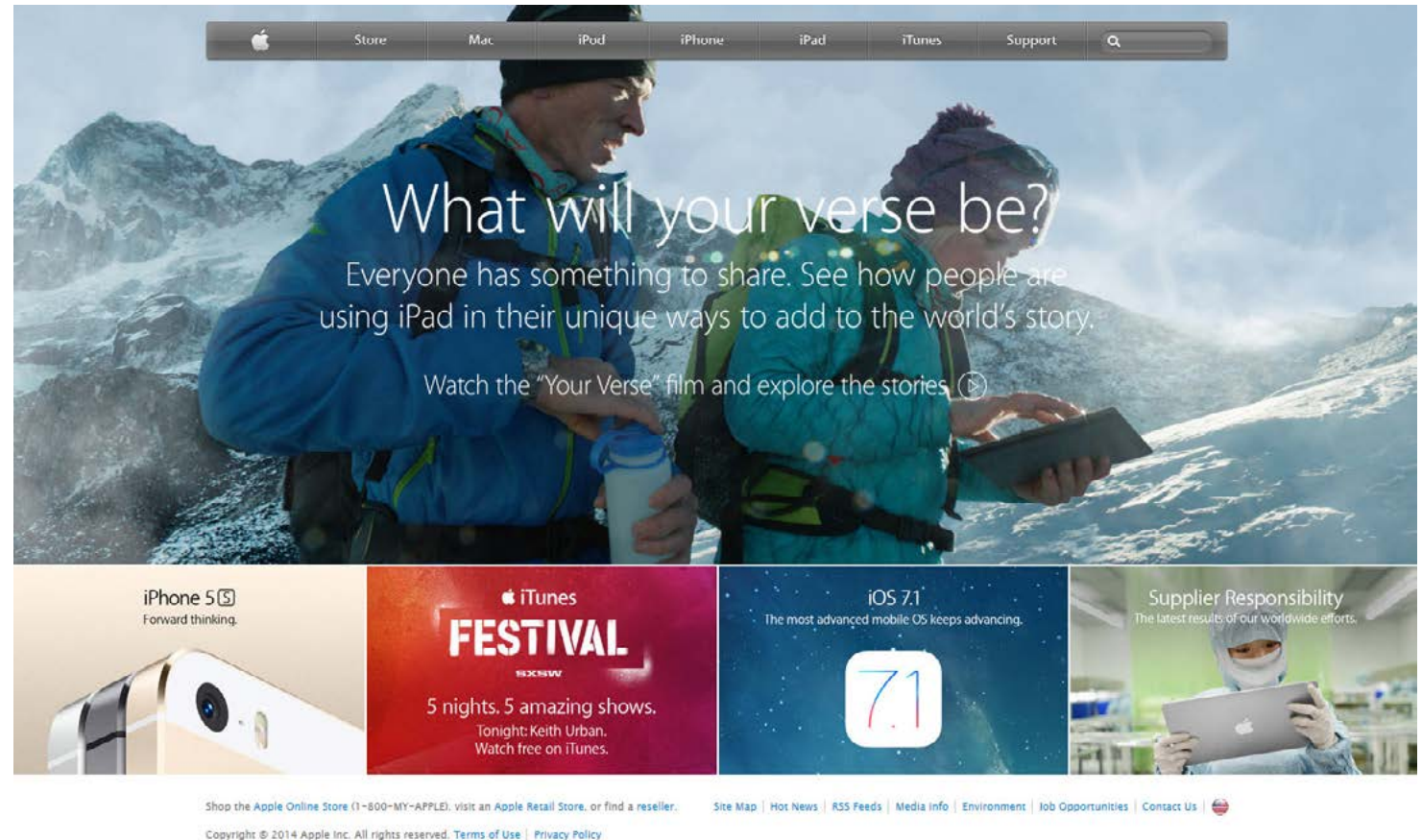
The next global change took place after 7 years in 2008.



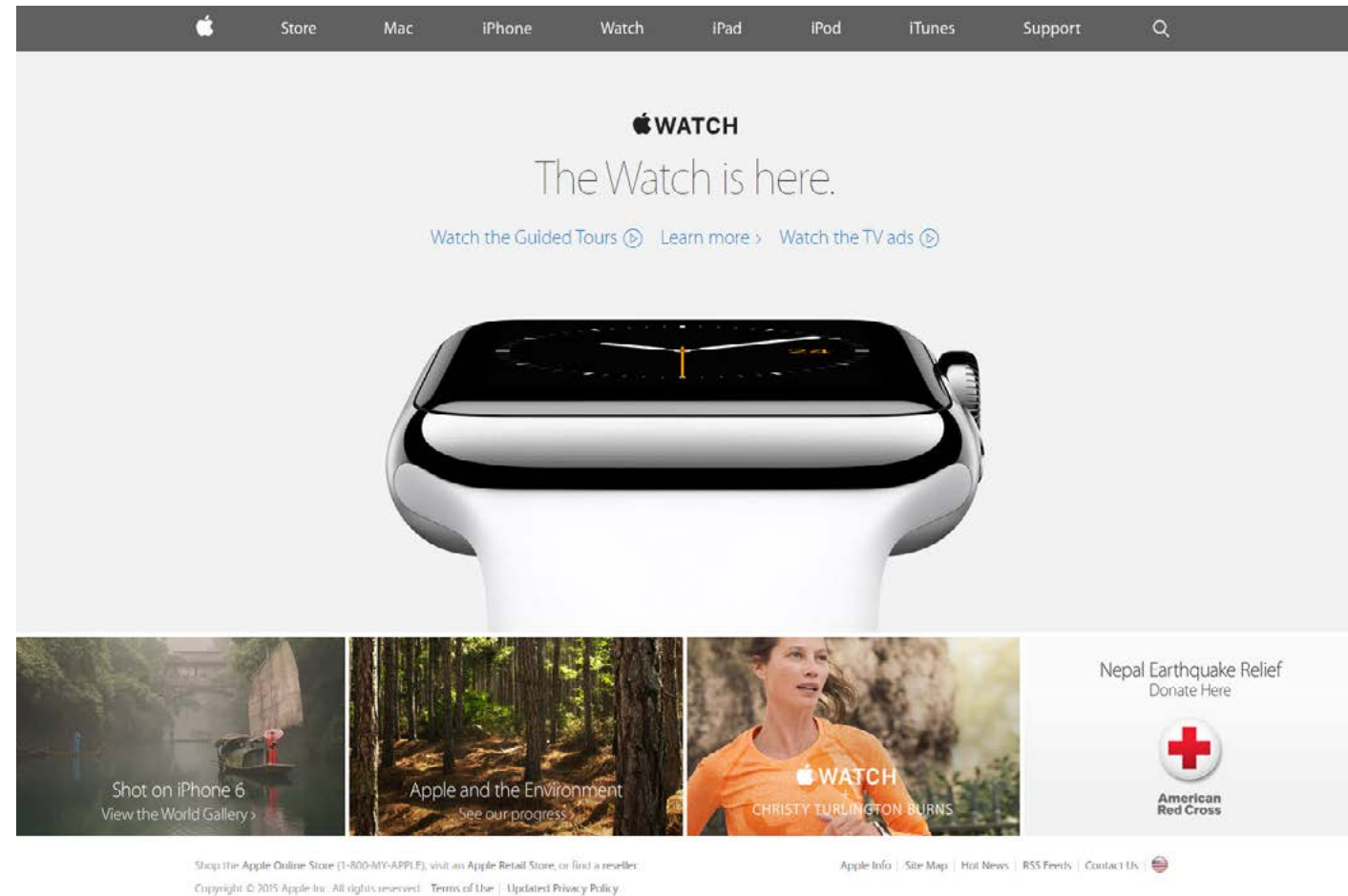
Three more years after, the metro elements began to appear.



And finally, in 2014 the website has got a modern look.

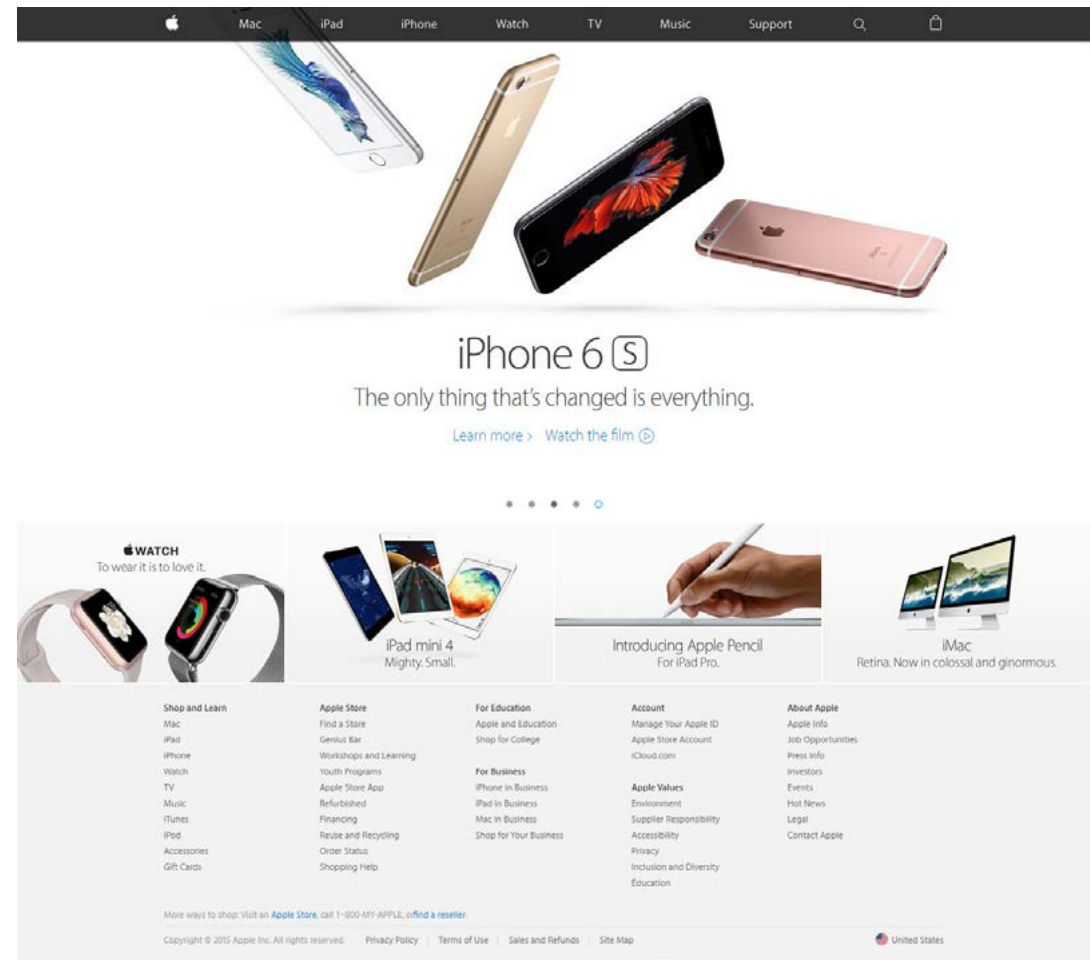


The penultimate significant change occurred in 2015 when the website became fully adaptive.



And the latest update has added a "complex functional" footer, which allowed displaying a large number of sections at a distance of "one click".

As we can see, for the 20-year history, the company's website has undergone eight significant changes, indicating the constant search for something new, trend tracking, and improvement of the project for users.



Search Engine Marketing

SEARCH ENGINE marketing is the second web marketing tool consisting of several kinds.

Search engine marketing (SEM) is a set of measures aimed at increasing site traffic by its target audience from the search engines. The methods of search engine marketing include all the methods that solve this task, ranging from the direct inducement of targeted traffic using the links from places that are less relevant to a website, to the works within a website site that provide an increase in site relevancy for your TA (thereby increasing the appearance of a website in search engines by reranking search results in favor of this site on the key requests). In fact, search engine marketing is involved in traffic redistribution from the places that are less relevant for this request to the places with greater relevance (E. Tarasov).

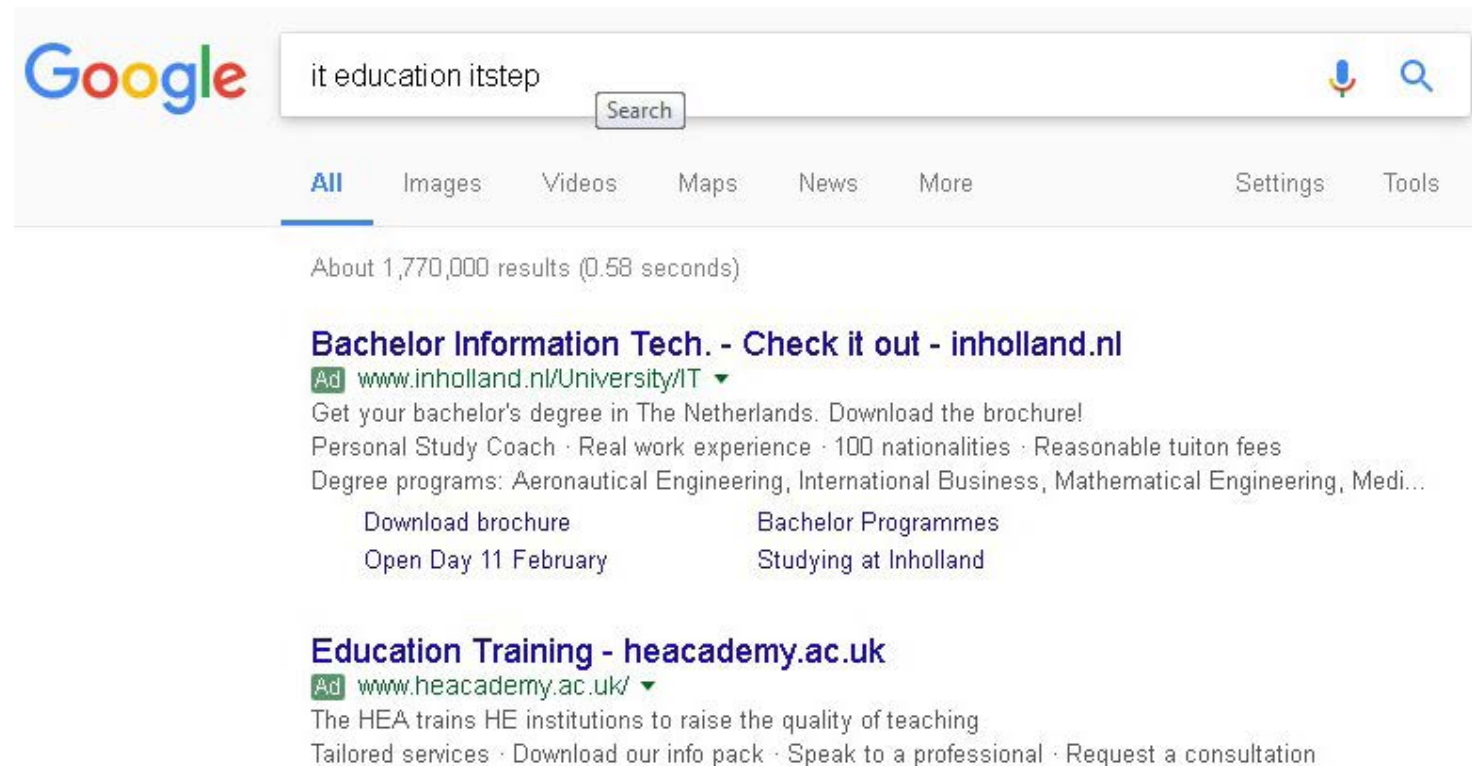


Search engine marketing (Website promotion)

Generally, a search for product on the Internet begins with a query in a search engine. Search engine optimization and search advertising are essential tools of web marketing, which allow the website to be displayed on top positions in the search engine results.

However, the use of this tool requires knowledge of the search engines operation principles.

An example of search engine marketing:

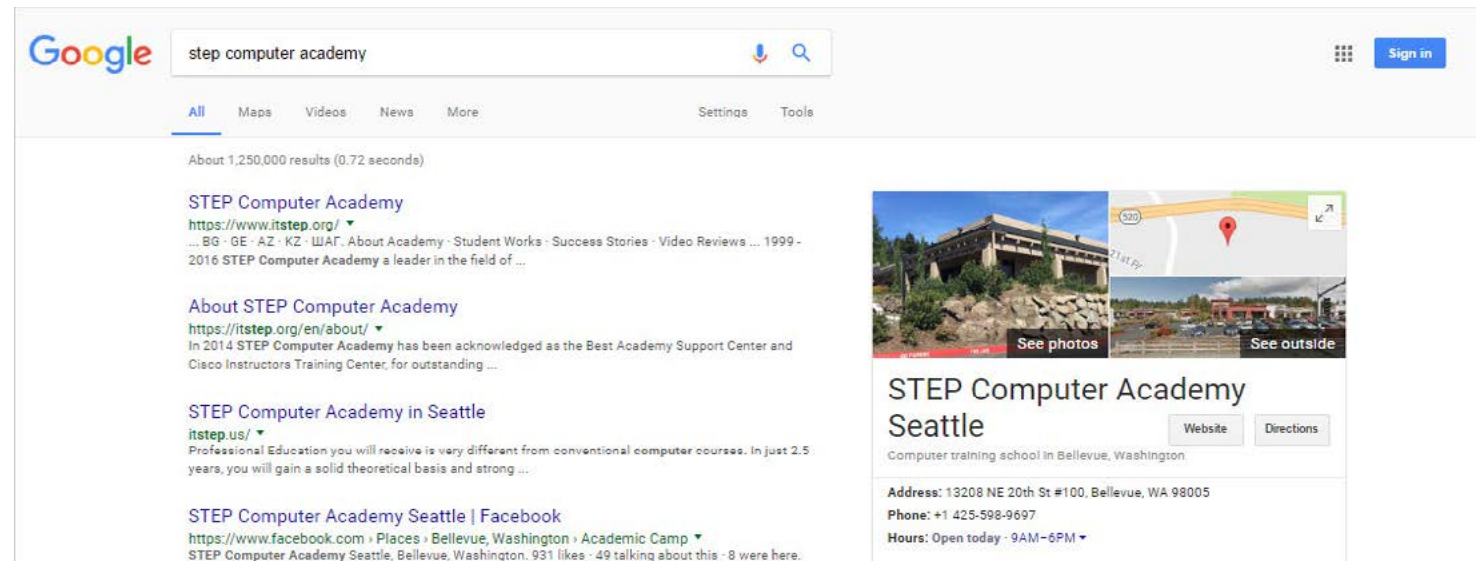


SEO (Search Engine Optimization)

It is also referred to as the website optimization for search engines, which is used to attract users from the search bots (Google, Bing, Yahoo or any other search engine varying in different countries

or regions) to a website or blog provided that their content is fully indexed for any search request.

Examples of SEO:



If you wikipedia the definitions of [SEO](#) and website promotion, it becomes clear that the basic function of SEO is to improve the display of a website in the search results and the work of the search engines themselves, while the website promotion is aimed at involving targeted visitors who will perform the conversion.

Unfortunately, as practice shows, the majority of companies that provide web marketing services are engaged only in SEO, which is not directly beneficial to the business owner (if it is a commercial structure and not a news portal or forum), although they still call these services "website promotion".

Thus, after six months or a year, the business owners begin to disappoint in SEO companies and later have a grudge against them.

To protect yourself and your business from such situations, you should clearly spell out the responsibilities and terms of agreement between your company and the contractors.



Online Advertising

ONLINE ADVERTISING is characterized by a high degree of accuracy in terms of target audience coverage, allowing you to manage the budget of an advertising campaign and trace its performance on-the-fly.

Advertising display settings allow choosing a variety of options:

- show only within a particular state, region, district, city;
- show in a predetermined coverage radius;
- show in search requests only in certain languages;
- limit advertising display time;
- set up fixed advertising costs;
- to advertise only to people, who previously visited your website or those who are interested in certain things on the Internet. For example: IT or looking to buy a steamer;
- and so on.

It is represented in two main forms: banner and contextual advertising, each of which has its own specifics of use and benefits relative to one another.



Banner advertising

Banner advertising is used to perform high-speed coverage of the target audience and gain awareness of an advertised product. It can rest on the existing base of your website's visitors

(the so-called remarketing), or on generalized information about all the users collected by the search engine (the so-called "interests" and "topics").

For example:

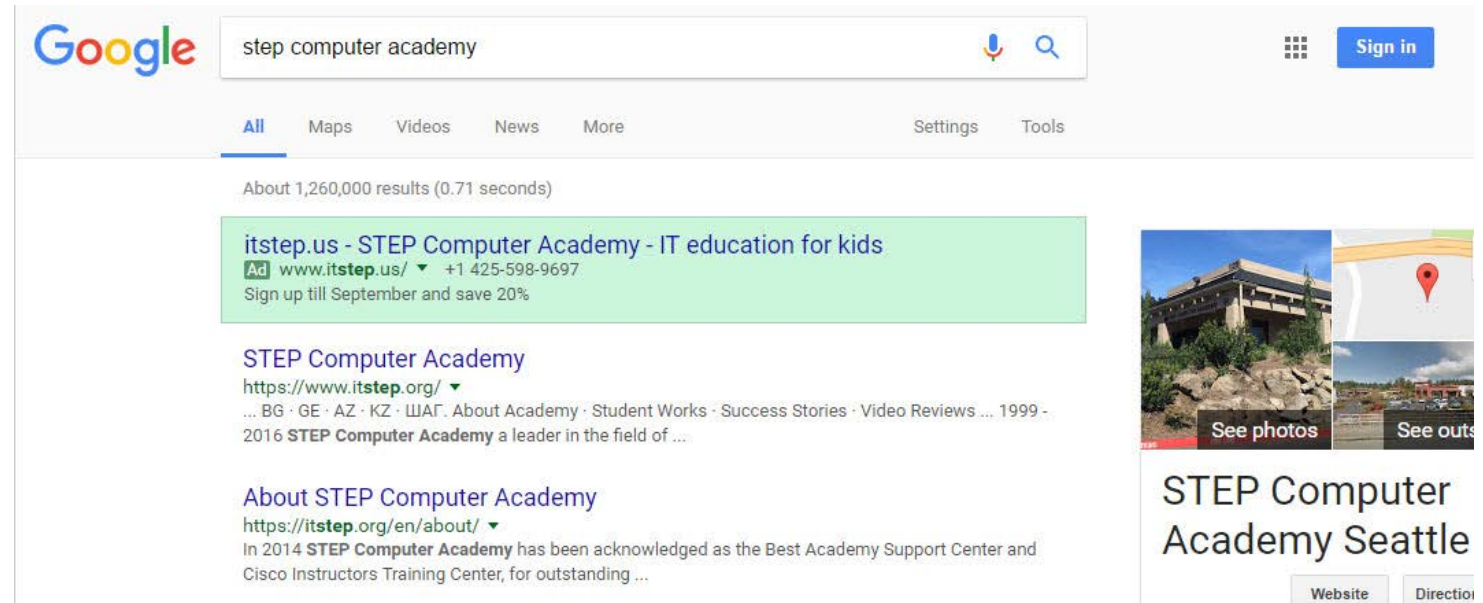
The screenshot shows a website interface with a top navigation bar containing links like "Здравствуйте, гость", "Войти", "Зарегистрироваться", "Что дает регистрация?", and "Напомнить пароль". Below this is a menu with "Тесты", "Сервисы", "Софт", "Провайдеры", "Забавы", "Статьи", and "Форум". The main content area is divided into two columns. The left column, titled "Тесты", lists various online tools: "Скорость интернет соединения", "Проверка анонимности", "Время загрузки файла", "Объем загружаемого файла", "Информация об IP адресе или домене", "IP интернет ресурса", "Время реакции вашего компьютера", "Система управления сайтом (CMS)", and "Хостинг сайта". The right column, titled "Система управления сайтом (CMS)", contains text explaining how the service identifies CMS on websites and a form with the label "IP адрес или домен:" and a text input field containing "http://". Below the form is a blue button labeled "Узнать". At the bottom of the right column is a link "Сообщить о неточности". A banner advertisement for "STEP computer ACADEMY" is positioned on the right side of the page. The banner features the academy's logo, the text "DREAM ACT EARN", "Computer graphics and design", and an image of a smiling woman. At the bottom of the banner, it says "SET OPEN".

Contextual advertising

Contextual advertising is a kind of online advertising of intellectual nature, which is used to attract those visitors who are most interested in

a product. It is shown on the internet resources in a close relation with their contents or in a search engine by certain requests of the users.

For example:



E-mail Marketing

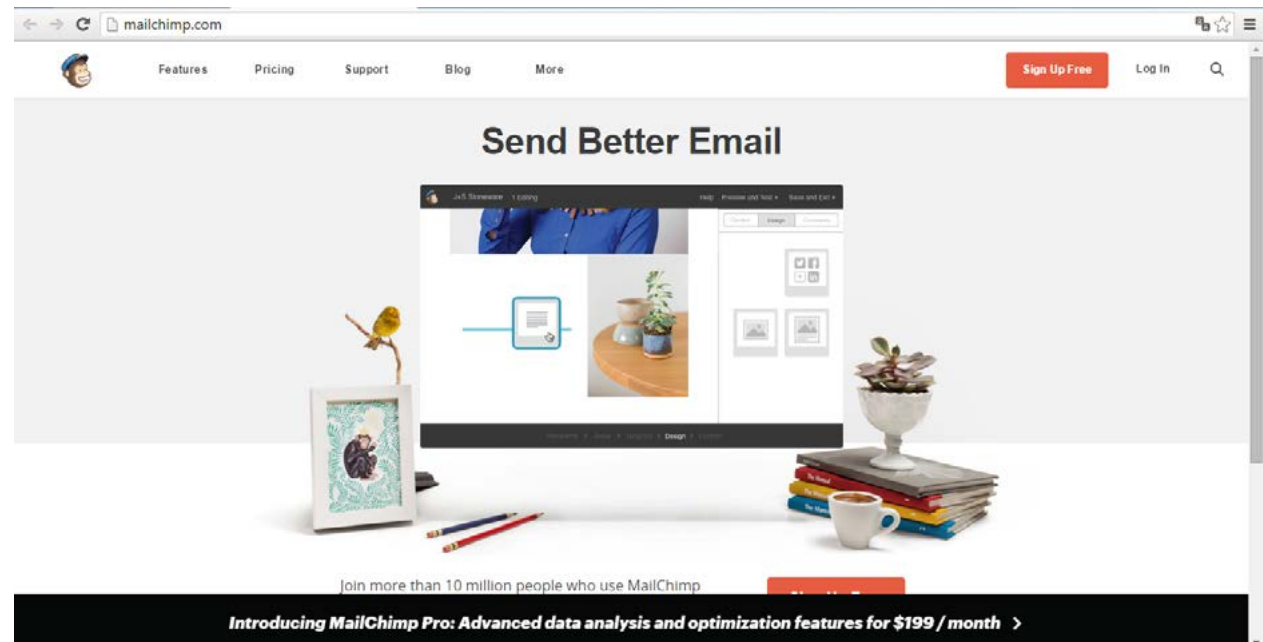
Over time, as your business is already running, you will gradually begin to gain customer base of people who have already made a purchase from you, signed up on your website, or completed the survey at purchase.

Email is the first online contact that you can get from your potential or actual customer. And the longer your company is running, the greater the base of email contacts it collects.

EMAIL MARKETING (DIRECT MARKETING) involves individual email newsletters. Despite its low costs, it makes possible to distribute

information among particular potential customers and identify their response by tracking the feedback.

There are many different services for email newsletters. One of the most popular is [MailChimp](https://mailchimp.com). It has a free version for working with a small base of contacts, and it has a rather simple but great functionality for adjusting and creating "nice" email newsletters.



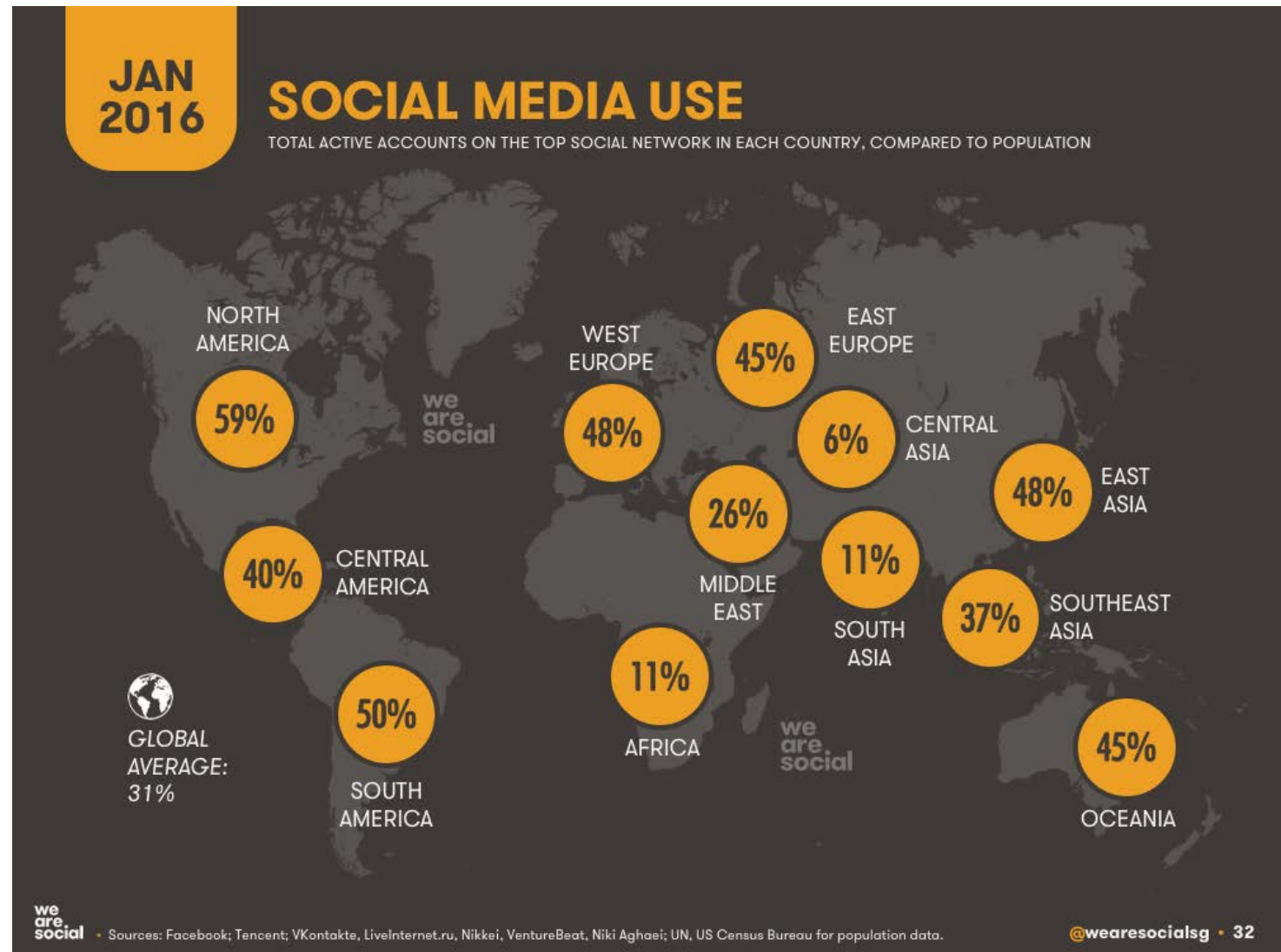
SMM. Social Networks, Forums, Chats, Messengers, Reviews and Rating Websites

We can now observe a rapid development of online marketing, the idea of which is to draw relationships between people to promote products. It is also called `SOCIAL MEDIA MARKETING` (SMM).

`SOCIAL NETWORK` is a platform, online service or website intended for drawing, reflecting, and arranging social relationships on the Internet. For example: Facebook, Twitter, Instagram, etc.



Let's go back to the statistics. Here is the percentage of social network users.



Now let's have a look at the most popular social networks in the world.

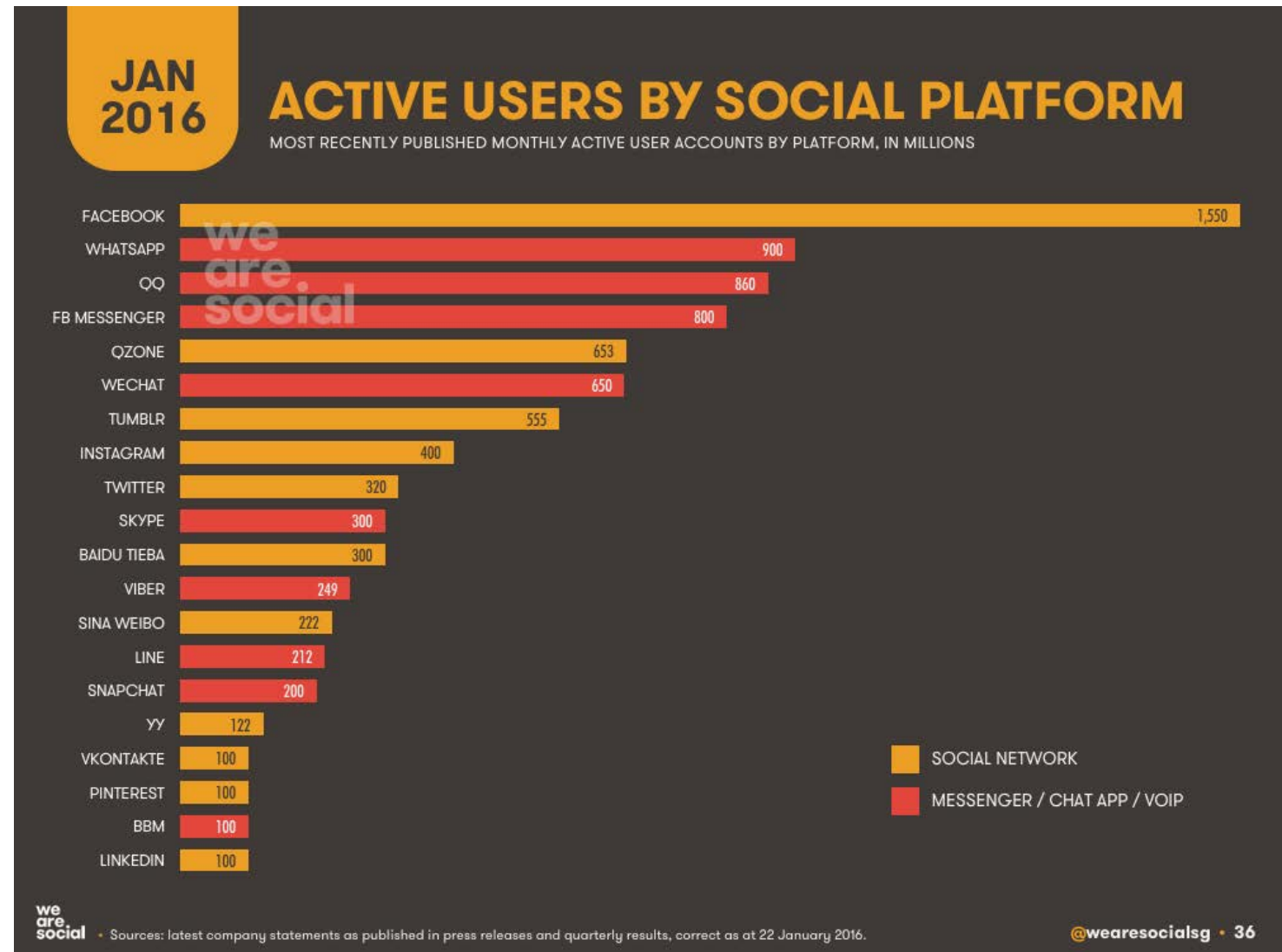
Facebook comes first with a wide margin.

WhatsApp mobile messenger is second.

The most popular network in the post-soviet countries is VK, which occupies the 17th highest position in the world.

Three of the top ten social networks are owned by Facebook (Facebook, FB Messenger, Instagram).

Another three are owned by the Chinese company Tencent (QQ, QZone, Wechat).



There is also an interesting data stating that in a number of countries, against which the sanctions are applied ([Iran](#), [Cuba](#)), the use of social networks through various anonymizers or Telegram is widely implemented.

Now we have a general idea of how much the social networks are common in the world.

Let's take an objective look: each of us (almost 100%) have accounts in any of the social networks. And frankly speaking, in more than just one social network.

Knowing only the name and the person's face, you have an 80-85% chance of finding him or her in any of the social networks. And then you can find out his/her phone, e-mail, and other contact information specified in his/her account.

Forum is a kind of web applications for organizing communication of website visitors. They come in two varieties: topical and general.

Here is an example of a topical forum:

[World of Tanks forum](#)

And here is an example of a general forum:

[U.S. forums](#)

Chat is used for exchanging messages over the network in real time, including the software that allows organizing such communication. A characteristic feature of chats is a communication in real time or almost in real time

Communication takes place in real time in the rooms created specifically for this purpose (chat rooms), which can also function as a library or even as an advertisement catalog arranged by topics.

Social networks, forums and chat rooms are widely used as one of the elements of online marketing, but the chats and forums are mostly obsolete. The plane of modern online communication is increasingly moving into social networks and instant messengers.

At the moment, the majority of large companies have their representative pages in various social networks.



Blogs

Companies that use corporate blogs in their activities for publishing corporate news, press releases, and other useful information for their clients, as well as for the arrangement of corporate communication, consider this reality as one of the Internet marketing tools. Blog is also used for SEO of a project and for increasing the number of visitors to a website.

Some good examples of blogs include:

[Netpeak](#) topical blog,

[comScore](#) corporate blog, etc.

Reviews and ratings websites

Websites that publish ratings and reviews of independent experts and consumers are becoming increasingly important. The frequent visitors of such websites include company representatives, distributors, retailers, and ordinary users, who are united by the search for relevant information.

Примеры сайтов рейтингов:

Movie rating:

<https://www.rottentomatoes.com/>

Rating of restaurants,

places to travel, and much more:

<https://www.tripadvisor.com/>

Web-based bulletin boards are the specialized network services, which are devoted to a specific topic or group.

One of the world's most popular boards is [Craigslist](#), where you can buy anything from spare parts and clothes to cars and houses.

Online conferences and seminars

These two directions are rapidly evolving on the Internet. Every day, thousands of conferences and seminars are held on all kinds of topics. Online conference allows gathering thousands of participants who can listen to some information and ask questions, as well as to get answers to them.



Viral Marketing

VIRAL MARKETING is a kind of online marketing, the idea of which is the creation of a "virus", which is attractive for users of the advertising information transmitted by them to each other not as advertising, but in the entertaining form.

Its distinguishing feature is exponential distribution of advertising material in the form of the original website, video, vine, picture, provocative article, animation, online service, scandal, and so on.

Here is an example of viral marketing.

Do you remember that picture posted on all social networks in 2015 with a little question: "What color is this dress?"

This dress caused heated debates not only between friends in social networks, but even between celebrities and scientists.



For example Taylor Swift favored for the blue and black dress.



While Kim Kardashian and Anna Kendrick stated that this is a white and gold dress.



Kim Kardashian West ✓
@KimKardashian

⚙️ Following

What color is that dress? I see white & gold. Kanye sees black & blue, who is color blind?


↩️ ↺️ ★ ⋮

RETWEETS
3,728

FAVORITES
6,090



8:41 PM - 26 Feb 2015



Anna Kendrick ✓
@AnnaKendrick47


⚙️ Following

If that's not White and Gold the universe is falling apart. Seriously what is happening????

↩️ ↺️ ★ ⋮

RETWEETS
7,792

FAVORITES
16,699



7:52 PM - 26 Feb 2015



The question even caught the interest of scientists and ophthalmologists.

According to their version, this difference in color perception is caused by the individual structure of each person's eyes and a combination of "rods" and "cones" that convert light stimuli into nervous excitement. Since the image that we see on the screen is based on the RGB principle (combination of red, green, and blue) with the addition of individual lighting, each perceives the color of this dress differently.

Eventually, despite the fact that most people declared this dress is white and gold, it was found out that its actual color is blue and black 😊



Gamification and Monetization. Online Games

GAMIFICATION involves introduction of game elements or game mechanics to everyday life, surfing the web, or using a variety of websites.

This tool can be divided into 2 types:

- Gamification of websites;
- Monetization of online games.

Gamification

Many of you have seen the system of *achievements* (patches or pins) implemented on various sites. They are used for rewarding users or to show their important role in a project.

Let's say you wrote 1000 comments on the forum, so you get one of the achievements (perhaps humorous, or maybe praiseful):



or



The "People's expert" award will be granted if you fulfill several conditions: sign up, have a large number of comments, are recognized being useful, filled personal information in your profile. Thus, you create a goal for which the users will strive.

The introduction of such achievements and awards system has significantly increased the number of registered users (from 2 to 15 thousand users per month).

For example, here is a list of awards at <https://en.myshows.me/>, which is a website that provides information about popular television series with the ability to track when the new episodes are to be aired.



The New Thing

Achieved 4 Oct 2014

Watches 10 premiere TV-shows



A Marvel fan

Achieved 7 Dec 2015

Watches Marvel's Agents of S.H.I.E.L.D., Jessica Jones, Marvel's Agent Carter and Daredevil



A DC fan

Achieved 12 Feb 2015

Watches Arrow, Flash, Gotham, and Constantine

Monetization and online games

The first multiplayer network games appeared back in '70s. They are considered to be these three games: [Maze War](#), [Empire](#) и [Spasim](#).

The so-called MMO games began to appear with the development of the Internet, which gained popularity in the last 10-15 years.

The next stage in the evolution of games is the so-called VRMMO, the games that are capable of supporting virtual and augmented reality. The first alpha tests of such games are already taking place: [Sword Art Online: The Beginning](#) developed by IBM. The game is based on one of the most popular contemporary art works in Japan: Sword Art Online ranobe series.

Online games with the built-in advertisements or elements of company brand are rapidly gaining popularity, providing many opportunities to attract potential customers. Besides, many games have a highly developed content monetization, which includes buying armor, bonuses, skills, and others for both the in-game currency and the donated real currency.

For example:

1. The most expensive battle in an online game took place on 27-28 January, 2014 in [EVE Online](#). It involved more than 75 thousand players. The cost of irretrievable losses in the in-game currency amounted to 13 trillion ISK, or about \$300,000.
2. In 2015, [Apple](#) earned almost \$ 6.5 billion exclusively on in-game purchases (and since the company gets only 30% of turnover, the total purchases in Apple Store amounted to more than \$20 billions).
3. The revenues from Google Play service for 2017 have not yet been formally presented, but there is comparative data. It is known that the number of downloads from Google Play is almost twice the number of downloads from Apple Store, but the income from application or in-game content sales in Google is almost two times lower than that of Apple. This indicates a lower monetization of applications and the higher availability of free content in the store for Android applications.

As we can see, the elements of gamification have a positive effect on a project, and at the same time, they stimulate brand loyalty.



Mobile Marketing. SMS Marketing

I am pretty sure that each one of you receives SMS notifications from various retail and online stores, boutiques and beauty salons at least once a week.

Nowadays, when visiting most of the websites or retail stores, and especially when buying something from them, you are offered to fill out a customer form (log in) to get a discount card, savings account, arrange for delivery, etc.

Presently, many websites are developed considering the capabilities of mobile devices, which provide Internet access, which in turn provides Internet marketing with the ability to attract more new partners in the network companies.

As practice shows, girls easily "fall for" SMS messages that come from various boutiques, spas, beauty salons, etc.

At the same time, men more often respond to the messages from hardware online stores, automobile dealers, and service stations.

In practice, it is very difficult to track the effectiveness of SMS marketing, since it is hard to understand that it was the sms sent to a potential client that has led to its monetization. At that, the cost of one SMS message is quite high with about one cent per message, and it also may be quite difficult to fit the entire message in 1 SMS.



Formation of Public Opinion. PR

This online marketing tool should develop a positive image of a company through the introduction of text information on various Internet resources: via the distribution of press releases and working with network media and news resources, through ordering relevant articles and activity on discussion forums, with a hidden advertising in blogs, social networks, and so on.

Let's look at a quite frequent situation, in which you are selling something on the Internet and have got a negative review. The client states that the smartphone he had bought was broken.

What are your next steps?

Practice shows that about 50-60% of users will try to delete the review, or will not know about it at all. However, this is a wrong decision. Such actions will only cause irritation or anger of the user that has created a negative review, which may cause him/her to create the same negative reviews on other websites, or appeal to the Union for Consumer Protection, which is an invitation to trouble.

I highly recommend you to address the issue with negative and neutral feedback very seriously and handle each case since all these reviews about your company on the Internet constitute the "face" of the company. Negative (especially not handled) reviews will lead to the fact that people will increasingly stumble on them, and as a result they will begin to mistrust you.

Sometimes it is enough just to get in touch with a disappointed customer, when it really turns out that you have sold him a defective (faulty) product or provided a bad service (perhaps your employee have botched something up). Detection of such problematic situations in the "bud" is the key to providing quality services in the future.



Social Video marketing

VIDEO MARKETING is a kind of online marketing that gains more and more adherents in recent years, since the use of this method of online marketing has proved its efficiency and profitability.

Software designed for PC allows any user to create videos on various topics since the technical side of their production is simple and logical. It does not require any special training for those who want to create their video and post it via the E-mail newsletter or on any web service, such as YouTube or Vimeo.

According to analysts, up to 80% of all the content on social networks can move from graphical and text form (images, text, memes, etc.) to video content until 2020.

The use of various short videos for showing the benefits of a product, service, or maybe just a funny video has already become more and more popular a few years ago.

Now almost all major companies have their own channels on YouTube or similar video hosting, to which visitors are directed in order to pick their interest in the services of a company.

Besides, you can also earn money on posting videos by advertising that will be shown on your channel.

You can easily remember a vivid example of video marketing that combines elements of video, viral marketing and competent PR that "forced" global giant YouTube to rewrite counter code, since it was not designed for such a large number of views).

If you have not guessed what I'm talking about, then follow the [link](#) ☺



Other Classifications of Internet Marketing Tools

Many sources may give you another classification of web marketing tools.

Video, viral, partial gamification, and smm are often combined into a general category called content marketing.

CONTENT MARKETING is a set of marketing techniques based on the creation and/or distribution of information that may be useful to the consumer in order to gain his/her trust and attract potential customers. Content marketing involves preparing and distributing high-quality, relevant and valuable information that is not considered advertising, but which indirectly convinces the audience to make the decision

necessary to the distributor, i.e. select his/her service. Content marketing is considered beneficial because it effectively attracts the audience's attention, helping to gain the trust and subtly promoting a product or service on the market.

The ways of media content distribution can be very diverse: websites, blogs, social media, traditional media, books, magazines, printed or online news publications, newsletter subscriptions, podcasts, seminars, webinars, conferences, roundtable discussions, video portals, etc. The main goal of free information distribution is not to advertise specific products or services, but to inform consumers about the general situation in this market segment, the events that are about



to take place in it, the solutions related to the problems of this segment, and sometimes it tells how products or services of a distributor will help to solve these problems. The motivation of those who launches content marketing campaign is to inform potential customers, effortlessly familiarizing them with their offerings, create a public image of a company that is considered a leader in this market segment, which employs only well-trained experts who are familiar with consumer problems and the ways of their solution.

Content marketing allows achieving various goals including: the creation of a public image of leader, the increase in direct sales, familiarize consumers with the brand new products or services, and promote them on the market.

[\[Source\]](#)



Conclusion

As we can see, there are plenty of reasons for your business to go online.

- Firstly, this is a huge market of potential customers who are ready to spend "real" money on your products or services.
- Secondly, it allows accessing new markets (transition from offline to online) and delivering within the country or neighboring regions.
- Thirdly, the very development of your business, since stagnation is a recipe for a loss of competitiveness and development.

I believe you can come up with at least another couple of reasons for going online ☺



Search Engine

SEARCH ENGINE is a computer system used for searching, arranging, and remembering information. .

There are four types of search engines according to the methods of research and service: systems that use web crawlers, human-operated systems, hybrid systems, and meta-systems.

The search system architecture includes: crawler that scans Internet websites, indexer that provides quick search, and a search engine, which is a graphical user interface.

It is a general idea of the search engine as a mechanism and operation principle. In our course we will emphasize and consider only the number of search engines (one of their kinds), to which we are accustomed the most.

Search engine is a software-hardware system with a web interface that provides the ability to search for information on the Internet.

Most search engines are searching for information on the Internet websites, but there are also systems that can search for files on FTP-servers, products in e-shops (so-called `PARSERS`), as well as information in the Usenet newsgroups.

The user formulates a request to search for information using a search engine. The search engine generates a search results page on the user request. This search result may combine different types of files, such as web pages, images and audio files. Some search engines also extract data from databases and web resource directories.

As of 2016, world's most popular search engine is Google, though there are countries where users prefer other search engines. In Russia, for example, Yandex is ahead of Google by about 10% when using a PC, and in China, the majority of users prefer the Baidu search engine.

The aim of a search engine is to find documents that contain any keywords or words that contain any related keywords (search query of the user to the search engine). The search engine is the better, the more documents relevant for the user's query it will return. Search results may worsen due to the nature of algorithms and the human factor.

Search engine is a set of programs designed to search for information. Usually, it is a part of the search system. The access to the source code, as well as the search algorithms, is kept in secret in order to reduce the impact on its work.

The main search quality criteria of a search engine are relevance (the compliance of the search query and result), index completeness, taking into account language morphology, and many others.



Main Properties of Search Engines. Indexing, Relevance, Ranking

Indexing in search engines (web indexing) is the process of adding information (about a website) by a search engine robot into the database that will then be used for the (full-text) search for information on the indexed websites. The information on the website often includes keywords (an algorithm for determining keywords depends on the search engine), articles, links, documents, images, audio, and so on.

There are some restrictions on the types of data being indexed (javascript, flash files).

The robots.txt files and such directives as the Disallow, Allow, User-agent, Crawl-delay, and other similar are used for managing indexes (for example, prohibition of indexing of a particular

page). The <noindex> and <nofollow> attribute tags are also used for managing indexing, which cover the contents of a website from the robots of Yandex and Google, respectively (Yahoo also uses the <nofollow> tag).

Website indexing is one of the primary and most important processes in the search engine's perception of your website. Remember that everything you see as a query result is not real information, but an "index" (cache is the stored information of a search engine).

Incorrect website result, robots.txt file setting, and software code of a website may guarantee you lower positions in the SERP.



Relevance (from latin *relevo* — facilitate) in information search is a semantic correspondence of a search query and a document image. More generally, one of the closest terms to "relevance" is "correspondence", i.e. not only the evaluation of compliance, but also the degree of practical applicability of the result, as well as the degree of social applicability of the problem solution.

Simply speaking, **RELEVANCE** is about finding a semantic correspondence between the search query entered by the user and the information found and remembered by the search engine from various websites, which was displayed on request.

Ranking is a process of website arrangement (sorting) in the search results according to the search query entered by the user. Ranking differs from the relevance in that it is a total effect of sorting, scanning, and determining importance and usefulness of the displayed information for the user, while the relevance refers only to the semantic meaning of a search query and information displayed by the search engine.

Search algorithms are secrets of search engines. Therefore, it is not possible to provide a full list of parameters used by the search engines for estimation of website content when generating search results. However, the main criteria are known. They include:

- Age of the resource.
- Resource name, domain zone, and domain level.
- Popularity of information topic posted on the resource and the correspondence of the keywords to it.
- The amount of information from the entire resource, each of its pages, as well as the number of pages.
- Total credibility of the resource in search engines and the credibility of each page individually.
- Style commonality of all the pages of the resource.
- The number of keywords in the text content of the entire resource and their distribution across the pages. The correspondence of keys to the whole number of words in the content.
- Citation index.



- The number of queries for each keyword from the semantic core of a website, which were created by users for a certain period of time.
- Update frequency of information on the website. Time elapsed since the last update.
- The use of graphics, multimedia, frames, and flash modules.
- The font and format (type, size) of the keywords, the style of headings and keys.
- The distance to the keywords from the beginning of the text.
- Attempts to make the text more unique using controversial methods (for example, keys written in s p a c e t y p i n g, or grammatical errors).
- The use of meta tags.
- The presence of robots.txt.
- Website depth (referring to the number of transitions possible "within" the website without visiting the same page twice, the number of website levels).
- The presence of comments in the code.
- Geographical location and the language of the resource.
- The presence and amount of external and internal links. The quality of external links.
- Other parameters.



Types of Search Engines.

The World's TOP Search Engines

As mentioned above, search engines are divided into four types.

1. **Systems that use web crawlers.** Such systems consist of several parts (mechanisms):
 - a) Spider (*robot, bot, crawler*) is a program that travels around the websites, scanning information placed on the resources;
 - b) Index (*cache, copy, archive*) is a set of saved copies of the website pages;
 - c) Algorithms (*filters*) are a set of software components responsible for processing and high-quality supply of the user with the corresponding search engine index that contains information he/she needs.

Most of the modern search engines are the systems of this type.

2. **Manual systems (resource catalogs)**

They include DMOZ, Yandex.Catalog, and others. Their specificity is in more or less careful manual selection of all resources that are selected by the webmasters of directories themselves as the best web resources in one category or another on the Internet.

On the one hand, this approach leads to a better selection of websites, but on the other hand, it is limited in its response efficiency to changes in the websites and has a subjective evaluation system.



3. Hybrid systems

They essentially combine the properties of the above systems: there is an automatic data processing, however, developers may interfere and complement a functioning model with some kind of "focus groups" with different access rights from non-regulatory to direct interaction with the index and search results.

Such search engines as Yahoo, Google, and MSN combine the functions of systems that use web crawlers and manually operated systems.

4. Meta systems

Systems combining the indexes of several search engines. Currently, they've become almost irrelevant due to the intensive development of algorithms and mechanisms of each individual search engine. The search became better, smarter and are now of higher quality. For example: MetaCrawler and MSN Search.

Now as we have discussed the types of search engines, let's move directly to studying the most popular search engines.



Google



At the moment, the most popular search engine in the world is **Google**. According to the statistics, about 70% of all world traffic is handled by its servers.

We can talk a lot about this search engine:

- Google got its name as a reference to the mathematical term googol (one and one hundred zeroes);
- The company was founded and the search engine was developed by two students: Larry Page and Sergey Brin;
- One of the company's vice presidents was the dog named Yoshka ☺
- And much more...

[Here](#) you can read about the history of this company in more details.

You may wonder why this search engine ranks first in the world, and it is quite justified. This is the company that constantly evolves, improves, and finds new influence branches throughout its history. Currently, *Alphabet Inc.* (which is a legal name of Google) has more than a hundred different projects from curing diabetes to creating a network of aerostatic balloons that will be used for providing free worldwide access to the Internet.

Algorithms and services are constantly developing (Google Images, Google Adwords, Google Adsense, Google Play, etc.), which are used by the Google search engine and grant it the deserved first place in the world. The development of the Android mobile platform played a significant role.

We will later talk about this in more details.



Baidu



It is the leader among Chinese search engines **Baidu** (covering up to 80% of all Chinese traffic, and that's why it is the second largest in the world).

One of the reasons for this situation is that Google [confronted](#) the Chinese government on the issue of providing information about users, which resulted in Google being virtually expelled from the market (it is used by about 1% of Chinese population). Thus, a regional search engine is leading in the Chinese market, it fully supports the state policy regarding information restriction and tracking Internet history and correspondence of the Chinese people.

But this is not the only feature of this search engine. If you have to cooperate with the Chinese market, then you should probably keep a few things in mind:

- Baidu is the main source of traffic for you;
- your website must be hosted in China (since all the external resources take a long time to load);
- be sure to use a dedicated server for a website;
- constantly check and monitor your website on being in the "black list" of government;
- make sure the content of your website is written in the Chinese language (English and others are ranked much worse in the search results);
- corrupted index (Baidu SERP) lies in the fact that 50-90% of the websites displayed in the SERP is listed there in the form of advertisements (context advertising: Baidu PPC, 百度推广);

- you should get the ICP Certificate (approval of your activity by the government).

As you can see, working with Baidu is not very simple and can be a bit "difficult psychologically", but you may have to deal with it only when working with East Asian market (China, Japan, Taiwan, South Korea, etc.)

Here you can read in more details about the features of Chinese market:

<http://eggplantdigital.cn/should-i-host-my-website-in-china/>

<https://www.nanjingmarketinggroup.com/blog/hosting/problems-hosting-website-china>



Bing



Bing search system is developed by one of the IT-industry giants, Microsoft. This search engine is named "Bing" just for the public, but the search engine itself was called *Kumo* ("spider" in Japanese).

Although this search engine officially got its name only in 2013 (it was called *Bing Beta* in 2009-2013). It is basically a rebranding (modernization) of the original "Windows" search engine developed by the company back in 1998:

- MSN Search (<http://search.msn.com/>) — since its appearance in 1998 up to September 11, 2006;
- Windows Live Search (<http://search.live.com/>) until March 21, 2007;
- Live Search (<http://www.live.com/>) until June 1, 2009.

Some "features" that allowed this search engine to achieve success and get in the list of top search engines are:

- Search differs depending on the specified categories;
- Videos can be viewed directly on the result page;
- Flash websites are not a problem for the search engine;
- High-quality maps;
- High-quality image search;
- Similar results are displayed at the top right corner.

Currently, the search system occupies 2-3 position in the world rankings, but a joke is still common that Bing is an abbreviation: **Bing – But It's Not Google.**



Yahoo!

YAHOO!

Yahoo! is an American company, founded in 1994 by two Stanford University students. The name came from the slang term describing simple-minded residents of the southern part of the country, where one of the project creators came from.

The project reached peak of popularity and significance in the early 2000s. That time, the company specialized in purchasing various IT-companies for their further modernization and incorporation in their services. Unfortunately, most of these projects were not only lossmaking, but also were completely destroyed by inefficient corporation management.

There is another feature of this search engine: from the very creation, Yahoo! hadn't got its own search algorithms, working on the basis of other search engines from independent developers: Inktomi, Google, Bing. This also did not help

strengthening on the market and led to the fact that the users began to use other search engines.

In 2000, the company tried to purchase a "small" online store called E-bay (fortunately it did not work for them). In 2005-2007, at "the sunset of its greatness", it did not accept Microsoft's offer to buy the majority stockholding for \$45 billion (they considered that the offered price was too low). And only in 2016, the company was purchased by the industry giant Verizon for just \$4.5 billion.

Yahoo!, one of the largest IT-companies, which had enormous potential for growth and market penetration is an example of management "failure" that is able to destroy the multi-billion dollar corporation.



Conclusion

There is a large number of search engines with their own search algorithms, different functional of various additional services included in the search engine functionality.

So if you have to work with different search engines in different countries, then you should learn all the features and specifics of each of them. This is the only thing that can ensure high rankings of your website.





FUNDAMENTALS OF SEO AND WEB MARKETING

01. INTRODUCTION

All rights to protected pictures, audio, and video belong to their authors or legal owners. Fragments of works are used exclusively in illustration purposes to the extent justified by the purpose as part of an educational process and for educational purposes in accordance with Article 1273 Sec. 4 of the Civil Code of the Russian Federation and Articles 21 and 23 of the Law of Ukraine "On Copyright and Related Rights". The extent and method of cited works are in conformity with the standards, do not conflict with a normal exploitation of the work, and do not prejudice the legitimate interests of the authors and rightholders. Cited fragments of works can be replaced with alternative, non-protected analogs, and as such correspond the criteria of fair use.

All rights reserved. Any reproduction, in whole or in part, is prohibited. Agreement of the use of works and their fragments is carried out with the authors and other right owners. Materials from this document can be used only with resource link.

Liability for unauthorized copying and commercial use of materials is defined according to the current legislation of Ukraine.

© Sergey Lysenko

© STEP IT Academy
www.itstep.org