



# 搜索引擎优化

## Search Engine Optimization

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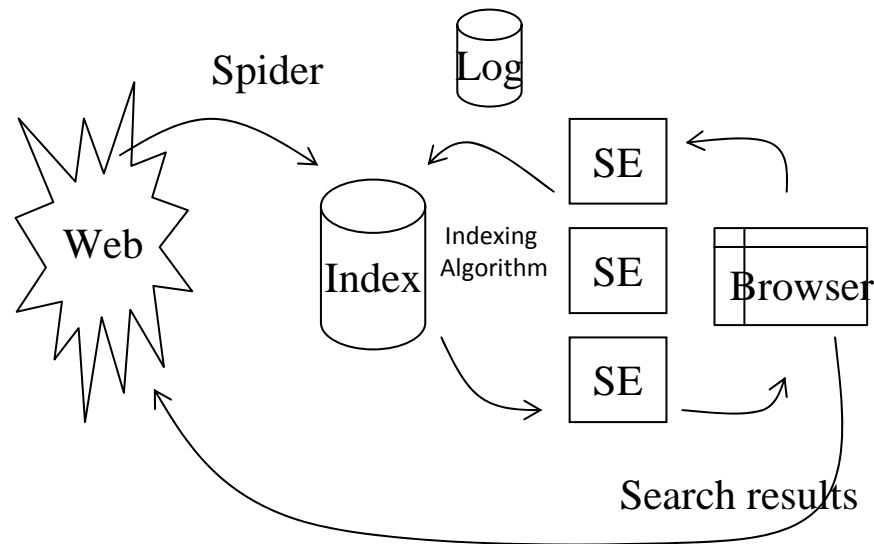
# It is not easy to design a good website?

- user perspective
- search engine
- Internet marketing

# search engine

A web search engine has the following three components...

- 1. Crawler/spider **Find content**
- 2. Indexer **Make searching fast**
- 3. Search Query Algorithm **Interpret user intent**





## What is SEO?

“Search engine optimization (SEO) is the process of improving the volume or quality of traffic to a web site from search engines via "natural" search results.”

—Wikipedia, 2009

“Make it easier for search engines to discover the content on our site, which is most relevant to a user’s search query.”

—Chris Moore, 2009



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bing windows vista

ALL RESULTS

1-10 of 51,800,000 results

RELATED SEARCHES

- Download Windows Vista
- Microsoft Windows Vista
- Windows Vista Themes
- Windows Vista Wallpaper
- Free Download Windows Vista
- Microsoft
- Windows Vista Updates
- Windows Vista Drivers

**Repair Your Computer** - windows-help.org  
Repair windows vista problems. Takes only 3 Mins. Free download.

**Windows Vista home page**  
See how Windows Vista can help you more safely and easily accomplish your favorite things, from watching TV to sharing memories with family and friends, and enhance productivity at...  
www.microsoft.com/windows/windows-vista/default.aspx

**Microsoft Windows: software and services as unique as you are**  
**Windows Vista** - See why it's easier and more entertaining to use your PC. **Windows Live** - Get to know **Windows 7**. You told us you want PCs that are more reliable, more...  
www.microsoft.com/windows

**Windows Vista - Wikipedia, the free encyclopedia**  
Windows Vista is a line of operating systems developed by Microsoft for use on personal computers including home and business desktops, laptops, tablet PCs, and media center PCs.  
Development - New or changed features - Removed features - Editions  
en.wikipedia.org/wiki/Windows\_Vista

**Windows Vista editions - Wikipedia, the free encyclopedia**  
Windows Vista is available in six different marketing editions. [1] With the exception of **Windows Vista Starter**, all editions support both 32-bit (x86) and 64-bit (x64) processor.  
Editions for personal - Vista for Embedded - Comparison chart  
en.wikipedia.org/wiki/Windows\_Vista\_editions

**NVIDIA Windows Vista Solutions**  
NVIDIA delivers an unsurpassed graphics experience with its complete line-up of graphics processing units (GPUs) that are **Windows Vista Ready**.  
www.nvidia.co.uk/page/technology\_vista\_main.html

**Windows Vista, the definitive review**  
Has any OS been so maligned and so praised during a painfully long development cycle as **Windows Vista**? The march to **Vista's** launch has sometimes seemed longer than the Hundred...  
www.pcadvisor.co.uk/reviews/index.cfm?reviewid=629

**Buy Windows Vista**  
Internet, Graphics, Office & More. **Windows Vista on Sale!**  
www.nextag.co.uk/software

**Windows Vista at Amazon**  
Save now on millions of titles. Free Delivery on Orders over £5.  
Amazon.co.uk/books

**Windows Vista**  
Software: great savings. Feed your passion on eBay.co.uk!  
www.ebay.co.uk/software

**Windows Vista**  
Browse reviews and compare prices on products from 100s of retailers.  
uk.shopping.com

**What Is A Windows Vista**  
Operating Systems from 19+ Shops. Buy What Is A Windows Vista Fast!  
uk.Cellex.com/Operating-Systems

See your message here

Organic



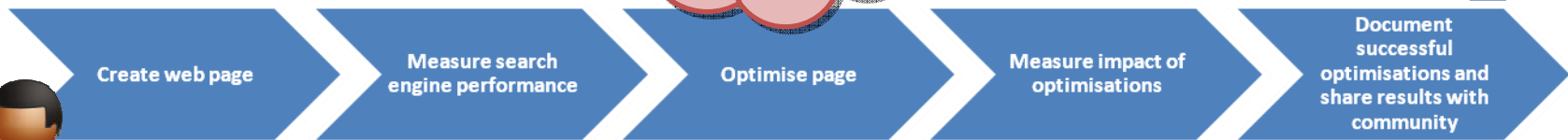
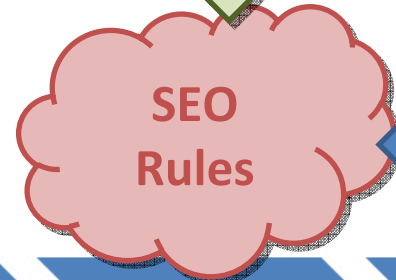
## The improvement of the search engines directly impacts the evolution of SEO

1993	<a href="#">Aliweb</a>
	<a href="#">JumpStation</a>
1994	<a href="#">Niranjan</a>
	<a href="#">Infoseek</a>
	<a href="#">Lycos</a>
1995	<a href="#">AltaVista</a>
	<a href="#">Open Text</a>
	<a href="#">Magellan</a>
	<a href="#">Excite</a>
	<a href="#">SAPO</a>
1996	<a href="#">Dogpile</a>
	<a href="#">Inktomi</a>
	<a href="#">HotBot</a>
	<a href="#">Ask Jeeves</a>
1997	<a href="#">Northern Light</a>
	<a href="#">Yandex</a>
1998	<a href="#">Google</a>
1999	<a href="#">AlltheWeb</a>
	<a href="#">GenieKnows</a>
	<a href="#">Naver</a>
	<a href="#">Teoma</a>
2000	<a href="#">Vivisimo</a>
	<a href="#">Baidu</a>
	<a href="#">Exalead</a>

2003	<a href="#">Info.com</a>
2004	<a href="#">Yahoo! Search</a>
	<a href="#">A9.com</a>
	<a href="#">Sogou</a>
2005	<a href="#">MSN Search</a>
	<a href="#">Ask.com</a>
	<a href="#">GoodSearch</a>
	<a href="#">SearchMe</a>
2006	<a href="#">wikiseek</a>
	<a href="#">Quaero</a>
	<a href="#">Ask.com</a>
	<a href="#">Live Search</a>
	<a href="#">ChaCha</a>
	<a href="#">Guruji.com</a>
2007	<a href="#">wikiseek</a>
	<a href="#">Sproose</a>
	<a href="#">Wikia Search</a>
	<a href="#">Blastic.com</a>
2008	<a href="#">Powerset</a>
	<a href="#">Viewzi</a>
	<a href="#">Cuil</a>
	<a href="#">Boogami</a>
	<a href="#">LeapFish</a>
	<a href="#">VADLO</a>
	<a href="#">Spense! Search</a>
	<a href="#">Duck Duck Go</a>
	<a href="#">Searchme</a>
2009	<a href="#">Bing</a>



Guides and hints about the algorithms



SEO Professionals



## ***Relevance***

- Degree to which the content matches what the user query intention and terms.
- The relevance is higher if the terms appear multiple times, and if they show up in the title or other important sections of the page.

## ***Popularity ( PageRank)***

- This is a measure of the relative ‘importance’ of a page
- Importance of a page is measured by number of, and importance of the pages linking to it





internet connection problems

Search

# Page 1

[How to troubleshoot possible causes of Internet connection ...](#)

Explains how to determine why some **Internet connection problems** occur and explains how to find ways to fix them.

[support.microsoft.com/kb/314095](http://support.microsoft.com/kb/314095) - Similar - [share] [print] [close]

[Troubleshooting Internet Connections](#)

Troubleshooting **Internet Connection Problems**. The purpose of this section is to give general tips on troubleshooting your **Internet Connection** ...

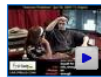
[www.onecomputerguy.com/.../troubleshoot\\_internet.htm](http://www.onecomputerguy.com/.../troubleshoot_internet.htm) - Cached - Similar - [share] [print] [close]

["Page cannot be displayed" and "Cannot find server" error messages](#)

7 Jul 2007 ... Troubleshooting **Internet Connection Problems**. "Page cannot be displayed" and "Cannot find server" error messages ...

[antivirus.about.com/od/windowsbasics/a/interneterrors.htm](http://antivirus.about.com/od/windowsbasics/a/interneterrors.htm) - Cached - Similar - [share] [print] [close]

[Video results for internet connection problems](#)



**Internet Connection Problems**  
9 min  
[www.youtube.com](http://www.youtube.com)



**internet connection problem**  
4 min 28 sec  
[www.youtube.com](http://www.youtube.com)

[Windows XP: Troubleshooting network connection problems](#)

15 Aug 2006 ... This **problem** could be caused by a failed DHCP server on the ISP's network, a failed modem, or a **problem** with your **Internet connection** ...

[www.microsoft.com/windowsxp/using/.../troubleshoot.msp](http://www.microsoft.com/windowsxp/using/.../troubleshoot.msp) - Cached - Similar - [share] [print] [close]

[Troubleshooting your High Speed Internet connection problems](#)

Previous Page > Troubleshooting your High Speed **Internet connection problems**. Did this walkthrough solve your **problem**? Back to Previous Page ...

[helpme.att.net/viewlets/dsl/connectivity/index.shtml](http://helpme.att.net/viewlets/dsl/connectivity/index.shtml) - Cached - Similar - [share] [print] [close]

[Internet connection problems](#)

3 Aug 2009 ... Hello, I have just changed my **internet connection** from a wireless modem to a broadband landline-based **connection**. The **problem** is that my ...

[en.kioskea.net/.../affich-136450-internet-connection-problems](http://en.kioskea.net/.../affich-136450-internet-connection-problems) - Cached - Similar - [share] [print] [close]

[Apple - Support - Discussions - iBook G4 internet connection ...](#)

iBook G4 **internet connection problems**. Posted: Jul 30, 2009 6:08 PM ... If anyone can shed light on my **internet connection problem**, I would be eternally ...

[discussions.apple.com/thread.jspa?threadID=2099747...1](http://discussions.apple.com/thread.jspa?threadID=2099747...1) - Cached - Similar - [share] [print] [close]

[PC Pitstop Internet Connection Center](#)

PC Pitstop's **Internet Connection Center** can help. This is the place to start to diagnose and perhaps fix **connection problems** for your home or office system. ...

[www.pcpitstop.com/internet/default.asp](http://www.pcpitstop.com/internet/default.asp) - Cached - Similar - [share] [print] [close]

[internet connection problems Resources | TechRepublic](#)

White papers, case studies, technical articles, and blog posts relating to **internet connection problems**.

[search.techrepublic.com/.../internet+connection+problems.html](http://search.techrepublic.com/.../internet+connection+problems.html) -

[Cached - Similar - \[share\] \[print\] \[close\]](#)

High PageRank

# Page 5

[EA admit Internet Connection problems with FIFA were there fault ...](#)

4 posts - 3 authors

This is an extract from a thread in the FIFA 10 Section: Originally Posted by EA\_SidMisra Hey Guys, So what happened with FIFA 09? Ok, so before I get.

[forums.electronicarts.co.uk/.../749337-ea-admit-internet-connection-problems-fifa-were-there-fault.html](http://forums.electronicarts.co.uk/.../749337-ea-admit-internet-connection-problems-fifa-were-there-fault.html) - Cached - Similar - [share] [print] [close]

[Hotspot internet connection problems - Windows Vista Networking ...](#)

Hotspot **internet connection problems** Windows Vista Networking & Sharing. ... **internet connection** in my home! My **problem** is whenever I go to a Hotspot and ...

[www.realgeek.com/.../hotspot-internet-connection-problems-436018.html](http://www.realgeek.com/.../hotspot-internet-connection-problems-436018.html) - Cached - Similar - [share] [print] [close]

[AOL Netgear DG834G - No internet connection problems - AVForums.com](#)

9 posts - 6 authors - Last post: 1 Aug

Firstly all the lights on the router are on including the **internet** light, aol seems to detect a **connection** but pages cannot be displayed.

[www.avforums.com/.../733614-aol-netgear-dg834g-no-internet-connection-problems.html](http://www.avforums.com/.../733614-aol-netgear-dg834g-no-internet-connection-problems.html) - Cached - Similar - [share] [print] [close]

[Apple - Support - Discussions - 10.5.7 Internet connection ...](#)

15 posts - 10 authors - Last post: 24 Jun

I upgraded, only difference, and had **internet connection problems**. Email, ftp uploads, **internet** slow like molasses. ...

[discussions.apple.com/thread.jspa?threadID=2019407...15](http://discussions.apple.com/thread.jspa?threadID=2019407...15) - Cached - Similar - [share] [print] [close]

[Amazon.co.uk: Customer Discussions: Wii Fifa09 Internet Connection ...](#)

Wii Fifa09 **Internet Connection problems**. 0, March 2009. recommend wii games, 2, February 2009. Manager Mode, 1, November 2008 ...

[www.amazon.co.uk/gp/forum/.../discussion.html?...](http://www.amazon.co.uk/gp/forum/.../discussion.html?...) - Cached - Similar - [share] [print] [close]

[How do you fix internet connection problems? - Yahoo! Answers](#)

I have an IBM thinkpad that crashed recently. I was able to save and back up ... Are you saying that your computer shows you have an **internet connection** but ...

[answers.yahoo.com/question/index?qid...](http://answers.yahoo.com/question/index?qid...) - Cached - Similar - [share] [print] [close]

[General Networking/Lan/Wan: Internet Connection Problem, ipconfig ...](#)

ipconfig flushdns, static electricity, communicating: Hi Elwin, Could be a bunch of things. First how are you connected to the **Internet**?

[en.allexperts.com/q/.../Internet-Connection-Problem.htm](http://en.allexperts.com/q/.../Internet-Connection-Problem.htm) - Cached - Similar - [share] [print] [close]

[Internet Connection Problems - 1 of 3](#)

25 Oct 2004 ... I'm running an Win ME machine which wont let me connect to **Internet**, when I try, I get an error message 'please check your **connection** ...

[techrepublic.com.com/5208-11184-0.html?forumID=49...](http://techrepublic.com.com/5208-11184-0.html?forumID=49...) - Cached - Similar - [share] [print] [close]

[Vista Sleep / Hibernate and Internet Connection Problem - Vista ...](#)

4 posts

Vista Sleep / Hibernate and **Internet Connection Problem**, Vista Hardware Devices, Get your system working right with all of your components via the correct ...

[forums.techarena.in/vista-hardware-devices/713875.htm](http://forums.techarena.in/vista-hardware-devices/713875.htm) - Cached - Similar - [share] [print] [close]

[GameSpot Forums - PC Hardware Discussion - Internet connection ...](#)

**Internet connection problems**? The PC Hardware is place for you to discuss hardware involving the PC. Please look back a few pages before posting repetitive ...

[www.gamespot.com/pages/forums/show\\_msgs.php?topic...](http://www.gamespot.com/pages/forums/show_msgs.php?topic...) - Cached - Similar - [share] [print] [close]

Lower PageRank

# Algorithms are a **SECRET**

Domain Authority



Relevance



Trust Rank



Browse Rank



PageRank

## PageRank Algorithm

$$PR_i = d \sum_j \frac{PR_j}{k_j} + (1 - d)$$

$PR_i$ : the PageRank value of page  $i$

$PR_j$ : the PageRank value of page  $j$

$k_j$ : number of the pages  $j$  refer to

$d$ : a parameter ranging [0,1].

?



# **POSITIVE** On-page SEO Google Ranking Factors

## Keywords

POSITIVE ON-Page SEO Factors	Brief Note
KEYWORDS	<b>Google patent</b> - Topic extraction For keyword selection, try <a href="#">Google Ad Words</a> - <a href="#">Google Trends</a>
Keyword in URL	First word is best, second is second best, etc.
Keyword in Title tag	<b>Keyword in Title tag - close to beginning</b> Title tag 10 - 60 characters, no special characters.

## Keywords - Body

POSITIVE ON-Page SEO Factors	Brief Note
Keyword density in body text	5 - 20% - (all keywords/ total words) Some report topic sensitivity - the keyword spamming threshold % varies with the topic.
Individual keyword density	1 - 6% - (each keyword/ total words)
Keyword in H1, H2 and H3	Use Hx font style tags appropriately
Keyword font size	"Strong is treated the same as bold, italic is treated the same as emphasis" . . . Matt Cutts July 2006
Keyword proximity (for 2+ keywords)	Directly adjacent is best
Keyword phrase order	Does word order in the page match word order in the query? Try to anticipate query, and match word order.
Keyword prominence (how early in page/tag)	Can be important at top of page, in bold, in large font

## Navigation – Internal Links

POSITIVE ON-Page SEO Factors	Brief Note
To internal pages- keywords?	Link should contain keywords. The filename "linked to" should contain the keywords. Use hyphenated filenames, but not long ones - two or three hyphens only.
All Internal links valid?	Validate all links to all pages on site. Use a <a href="#">free link checker</a> . I like this one.
Efficient - tree-like structure	TRY FOR two clicks to any page - no page deeper than 4 clicks
Intra-site linking	Appropriate links between lower-level pages

## Navigation – Outgoing Links

POSITIVE ON-Page SEO Factors	Brief Note
To external pages- keywords?	<b>Google patent</b> - Link only to good sites. Do not link to link farms. CAREFUL - Links can and do go bad, resulting in site demotion. Unfortunately, you must devote the time necessary to police your outgoing links - they are your responsibility.
Outgoing link Anchor Text	<b>Google patent</b> - Should be on topic, descriptive
Link stability over time	<b>Google patent</b> - Avoid "Link Churn"
All External links valid?	Validate all links periodically.
Less than 100 links out total	Google says <a href="#">limit to 100</a> , but readily accepts 2-3 times that number. ref 2k



## Other On-Page Factors

POSITIVE ON-Page SEO Factors	Brief Note
File Size	Try not to exceed 100K page size (however, some subject matter, such as this page, requires larger file sizes). Smaller files are preferred <40K (lots of them).
Hyphens in URL	Preferred method for indicating a space, where there can be no actual space One or two= excellent for separating keywords (i.e., pet-smart, pets-mart) Four or more= BAD, starts to look spammy Ten = Spammer for sure, demotion probable?
Freshness of Pages	<b>Google patent</b> - Changes over time Newer the better - if news, retail or auction! Google likes fresh pages. So do I.
Freshness of Links	<b>Google patent</b> - May be good or bad Excellent for high-trust sites May not be so good for newer, low-trust sites
<a href="#">Page Theming</a>	Page exhibit theme? General consistency?
Freshness - Amount of Content Change	New pages - Ratio of old pages to new pages



# Negative On-page SEO Google Ranking Factors

**NEGATIVE  
ON-Page SEO Factors**

**Brief Note**

**Text presented in graphics form only  
No ACTUAL body text on the page**

Text represented graphically is invisible to search engines.

**Link to a bad neighborhood**

Don't link to [link farms, FFAs \(Free For All's\)](#)  
Also, don't forget to check the Google status of EVERYONE you link to periodically. A site may go "bad", and you can end up being penalized, even though you did nothing. For instance, some failed real estate sites have been switched to p0rn by unscrupulous webmasters, for the traffic.

**[Excessive cross-linking](#)**

- within the same C block (IP=xxx.xxx.CCC.xxx)  
If you have many sites (>10, author's guess) with the same web host, prolific cross-linking can indicate more of a single entity, and less of democratic web voting.  
Easy to spot, easy to penalize.

**Vile language - ethnic slur**

Including the [George Carlin 7 bad words](#) you can't say on TV, plus the 150 or so that followed. Don't shoot yourself right straight in the foot. Also, avoid combinations of normal words, which when used together, become something else entirely - such as the word juice, and the word l0ve.



NEGATIVE ON-Page SEO Factors	Brief Note
Stealing images/ text blocks from another domain	Copyright violation - Google responds strongly
<u>Keyword stuffing</u> threshold	In body, meta tags, alt text, etc. = demotion
Frequency of Content Change	<b>Google patent</b> - Too frequent = bad
<u>Excessive Javascript</u>	Don't use for redirects, or hiding links
Flash page - NOT	Most SE spiders can't read Flash content Provide an HTML alternative
Keyword dilution	Targeting too many unrelated keywords on a page, which would detract from theme, and reduce the importance of your REALLY important keywords.





# POSITIVE OFF-Page SEO Google Ranking Factors

**POSITIVE  
OFF-Page SEO Factors**

**Brief Note**

Incoming links from high-ranking pages

In 2004, Google used to count (report) the links from all PR4+ pages that linked to you. In 2005-2006, Google reported only a small fraction of the links, in what seemed like an almost random manner. In Feb. 2007, Google markedly upgraded (increased) the number of links that they report.

Page rank of the referring page

Based on the quality of links to you

# of outgoing links on referrer page

Fewer is better - makes yours more important

Popularity of referring page

Popularity = desirability, respect

Age of link

**Google patent** - Old = Good.



# NEGATIVE OFF-Page SEO Google Ranking Factors

**NEGATIVE  
OFF-Page SEO Factors**

**Brief Note**

Keyword density on referring page

For search keyword(s)

HTML title of referrer page

Same subject/ theme?

Referrer page - Same theme

From the same or related theme? BETTER

Image map link?

Problematic?

Javascript link?

Problematic- attempt to hide link?



**NEGATIVE  
OFF-Page SEO Factors**

**Brief Note**

Zero links to you

You **MUST** have at least 1 (one) incoming link (back link) from some website somewhere, that Google is aware of, to **REMAIN** in the index.

Link-buying  
(Very good IF you don't get caught, but don't do it - when caught, the penalty isn't worth it.)

**Google patent** - Google hates link-buying, because it corrupts their PR model in the worst way possible.  
1. Does your page have links it really doesn't merit?  
2. Did you get tons of links in a short time period?  
3. Do you have links from high-PR, unrelated sites?

Links from bad neighborhoods, affiliates

Google says that incoming links from bad sites can't hurt you, because you can't control them. However, some speculate otherwise, esp., when other associated factors are thrown into the mix, such as web rings.

**Pages being dropped from large sites**

Google now has over 8 Gigs of indexed pages. Thousands of pages are disappearing from various huge websites, but I think that it is G just cleaning house, by dumping computer-generated pages.

Server Reliability

What is your uptime? Ever notice a daily time when your server is unavailable, like about 1:30 AM? How diligent must Googlebot be?.

# SEO 思亿欧™

争创中国SEO行业第一品牌

语言版本:

站内搜索

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## 网站帮助

## 行业术语

## 网站地图



### 关于思亿欧公司

杭州思亿欧网络科技有限公司是中国专业搜索引擎优化服务供应商, 长期专注于搜索引擎优化行业及应用技术解决方案的研发与运营. 我们的目标: 成为中国搜索引擎优化 (SEO) 行业的第一品牌!

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### 搜索引擎优化服务介绍

搜索引擎优化英文全称: Search engine optimization, 一种可以让网站在搜索引擎上表现的更好的技术. 通过对网站进行优化, 提高搜索排名、提高访问量, 最终提升网站的销售能力或企业品牌知名度.

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### 企业网站建设服务介绍

思亿欧长期致力于提高企业网站核心竞争力, 根据我们多年的经验及对中国网络现状的了解, 提出了两种企业网站建设方案: 1. 以用户体验为中心的网站建设; 2. 基于搜索引擎优化 (SEO) 的网站建设.

[More. >](#)

### 搜索引擎优化技术文章

- 搜索引擎的算法 [2009-10-19]
- Google高排名网站的共性 [2009-10-13]
- 社会性书签对SEO的作用 [2009-10-11]
- keywords不再参与搜索排序 [2009-10-10]
- 什么是链接农场? [2009-10-8]

### 公司新闻

- 思亿欧正式推出多种语言版本网站 [2009-9-5]
- 2009年9月4日, 南京·全球网络营销大会 [2009-8-5]
- 思亿欧成为浙江省区域经济促进会会员!



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Store

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We aspire to excellence in consulting, Internet marketing and search engine optimization services so that our clients and community can increase their online visibility and achieve success. You can join them by reading our blog or contributing your own content.

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and get the search engine exposure you need!  
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Thanks