

## **OptiRanker – A Technical Introduction**

### **The Importance of Themes in SEO**

The role of themes is becoming more and more important for search engine marketing strategists to understand. Research from the fields of Information Theory and Machine Learning (science-speak for AI) is being applied to the way search engines index their databases. In 1975, Gerard Salton developed a technique for automatic document retrieval known as the Vector Space Model. It was introduced to the web in 1994 by Brian Pinkerton.

For now, all you need to know is that the keyword selection portion of the SEO process is no longer just about keyword effectiveness (KEI), keyword density, and keyword positioning on your page. It's about a complex mathematical relationship between words on your pages and other pages that a process with artificial intelligence determines are important enough to reveal what those pages mean. The only way to adequately predict how a document may fair under such a process is by another process with similar intelligence.

The important thing to understand is that themes, as they relate to search engines, have nothing to do with written content. After all, it isn't as if search engines sit around over coffee and discuss the themes present in Hamlet or Pride and Prejudice. Really, though, search engine themes do not correspond to a motif or some two-word summary of your site's context. No, search engine themes correlate to a complex mathematical relationship between words on a specific web page and words on other pages in their database.

This mathematical relationship tells them whether web pages are about the same subject matter or theme. The manner in which these pages are cross-linked tells the search engine the relative importance of web pages within a particular theme. OptiRanker™ will be uniquely beneficial to you as you aim to craft a theme for your entire web site or specific sections of your web site.

Now, all that being said, don't believe for an instant that the most advanced math theories and equations in the world can save you from having to write good content. On the contrary, it is your job - or your writer's job to make sure that your site is full of well-written, clear, and focused content that satisfies your audience's needs. For while OptiRanker will point you in the right direction, it cannot write your content for you. OptiRanker is only the analytical and mathematical side of good web content; creativity and well-rounded writing makes up the other half.

In this new era, superior and truly competitive Internet marketing strategies will have to incorporate knowledge from these disciplines along with the older fundamentals, such as an overall web design that is professional in appearance and not only user friendly, but search engine friendly.

## **The OptiRanker Difference**

OptiRanker provides the opportunity for your business to reach more of its target audience and be more relevant in the marketplace. Its analyses of search engine themes enable your website to achieve high rankings and great overall customer appeal. Your website's success requires more than simply keywords and graphics; it requires the

OptiRanker knows that when it comes to web content, Context is King! With OptiRanker, your website will have a better chance of not just being seen by more traffic, but more of the right traffic. Without optimizing your website with OptiRanker, however, the likelihood of your website being more visible than your competitors' sites is far less certain. Why gamble on your company's success?

With OptiRanker, you won't have to gamble, and you won't have to guess when it comes to creating viable, powerful content. Find exactly right keywords for your content and your target search engine(s) every time, all the time. You'll know how to find the best link partners that are most relevant to any theme. Ultimately, you'll have access to information that not only enhances the ease with which you do business, but also the ease with which you share information with your clients and customers. It's a win-win situation!

OptiRanker's time-tested and proven techniques result in higher search engine visibility, higher audience visibility, and greater revenue potential - that's the OptiRanker Difference.

## **Artificial Intelligence - Behind the Scenes of Search Engines**

Artificial Intelligence isn't reserved for science fiction movies. No, Artificial Intelligence (AI) is completely real. In fact, did you know that directories and search engines (Yahoo, Google, Lycos, MSN, etc.) use AI to rank your website? It's true. Machine learning, or Artificial Intelligence software, is used by search engines to classify and determine the themes of internet content.

The way that OptiRanker processes its information is based off that same AI technology used by Search Engines. While you by no means need to become an expert in AI—or even a novice, for that matter!—to use OptiRanker, it doesn't hurt to have a little background about how AI relates to search engines and the optimization services and tools that OptiRanker provides.

## **Search Engines and Artificial Intelligence - A Different Way of Thinking**

Artificial Intelligence is its own highly complex world; there are many different schools of AI and many examples of how it has permeated almost every corner of society and business: economics, medicine, engineering, military, and many common home PC software applications and video games.

The area of AI that we're discussing falls into the category of machine learning. Machine learning is the field of AI that most relates to search engine optimization. Machine learning is an area of artificial intelligence concerned with the development of techniques which allow computers to "learn."

Search Engines don't think like people do. Of course, that may seem obvious, but it's a very important thing to understand. Artificial Intelligence is not intelligence such as what a human possesses. By all rights, the basis by which search engines "learn" and process info does not even begin to come close to how a person acquires knowledge. Rather, machine learning links together with statistics, and is concerned with the algorithmic complexity of computational implementations...or, in laymen's terms, heavy-duty mathematics.

The trick, or secret to discovering how AI works, is to know which words and combination of words speak to the AI technology of search engines the most. Now, that's not something you need to do on your own; that's where OptiRanker's Search Engine Optimization capabilities and keyword services come in.

OptiRanker speaks the language of AI. OptiRanker does all the heavy lifting for you and finds out what words speak to AI the most. Then you can make sure that the words that speak the most to the search engines are included in your copy.

Of course, if you had the ability to automatically figure out what words spoke to AI, it would be the linguistic equivalent of somebody (think Dustin Hoffman in "Rain Man") counting not just hundreds, but millions, of toothpicks on the floor with a single glance.

### **Understanding Artificial Intelligence & Search Engine Optimization**

Here's how AI works in relation to search engines and the optimization process...in a nutshell anyway. First, search engines take the text from html pages and convert them into mathematical representations. This results in more efficient use of disk space, more complete queries, and accurate, Automatic Document Classification (ADC). Next, a fancy piece of software with AI looks over the newly converted information and learns what the topic or theme of each mathematically represented document is—relative to the other documents it has.

Or to put it another way, think of it as, "He said; she said." The AI software looks at what He says on one web page, what She say on other web pages, and who's talking about (sharing a link with) you on inter-linked web pages. After that, the search engines' AI software is going to analyze what everyone (all the websites) is saying.

### **Artificial Intelligence - Search Engine Interrogation**

In a way, the AI software is like a detective interrogating multiple witnesses at a time. Imagine that the detective (the AI software) is given 100 witnesses (the web sites). Solely by listening to their various testimonies, the detective has to find out how many different

crime cases were represented among the whole group and which witnesses are related to which crime cases.

The more the testimonies correspond to one another, and the more what one witness said lines up with what another witness said, the more weight their testimonies will be given. In other words, the more likely it is that they're talking about the same crime case and that they should be included in the same group. Make sense? Well, that's what the AI software behind search engine themes does.

Once the interrogation with all the witnesses is finished, the AI software will have learned extremely complex and sophisticated relationships and patterns between all the words in all the pages it has collected.

### **Search Engines and OptiRanker**

OptiRanker takes the information that AI and the search engines generate and turns it into charts, visual aids, organized tables, and concrete numbers that tell you all you need to know. OptiRanker turns the complexity of AI into simple, easy-to-understand data. Then, you can make sure that the keywords that speak the most are included in your copy. That way, your website ends up being inserted into the correct theme group and rises towards the top rankings in the search engines!

### **Keyword Services**

The keyword research and selection portion of the SEO process is no longer just about keyword effectiveness (KEI), keyword density, and keyword placement on your page. Keyword services relate to a complex mathematical relationship between the words and information on your website with that of other websites; it's all governed by Artificial Intelligence. Still, when it comes to the best methods and keyword tools you can use to insert these words into your text, there are a few things you can remember to ensure you do as well as possible.

Think of keywords as sugar in a cake. When you use just the right amount of sugar during the baking process—that is, the best amount of sugar in proportion to the other ingredients—the cake comes out of the oven tasting great. Yet, when you don't use enough sugar, the cake isn't sweet enough; it's bland and tasteless. Conversely, too much sugar in your cake will make it overly sweet and inedible; all that sugar will overpower the other ingredients. Of course, most importantly, only use ingredients that will compliment what you're making!

The same holds true for keyword services. Just as you would read the directions and gather your ingredients before baking, you should also do some keyword research before optimizing your content. Also, when you use too few or too many keywords, your content won't be as effective as it could be. Also, you cannot use keywords that don't fit into the theme of your content. Like the act of baking a cake, you have to measure to make sure you have the right ingredients in the right amount.

## **Keyword Tools Used the Right Way**

So, when a web marketer or web writer attempts to increase a website's rankings to the top of a directory or search engine by haphazardly inserting words into web content, the results rarely even begin to meet their expectations. If there aren't enough keywords in the text, the search engines won't be drawn to it. Similarly, overly repeating and cramming terms or phrases into online text until the meaning is lost for anyone who reads it (an act often referred to as "keyword saturation") is never a productive method of pleasing a target audience or a search engine. As you can tell—using keyword tools to enhance your content is a balancing act.

So, now we come to the question:...

### **How exactly do you write with keywords so that your content is irresistible to the search engines?**

Well, the first thing you should know is that there is no such thing as an absolute perfect related keyword tool. No SEO company, no matter how thorough they're keyword services and keyword research, can guarantee your website a number one spot in the search engines. That's because the algorithms and methods by which search engines use to determine ranking are constantly changing.

An equally important thing to remember concerning keyword services and keyword research is actually not the search engines. The first thing you should be thinking about is the people who will be visiting your site. You need to write your content and design your site in a manner that's appealing to them. Fortunately, much of what you would do—or wouldn't do—to make your audience happy is exactly what you need to do to satisfy the search engines.

### **Keyword Services - Keyword Placement and Density**

A good technique to use when using OptiRanker's keyword tools is what you can think of as the inverted triangle technique. Turn a triangle upside down so that the point is facing downward and the plane of the triangle is on top. Now, if you take that image and see how it's related to keyword tools and keyword placement, what we're talking about is having the highest density of keywords toward the top of your page and fewer words as you go lower in the page. This is not a rock solid rule, as search engine algorithms change frequently.

But think of it this way: Even if using the inverted triangle model gave you no advantage as related to search engine ranking, it would most definitely help you with your human audience. After all, if they're searching with the term "Kona coffee" and are directed to your page, they would be more likely to stay if the keywords and key phrases that they're looking for (those related to "Kona coffee") are toward the top of the page.

Of course, a tried and true method of determining keyword density and placement is to use OptiRanker's tools, such as the Matrix and the Theme Zapper.

We realize that there's a plethora of information to pour through on this site, so we've trimmed our main points down to what one of the things we love most—math! Obviously, these are not genuine mathematical equations, but we like to think that they genuinely sum up the principal ingredients of optimization.