



PART ONE: HOW WE GOT TO NEO™

CMO Summary – the bottom line

Keyword tracking and optimization, a practice that has historically been thought of from a search engine optimization (SEO) standpoint, is an integral part of a company's ongoing data analysis efforts and can provide useful insights for outfacing communications strategies, lead generation tactics, and even large-scale public relations efforts.

This paper will define "the next generation of SEO" for marketing and communications professionals: News Engine Optimization (NEO $^{\text{TM}}$).

 NEO^{TM} gives organizations powerful insights into how the media, influencers, and ultimately customers are responding to and amplifying "sticky" messages: messages that can then be used to drive future marketing and public relations activities, owned media content creation, and even advertising campaigns.

Overview – why NEO[™], why now?

Let's face it – with today's extensive data-driven landscape, companies both large and small are demanding measurement and key metrics in order to make decisions about everything from hiring to budget allocation.

In terms of marketing, how can you be sure the messages you are pushing out into the digital ether are the right messages? Are these messages resonating with influencers, media, and ultimately, your customer? What data do you use to identify what's working and what isn't?

One of the current problems faced by marketing teams worldwide: **it's an Internet battle out there**. Getting noticed, particularly if you are an emerging company, new product or business unit, or an established company who was a little late to the party, is more challenging than ever.

Being ranked on the first page of search results under specific terms related to your company is an effective way to build brand equity and get noticed by potential customers. This is important for a variety of reasons, the least of which is that **online search has turned your prospects into informed investigators** – meaning they come to the proverbial buying table armed with information; they will make judgments about your brand before they speak to a sales rep, send an email inquiry, or click "checkout" on that shopping cart.

"A full 79 percent of the CMOs we talked with believe the level of complexity will be high or very high over the next five years. But only 48 percent feel prepared to cope with it."

- IBM CMO C-Suite Study

27,000,000 pieces of content are shared every day.

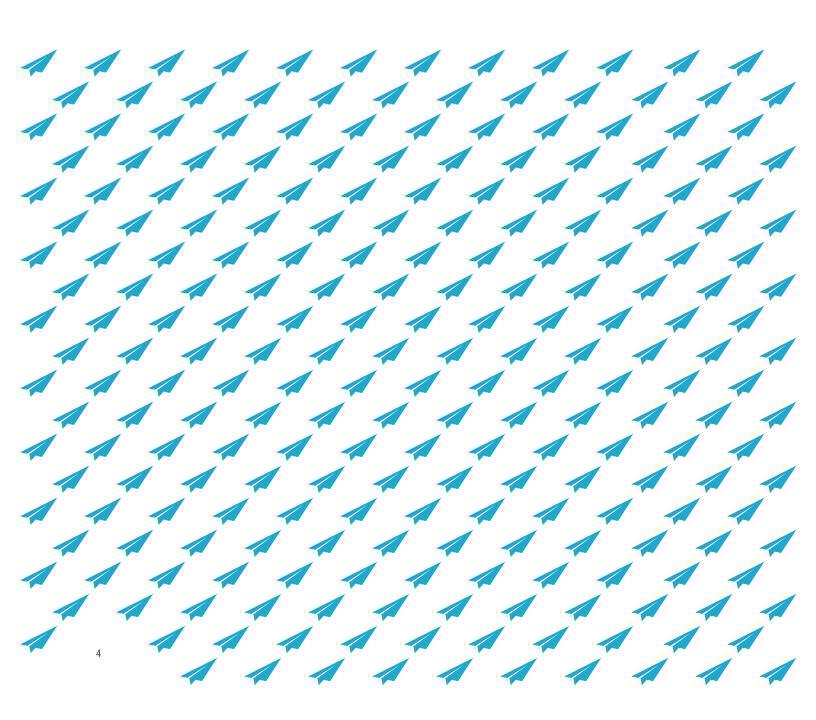
- 2012 study by AOL & Neilson

The customers of today are a far cry from the customers of fifteen, ten, or even five years ago. They don't wait for someone to show up at their door to make a sales pitch. Armed with Amazon reviews, Google searches, forums, online news sites, blogs, expert recommendations, and a variety of devices, they "seek and find" – in real time – based on variables you would never be able to guess without some level of data analysis.

A recent Forrester Report entitled "The Evolved CMO in 2014", reports that 40% of CMOs are hindered by the quality of customer data.

With this in mind, it is more important than ever for companies to leverage every piece of data they have in order to cut through the noise and increase their "signal" in the overcrowded digital environment.

Understanding how customers search and what messages are resonating with them is an important part of connecting the dots and making important business decisions.



PART TWO: TECHNOLOGY BACKGROUND

NEO[™] Methodology

NEO[™] is a key feature of AirPR's Analyst product (airpr.com/analyst): it leverages the power of search to give you insights into what key "soundbytes" are being embraced and amplified by media and influencers on the web and in the social sphere.

The feature offers automated, unbiased, data-driven feedback for understanding which brand messages should continue to be incorporated into future marketing/PR efforts and which ones need to be dropped.

NEO[™] allows brands to take advantage of search's "fresh and relevant" content rule as well as riding the wave of what is trending in the digital environment as it applies to your brand.

A quick refresher on how search technically works

We've all used search engines to find information on everything from "best Thai restaurants" to "best time of year to visit Minnesota and not freeze to death." Search is one of the most empowering tools of our technology-driven age, and has turned consumers into informed decision makers.

But understanding how search works is just as important as understanding what we search for and why.

Search has two major parts that determine what content you see:

#1 - The rank of the website itself

When you type a search query into Google or Bing, the websites that show up closest to the top typically have the highest page rank or "authority." This page rank depends on a mixture of variables including inbound links and references from other sites as well as overall link structure on the web.

#2 - Freshness and relevance of content

In terms of Google, it used to be that you would search for specific keywords and the query would return any content that included those terms. But now Google expands keywords to other search terms that are in a similar content space: this is called a "relevance calculation."

Additionally, results are also based on personalized search history (how you have searched before) as well as freshness of content.

In other words, it's all about "fresh and relevant" content combined with authority.

For example: If you have two websites with same "authority" in terms of content, but one posts something every 3 hours and the other only posts every 3 months, the one who has the fresh content will show up higher on the search results, all things considered.



TIP: For a more in-depth understanding of how search works, here is a useful, interactive article (http://goo.gl/1Das0g) from Google

¹ Soundbytes refer to key messages or terms that best define your brand or company, and for which you are trying to build recognition or brand equity

PART THREE:

UNDERSTANDING THE RELATIONSHIP BETWEEN SEARCH AND NEO™

How does search psychology interact with NEO™?

The search behavior of key audience segments has important implications for those in marketing communications and public relations; because how people think about something related to a brand is often unrelated to how they search for it.

As a marketer, if you are unable to cross the psychological chasm between "what a customer should know about your brand" and "how a customer searches based on how they they think and what they already know" you run the risk of losing them to a competitor or worse — to the Internet vortex.

Here's a great example, as told to us by Bill Tancer, the world's preeminent expert on online behavior and author of New York Times bestseller *Click*:



"As General Manager of Global Research at Experian, I spend a vast majority of time working with large data sets to give companies – mostly Fortune 500 – insights into audience segments' online behavior so they can make better decisions about marketing, advertising, and the list goes on. What people do online – search for, buy, etc. – is probably the most important information a company can have for understanding their customer.

"One such customer (who will go unnamed!) tapped us to provide insights on the Games part of their business. When we started, we were told that they were optimizing around the term **walkthrough**. As it turns out, when we looked at actual search traffic, consumers would search for:

<insert the name of the game> then the word 'cheats'

"This is a great example of how we often have preconceived notions of how consumers search. Sometimes those notions can diminish how we buy or optimize search traffic. We have to look at external data to really be able to understand."

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When your digital marketing and PR efforts match the "search thinking" of your customers, your ability to see a return on your efforts increases exponentially.

But how do you maximize your efforts based on this knowledge?



TIP: Google's Keyword Planner (http://goo.gl/eG8HGI) is extremely useful tool for planning which keywords you may want to incorporate into digital marketing and PR campaigns

PART FOUR: NEO™ EXAMPLES & APPLICATION

How does NEO[™] benefit your PR efforts?

NEO[™] gives you the ability to identify and leverage pieces of content that hold authoritative recommendations. Google Authorship, designed for news publishers, blogs, and other content creation sites, has enabled much higher click through rates.

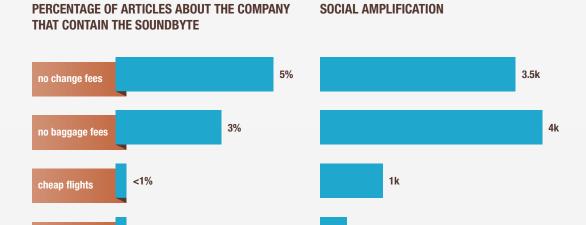
In terms of earned media, suddenly PR has an important impact on search; what was once left to instinct now has data-backed outcomes. If you see a phrase is gaining momentum you can identify it; then start incorporating it into future communications in order to increase the search impact.

Example #1: Virgin America If we look at Virgin America's "in-flight safety video" campaign (over 11M views to date), using the NEO™ feature they would be able to see a few interesting insights from three key soundbytes: safety video, safety dance, and #vxsafetydance. PERCENTAGE OF ARTICLES ABOUT THE COMPANY THAT CONTAIN THE SOUNDBYTE Safety video 9% 310k #vxsafetydance 1% 34k Key insights:

- #1 The soundbyte **#vxsafetydance** is mentioned in less than half the number of articles (8 total articles) as **safety dance** (16 total articles), but shared on social media 3.7x as much.
- #2 0verall, the soundbyte **safety video** dominates in terms of what the media pick up in headlines, even though **safety dance** seems like the "hip" phrase that would resonate.

Example #2: Southwest Airlines

In terms of important brand messages, Southwest Airlines provides us some interesting data in terms of how customers think about those pesky baggage charge fees (**no baggage fees**) and getting the best deals and price flexibility on flights (**no change fees**, **cheap flights**, **flexible fares**).



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Key insights:

flexible fares

- #1 The soundbyte **no baggage fees** has 15% more social media shares than **no change fees**, but it is only mentioned in 60% of the total media coverage.
- #2 Cheap flights has 3.7x the social media shares of flexible fares.
- #3 Overall, soundbytes like **no change fees** and **no baggage fees** perform much better than **cheap flights** and **flexible fares**.

How NEO[™] can be applied to your organization

Essentially, NEO[™] allows you to A/B test your key terms so you can optimize all future PR and marketing efforts. Organizations can leverage the power of NEO[™] to gain insights into which key messages should be incorporated into everything from investor and customer communications to media pitches. In the simplest form, NEO[™] offers a deeper look into the *behavioral aspects* of your messages, supported by data.

How AirPR Analyst supports NEO™

- #1 Ability to input and track soundbytes that are important to your brand
- #2 No technical expertise required to pull data or insights; outputs are automated based on data inputs
- #3 Determines all occurrences of soundbytes in news articles and blogs about your brand and provides an overall percentage of soundbyte mentions
- #4 Shows the reach (social amplification) of that article beyond normal occurrences

Applications (for PR teams/agencies, communications managers, etc.)

- #1 Track soundbytes for a specific product, the outcomes of which can be integral to future PR messaging
- #2 Track soundbytes for a company, brand, or person based on what is resonating with the media, your customers, or audience; leverage that data to create entire campaigns (earned, owned, and even bought media)
- #3 A/B test soundbytes and then optimize email marketing, social media, and key messaging materials by leveraging your top performing messages
- #4 Identify both underperforming and successful messages according to your specific corporate metrics; fill gaps in your messaging as well as "double down" on the winning messages that move the needle for your business

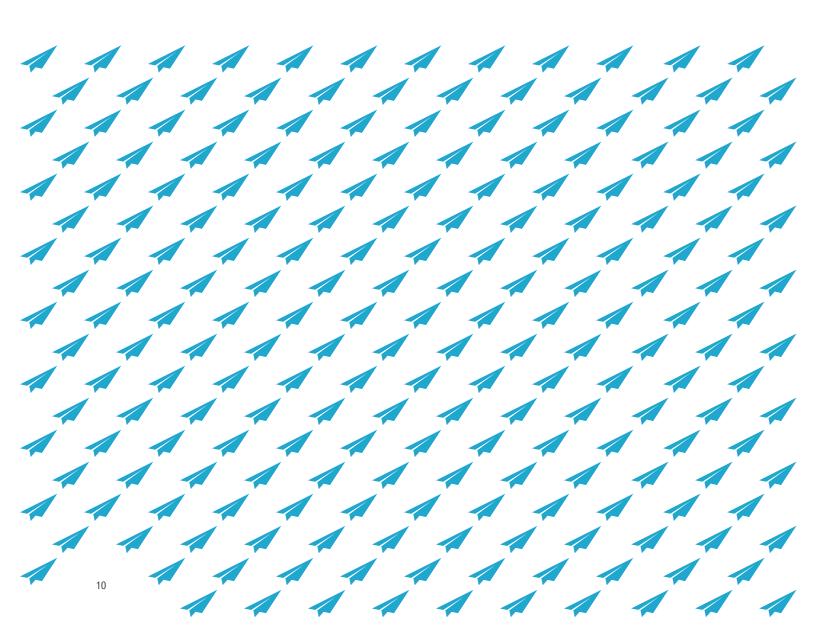
What NEO™ is not

There is no "magic button" to change search engine results. However, the data insights provided by NEO™ allow you to understand what messages are resonating with media in the news and influencers in the social environments.

Giving context to $\text{NEO}^{\scriptscriptstyle\mathsf{TM}}$

In the simplest form, you can think of $NEO^{\scriptscriptstyle\mathsf{TM}}$ in this context:

- #1 Search engines (Google, Bing) are the infrastructure
- #2 Search terms are the inputs into the infrastructure
- #3 Search results are the outputs, and show how the infrastructure values the search terms in relationship to highly ranked news and blog sites
- #4 NEO[™] provides insights into what search terms (soundbytes) have the most value for your brand, company, or product on highly ranked news and blog sites



ABOUT AIRPR

AirPR is a venture-backed technology platform to increase PR performance. As technological innovation continues to shake up everything in the media realm, AirPR's visionary product, Analyst, has garnered attention from Fortune, FastCompany, Bloomberg, TechCrunch, Forbes, Mashable, and PRWeek as well as Fortune 500 brands and fast-growing companies.

AirPR's first-to-market measurement solution, Analyst, uses machine learning and proprietary technology to highlight and measure the impact of PR in a unique and compelling way. The product analyzes digital media activities to highlight the key business metrics important to the brand.



ABOUT THE AUTHORS

Rajagopal Sathyamurthi, Co-founder & CTO

Rajagopal Sathyamurthi is the Co-founder and CTO of AirPR. Prior to AirPR, Raj was a Technical Director at Dreamworks Animation and a Software Engineer at Zynga. He has designed, implemented and deployed several web applications, and most recently, an iOS app as well. He holds a Bachelors Degree in Computer Science and a Masters in Mathematics from the Birla Institute of Technology and Science and a Masters in Computer Science from Stanford University with a specialization in Data Visualization and Computer Graphics. While at Stanford, Raj worked as a Research Assistant in the Artificial Intelligence / Robotics Laboratory. As part of this work, he designed and implemented algorithms that simulate local methods for communication in ad-hoc networks.



Patrick Liang, Chief Architect

Patrick Liang is the Chief Architect for AirPR. Most recently, he was a Senior Software Engineer at Zynga focused on backend optimization and infrastructure for large scale text processing and analysis. Other relevant experience and accolades include: creating usage analytics reports for internal project tracking systems at Apple; developing a data API mashup while at Yahoo (for which he also won the grand prize in their internal mobile app contest); and creating a language and encoding detection tool based on n-gram text analysis while working for IAC. Patrick holds a Bachelors Degree in Computer Science from the California Institute of Technology, where he did coursework in learning systems and neural networks and was a teaching assistant for database systems.



