Speed, Search Engine & Conversion Rate Secrets



Want to read more?

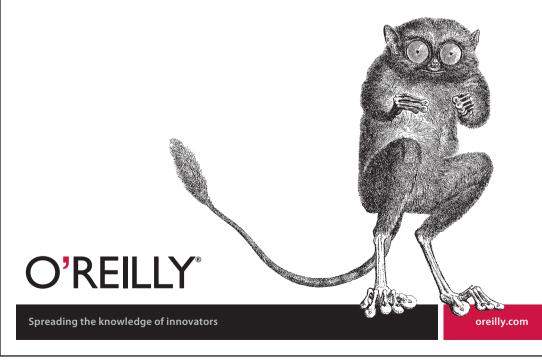
You can <u>buy this book</u> at **oreilly.com** in print and ebook format.

Buy 2 books, get the 3rd FREE!

Use discount code: OPC10

All orders over \$29.95 qualify for free shipping within the US.

It's also available at your favorite book retailer, including the iBookstore, the <u>Android Marketplace</u>, and Amazon.com.



Website Optimization

by Andrew B. King

Copyright © 2008 Andrew B. King. All rights reserved. Printed in the United States of America.

Published by O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472.

O'Reilly books may be purchased for educational, business, or sales promotional use. Online editions are also available for most titles (*safari.oreilly.com*). For more information, contact our corporate/institutional sales department: (800) 998-9938 or *corporate@oreilly.com*.

Editor: Simon St.Laurent Indexer: Lucie Haskins

Production Editor:Rachel MonaghanCover Designer:Karen MontgomeryCopyeditor:Audrey DoyleInterior Designer:David FutatoProofreader:Rachel MonaghanIllustrator:Jessamyn Read

Printing History:

July 2008: First Edition.

Nutshell Handbook, the Nutshell Handbook logo, and the O'Reilly logo are registered trademarks of O'Reilly Media, Inc. *Website Optimization*, the image of a common nighthawk, and related trade dress are trademarks of O'Reilly Media, Inc.

Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and O'Reilly Media, Inc. was aware of a trademark claim, the designations have been printed in caps or initial caps.

While every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions, or for damages resulting from the use of the information contained herein.

RepKover...

This book uses RepKover[™], a durable and flexible lay-flat binding.

ISBN: 978-0-596-51508-9

[M]

Table of Contents

Forev	vord	xi
Prefa	ce	XV
Part	I. Search Engine Marketing Optimization	
1.	Natural Search Engine Optimization The Benefits of SEO Core SEO Techniques Ten Steps to Higher Search Engine Rankings Summary	5 5 7 11 41
2.	SEO Case Study: PhillyDentistry.com Original Site First Redesign: Mid-2004 Second Redesign: Late 2007 Summary	44 44 47 50 54
3.	Pay-per-Click Optimization Pay-per-Click Basics and Definitions Google, Yahoo!, Microsoft, and Everybody Else Goal Setting, Measurement, Analytics Support, and Closing the Loop Keyword Discovery, Selection, and Analysis Organizing and Optimizing Ad Groups Optimizing Pay-per-Click Ads Optimizing Landing Pages Optimizing Bids	55 56 58 62 66 71 74 81

	Other Pay-per-Click Issues	95
	Summary	100
4.	PPC Case Study: BodyGlove.com	103
	Body Glove PPC Optimization	103
	Summary	110
5.	Conversion Rate Optimization	111
	The Benefits of CRO	111
	Best Practices for CRO	112
	Top 10 Factors to Maximize Conversion Rates	118
	Staging Your CRO Campaign	127
	Summary	145
Part	II. Web Performance Optimization	
6.	Web Page Optimization	155
	Common Web Page Problems	156
	How to Optimize Your Web Page Speed	160
	Summary	185
7.	CSS Optimization	186
	Build on a CSS Architecture	186
	Top 10 Tips for Optimizing CSS	189
	Summary	214
8.	Ajax Optimization	
	Common Problems with Ajax	217
	Ajax: New and Improved JavaScript Communications	218
	Proper Application of Ajax	218
	Rolling Your Own Ajax Solution	222
	Relying on Ajax Libraries	226
	JavaScript Optimization	230
	Minimizing HTTP Requests	243
	Choosing Data Formats Wisely	245
	Addressing the Caching Quandary of Ajax	248
	Addressing Network Robustness	250
	Understanding the Ajax Architecture Effect	254
	Summary	256

9.	Advanced Web Performance Optimization	257
	Server-Side Optimization Techniques	257
	Client-Side Performance Techniques	282
	Summary	296
10.	Website Optimization Metrics	297
	Website Success Metrics	298
	Types of Web Analytics Software	302
	Search Engine Marketing Metrics	310
	Web Performance Metrics	323
	Summary	347
Index	x	349

PPC Case Study: BodyGlove.com

In this chapter, we'll show you how to put into action the pay-per-click (PPC) optimization techniques that you learned in Chapter 3 and the conversion boosting techniques you'll learn in Chapter 5, as well as how to use metrics to guide optimization efforts, which we'll cover in Chapter 10. This chapter features a case study that shows how to maximize your PPC advertising budget.

Body Glove PPC Optimization

Body Glove International provides high-quality protective products for people and objects alike. In 2001, the Body Glove Mobile Accessories Group at Fellowes, Inc., developed protective cases for cell phones, laptops, and other handheld electronic devices. In 2007, Body Glove's goal was to develop brand recognition and presence in this very competitive market through a combination of different types of advertising, including a PPC campaign. The primary goal of the campaign was to generate high visibility while minimizing cost per conversion.

We were responsible for creating the campaign and then improving it as a way to conduct an initial market assessment and identify the key ways in which it could be improved for the final quarter of 2007.

Market Analysis

The market for cell phone cases is extremely competitive. As accessories, the products are fairly inexpensive to make and are used as promotional vehicles or branding tools. Competitors include cell phone case companies as well as cell phone manufacturers, such as Motorola and Nokia, and even cell phone service providers such as Verizon and AT&T (see Figure 4-1, which shows a typical search engine result from 2007 for cell phone covers).

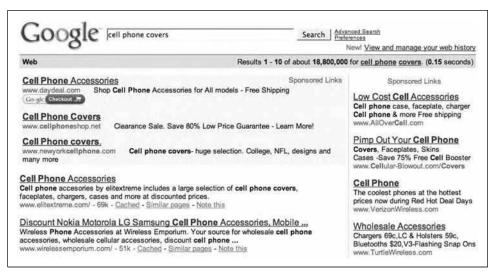


Figure 4-1. A typical search result for the phrase "cell phone covers"

Our first goal was to identify the projected traffic and costs for cell phone cases. We created a list of candidate keyphrases and then broke them into three categories based on their relative price:

• Low cost per click (CPC): \$0.25–\$0.75

• Medium CPC: \$0.76-\$1.50

• High CPC: \$1.51-\$2.50

We used the list of candidate keyphrases to create two scenarios (see Figure 4-2). The first assumed a 3% conversion rate for any given click and the second assumed 5%, both typical for e-commerce sites. We then used a combination of tools, including Wordtracker, KeywordDiscovery, and Google's Traffic Estimator tool, to identify the expected traffic and costs per conversion in the current market for each scenario.

Summary	Est Monthly Clicks	Avg. CPC	Total Cost	Est. Conversions	Cost per conversion
Low	309	\$0.55	\$172.89	9	\$18.64
Medium	3201	\$1.71	\$5,989.10	96	\$62.36
High	2623	\$2.25	\$5,741.43	79	\$72.97
Totals	6133	\$1.94	\$11,903.41	184	\$64.69
Caamaria	2: 5% conversio	- Data			
			Total Cost	Fat Campanalana	Cook now commercian
	Est Monthly Clicks				Cost per conversion
Low	309			15	\$11.18
Medium	3201	\$1.71	\$ 5,989.10	160	\$37.42
High	2623	\$2.25	\$ 5,741.43	131	\$43.78
Totals	6133	\$1.94	\$11,903.41	307	\$38.81

Figure 4-2. Keyphrase scenarios

Research confirmed our suspicions that this market was enormously competitive. In fact, the average price across all the keyphrases that we examined showed that the competition was willing to spend as much as \$2.25 per click! At the conversion rates in scenarios 1 and 2, the average cost per conversion or sale is \$64.69 or \$38.81, more than the value of the product, which averages around \$30. Typically, we'd like to see the cost per conversion at about 10% of the gross value. In this case, the cost per click is around 10%. At our estimated conversion rates, it appears that the cost per conversion exceeds the cost of the product! Advertising for cell phone cases is either a loss leader or a marketing exercise. If this campaign were run in isolation, it would not pay for itself through the sale of the item because the costs are simply too high. Service providers and phone resellers can afford to have a loss leader to promote phone covers, however, if they are making lots of money off service plans, warranties, and high-end phones.

Based on these findings, we developed two key goals for Body Glove Mobile Accessories:

Phase one goal

To increase the conversion rate of paid search visitors by improving the usability and effectiveness of their website

Phase two goal

To make cost per conversion less than or equal to the total value of the product Armed with these specific goals we created the campaign.

Campaign Creation and Kickoff

We performed traditional keyphrase research, relying on the use of Body Glove's brand name and the names of key cell phone brands for our root keyphrases. We focused on keyphrases and bids that were in the \$0.75 to \$1.25 range to keep costs down.

Initial ad copy was diverse and included a number of different experiments. Because few people considered surfing in the context of cell phones, we wanted to try to differentiate "cell phone cases" through that term as well as some others that were specific to the brand name, such as use of the word *glove*. Figure 4-3 shows four examples of starting ads that we used as a baseline for the project.

Our primary concern at the beginning of the project was the ability of the Body Glove site to convert. Although the design of the site was arresting, with handsome shots of Body Glove products (see Figure 4-4), the actual purchase pages lacked prominent calls to action that were going to help conversions (see Figure 4-5).

Cell Cases By Body Glove Visit Our Website To Browse Our Wide Selection Of Cell Phone Cases. www.BodyGlove.com {KeyWord:Cell Phone Cases} Find a Wide Variety of Body Glove Cell Phone Cases for Most Phones www.BodyGlove.com

{KeyWord:Body Glove Cases} Body Glove Cell Phone Covers Visit us to See the Full Selection. www.BodyGlove.com

Motorola Cell Phone Glove Visit Now To Check Out All Of Body Glove's Motorola Cases! www.BodyGlove.com

Figure 4-3. Four baseline ads for variations on "cell phone cases"

Body Glove agreed with our assessment but wanted to begin immediately to learn about the market interest and potential traffic. We agreed that the pages would be incrementally improved in conjunction with the ad copy and keyphrases as the campaign progressed.

With our long-term plans for incremental improvement in place, we initiated the campaign.

Figure 4-5 shows the original product page. Note the call to action, which is simply an invitation to enter a zip or postal code. After the code is entered, the retailer results would show up and the "buy now" call to action would appear as a text hyperlink. Not only was this call to action fairly small, but it was also below the fold on most computer screens.

Initial Outcome and Improvements

As expected, initial conversion rates were fairly low and costs per conversion were fairly high because of the extremely competitive market and the first iteration of the product pages. From August until mid-October, we incrementally tweaked bids and some ad copy to improve click-through rates (CTRs) and CPC. The average CPC steadily improved, while the average ad position slowly improved from about 2 to 1.8 as our quality scores improved. Figure 4-6 shows the improvement in average CPC from September 2007 through January 2008, as the holiday season progressed.



Figure 4-4. Body Glove category page

We were particularly pleased with the steadily decreasing CPC during the very competitive and busy Christmas season in December, when traffic and spending from competitors increased dramatically.

Dramatic Results

On November 1, 2007, the Body Glove Mobile Accessories Group implemented our design recommendations on their product pages, as shown in Figure 4-7.

Now the call to action is above the fold; it is also clearly marked by a blue gradient button with BUY NOW in a large font. The name of the brick-and-mortar dealer is still visible as well. This was a critical requirement of the marketing goals for Body Glove.

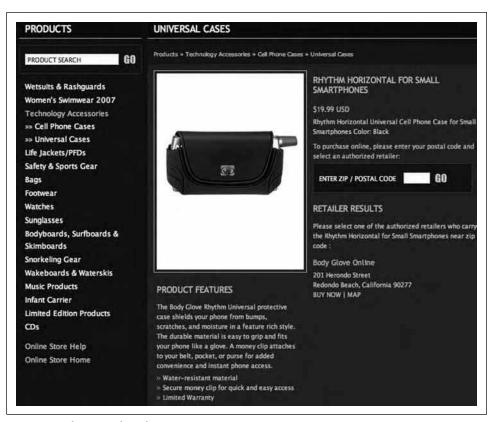


Figure 4-5. The original product page

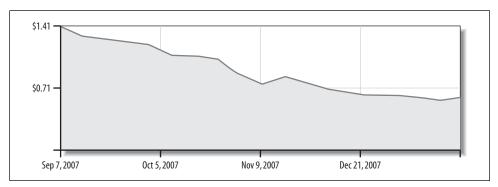


Figure 4-6. Average CPC, by month

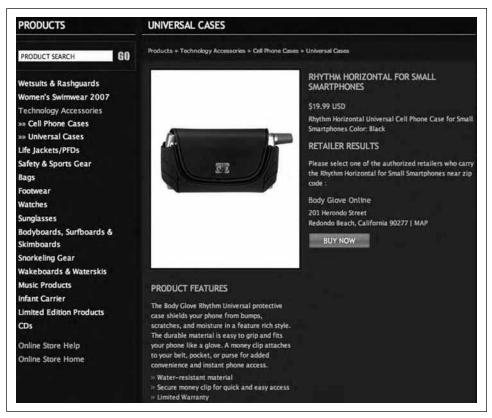


Figure 4-7. The improved product page

The results were immediate and dramatic. The following week's conversion rates increased by 100%, and between November 2 and December 20, 2007, the conversion increased 600% from 0.34% to nearly 2.4%. The majority of these changes came from improvements in the landing pages and the boost from the Christmas shopping season. The only major change made to the PPC campaign at this time was a general decrease in the use of underperforming keyphrases around November 9. Figure 4-8 shows the dramatic increase in conversion rate.

Note that the increased conversion rate stayed relatively steady after the holiday season, indicating that the landing and product pages continued to be effective in slower market periods.

Between December 1 and December 20, we also dramatically reduced the number of keyphrases on which we were bidding. We focused on the most visible and highest-quality terms, which created high CTRs from qualified visitors to take advantage of the new landing and product pages. In particular, we found unique keyphrases that were relatively low cost and not very competitive, based on their bids and number of clicks. This allowed us to enjoy high CTRs and conversion rates even after the holiday season.

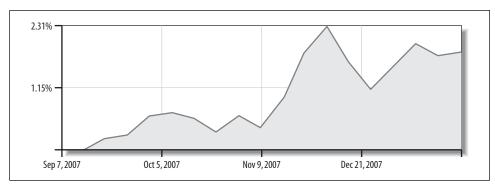


Figure 4-8. Conversion rates for Body Glove cell phone cases, by month

Overall, during the months of November and December the Body Glove cell phone case campaign enjoyed a conversion rate of 1.67% at a cost per conversion of about \$39.63. This was slightly higher than the average price of a cell phone case, but with improved landing pages, the conversion rate and the cost per conversion should continue to improve dramatically.

Summary

Accessory product markets are incredibly competitive. Body Glove's combination of brand recognition and quality gave the company advantages that many companies don't enjoy. Body Glove was, however, still competing against companies that see cell phone accessories as promotional tools first and actual products second. Through a careful PPC campaign and incremental improvements to Body Glove's website product pages, Body Glove's accessory conversions showed excellent progress. This effort demonstrated the importance of steady, incremental improvement and the use of metrics to improve on previous findings. We expect some exciting years ahead for Body Glove in the online marketing space.

O'Reilly Ebooks—Your bookshelf on your devices!



When you buy an ebook through <u>oreilly.com</u> you get lifetime access to the book, and whenever possible we provide it to you in five, DRM-free file formats—PDF, .epub, Kindle-compatible .mobi, Android .apk, and DAISY—that you can use on the devices of your choice. Our ebook files are fully searchable, and you can cut-and-paste and print them. We also alert you when we've updated the files with corrections and additions.

Learn more at ebooks.oreilly.com

You can also purchase O'Reilly ebooks through the iBookstore, the <u>Android Marketplace</u>, and <u>Amazon.com</u>.

