An Introduction to Search Engine Advertising Campaigns for Business Executives

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"How do search engines affect
my global business?"

Overview

I.   How Search Engines Work

1.   Google PageRank

2.   What is Relevance

II.   How Search Engines Impact Your Business

3.   Online Advertising Industry

4.   Customer Beliefs and Biases in Search

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III. What Your Business Must Do

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7.   How to Create Search Ad Campaigns

8.   How to Boost Your Ranking

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10.   Consider Contracting an SEO Firm

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I. How Search Engines Work

PageRank

- Search engine creates a citation graph of hyperlinks on the Worldwide Web
- Your PageRank is proportional to the number of times your site is linked from another website
  - Works well because citations are created by people
- Anchor text is the blue text you read on the page
  - Search engine examines this text because it summarizes a page content
  - Determines relevance of content like images

What is Relevance?

- How do search engine providers define relevance?

- What factors motivate a new feature or change to the ranking algorithm?

- Interviewed 11 technical executives from all of the major search engine companies
  - (Google, Yahoo!, MSN, Ask Jeeves, etc.)

- Discovered three schemas for thinking about search engine quality: market, science, war

What is Relevance?

Schemas (Paradigms) for Search Engine Quality

Objective

Market

- Revenue
- Costs
- Conversions
- Click-throughs

Science

- Experiment
- Feasibility
- Recall
- Precision

War
- Competitive Advantage
- Research & Development

Subjective

- Blacklists
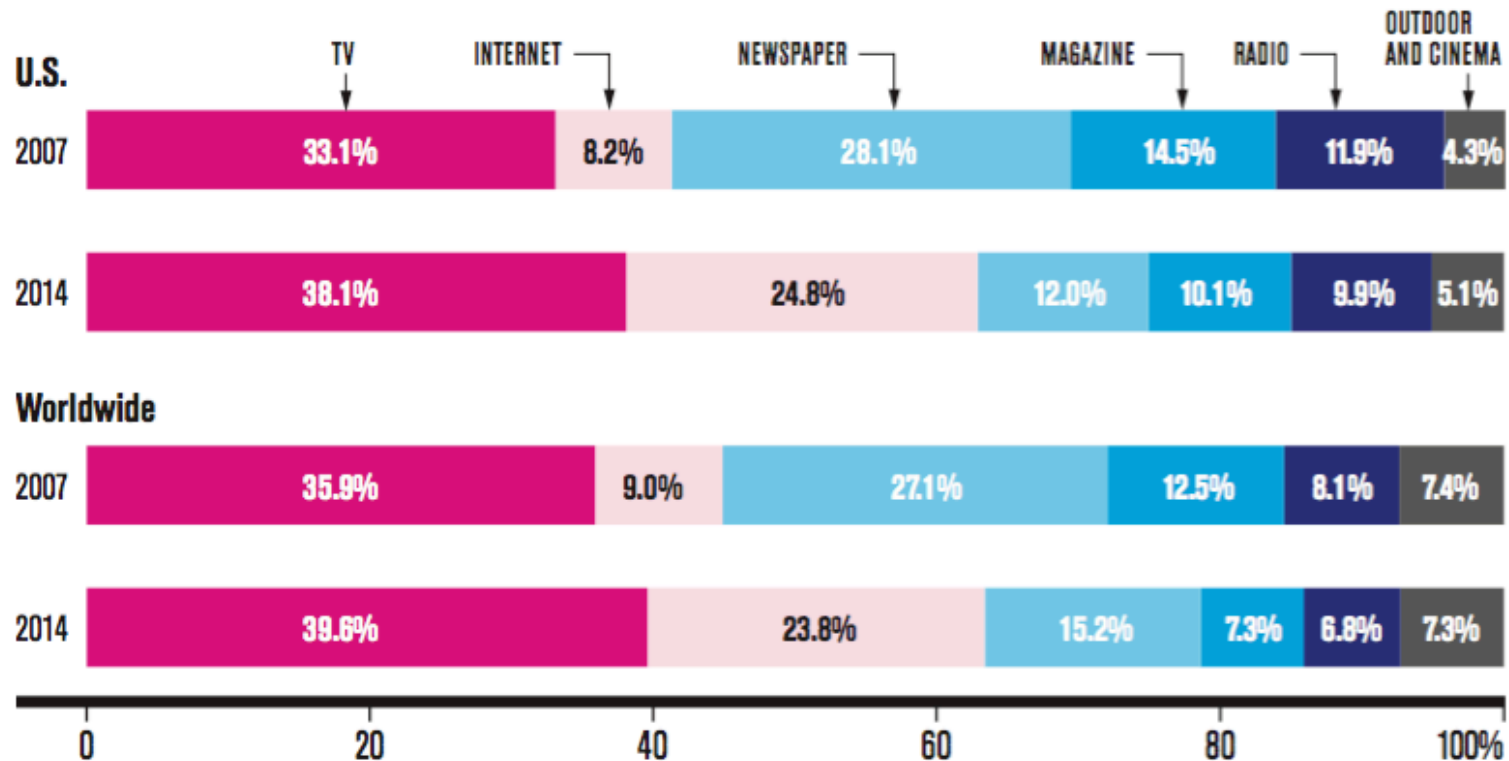- Whitelists
- Topic-specific Weights
- Law Suits

II. How Search Engines Impact Your Business

Online Advertising Industry

Share of ad spending by medium

The internet's share of ad spending in 2014 passed print media's share—newspapers plus magazines—in the U.S. and world, according to ZenithOptimedia's forecast data. Graphic shows share of spending in 2014 vs. prerecession 2007.

U.S.

	TV	INTERNET	NEWSPAPER	MAGAZINE	RADIO	OUTDOOR AND CINEMA
2007	33.1%	8.2%	28.1%	14.5%	11.9%	4.3%
2014	38.1%	24.8%	12.0%	10.1%	9.9%	5.1%

Worldwide

	TV	INTERNET	NEWSPAPER	MAGAZINE	RADIO	OUTDOOR AND CINEMA
2007	35.9%	9.0%	27.1%	12.5%	8.1%	7.4%
2014	39.6%	23.8%	15.2%	7.3%	6.8%	7.3%

0   20   40   60   80   100%

Online Advertising Industry

- Media companies spent $545 billion on ads
- Newspaper and magazines have been dominated by Internet ads in search engines
- Advertising is a matching game between merchants and consumers
- Search engines are extremely efficient at matching because they know consumer information and intent to purchase

Beliefs and Biases in Web Search

- Consumers trust search results
  - Top ranked result provided by search engine only correct 45% of the time
  - After the first result, consumers rarely change their opinion
- Search engines produce positively biased results
  - Positive results three times as likely as negative results

Indirect Benefits of Search Advertising

- Direct type-in visitation: when a user directly types in the URL instead of searching for it

- Empirical study of dataset from e-commerce website in automotive industry

- 599 of the 3,186 keywords were linked to fluctuations in direct type-in traffic

- Significant keywords include company's brand name and broad words like "buy car Toyota"

- Estimated yield of $90,000 which was 50% of the firm's annual paid search budget

III. What Your Business Must Do

Optimal Search Engine Marketing Strategy

- Many ways to market on search engines
  - Keyword-related banner advertisements
  - Paid submission for regular updates
  - Search engine optimization (SEO)
  - Paid product placements

- SEO has the most potential of these options

Optimal Search Engine Marketing Strategy

- SEM only worth investing in under certain circumstances:
  - Buyers have low search intensity
  - Product sold is provided by many other providers
  - Product is of low value

- For niche markets, SEM is not worth investing

How to Boost Your Ranking

- Register your site with search engine indexes
- Give reputable sites a compelling reason to link to your site
- Use keywords in the <title> block
- Use <meta> tags to provide extra information
- Place important information near the top
- The site must be interesting to retain users

How to Create Search Ad Campaigns

1. Define an objective
   a. "increase sales of product X by 10%"
2. Set a budget
   a. "$30 million in 2016"
3. Divide the budget across media types
   a. 40% TV, 30% search, 15% radio, 15% newspaper
   b. Based on expected Return on Investment for each medium
4. Select top keywords for product, allocating budget to the best keywords
5. Monitor conversion rate and tweak keyword allocation to maximize sales

How to Optimize Ad Success Rates

- Optimize click-through rate
  - Retailer-specific terms increase rate by 28%
  - Brand-specific terms do not affect click-through rate
  - Length of the keyword is inversely proportional to click-through rate
- Optimize conversion rate
  - Rank of an ad has huge impact on conversation rate
  - Landing page quality influences rate
  - High click-through rate leads to high conversion rate
  - Brand-specific terms affect conversion rate

Consider Contracting an SEO Firm

- SEO = Search Engine Optimization firm, often contracted by a business to consult and improve its search engine ranking

- Algorithm Robustness: a search engine's ability to exclude the noise created by SEOs

- Created a model to estimate impact of SEOs. Results:
  - Search engines combat SEO manipulation by investing in algorithm robustness
  - This increases search engine profits and diminishes the effect of SEOs
  - However, SEO still generates value for business owners and is often a worthwhile investment for advertising

Search Engine Marketing for Travel Companies

- Two categories of travel search
  - Core queries: transportation and accommodation
  - Specialty queries: context-dependent
- Search engines are the most popular source of information for travelers
- "Touristic level" metric of city calculated as
  - Tourism-related queries / Total queries in city
- SEM strategies depend on destination
  - Size of destination
  - "Touristic level" of destination

Conclusions

1. Search engines are complex, but a basic understanding is invaluable to the modern business executive

2. Virtually every modern consumer business should advertise in search engines because they are the first and most efficient source of contact with the customer

3. If you invest resources, planning time, and evaluation efforts into a search ad campaign, then you can directly influence the success of your campaign.

Future Work

1. Create walkthrough tutorials for creating and evaluating a campaign in real-world advertising tools like Google AdWords
2. Develop case studies of successful online advertising campaigns
3. Research industry-specific advertising advice
4. Research successful trends in advertising campaigns
5. Monitor major changes to the major search engine ranking algorithms over time
6. Survey of campaign evaluation tools on the market

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