

SPENDING ON PPC SEARCH ENGINE MARKETING AND ITS INFLUENCE ON RETURN ON INVESTMENT

Introduction

- High traffic volumes and conversion figures on commercial websites are difficult to achieve
- Pay Per Click (PPC) systems and its management is complex and expensive
- There is a need to match advertising spending with Return on Investment (ROI)

Research Questions

- Which attribute of the PPC campaign affects ROI most in a dynamic situation?
- How can the manipulation of this attribute be used to positively influence ROI?

Literature review

- In aiming for the optimal reserve price - investigate the impact of ad links and multiple keywords on PPC adverts (Xiao *et al*)
- Most investigations on maximising ROI are done for a single keyword (Chen *et al*)
- One can manage multiple keyword campaigns dynamically using the second highest keyword price bid
- There is a need to help advertisers to model these conditions of PPC to achieve optimum profitability

Research Problem

PPC campaigns show that ROI does not follow the same trend as the marketing expenditure

Clicks	145
Impressions	10,084
CTR	0.36%
Avg. CPC	\$0.32
Avg. CPM	\$1.15
Total Cost	\$46.09

too low! →

Methodology

- Collect data from existing, commercial PPC users
- Run an experimental website, identify and set up PPC parameters with an unknown effect on ROI
- Measure, define and test a multi optimisation strategy

Expected Outcomes

- Optimisation strategy to help optimise ROI
- Understanding of dynamism of PPC that will help advertisers focus on the correct attributes

References

- Auerbach, J. *et al.* 2008. An Empirical Analysis of Return on Investment Maximization in Sponsored Search Auctions. *Proceedings of the 2nd International Workshop on Data Mining and Audience Intelligence for Advertising*, ACM 978, 1-9.
- Chen, J. *et al.* 2006. Resource Packaging in Keyword Auctions: web-based information systems and applications. *Twenty-Seventh International Conference Systems*, 1999-2014.
- Szymanski, B.K. and Lee, J.S. 2006. Impact of ROI on Bidding and Revenue in Sponsored Search Advertisement Auctions. *Second Workshop on Sponsored Search Auctions*, ACM Electronic Commerce.
- Xiao, B. *et al.* 2009. Optimal reserve price for the generalized second-price auction in sponsored search advertising. *Journal of Electronic Commerce Research*, 10 (3): 114-129.



adjacent to or above organic results on search engine results pages, or anywhere a web developer chooses on a content site. [1]

