

Executive Summary: Optimal Advertising Campaign Strategy

Our comprehensive analysis of the £1M digital advertising budget allocation reveals that traditional linear spending models significantly oversimplify market dynamics. Through progressive modelling refinements, we discovered that cost-per-click (CPC) rates increase substantially with higher spending, particularly beyond £20,000 per keyword threshold.

Initial analysis identified "retail UK" as our most efficient keyword at £3.93 per click, while "dua lipa gloves" proved least efficient at £82.30 per click. However, the critical insight emerged when examining budget-scale effects: CPC rates do not remain constant but increase significantly with higher spending levels. This finding fundamentally challenges the initial assumption of allocating the full £1M budget.

Based on our piecewise linear optimization model, we recommend starting with a significantly smaller total budget of £75,000, distributed primarily across three key keywords: "retail UK," "free shipping UK," and "spotted dress." This conservative approach allows for careful monitoring of CPC dynamics while maintaining campaign efficiency. Each keyword should initially receive no more than £20,000, as our analysis shows performance deterioration beyond this threshold.

The recommended strategy emphasizes gradual scaling based on performance metrics rather than immediate full-budget deployment. This approach not only optimizes immediate click generation but also provides valuable data for future budget adjustments. Cross-platform attribution tracking should be implemented to accurately measure campaign effectiveness and prevent redundant spending across platforms.

Risk management features prominently in our recommendations through strategic keyword diversification and strict performance monitoring. Regular reallocation of budgets based on performance data will help maintain campaign efficiency while adapting to market changes. The strategy should be reviewed monthly, with particular attention to CPC trends and competitor behaviour.

Looking forward, we recommend additional analysis in three key areas: seasonal trend impact on CPC rates, cross-platform attribution modelling, and competitive bidding effects. These insights would further refine our optimization model and improve budget allocation decisions.

Success metrics should extend beyond simple click counts to include cross-platform attribution data and long-term customer value indicators. This broader perspective will better align campaign performance with overall business objectives while maintaining cost efficiency.

This conservative yet data-driven approach balances immediate performance optimization with long-term strategic goals, while maintaining the flexibility to adapt to changing market conditions. By starting with smaller, targeted budgets and scaling based on actual performance data, we can maximize campaign effectiveness while minimizing inefficient spending.

Supporting data and detailed analyses are available in the referenced workshop questions, particularly Q1.4 for CPC scaling effects, Q6.7 for optimal budget determination, and Q8 for piecewise linear modelling insights.