

## **The Utilization of Manual & Automated PPC Bidding Strategies in the B2C Ecommerce Sector**

**Braden Vernon, MBA**

### **Abstract**

Marketing is core function that constitutes a significant portion of all business plans. An effective marketing strategy is directly related to the financial success of all organizations and their ability to position their brand in the market and obtain a competitive advantage. With the development of the internet, email, search engines, and social media, organizations have had to significantly adjust their marketing strategies to reach users across these digital channels. This research has focused on, Pay Per Click (PPC) advertising, a common and effective digital marketing strategy, with the purpose of determining whether manual or automated PPC bidding strategies are most suited for companies within the B2C E-commerce sector. This author of this paper has engaged in exploratory research to obtain both quantitative and qualitative data on this subject through employing a survey methodology. The data collection process involved surveying a number of Google Adwords certified professionals on their experience with using manual bidding strategies and Google's automated bidding strategies in accounts within the B2C Ecommerce sector. The primary finding of this report is that there is a clear correlation between the experience of an Adwords account manager and the recommendation of whether to employ manual, automated or a combination of both strategies by certified Adwords professionals. It was determined that experienced account managers should rely more heavily on manual strategies and optimization tactics and less experienced account managers on automated bidding strategies.

### **1. Introduction**

Australians spend an average of 10 hours per day on the internet (Digital Australia n.d.), and over the past decade, online shopping has grown significantly. In Australia alone online sales generate 18 billion dollars in revenue annually and has an annual growth rate of 16.2 % (Magner 2016). In light of this, organizations across the globe have been adapting their marketing strategies in order to leverage this expanding market. The growth of the internet and online shopping has prompted many companies to recognize the importance of crafting and implementing digital marketing strategies which effectively target their audience and assist them in achieving a competitive advantage. It is now considered critically important for the growth of all businesses, regardless of their size, to maintain an online presence (Kennedy and Kennedy 2014).

Developed in 1996, Pay Per Click (PPC) advertising has since become one of the most common digital marketing strategies. It is used across the board by multiple national enterprises (MNE), small to medium enterprises (SME), not for profits (NFP) and Government agencies, as a means of communicating with relevant target audiences. PPC platforms allow advertisers to display advertisements in response to user generated search queries on popular search engines, and the advertisers only pay each time their advertisement is clicked, not displayed. Unlike traditional methods of advertising, advertisers only pay for verifiable results. Furthermore while traditional advertising methods primarily create brand and product awareness amongst consumers, PPC advertising gives organizations the ability to target consumers who are already in the second stage of the buying process (Kotler et al. 2012) and are engaged in the process of active information search online. Since related advertisements are only shown to qualified prospects in response to their specific search queries, it is considered as less invasive by users, contributing to its effectiveness. Geddes (2014) highlights that 'When ads become apart of the information-gathering process, they cease to be ads...they are pieces of information that consumers are seeking' and it's an interesting observation that 50% of adults do not recognize the Ads displayed Google's search engine response page (SERP) as paid advertisements (Charlton 2016).

In addition to this, the ability for organizations to strategically target their market based on multiple demographics, to re-market to users who have engaged with their brand, measure detailed analytical data and clearly understand their return on ad spend (ROAS) are other key reasons that PPC advertising is considered so effective (Liu et al. 2010).

Google is the world’s largest search engine. It is used six billion times per day, which equates to 70,000 searches per second (Marshall et al. 2014). Not surprisingly, Google Adwords is therefore the world’s largest PPC platform, and has been credited as Google’s revenue foundation (Eaton and Kenyon 2014). In fact, 99% of Google’s profits are allegedly derived from Adwords (Khraim and Alkarablieh 2015). Google Adwords is an online generalized second price auction platform in which advertisers bid against each other to have their advertisements shown when related keywords are searched on Google. Every time a user of Google enters a search query, Google Adwords runs a live auction in which the advertisers who have bid on keywords that are related to the users search query compete against each other. The advertiser with the highest ad rank (AR) wins position one on the SERP, while the second highest wins position two, and so on. Since 2008, Google has started introducing automated bidding strategies, which allow Google’s algorithms to automatically adjust an advertiser’s bid based on historical performance data. Since the introduction of automated bidding strategies, there has been significant debate over which strategies, manual or automated, are the most effective for advertising B2C e-commerce websites. This subject will be the focus of this research paper.

To date few empirical studies on PPC marketing have been completed. Yang & Ghose (2010) have researched whether there is positive, negative or zero interdependence between organic and paid ad results on the SERP, through their impact on click through rate (CTR). Jansen and Resnick (2006) addressed users’ perceptions between paid ads and organic results and Jerath et al. (2011) studied the click behavior of consumers and the role of keyword popularity. However, to date none of the available research addresses the issue of whether manual or automated bidding strategies are most suitable for advertising websites within the B2C e-commerce sector.

**2. Orientation: relevant literature, case organisation and research questions**

In the Google Adwords auction advertisers set a maximum cost per click (CPC), which is the maximum amount they are willing to pay for a click on their advertisement, this CPC constitutes their bid. However, Google Adwords employs a generalized second price auction mechanism, thus advertisers aren’t charged their maximum CPC when their advertisement is clicked, rather they pay the minimum amount required to outbid the next highest bidder. In the Adwords auction model, the bidder with the highest AR, which may not necessarily be the bidder with the highest CPC, is the winner will receive the top paid position on the SERP, that are displayed above the unpaid (organic) results. There are two variables that determine the advertiser’s AR: maximum CPC and quality score (QS). While maximum CPC is the highest amount the advertiser has determined they are willing to pay for each click, QS is a metric that measures the quality of an ad, the website’s landing page and its relevance to Google’s users. Geddes (2014) describes QS as ‘a metric that Google uses to help keep the paid search results relevant to users’. Google calculates AR by multiplying each bidder’s maximum CPC by their QS (Table 1). The bidder with the highest AR is placed in position one on the SERP.

<b>Ad Rank</b>	$AR = \text{Max CPC} \times QS$
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Table 1: Ad Rank Formula.

Therefore, to improve performance in the Adwords auction, Advertisers can adjust bids and improve the quality of their advertisements and website landing pages. The maximum CPC that an advertiser sets clearly has a significant impact on the advertiser’s whole performance in the Adwords auction, as it has a direct influence on their AR and costs. Since 2008, Google has introduced automated bidding strategies, which grant Google’s algorithms the freedom to adjust the max CPC to an amount which it perceives to be the most suitable in order to achieve a particular objective. A total of seven automated bidding strategies now exist. These are:

- a. Target CPA  
Target CPA (Cost Per Acquisition) automatically sets bids to achieve as many conversions as possible at a desired CPA that is set by the advertiser.
- b. Enhanced Cost Per Click  
Enhanced cost per click (ECPC) automatically adjusts manual bids for clicks that are more or less likely to lead

to a conversion. ECPC is semiautomated, as with this strategy a manual bid is still set by the advertiser and while Google will adjust this bid, overtime they will keep the average below the advertisers Mac CPC.

**c. Target ROAS**

Target ROAS (Return on Ad Spend) automatically sets bids to achieve a desired ROAS that is selected by the advertiser.

**d. Maximize Clicks**

Maximize clicks automatically set bids to achieve as many clicks as possible with the advertisers budget.

**e. Maximize Conversions**

Maximize clicks automatically set bids to achieve as many conversions as possible with the advertisers budget.

**f. Target Outranking Share**

Target outranking share allows advertisers to select a competitor's domain in which they wish to outrank that competitor, and how often they wish to outrank their competitor. Google Adwords then automatically set bids that are focused on meeting that target.

**g. Target Search Page Location**

Target search page location automatically sets bids to help increase the likelihood that your advertisement will appear in position one or on page one.

## **2.1 Literature Overview**

A review of the literature reveals that in comparison to other non-internet based advertising methods, such as print, TV and radio, there is limited academic publications available on PPC marketing. This is largely due to the fact that in contrast to traditional advertising methods, PPC is still a relatively new concept, thus the quantity of literature will continue to grow. The commercial success of the PPC advertising model is documented in the available literature (Edelman et al.2007) and empirical studies are available.

### **2.1.1 Organic and sponsored listings and their level of interdependence**

Yang & Ghose (2010) conducted research into the relationship between organic and sponsored listings on the SERP and their level of interdependence. It had been theorized that when both a paid and organic listing for the same brand are present on the SERP, the 'second opinion effect' will lead to a higher CTR. Their empirical findings indicate 'that the presence of organic listings is associated with a higher probability of click-throughs on paid ads, and vice versa.' This finding supports the hypothesis that there is a positive interdependence on CTR between paid and organic rankings, which highlights the necessity for organisations to utilise both PPC and Search Engine Optimisation (SEO) marketing as part of their overall digital strategy. The majority of the web traffic that retailers receive from search engines still comes organic links on the SERP (Jerath et al. 2014), thus SEO and PPC are strategies which work in synergy with one another. Yang & Ghose (2010) conclude that '...firms, which tend to rank highly in organic search, are more likely to benefit from sponsored search advertising'. This positive interdependence was also found to increase expected profits from 4.2% to 6.15%.

### **2.1.2 Consumer perceptions towards paid and organic SERP listings**

Both practitioners and academics have shown great interest in users' perceptions towards paid and organic listings on the SERP. Jansen and Resnick (2006) found that there was a 'strong preference for non-sponsored links, with searchers viewing these results more than 82% of the time'. However, Jansen (2007) finds that paid links are more relevant to users, in contrast to organic links, when users are searching for ecommerce related keywords, which again highlights the necessity of engaging in both SEO and PPC advertising. After analyzing 1.5 million searches of 120 different keywords Jerath et al. (2014) found that 'the total clicks and the proportion of sponsored clicks after a keyword search is greater for less popular keywords.' Their findings show that searches for more popular keywords (keywords with a higher search volume) tend to result in more clicks on the organic results while less popular keywords (keywords with a lower search volume) resulted in more clicks on paid ads, suggesting that organisations could focus their PPC activity on less popular keywords and their SEO strategy on more popular keywords. This finding supports the purchasing funnel theory of consumer purchasing (Howard & Sheth 1969) and indicates that lower-involvement consumers tend to search for more popular key words, while higher-involvement consumers, those who are closer to completing a purchase, tend to search for less popular keywords. This supports Jansen's (2007) findings that paid links have more relevance for e-commerce related search queries.

We can hypothetically understand that qualified prospects, who are further down the buying funnel, are more inclined to search for less popular, long tail keywords, which demonstrate a high-commercial intent. These users are likely to find specific paid listings more relevant to their search query and thus click these above organic listings on the SERP.

### **2.1.3 Impact of automated bidding strategies**

A publication in the *Search Engine Journal* has claimed that ‘...automated bidding can lead to higher CPC’s and a lower ROI if multiple advertisers are using position-based and some performance-based bidding rules’ (Castro 2013). However, no empirical studies have been conducted on automated and manual bidding strategies in Google Adwords and their impact on B2C the e-commerce sector.

## **2.2 The Case**

The American Marketing Association defines marketing as ‘the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society at large’ (Belch & Belch 2011). Within the B2C ecommerce sector, the majority of this process takes place online. The B2C ecommerce sector has been rapidly growing since its beginnings in 1979 when Michael Aldrich demonstrated the first online shopping system. Today, e-commerce transactions account for 10% of all global retail sales, amounting to revenue of 1.9 trillion US dollars (Statista 2016). In Australia alone online sales generates 18 billion dollars in revenue and has an annual growth rate of 16.2% (Magner 2016). E-commerce has taken the world by storm, and organizations across the globe have had to adapt their strategies to leverage this growing market. Duffy (2004) suggests that e-commerce is not necessarily a new way of doing business, but rather a ‘...better way of doing the same business that people have been doing for years’.

As a part of communicating offerings, all successful operators within the B2C ecommerce sector utilize a combination of the most common digital channels, which are search engine marketing (SEM), display advertising, email marketing, affiliate marketing and social marketing (Ryan 2014). The vast majority engage in SEM, which is split into two distinctive methods: SEO and PPC. SEO is the process of ‘designing a website to appear early in search engine result pages (SERPs) when a user conducts a related search’ (Irfan et. al 2017) and is an effective method for promoting goods and services (Cahill & Chalut 2009), other than hiring the services of an SEO professional there is no advertising costs associated with SEO. PPC is ‘based on competitive bidding among commercial advertisers’ (Kapoor et al 2016) for an advertising position on the SERP, and in contrast to SEO, advertisers pay for every click their advertisement receives. PPC advertising is a fundamental component to success in the B2C e-commerce sector, thus large brands are investing up to \$50 million dollars per annum running advertisements on Google Adwords alone, while the average small business using Google Adwords spends between \$100,000 to \$120,000 per annum (Wordstream 2016). Businesses within the B2C ecommerce sector want to show advertisements to targeted users, remarket to those who have previously visited their website, improve branding and drive highly targeted traffic to their websites. Importantly, PPC advertising meets these specific needs and through tacking scripts advertisers and clearly measure how much return they are receiving for every dollar invest in PPC. As B2C e-commerce businesses are investing such large amounts into PPC advertising, they need to ensure they are implementing strategies that result in the highest ROAS and organizations are often unsure of whether automated or manual bidding strategies are most suitable to do so. The focus of this research is important to the B2C e-commerce sector as this paper aims to reveal important insights from certified Adwords professionals on whether automated or manual bidding strategies are most suitable for the B2C e-commerce sector.

## **2.3 Research Questions**

As the B2C e-commerce sector is attempting to understand whether automated or manual bidding strategies are most suited, this paper will seek insight into these issues through considering the following four research questions.

1. Do experienced digital marketers have clear a preference between manual and automated bidding strategies when managing SME Google Adwords accounts within the B2C e-commerce sector?
2. From experience, do digital marketers find that manual or automated bidding strategies produce a higher ROAS in the B2C e-commerce sector?

3. Does the experience of the account manager determine whether manual or automated bidding strategies are most suited?
4. What bidding strategies are most suited for SME that manage their Google Adwords accounts in-house?

### 3. Research Methodology

#### 3.1 Research Method

To gain further insight into this subject, the author of this paper has engaged in exploratory research, using a survey methodology. This research has been conducted through an inductive approach, as the author starts with four relevant research questions and proceeds to develop a theory and understanding of the problem through investigation (Greener 2008). This research has been predominately quantitative in nature and will be reported as quantitative data, however some of the data collected is qualitative in nature, such as the personal preferences of digital marketers. (Greener 2008) note that research combining qualitative and quantitative data is a common approach. The survey methodology selected involves a self-administered questionnaire (Saunders et al. 2009 ) which is completed via an online survey platform.

#### 3.2 Data Collection

To further understand this issue, primary data has been collected from 25 Google Adwords certified professionals through an online survey (Appendix A). 25 certified Adwords professionals that meet suitable criteria, as outlined in section 3.3, were recruited from the Google Advertisers Community to complete the web-based survey.

The Google Advertisers Community is an online community run by Google for those who use Google's online platforms, such as Google Adwords, to advertise. On the 10/05/2017 the author of this paper submitted a post within the Google Advertisers Community, which asked Google Adwords certified professionals, who meet the required criteria, to complete an online survey. This online survey was hosted at Survey Monkey, one of the world's largest online survey hosts. The survey was developed to collect relevant primary data from 25 Google Adwords certified professionals as a part of the author's primary research into whether manual or automated bidding strategies were most suitable for SME within the B2C e-commerce sector. The survey consisted of five multiple choice questions (Appendix A)

#### 3.3 Participants

25 subjects from the Google Advertiser Community volunteered to complete these survey questions via an online platform. All 25 participants were required to meet the following criteria to ensure their suitability for this research.

- a. Google Adwords Certified
- b. Currently working as a digital marketing consultant (or similar role)
- c. Currently managing >2 Google Adwords Accounts For small-medium businesses in the B2C (business to consumer) e-commerce sector
- d. Have experience in using both manual and automated bidding strategies
- e. Have previously split tested manual and automated bidding strategies in Adwords accounts for small to medium business in the B2C e-commerce sector

### 4. Ethical Considerations

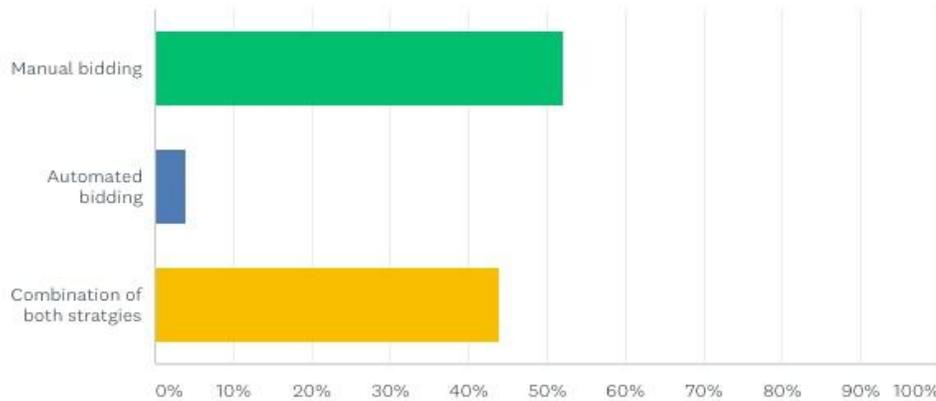
There is no foreseeable risk of harm to or discomfort to any of the participants in this research, all of whom were volunteers. Thus, this research carries a negligible risk by the standards outlined in the National Statement On Ethical Conduct In Human Research. The data collected from the 25 Adwords Certified professionals contained no information which could in anyway identify their clients and the brands they were managing, so as to mitigate the risk of confidential information being shared.

### 5. Presentation of Findings

#### 5.1 Analysing the data

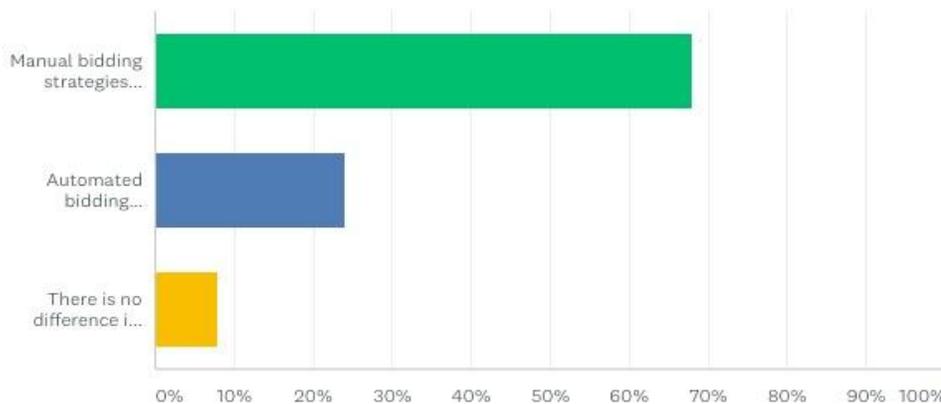
An analysis of the quantitative data reveals that the majority (52%) of consultants surveyed, preferred using

manual bidding strategies whilst managing Google Adwords accounts in the B2C e-commerce sector, in contrast to 44% who preferred a combination of both manual and automated bidding strategies and just 4% who preferred automated bidding, as demonstrated in figure 1.



**Figure 1** – bar chart demonstrating answers to question one as a percentage of total responses.

Furthermore 68% have found that manual strategies produced a higher ROAS, in contrast to 24% that have found that automated strategies produced a higher ROAS and 8% who indicated that there was no difference in ROAS between strategies (figure 2)



**Figure 2** – bar chart demonstrating answers to question two as a percentage of total responses.

Additionally 84% of subjects believed that the experience of the account manager impacted the suitability of manual or automated strategies, with 80% indicating that experienced account managers should rely more on manual bidding strategies in contrast to 4% who felt they should rely on automated strategies. The majority of SME within the B2C e-commerce sector hire the services of a digital marketing consultant or agency to manage their Google Adwords campaigns, however some still choose to manage this in house. 40% of the consultants surveyed recommended that such advertisers utilize both manual and automated bidding strategies, while 36% recommend automated and 24% manual bidding strategies.

**5.2 Answering the Research Questions**

The obtained data provides answers to each of the five research questions, as below and insights into the overarching problem of whether manual or automated bidding strategies are most suited for accounts within the B2C e-commerce sector. Do experienced digital marketers have clear a preference between manual and automated bidding strategies when managing SME Google Adwords accounts within the B2C e-commerce sector?

The consultants surveyed had a clear preference towards utilizing a manual bidding strategy as opposed to automated strategies, which just 4% (1 out of the 25 surveyed) preferred. However a significant portion (44%) of those surveyed indicated that their preference was to utilize a combination of both manual and automated bidding strategies.

All of those surveyed had experience in both strategies and in split-testing these strategies as per the pre-requisite criteria. Although a preference towards manual strategies exists, we can theorize that a number of consultants implement both manual and automated strategies for the purpose of split testing, which is a common industry practice, as its well accepted that advertisers should ‘test and re-test their brand’s sites and campaigns to see what will be successful in the AdWords regime.’ (Arenstein 2016). Furthermore it is likely these consultants have certain objectives which they find automated strategies more suited for, as 36% also agreed that some automated strategies were more effective for meeting a specific advertisers goal. Does the experience of the account manager determine whether manual or automated bidding strategies are most suited?

The surveyed population overwhelmingly agreed (84%) that the experience of the account manager does determine the suitability of manual and automated bidding strategies. Based on this data, it would appear that manual strategies are most suited for experienced account managers and automated for those with less experience. Based on their professional experiences, 80% believed that that experienced account managers should rely more on manual bidding strategies and less experienced advertisers on automated strategies. Google Adwords is an online auction platform that has a degree of volatility to, therefore it is logical that those with extensive experience would be inclined to manually manage and adjust their bids based on their interpretations of performance data, as opposed to leaving this task up to algorithms.

Likewise those with less experience in data interpretation and optimization would be more inclined to allow Google’s algorithms to analyze various metrics and make complex bidding decisions. From experience, do digital marketers find that manual or automated bidding strategies produce a higher ROAS in the B2C e-commerce sector? The majority (68%) of digital marketing consultants surveyed found that a manual bidding strategy produced a higher ROAS. Thus based on the data obtained manual bidding is recommend for improving ROAS.

However, this raises the question as to why 44% of those surveyed still preferred using both manual and automated strategies. Although a high ROAS is most often the primary objective on B2C e-commerce websites, brands will often have other objectives, such as to target outranking share, so they can rank higher than their competitors on Google’s SERP. Although less common, brand awareness is also an objective of many advertisers on Google Adwords and this provides an explanation as to why 44% of those surveyed still prefer to utilize both strategies, as 36% also agreed that some automated strategies were more effective for meeting the advertisers goals. What bidding strategies are most suitable for SME within the B2C e-commerce sector, who manage their Google Adwords accounts in-house?

40% of the consultants surveyed recommended that such advertisers utilize both manual and automated bidding strategies while 36% recommend automated and 24% manual bidding strategies. When compared with the results in previous questions, specifically that 80% indicated that experienced account managers should rely more on manual bidding strategies in contrast to 4% who felt they should rely on automated strategies, we can conclude that automated strategies are more suitable than manual strategies for SME within the B2C e-commerce sector that manage their accounts in-house and who don’t have the same level of experience or expertise as a digital marketing consultant or digital agency. However, interestingly, there are still many consultants who recommend a combination of both strategies, perhaps indicating that even less experienced managers should still engage in split testing to determine which yields the superior results within their account.

## 6. Implications and Recommendations

The research conducted identifies the importance of both manual and automated bidding strategies in the B2C e-commerce sector, and highlights that these strategies are not mutually exclusive. Within the industry account managers are often categorized into the ‘for’ and ‘against’ camp when it comes to automated strategies, however, our findings indicated that both strategies have a place in most accounts and that the appropriateness of one bidding strategy above another is particularly dependent on the level of experience and skill the individual account manager has. Considering that 84% of the surveyed Google Adwords professionals stated that manual strategies were more suitable for experienced account managers while 44% still preferred utilizing both manual and automated bidding strategies, we can determine these strategies are not mutually exclusive, even for highly experienced professionals. Based on the data obtained from these certified Adwords professionals, the following recommendations can be made for Adwords account management in the B2C e-commerce sector:

### **6.1 Experience of Account Managers**

Overall, experienced account managers should rely more heavily on manual bidding strategies as opposed to Google's seven automated options. Presumably their experience in understanding multiple metrics, data interpretation and optimization techniques is more reliable than an automated algorithm. Experienced account managers should still consider automated strategies for certain objectives and for the purpose of split testing the automated strategies against their own manual optimizations. From the survey results 44% of the experienced and certified Google Adwords professionals preferred utilizing a combination of both manual and automated bidding strategies. In contrast less experienced account managers who are not well acquainted with the necessary data interpretation or advanced optimization techniques should rely more automated strategies and allow Google's algorithms to adjust bids based on historical performance data. Less experienced managers typically don't have the skills or time to analyze all account metrics and make relevant optimizations. In these cases automated strategies can assist.

### **6.2 Manual Bidding Strategies for Improving ROAS**

Manual bidding strategies should be implemented when attempting to improve the ROAS of a Google Adwords campaign and not solely automated. 68% of the consultants surveyed found that manual strategies produced a higher ROAS while only 8% found that using automated strategies alone would produce a higher ROAS. As with all Adwords strategies split testing should be utilized,

### **6.3 'in house' Adwords Management and Automated Bidding Strategies**

Businesses within the B2C e-commerce sector that manage their Google Adwords 'in house', without using professional services, should adopt Google's automated strategies above manual bidding and ideally split test both to identify the most suitable strategy for their brand.

Only a minority (24%) of the consultants surveyed recommend that such organizations adopt manually strategies exclusively, which is most likely related to their level of experience as addressed in section 6.1, in which it was noted that automated bidding strategies were preferred above manual strategies for less experienced account managers.

It should be noted that this study was confined to a limited number of certified Adwords professionals and there is the opportunity additional quantitative and qualitative research to be conducted to further explore this subject. While 52% of the surveyed Adwords professionals preferred manual bidding strategies 36% also noted that some automated strategies were more effective for specific objectives, thus there is the opportunity for additional research to explore which of the individual automated strategies can be more effective than manual bidding and for which objectives. Another area that was not addressed in this paper is how much historical performance data an account should have before any automated strategies are adopted, as in order for Google's algorithms to make automated optimisations they need a reasonable amount data to first analyse. Any future research into these areas would provide additional insights into the findings of this research paper.

## **7. Conclusion**

Kotler et al. (2012) note that 'financial success often depends on marketing ability'. This is particularly true for organizations that operate in the B2C e-commerce sector and who heavily rely on digital channels such as PPC, SEO and social media to engage internet users and encourage them to complete online transactions. As a result, advertisers using Google Adwords have the responsibility of ensuring marketing budgets are used most efficiently and allocated correctly to produce the best results. In order to do this, they need to understand which bidding strategies are most suitable. The purpose of this paper was to research whether manual or automated PPC bidding strategies were most suitable for SME in the B2C e-commerce sector and provide information that would assist Adwords account managers in making bidding decisions that will affect their accounts performance.

From the data reviewed in this paper we can conclude that whilst manual strategies are most suited for experienced account managers and automated strategies for less experienced account managers, both manual and automated bidding strategies can be used appropriately in Adwords campaigns for specific purposes within the B2C e-commerce sector.

From the literature reviewed we can also determine that organizations employing Google Adwords should also engage in an SEO strategy, so as to benefit from the positive interdependence between paid and organic listings and achieve target traffic to their website without the expense of paying per click. Furthermore, although Google Adwords and PPC strategies in general have been found to be very successful, consumers have still shown a preference for nonsponsored links on the SERP, again highlight the necessity for organizations in the B2C E-commerce sector to employ a holistic search marketing strategy, that includes both SEO and PPC campaigns. To expand on these findings further research is recommended, particularly into which of the seven automated strategies may produce stronger results and at what stage in the account history automated strategies may be more suited.

## 8. References

- Arenstein, S 2016, Why It's Critical for Organizations to Test Their Tactics When Using Google AdWords, viewed 1<sup>st</sup> June 2017  
<http://www.prnewsonline.com/critical-organizations-test-tactics-using-googleadwords/>
- Belch, G & Belch, M 2009, Advertising and promotion : an integrated marketing communications perspective, 3rd edn, McGraw-Hill Irwin, Sydney
- Cahill, K., &Chalut, R, 2009, Optimal results: What libraries need to know about Google and search engine optimization. *The Reference Librarian*, Vol, 50, no 3, pp .234– 247.
- Charlton, G 2016, Do 50% of Adults Really Not Recognise Ads in Search Results?, viewed 29<sup>th</sup> May 2016, <https://searchenginewatch.com/2016/04/27/do-50-ofadults-really-not-recognise-ads-in-search-results/>
- Digital Australia, n.d, Digital Australia: The State Of The Nation 2015-16, viewed 29<sup>th</sup> May 2017, <https://digitalaustralia.gov.au/Documents/SotN-Report-2015-16.pdf>
- Eaton, W. Kenyon, K. 2014, Accessing populations with specialized clinical needs: An illustrative case study using Google Adwords™, *Professional Psychology: Research and Practice*, Vol. 45, No.1, pp 36-43
- Edelman, B, Ostrovsky, M, Schwarz, M 2007, Internet Advertising and the Generalized Second-Price Auction: Selling Billions of Dollars Worth of Keywords” *American Economic Review*, Vol 97, No .1 , pp 242-259
- Geddes, B 2014, *Advanced Google Adwords*, 3<sup>rd</sup>edn, John Wiley & Sons, Indiana
- Greener, S 2008, *Business Research Methods*, Bookboon, London
- Howard, A, Sheth, J 1969, *The theory of buyer behaviour*, Wiley, New York
- Irfan, A, Rana Khurram, S, Kashif-ur-Rehman, & Shabbir, J 2013, 'Search Engine Optimisation: Evidence From Pakistan', *Asian Academy Of Management Journal*, Vol 18, no 2, pp. 1-16,
- Jansen, B, Resnick, M 2006, 'An Examination Of Searcher's Perceptions Of Nonsponsored And Sponsored Links During Ecommerce Web Searching' *Journal of the American Society for Information Science and Technology*, vol. 57, no. 14, pp. 1949–1961
- Jerath, K, Ma, L Park, Y 2014, Consumer Click Behaviour at a Search Engine: The Role Of Keyword Popularity, *Journal of Marketing Research*, Vol. LI, pp.480-486
- Kapoor, K, Dwivedi, Y, & Piercy, N 2016, 'Pay-per-click advertising: A literature review', *Marketing Review*, Vol 16, No. 2, pp. 183-202
- Khraim, H, Alkrableih, A 2015, The Effect of Using Pay Per Click Advertisement on Online Advertisement Effectiveness and Attracting Customers in E-marketing Companies in Jordan, *International Journal of Marketing Studies*, Vol. 7, No. 1, pp. 180-189
- Kennedy, K, Kennedy, B 2014,. A Comparison of Google and Yahoo: Which is More Cost Effective When Using Sponsored Links for Small Companies? , *Case Studies In Business, Industry And Government Statistics* Vol. 2, No. 2, pp.114-119.
- Kotler, P, Keller, K, Ang, S, Leong, S & Tan, C 2012 ,*Marketing Management An Asian Perspective*, Pearson, Singapore
- Liu, D, Chen, J, &Whinston, A 2010, Ex ante information and the design of keyword auctions, *Information Systems Research*, Vol. 21, No. 1, pp. 133-153
- Magner, L 2016, *IBIS World Industry Report X0004 Online Shopping In Australia*, IBIS World
- Marshal P, Rhodes, M, Tood, B 2014, *Google Adwords*, 4<sup>th</sup>edn, Entrepreneur Media Inc

- Ryan, D 2014, *Understanding digital marketing: Marketing strategies for engaging the digital generation*, Kogan Page Publishers, London
- Saunders, M, Lewis, P & Thornhill, A 2016, *Research Methods For Business Students*, Prentice Hall, London
- Statista, 2016, *Online-Shopping and E-Commerce worldwide: Statistics & Facts*, viewed 20<sup>th</sup> May 2017, <https://www.statista.com/topics/871/online-shopping/>
- Wordstream, 2016, *How Much Does Google Adwords Cost*, viewed 29<sup>th</sup> April 2017, <http://www.wordstream.com/blog/ws/2015/05/21/how-much-does-adwords-cost>
- Yang, S, Ghose, A 2010, 'Analyzing the Relationship Between Organic and Sponsored Search Advertising: Positive, Negative, or Zero Interdependence?' *Marketing Science*, vol. 29, no.4 pp. 602-623

## 9. Appendices

### Appendix A: Survey Questions

1. When managing Google Adwords accounts for small to medium businesses within the B2C e-commerce sector do you prefer using:
  - a. Manual bidding strategies
  - b. Automated bidding strategies
  - c. A combination of both manual and automated bidding strategies
2. When split testing bidding strategies in Google Adwords accounts for small to medium e-commerce (B2C) businesses, have you found that:
  - a. Manual bidding strategies predominantly produce a higher ROAS
  - b. Automated bidding strategies predominantly produce a higher ROAS
  - c. There is no difference in ROAS when running campaigns with either manual or automated bidding strategies.
3. Google's range of automated bidding strategies adjust bids in order to help advertisers achieve a specific goal, such as to increase clicks or conversions or to meet a target CPA, ROAS, location or outranking share. When managing the Google Adwords accounts of small to medium businesses within the B2C e-commerce sector have you found that:
  - a. A manual bidding strategy is predominantly more effective than the relevant goal related automated bidding strategy at meeting the advertisers specific goal.
  - b. The relevant goal related automated bidding strategy is predominantly more effective than manual bidding strategies at meeting the specific goal.
  - c. Some automated bidding strategies are more effective at meeting the advertisers goal than manual bidding, while some do not perform as well as manual bidding.
4. Does the experience of the account manager determine whether manual or automated bidding strategies are most suitable?
  - a. No
  - b. Yes. Experienced advertisers should rely more on manual and less experienced Adwords users more on automated bidding strategies.
  - c. Yes. Experienced advertisers should rely more on automated and less experienced Adwords users more on manual bidding strategies.
5. Some small to medium businesses within the e-commerce sector continue to self-manage their Google Adwords accounts as opposed to outsourcing to a professional agency or freelance consultant. Do you recommend that such advertisers use:
  - a. Manual bidding strategies
  - b. Automated bidding strategies
  - c. A combination of both manual and automated bidding strategies