

# RESEARCHING SEARCH

## *A Study into Search Engine Marketing Practices in Ireland*

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**Abstract:** Researchers have identified the Web as the searchers first port of call for locating information. Search Engine Marketing (SEM) strategies have been noted as a key area for firms to consider when developing, maintaining and managing their Websites. SEM falls into two categories - 'Search Engine Optimisation' (SEO) and 'Paid Search'. To examine how these SEM methods are reflected in practice, and the issues inherent in carrying out SEM effectively, a survey was conducted amongst small to medium enterprises (SMEs) in Ireland. The research reveals that Irish SMEs plan to spend more time and resources on SEM in the future. Most firms utilize an informal SEM strategy, where SEO is perceived to be the more effective technique in driving traffic to a company Website. Respondents cite the use of 'keywords in title and description tags' as the most used SEM technique; while 'Pay for Placement' was found to be the most widely used Paid Search technique. In concurrence with the literature, measuring SEM performance remains a significant challenge with many firms unsure if they measure it effectively. An encouraging finding from the study is that Irish SMEs adopt a positive ethical posture when undertaking SEM.

## 1 INTRODUCTION

For many, online search has become an important daily activity to navigate the Internet and has triggered fundamental changes in the way people seek and find information (Browne, Pitts and Weatherbe, 2007). Boughton (2005) and Fain and Pedersen (2006) have identified the Web as the searchers first port of call for locating information. Search Engines regularly feature amongst the most frequented Websites and are a vital mechanism by which e-commerce sites promote themselves (Jansen and Molina, 2006). Given the importance of the Search Engine as a method for finding information, and the opportunity it presents to advertisers as a marketing medium, Search Engine Marketing (SEM) strategies have been noted as a key area for firms to consider when developing, maintaining and managing their Websites (Sen, 2005).

## 2 STUDY BACKGROUND

SEM has emerged as the main method firms use to successfully increase the visibility of their Website. SEM consists of a number of methods that broadly

fall into two categories - 'Search Engine Optimisation' (SEO) and 'Paid Search' (Boughton, 2005; Jansen and Resnick, 2005; Feng, Bhargava, and Pennock, 2007). SEO is the process of identifying and fine-tuning elements of a Website in order to achieve the highest possible visibility when a Search Engine responds to a relevant query (Xing and Lin, 2004; Zhang and Dimitroff, 2005). SEO leverages the Search Engine algorithm to channel users to specific Websites, the results of which are referred to as organic results. Paid Search uses Search Engines to trigger a display of advertisements based on the topic or keyword entered (Laffey, 2007).

A major factor in choosing one strategy over another is the searcher's perception of sponsored listings (Paid Search) over that of organic or editorial listings (SEO). Jansen and Resnick (2005) suggest that searchers tend to trust the relevance of organic links over sponsored links, whereas Boughton (2005) argues that searchers more commonly following sponsored advertisements. Sen (2005) uses an analytical model to assess the use of Paid Search over SEO. He finds that even if the cost of Paid Search and SEO were the same, firms would still select Paid Search as the most popular strategy.

In contrast, Xing and Lin (2004) find SEO more popular based on cost and due to searchers' perceptions of Paid Search results. Jansen and Molina (2006) surmise that a dual strategy of SEO and Paid Search is the best approach having found that Paid Search results are just as relevant as non-paid results (SEO). Laffey (2007) discusses how a strategy may depend on which Search Engine is subscribed to. He reports that Google users are more likely to click on organic results and least likely to click on paid results, whereas MSN users are more likely to click on Paid Search results.

Several optimizing SEO techniques have been identified. Some of these include: providing keyword rich Website content throughout all Web pages (Seda, 2004; Schultz and Fristedt, 2005; Dawson and Hamilton, 2006); using keywords in the title and description meta tags in the Website code (Zhang and Dimitroff, 2005); and keeping the likes of flash, graphics, forms and frames to a minimum (Schultz and Fristedt, 2005; Dawson and Hamilton, 2006). Mentz and Whiteside (2003), Oliva (2004), Seda (2004), and Schultz and Fristedt (2005) recommend a link development strategy whereby other good quality and relevant Websites are used to develop or implement a link back to the company Website.

Paid Search takes a number of different forms. Paid Placement is where, in response to a particular search term, a firm pays a fee for their link to appear on the search results page, for example Google's AdWords. Paid Inclusion is where Search Engines are paid to index pages from a Website (Thurow, 2007). These results can often be mixed into the organic/editorial listings on the search engine results page (SERP). For example, Yahoo and other Search Engines firms offer Paid Inclusion programmes for this purpose. At present Google does not offer such a service (Mangalindan, 2003). With Paid Submission, advertisers pay Search Engines to speed up the process of having their Website reviewed more quickly than they would under a free submission (Sen, 2005). However there is no guarantee that it is accepted and included in the SERP (Thurow, 2007). Contextual search is another type of Paid Search whereby search results are returned based on user behaviour and relevance rather than matching keywords (Vine, 2004), for example Google's AdSense programme. Local search allows advertisers to target local customers in a geographic region rather than marketing to a generic audience (Jones, 2006). Google permits this feature through its AdWords programme.

There is widespread recognition of the importance of using performance metrics for SEO and Paid Search in order to achieve a competitive advantage (Weischedel, Matear and Deans, 2005; Fain and Pedersen, 2006; Laffey, 2007). However despite these calls there is general consensus throughout the literature regarding the mis-use of measurement tools for SEM (Weischedel et al, 2005). Some SEO measures put forward are: setting a baseline to measure inbound links to a site, where a company should continue to improve the number and quality of inbound links to increase the site's page rank; and site usage statistics (Schultz and Fristedt, 2005) where the likes of Google Analytics can be used. Zhang and Dimitroff (2005) and Seda (2004) recommend tweaking different SEO aspects of the Website and then measuring the change in rank of the Website on the SERP on a continual basis. Paid Search measures put forward include: Cost Per Click (CPC) where the cost to an advertiser to generate one click is monitored; Cost Per Mille (CPM) where the cost to display an advertisement a thousand times is recorded; Cost Per Action (CPA) which monitors the cost for actions such as signing up for a new account or making a sale; and Conversion Rate which is the ratio between CPC and CPA (Fain and Pedersen, 2006). Smith (2002) discusses conversion metrics as a key tool for measuring ROI. Another important and commonly used measure is Click Through Rate (CTR). CTR is the ratio between the number of times a Web link is displayed against the CPC (Kumar and Shah, 2004; Fain and Pedersen, 2006).

Ethical practice in SEM is an increasingly important consideration for all stakeholders (Palmer, 2005), particularly searchers who rely on Search Engine to organise and distribute returned results in an ethical way (Zimmer, 2006). Ethics takes two forms - the responsibility of Search Engine operators and the onus on Search Engine marketers to conduct themselves ethically. Conflictingly, it is in the best interest of Search Engines operators to push for paid advertisement (that generate revenue) rather than organic results. This leads searchers to be concerned about SERP results since some Search Engines do not disclose the difference between sponsored and organic search results (Moxley, Blake and Maze, 2004) - a clear breach of any assumed ethicality. Other concerns are expressed about: unethical link development such as when a site is found with identical link development on other sites that are completely unrelated; bogus blogs generated to include links to increase the Website's rankings (Economist, 2006); 'Black Hat SEO' where popular

links are rented out from quality Websites and hidden links are placed on prestigious sites unknown to their owners; and Web spamming where invisible or unreadable text, or excessive use of the same word are used to fool the Search Engine spider into thinking there are certain keywords on the Website (Esparza, 2007). Click fraud is also discussed at length in the literature (Asdemir and Yaha, 2006; Laffey, 2007). It occurs when an advertiser falsely generates clicks on an ad with the only goal of increasing the payment to the advertiser.

### 3 RESEARCH METHODOLOGY

The broad objective of this research effort was to examine SEM strategies of small to medium sized enterprises (SMEs) in Ireland. It was also designed to: identify the specific SEM techniques used; reveal which strategies are perceived as being more effective; discover if SMEs use performance metrics; to investigate if firms consider an ethical perspective when undertaking SEM activity; and to identify the main challenges faced in undertaking SEM. The research method used was an extensive, quantitative survey. The population from which the sample was drawn possessed the following attributes: an SME operating in Ireland with an in-house marketing manager or specialist in a marketing department and an operating company Website. The sampling frame was selected based on the research questions, as well as the attributes listed above for selection. The sample information was compiled from Kompass, a business database listing companies in Ireland. A total of 95 responses were received out of a sample of 623, giving a response rate of 15.24 %. The data collection method chosen for this study was a self-administered postal questionnaire and a matching Web-based questionnaire.

## 4 FINDINGS

### 4.1 Website Development

Most firms that participated in the survey develop and manage their Website internally. While one third outsource the development of the Website they still manage and update their Website in-house. The significance of this is that most respondents have the capacity to carefully manage their SEM strategy with expertise based in-house. For these firms

technical aspects of SEM should not be a barrier to understanding or developing online marketing techniques.

### 4.2 Nature of the SEM Strategy

Concurring with recommendations elsewhere (Ostler, 2001; Porter, 2002), two thirds of those surveyed describe their SEM strategy as closely aligned with their firms overall business strategy. This finding suggests firms have moved beyond experimentation and approach a more mature relationship between their online and broader strategies.

Many respondents (46%) revealed their SEM strategy was of an informal nature, while (39%) reported a fairly formal or a formal SEM strategy. The remainder indicated that they did not carry out any SEM strategy. This contrasts with the exhortations of writers that recommend a strategy formulation to achieve sustainable competitive advantage (Varadarajan and Jayachandran, 1999; Novak, Hoffman and Yung, 2000; Schultz and Fristedt, 2005; Sen, 2005). In relation to the effectiveness of their SEM strategy, nearly three quarters of respondents agreed they would consider their SEM strategy ineffective if it did not return their company's Website link on the first page of the SERP. This finding is reinforced by research that suggests searchers view at most the first few pages of the SERP (Lempel and Moran, 2000; Zwick, Rapport, Lo and Muthukrishnan, 2003).

An overwhelming number (91%) listed Google as the Search Engine most subscribed to for indexing by companies. This is followed by Yahoo at 65%, with MSN coming significantly behind (29%), while AOL, Alta Vista and Ask only received a very small percent. These findings are in line with findings elsewhere by Schultz and Fristedt (2005) and Taylor (2007). Schultz and Fristedt noted that Google receives the highest number of keyword searches followed by Yahoo. The findings here suggest Irish firms are aware of the importance of subscribing to the most popular search engines to target the largest possible market. It may also suggest that many of these SME's are subscribing to Google because it is free, whereas subscription to other search engines such as Yahoo and MSN incur cost.

### 4.3 Types of SEM Strategy Used by SMEs

The literature suggests a key factor in a firm’s choice of SEM has much to do with how searchers perceive organic versus sponsored results (Seda, 2004; Boughton, 2005; Jansen and Resnick, 2005; Sen, 2005). If firms are reading searchers correctly, they are choosing to focus on SEO. Nearly half of respondents indicated that they predominantly use SEO for SEM (see Figure 1). This concurs with a European report conducted by SEMPO (2007a), which found that French, Spanish and Italian advertisers focus more on the use of SEO over Paid Search. In a similar type report on the US market, SEMPO found that over three quarters of respondents use SEO as their main form of SEM (SEMPO, 2007b). A third of those surveyed here report that they use a combination of SEO and Paid Search, while few respondents reported that they use Paid Search only. This latter finding would suggest a clear view of Irish SMEs that Paid Search on its own is not capable of delivering searchers to their Website. The position would seem to be vindicated by a recent Amarach Consulting report showed a clear majority (82%) of searchers admitting to rarely or never clicking on sponsored results when conducting a Web search (Amarach, 2007).

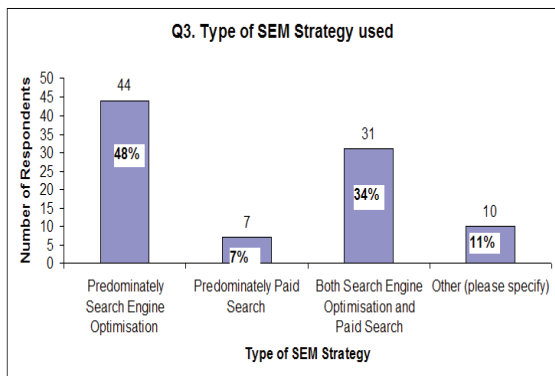


Figure 1: Type of SEM Strategy used.

When respondents were also asked which SEM strategy they perceived to be most effective in driving traffic to their company’s Website, most (61%) indicated SEO while only 10% believed Paid Search to be so. This view concurs with Xing and Lin (2004) who argue SEO is a more cost effective and viable long-term option. They posit that as Paid Search costs rise, SEO costs will remain constant. Only 11% thought Paid Search and SEO were as effective as each other.

### 4.4 SEO Strategy Techniques

Respondents cite the use of ‘keywords in title and description tags’ as the most used SEO technique, followed by use of ‘keywords throughout the whole Website’ (see Figure 2). The first of these findings contrasts with the recommendations of Seda (2004) and Schultz and Fristedt (2005) who state that keywords should be used throughout all pages of the Website content. While Dawson and Hamilton (2006) advise minimizing the use of graphics, forms and frames, a significant number (22%) employ this technique. The use of these elements often restricts spiders from reading the Website, thereby affecting its Search Engine ranking.

About half (46%) reported ‘refreshing page content’ as a regularly used method - although a useful ingredient, it seems slighted elevated when contrasted with the literature. Surprisingly, few cited ‘link development’ as an applied method to carry out SEO despite the exhortations of writers. While it has been suggested that techniques should be used in tandem in pursuit of optimal SEO, the variability in the logic and operation of each Search Engine’s algorithm means differing techniques may be needed to achieve effectiveness across each Search Engine.

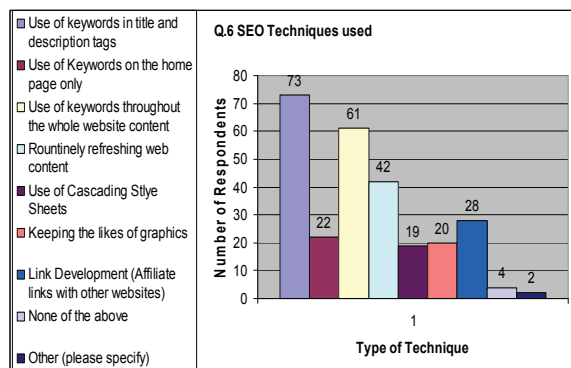


Figure 2: SEO Techniques.

### 4.5 Paid Search Strategy Techniques

When SMEs were asked about their most used Paid Search technique, Paid Placement was ranked first (see Table 1). Given the dominance of Google, this finding echoes the literature’s claim that paid placement is Google’s only Paid Search offering. The much smaller numbers for Paid Inclusion (9%) and Paid Submission (9%) appears to reflect the less widespread use of Search Engines like Yahoo and MSN who offer both types of Paid Search.



Table 1: Paid Search Techniques used by Respondents.

|                   | Total Responses | Percent |
|-------------------|-----------------|---------|
| Pay for Placement | 33              | 38%     |
| Paid Inclusion    | 8               | 9%      |
| Contextual Search | 7               | 8%      |
| Paid Submission   | 8               | 9%      |
| Local Search      | 13              | 15%     |
| None of the above | 25              | 29%     |
| Other             | 3               | 3%      |

The significant number that does not use any Paid Search technique (29%) most likely reflects the earlier finding that reported SEO as the more used and effective technique. The reasonable level of Local Search is supportive of Laffey's (2007) observation that this method assists the smaller business compete with the bigger players on a global scale and helps target specific geographic markets.

## 4.6 Measuring SEM

### 4.6.1 SEO Measurement

Traffic measurement was listed as the most used method for measuring SEO campaigns (see Table 2), concurring with the views of Zhang and Dimitroff (2005) and Friesen (2007). Traffic measurement is the most popular measure for SEO in practice, using tools such as Google Analytics. This was followed by 'measuring link popularity', as recommended by Schultz and Fristedt (2005). Disappointingly, 'setting baselines and measuring the impact' did not rate highly, despite its advocacy (Schultz and Fristedt, 2005). This technique should be more widely deployed since it is a true indication of a ranking on the SERP at one point in time, versus where it is at a future time having carried out SEO improvement measures. Worryingly, nearly a quarter said they do not use any method to assess their SEO initiatives. Given the current spend on SEM in Ireland and the expected growth of this form of online advertising (Taylor, 2007), this is a matter for concern.

Table 2: Measures of SEO.

|                               | Frequency | Percent |
|-------------------------------|-----------|---------|
| Measuring Link popularity     | 33        | 37%     |
| Setting Baselines & Measuring | 11        | 12%     |
| Traffic Measurement           | 58        | 64%     |
| None                          | 18        | 20%     |
| Other                         | 6         | 6%      |

### 4.6.2 Paid Search Measurement

On measuring Paid Search campaigns, firms indicated that both Traffic Measurement and CTR were jointly the most used methods (see Table 3). Fewer use Conversion Rate despite the view by Smith (2002) that conversion metrics are a very important tool for estimating ROI. Smith discusses how traffic measurement used to be the most appropriate measure, but the consumer conversion rate is now considered to be more important, where traffic measurement is more useful for analysing SEO initiatives (Zhang and Dimitroff, 2005; Friesen, 2007).

Table 3: Measures of Paid Search.

|                     | Respondents | Percent |
|---------------------|-------------|---------|
| Conversion Rate     | 23          | 29%     |
| Click Through Rate  | 35          | 44%     |
| Traffic Measurement | 36          | 45%     |
| None                | 30          | 37%     |
| Other               | 3           | 4%      |

Reviewed at length in the literature are the large numbers of Websites that do not measure their Paid Search initiatives (Weischedel et al, 2005; Fain and Pedersen, 2006). This corresponds with the significant proportion here (37%) that indicates that they do not use any metrics to estimate their Paid Search efforts. This finding may be explained by the recognition throughout the literature that Paid Search lacks sound measurement tools (Weischedel et al, 2005). Nonetheless, implementing a Paid Search campaign and not measuring its outcome is futile.

#### 4.7 Effectiveness of SEM Measurement

Opinions are divided evenly regarding how firm's believe they are effectively measuring their SEM activity. Nearly half believe that they are effectively or very effectively measuring it, however the remainder are not at all happy with their current SEM metrics (see Figure 3). This view compounds the argument in the literature regarding the availability of effective tools and justifies why so many are discontented with their current arrangement (Fain and Pedersen, 2006).

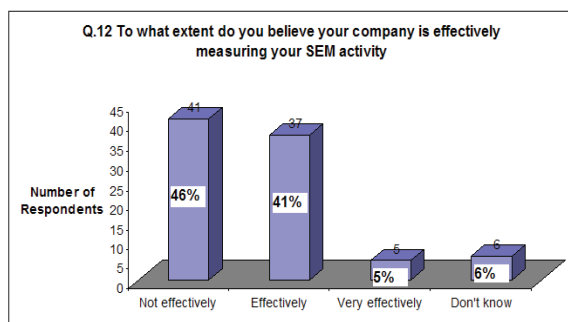


Figure 3: Effectiveness of SEM Measurement.

As argued by Smith (2002), businesses using relevant metrics have a greater opportunity to achieve a competitive advantage. Metrics also provide valuable information about consumer's online behaviour. Clearly much needs to be done to improve the satisfaction of firms in assessing the usefulness of their SEM effort.

#### 4.8 Ethics and SEM

Respondents overwhelmingly agree that ethical considerations are a very important part of both their SEO and Paid Search campaigns. In concordance with this belief, there was general consensus that firms would have ethical issues in commissioning 'all forms' of Paid Search. Respondents strongly reported that they would only commission Paid Search that was transparent to users. These are very positive findings and would suggest that SMEs for the most part act ethically when undertaking their SEM and have given consideration to ethical issues.

Moxley et al (2004) view Paid Search advertising as misleading for information searchers as Search Engines often do not disclose the difference between paid and organic results. So while the most frequently subscribed to Search Engine firm, Google, (who clearly display the difference between sponsored results and organic results on the SERP) is used, searchers may have

some confidence that firms are acting morally. Nevertheless, as Search Engine marketers change their Search Engine provider and develop their strategies (say to less transparent operators like MSN), an ethical policy should be carefully considered.

SMEs were more indifferent to whether their users were aware that they were using Paid Search. However, to a great extent it is outside of their control since the Search Engine firms design and deliver the SERPs. While Search Engine marketers might lobby those Search Engines that do not disclose the difference between paid and free Search Engine results, it is really up to consumer watchdogs and government agencies to ensure consumer rights are protected. Since there are a significant number of respondents who were unaware of what constitutes ethical SEO, these bodies have an important role in educating firms on the consequences of using third party marketing practices that are of questionable ethical merit and of other SEO practices such as Web spamming and unethical link development.

#### 4.9 Challenges in SEM

When firms were asked about the main challenges encountered when undertaking SEM, the greatest one reported was competing for and achieving a high rank on the SERP. While earlier firms felt they were carrying out their SEO effectively, it still reflects the imperative for any SEM, which is to deliver users to their Website. A related challenge widely cited was the shortage of measurement tools available for SEM. Closely related to achieving a high ranking is the respondent's concerns with the Search Engines algorithm. This will always be an ongoing challenge for marketers as Search Engines never disclose their ranking algorithms.

A significant number cited knowledge of SEM practices in general as an obstacle, indicative that much remains to be understood about this form of marketing for SMEs in Ireland to fully realize the opportunities it offers to their broader marketing initiatives. Dedicating time, budget and resources were listed by many respondents as a barrier to adopting SEM. This finding again illustrates SME's lack of knowledge of SEM. Given the projected growth of SEM as a marketing medium - dedicating time, budget and resources is a crucial element in carrying out any SEM strategy. Managing keywords remain a major element for both Paid Search and SEO campaigns. In contrast, unethical competitor practices (click fraud, Web spamming and unethical

link development) are not a major concern for SMEs.

## 5 CONCLUSIONS

SEM is a growing strategy that firms use to improve the visibility of their Website so that searchers are delivered to the company Website to achieve their informational or commercial goals. The findings here suggest that Irish SMEs plan to spend more time and resources on SEM in the future. It is also clear that SEM strategies need to be more formal in nature, in line with recommendations made elsewhere. While it is to be expected that an important business initiative begins in a casual and experimental manner, very quickly the importance of aligning the effort with organisational strategy becomes evident. A fundamental mission of a SEM strategy, and clearly identified by respondents in this study, is to achieve a top position on the first page of the SERP.

The study also reveals that the great majority of respondents use SEO or a combination of SEO and Paid Search. Despite the general lack of comprehensive tools to measure SEM effectiveness, firms seem to have a clear preference for SEO at this time and perceive it to be more effective. To reinforce the perceptions of SMEs it is evident that SEM initiatives need to be measured with appropriate tools so that outcomes can be fed back into the strategic decision making process. What also emerges is that firms need to increasingly consider the behaviour and geographic location of searchers as an integral part of their SEM strategy.

An encouraging finding from the study is that Irish SMEs adopt a positive ethical posture when undertaking SEM. On a cautionary note however, since Paid Search is, for now, less widely employed, the more obvious ethical problems with it do not present themselves. Vigilance to give users transparency in recognizing paid versus free search results must be part of a firm's SEM strategy if searchers are to remain confident in the integrity of Search Engine operatives.

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