

## The Impact of Search Engine Optimization Dimensions on Companies Using Online Advertisement in Jordan

Hamza Salim Khraim, PhD

*Department of Marketing, Faculty of Economics and Administrative Sciences, Applied Science University, Amman, Jordan*

Search Engine Optimization (SEO) is an Internet marketing strategy that used widely for improving the volume and quality of customer traffic to a company website through search engines. This research aims to explore the importance and benefits of SEO in marketing as well as to examine the impact of SEO dimensions on online advertisement. A questionnaire was distributed personally on 121 companies in Jordan. Out of 121, only 102 companies completed and returned the questionnaire, which give 72% response rate. Factor Analysis provided four dimensions which were used later in Multiple Regression. Those factors were named as; SEO connectivity, SEO competitiveness, SEO experience and SEO techniques. Results show that SEO connectivity was not significant, while the remaining three dimensions were all significant.

*Key Words:* Search engine optimization (SEO) Dimensions, online advertisement

### Introduction


Search engine optimization (SEO) is the procedure of designing, writing, and coding a website in a way that helps to improve the volume, quality and visibility of company website by people using search engines via the natural or un-paid ("organic" or "algorithmic") search results. While other forms of search engine marketing (SEM) target paid listings. Search engine optimization (SEO) is a marketing strategy that helps in enhancing company website presence. Companies try hard to attain higher rankings for their websites because when a site appears at the beginning of the search results list or top of the page and more frequently, the greater the likelihood that users will visit the site (Enge *et al.*, 2012). To achieve higher ranking, SEO provides a variety of techniques, it include increasing links from other websites to company web pages, editing the content of the website, reorganizing the structure and organization of company website, and coding changes (Shih, *et al.* 2013). The additional interest in website ranking is attributed to the fact that 73 percent of search engine users never look beyond the first page of returned results (Jansen and Spink, 2006). According to (Nielsen-NetRatings, 2015) the average SEO-engaged brand saw its natural traffic rise by 19.8 percent year-over-year in 2014. Natural search drove 21 percent of total site traffic in 2014, well up from 18.1 percent in 2013. However, there are millions of websites on Internet and it is really difficult to advertise or sell products on such large scale. At present there are many popular search engines in use and include Google, Bing, Yahoo,

MSN, AOL, ASK etc. Currently, Google is the most widely used at 83 percent (Netmarketshare, 2013). At early stage, online display advertising began as simple hyperlinked images shown on websites and has since progressed to include video, sound and many other modern technologies. Images or video carry the message and a hyperlink takes the visitor to the advertiser's desired landing page. Today, messages and interactions can be contained within the advertising display, without ever taking consumers to a landing page. Advertising, naturally, follows web-user behavior. Advertisers want to place their adverts where potential customers will see them. This trend is resulting in the growth of advertising options using rich, interactive technology, such as in social networking.

Search engine optimization is widespread in the world of online advertising; a 2010 survey of 1500 advertisers and agencies revealed that 90% of them engaged in SEO compared to 81% who purchased sponsored links (SEMPO, 2010). This increased importance is attributed to the direct affect of online advertisement on sales. Aggregated results from 18

---

**Corresponding author:** Hamza Salim Khraim, PhD, Associate Professor in Marketing, Department of Marketing, Applied Science University, Jordan, P.O.Box 166, Amman 11931, Jordan. Email: hkhraim@hotmail.com

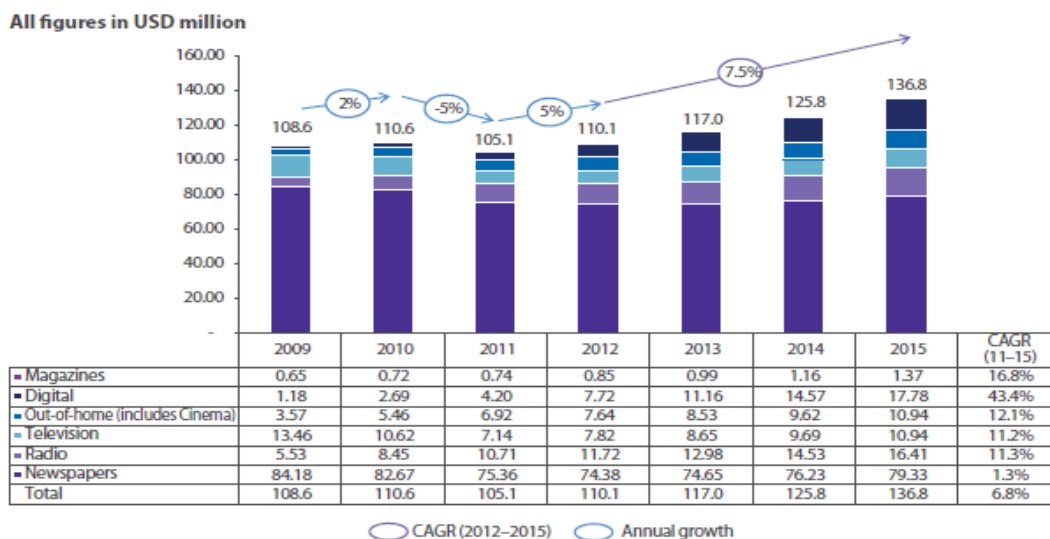
 This article is distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use and redistribution provided that the original author and source are credited.

studies provide evidence that, in the majority of studies, online advertising had a great impact on online and offline sales (Abraham, 2008). In a study of 1,275 consumers, sales revenue increased for consumers who used the Internet to search for product information prior to the in-store purchases, for three out of four retail categories (Sands *et al.*, 2010). Overall, research confirms that online advertising, affects both online and offline sales (Rainer and Carsten, 2014).

In the Arab world, Jordan stands amongst the top 50 countries in the world in terms of their Networked Readiness Index (Arab Media Outlook, 2012, p58). Jordan is developing into an important hub for regional digital media and internet companies. Digital advertising spend in Jordan was estimated to be USD4.2 million in 2011 and its Compound Annual Growth Rate (CAGR) of 43% reaching USD18 million by 2015. The Jordan based Jabbar Internet Group is one of the leading integrated online service provid-

ers in the region with a range of properties across segments and verticals including e-commerce and online marketplaces (i.e. *Souq.com, sukar.com*), cash payment platforms (i.e. *Cash U*), Group Buying Services (i.e. *Cobone*), online gaming (i.e. *Tahadi Games*), online travel (i.e. *joob.com*), digital ad agency (i.e. *Ikoo*) (Arab Media Outlook, 2012). Souq.com, can be considered another local success story in the e-commerce space having successfully transitioned from an online auction site to a multi-category and multi-country online marketplace. Souq.com has a successful presence in markets such as the UAE, KSA, Egypt, Kuwait and Jordan. Souq.com has built strong credibility amongst buyers and sellers and successfully explored diverse revenue streams (e.g. online retail, advertising and deal of the day). Figure 1 the growth in net advertising projections and Compound Annual Growth Rate between 2011 and 2015.

Figure 1: Jordan net advertising projections



Source: Deloitte analysis, Arab Media Outlook 2011-2015

Ghazal report (2012) on online advertisement show that Jordanians hold positive view towards online advertising, which makes experts believe more companies and users will resort to such medium for ads in the coming few years. Ghazal maintain that about 32 per cent of Internet users in Jordan believe that online ads are fun to watch, 31 per cent believe online ads provide useful information, 29 per cent think a company that advertises online is creative, 28 per cent think online ads often highlight good deals and promotions, and 16 per cent always pay attention to ads when surfing the net.

### Significance of the study

This paper attempts to contribute to the limited literature and empirical studies regarding the influence of SEO dimensions on online advertisement. In particular, this work explores the nature, importance and working mechanism of this concept and the diverse factors that influence online advertisement. The empirical research was conducted on companies operating and having online website in Jordan. The subject of the study is considered as a new subject, where the concept of search engine optimization appeared newly in marketing, and the most studies especially Arab studies are still in early stages.

## Research objectives

- 1) To provide an overview on the development, components, and benefits of SEO and its uses in marketing.
- 2) To identify and test the impact of SEO dimensions on online advertisement

## Literature Review

### Search Engine Optimization (SEO)

SEO has been defined in different ways by authors to capture the dynamic nature of this concept. For example, Cheffey *et al.*, (2006) defined SEO as a structured approach used to increase the position of a company or its products in search engine natural or organic results listings for selected keywords or phrase. Search engine optimization (SEO) is a set of techniques aimed at improving the ranking of a website in search engine listings, thereby making it more likely that the end user will choose to visit the site (Vryniotis, 2015). SEO gathers the techniques leading to a better indexing of one's site by one or several targeted search engines (Gandour and Regolini 2011). It is also defined as the process of identifying factors in a webpage which would impact search engine accessibility to it and fine-tuning the many elements of a website so it can achieve the highest possible visibility when a search engine responds to a relevant query (Zgang and Dimitroff, 2005). Its role is to achieve the highest position or ranking on search engines, such as Google, Yahoo! and MSN Search and so on, after a specific combination of keywords or key phrase that is typed in. The final goal is for the site to be better ranked by one or several targeted search engines and therefore appearing higher in their results lists for specified requests (Gandour and Regolini 2011). Search engine optimization (SEO) is a systematic approach to improving the membership website on the Internet unpaid wage (Organic result), and focus on the number of visitors to the site and don't on the quality of the search engine, (Google, Search Engine Optimization Starter Guide, 2010).

### How Search Engines Work?

To develop efficient and successful SEO techniques we need to consider how search engines work and what people are looking for. According to Paraskevas *et al.*, (2011) there are basically two types of search engines that collect information in different ways. The first one is Crawler-Based Search Engines (e.g. Google and AltaVista), while the second one is Human-Powered Directories (e.g. Yahoo Directory and Business.com). Search engines are complex software applications that are automated to survey ("crawl" or "spider") the Internet to find websites. A Search En-

gine crawler is also referred to as "robot" or "bot" and it's a program, which searches or browses the Web in a logical, automated manner. Search engines use crawlers to find up-to-date information. Crawlers are mainly used to create a copy of all the visited pages. These pages are processed by a search engine that will index the downloaded pages to provide fast searches (Innovation PEI). These search engine "bots" generally index sites based on their content and links (i.e. how many websites link to your website). Therefore, a high number of links, links from authoritative/reputable websites, and websites with similar content/keywords are valued higher by search engines (Lahuerta *et al.*, 2014).

### SEO Dimensions

SEO factors are notoriously difficult to enumerate, as search engines do not reveal the specific factors used when determining the ranking of a website (Lourdes and Paloma 2013). SEO factors can generally be categorized into two groups (Enge *et al.*, 2009; Evans, 2007; SEOMoz, 2009). The first group, known as on-page factors, includes those factors related to information that can be gathered directly from the pages of a website whose relevance is to be optimized, such as the existence and frequency of keywords. The second group, known as off-page factors, includes those factors related to information about the website being optimized that can be collected from other, external websites. This study will focus on on-page factors. According to SEOMoz (2011) and Evans (2007), search engines constantly work to improve their ranking calculations which complicate matters further. As a result the calculated relevance of webpages has been observed to have varied over time, due to changes in the relative weights assigned to individual SEO factors, as well as the incorporation of new factors and the elimination or modification of others. In the case of Google, for instance, the identification of more than 200 factors which have varied over the lifespan of the search engine has, thus far, prevented the definition of a precise method by which the high ranking of a website on the search engine could be guaranteed. Despite these difficulties, the peer group assembled by SEOMoz identified the most critical SEO components to include keywords, titles, web site name, and the right top level headings. With the proper usage of a keyword phrase, a web site is more likely to appear in the first page of search results and be seen by the people that an organization wants to get to their web page (SEOMoz, 2009). Google recommends that a web site page should have a short but unique and accurate page title. The description meta tag is not seen on the page, but should have useful and more detailed information than the page title. The

filename of the page or its page address should be worded so that it is easily understood by a visitor (Google, Search Engine Optimization Starter Guide, 2010). The easiest way to optimize a web site is to enter appropriate text in the web site's title, meta description, headings, and page content that search engines recognize (Goldsborough, 2005).

To ensure that Internet users find the company's website, different Internet marketing techniques are used (Madleňák, *et al.*, 2015). In addition to using Search Engine Optimization (SEO) techniques, Google recommends using a general sitemap for human visitors and an XML Sitemap to improve the visibility of pages to users and search engines. Navigation should be simple to follow and be made from text instead of Flash or JavaScript (Google, Search Engine Optimization Starter Guide, 2010). Also, Google recommends using the Robots.TXT file to let search engines know what should be shown in search results and what should be hidden. A site without a Robots.TXT file cannot grant search engines the permission needed to look at their pages or show search results to searchers (Google, Search Engine Optimization Starter Guide, 2010). The common elements that occur among different sources are the elements that were used in the instrument. The SEO component include these seven items: the H1 header tag, page titles, description meta tag, relevant keyword use, user friendly page address, Sitemap.XML file presence, and Robots.TXT file presence.

### **Benefits of SEO**

We can summarize some major benefits and advantages of SEO as follows:

- 1) According to Nezar, (2009) the primary advantage of SEO is that your company can be ranked in top 10 without any fuss. Users are most likely to choose from the addresses appearing on the first page of results. If your website ranks high, your site becomes much easier to find, thus increasing traffic.
- 2) SEO is a good investment on the long run. A successful search engine marketing strategy can generate steady levels of traffic to the website, a great return on investments, and enhance awareness of brands and vendors (Shih *et al.*, 2013).
- 3) If your site is designed and optimized properly SEO is cost effective compared with conventional marketing, Search Engine Advertisement SEA and pay per click advertising PPC. Using SEO save much time and money and can stay longer than other tools.
- 4) SEO leads to the increased brand visibility for your site, the more times a company's website is visible in the search results, the better the company's online visibility (Smithson *et al.*, 2011).

5) Increased accessibility leads to higher sales for your products and services (Lourdes and Paloma, 2013).

6) The search engine is also coming to play a greater role as a critical link between firms that use the Internet to build their image and find their target customers (Shih, *et al.* 2013).

7) In order to achieve excellent results it's not enough to use SEO. The company needs to have a good website with a good design to actually attain the customer. The content on the website has to be "useful, usable, desirable, accessible, credible, and valuable" (Rangaswamy *et al.*, 2009).

8) In general, if the company manages to achieve the above mentioned points, this will results in improving the company image as well as growth in sales, market share, credibility and referral businesses online.

### **Previous Studies**

Research conducted worldwide on search engine optimization is considered very few. We can assume that this research is the first one to tackle this issue in Jordan and maybe in the Arab world as well. Most of the research focused on search engine in general (Ramaraj, 2013), search engine advertisement (Jafarzadeh, 2011), and search engine optimization in education (Gandour and Regolini 2011). Based on that, research that link SEO with online advertisement is considered very rare. In the following lines we will highlight some of previous studies focused on SEO and online advertisement.

The purpose of Evans (2007) paper was to identify the most popular techniques used to rank a web page highly in Google. The paper presents the results of a study into 50 highly optimized web pages that were created as part of a Search Engine Optimization competition. The study focuses on the most popular techniques that were used to rank highest in this competition, and includes an analysis on the use of PageRank, number of pages, number of in-links, domain age and the use of third party sites such as directories and social bookmarking sites. A separate study was made into 50 non-optimized web pages for comparison. The paper provides insight into the techniques that successful Search Engine Optimizers use to ensure a page ranks highly in Google. Recognizes the importance of Page Rank and links as well as directories and social bookmarking sites.

While Singh *et al.*, (2011) investigate the impact of Search Engine Optimization on Advertisement in IT companies of north India. The study use quantitative and qualitative research methodology. Google, Bing MSN, and Yahoo etc, are a common search engines that consumers use when they search for product or services online. The majority or about

90% of the customers select the product from first page only and out of that 90% more than 80% select the product or services from first three or four. The study concludes that companies using SEO for the purpose of advertisement are getting more new customer than the companies using traditional methods. Kaurin and Dragić, (2012) research aimed to determine the influence of Meta Tags usage on web rating within Search Engine Results Pages (SERP) by examining travel agencies in Serbia, as a relatively new but the large market, and their knowledge and right usage of available technologies of Meta Tags usage. Research covered a total of 66 travel agencies operating in Serbia. Companies are mostly from cities in the regional centers. The study used quantitative and qualitative research methodology. Research result shows that 41 of 66 companies (62%) are maintaining their own website, and that the rest (25 companies, 38%) don't have their internet presentation or are using other websites for their promotion. Because the research should provide the website positioning within SERP, we would be considering only those companies that have their own website presentation.

Berman and Katonay (2012) study the impact of search engine optimization (SEO) on the competition between advertisers for organic and sponsored search results. They find that a positive level of search engine optimization may improve the search engine's ranking quality and thus the satisfaction of its visitors. Results imply that high quality sites have an advantage as they can always use sponsored links as a backup option if their organic link does not place well. In the absence of sponsored links, the organic ranking is improved by SEO if and only if the quality provided by a website is sufficiently positively correlated with its valuation for consumers. That is, if sites' valuations for consumers are correlated with their qualities then consumers are better off with some positive level of SEO than without. By contrast, if there are sites that extract high value from visitors yet provide them with low quality then SEO is generally detrimental to consumer welfare. As a result of the high expected quality on the organic side, consumers begin their search with an organic click. Although SEO can improve consumer welfare and the payoff of high quality sites, they find that the search engine's revenues are typically lower when advertisers spend more on SEO and thus less on sponsored links.

Lourdes and Paloma (2013) conducted an interesting research on the relationship between SEO on-page factors and web accessibility. Access to web content is the central link between SEO and accessibility. The research described arose from an investigation into the observed phenomenon that pages from accessible websites regularly appear near the top of search engine (such as Google) results, without any

deliberate effort having been made through the application of search engine optimization (SEO) techniques to achieve this. The research provides firm evidence that the overlapping factors not only serve to ensure the accessibility of a website for all users, but are also useful for the optimization of the website's search engine ranking. The paper demonstrates that any SEO project undertaken should include, as a prerequisite, the proper design of accessible web content, inasmuch as search engines will interpret the web accessibility achieved as an indicator of quality and will be able to better access and index the resulting web content.

The purpose of Madleňák, *et al.*, (2015) article is to find the suitable Internet marketing tools that increase the number of visitors at the business website. For the Analysis of website traffic, Google Analytics was used. While Facebook Insights tool and correlation analysis was used to find the degree of dependence between visitors streams at personal and official business website. Results of the research show a clear correlation between website traffic at business and personal websites as well as clear correlation between competition at social network and business websites traffic. The researchers suggested that the creation of primary website must be supported by additional activities as a social network activities, frequent actualization of website and creation secondary websites, that are connected with primary website.

### Research Hypothesis

Based on the above literature review, the following hypothesis will be proposed:

**H.1:** There is a statistically significant effect for search engine optimization (SEO) dimensions on companies using online advertisement in Jordan at (0.05).

**H.1-1:** There is a statistically significant effect for SEO connectivity on online advertisement at Jordanian companies at (0.05).

**H.1-2:** There is a statistically significant effect for SEO competitiveness on online advertisement at Jordanian companies at (0.05).

**H.1-3:** There is a statistically significant effect for SEO experience on online advertisement at Jordanian companies at (0.05).

**H.1-4:** There is a statistically significant effect for SEO techniques on online advertisement at Jordanian companies at (0.05).

### Research Methodology

This research will use the analytical descriptive method, where the survey questionnaire will be built to collect information about the variables of the study through a sample search. The research instrument

was a three-page questionnaire designed to collect information about the main practices that contribute most to influence online advertisement by SEO dimensions in Jordanian companies, which affect their sales and operational performance. A total of 24 questions in the form of multiple-choices were included. The research questionnaire was divided into three sections, with most of the scales standardized to a five-point Likert scale for consistency and ease of completion. The statistics, reported by Ministry of IT in June 2013, indicate that 140 companies have active online marketing websites in Jordan. After contacting those companies, only 121 companies agree to participate in this research. The questionnaires were administered and gathered during a two-month field survey. The research visited the designated companies and handled the questionnaire to the person in charge on marketing operation in the company. At the end of the two months period only 112 companies returned

the questionnaire. After discarding invalid and incomplete questionnaires, this study collected 102 valid responses, which gives us 72.8% response rate.

## Results

### *Study Sample Characteristics*

As shown in table 1, majority of the sample was male (73.5%). Respondents were predominantly with less than (4) years experience and about (34.3%) of the respondents were specialized in marketing. Over (56.8%) of companies are small size (less than 50 employee) and only (32.3%) of them are using E-marketing in high level. Regarding annual online sales, (32.3%) of companies were between 51.000-99.000JD.

Table 1: Demographic profile of the respondents

Demographics	Frequency	Percentage %
Gender		
Male	75	73.5
Female	27	26.5
<b>Total</b>	102	100%
Years of experience		
1-4years	44	43.1
5-9 years	32	31.3
10-15 years	20	19.7
More than 16 years	6	5.8
<b>Total</b>	102	100%
Job Title		
Marketing Manager	35	34.3
General Manager	12	11.7
Web Designer	16	15.7
Programmer	14	13.8
Software Engineering	22	21.5
System Analysis	3	3.00
<b>Total</b>	102	100%
Company Size (Employee no.)		
less than 50 ( Small Size)	58	56.8
101 and less than 200 (Medium size)	23	22.6
More than 201 (Large Size)	21	20.6
<b>Total</b>	102	100%
Frequency of E-marketing usage		
Low	17	16.7
Moderate	22	21.5
High	33	32.3
Extremely high	30	29.4
<b>Total</b>	102	100%
Company Annual Online sales		
Less than 50.000 JD	31	30.4
51.000-99.000JD	33	32.3
100.000 – 250.000 JD	15	14.7
More than 250.000 JD	23	22.5
<b>Total</b>	102	100%

### Testing of Hypothesis

In order to determine the SEO dimensions that influence companies using E-marketing and discern what kind of factors that affects online advertisement, SEO statements were factor analyzed. A principal component factor analysis with Varimax Kaiser Normalization rotation was conducted. Values greater than 0.5 are considered acceptable. The results of the factor analysis are given in Table 2. The analysis produced four factors, which explained 68.504 percent of the

total variance. Only those factors with an eigenvalue greater than 1.00 were retained. Factor Analysis provided four dimensions which were used later in Multiple Regression. Those factors were named as; SEO connectivity, SEO competitiveness, SEO experience and SEO techniques. The reliability for each of the extracted factors is established by checking these factors for internal consistency using Cronbach's alphas. Cronbach's alpha is based on the average correlation between variables within each factor where a value of 0.7 is the minimum

Table 2: Results of factor Analysis for SEO items

	Factor No.	Factor loading	Explained variance	Cronbach alpha
1) Our company consider SEO as a priority bond to communicate our brands by online advertisement	1	.824	15.611	.710
2) SEO strategies are cheaper Lower in cost compared with the rest of other strategy		.803		
5) SEO Promotional techniques increase the company competitive advantage in the online market		.589		
3) It is extremely important to be on the top of the SERP, as consumers search for information online.	2	.697	15.828	.823
4) The higher ranking on SE, the bigger probability that more customers will come to our company site		.732		
15) The company knows the process done inside the search engine like (Robots, Index Server.. et al)		.830		
7) Making links to the company's website with other sites contributed in increasing company website ranking on search engines	3	.644	16.711	.683
6) SEO increased the levels of confidence and competency to the company website		.761		
8) SEO improved the company's brand recognition		.744		
9) The company has sufficient experience when to implementing SEO	4	.560	20.353	.751
10) The company choose Keywords carefully which are added to the website		.518		
11) Using (H1 tag) and (Title tag) has improved the company website ranking		.565		
12) The company realize the importance of suitable "URL" in improving its image		.775		
13) Using (Meta tag) has improved the company website ranking in search engine		.827		
14) Using (Sitemap) has contributed positively to the company website	.828			

acceptability value; although the exploratory research studies the value of 0.6 is considered sufficient (Hair et al., 1998). Examination of the Cronbach's alpha values revealed that almost all of the reliability coefficients for the constructs listed in Table 2 have acceptable levels of reliability.

To test the hypothesis, regression analysis was used to determine which of the four factors had the utmost impact on respondents' toward online advertising. In these analyses the four factors index scores served as the independent and the overall opinion scores as the dependent variables. Regressions proved to be significant. In Table 3 the model summary derived from multiple regression shows that R square is .427 which indicates the amount of variation in one variable that is accounted for by another variable. In another word, through the survey with

102 companies, their opinion of SEO account for 42.7 percent of total impact on online advertisement in Jordan. This indicates that the level of influence of SEO impact on online advertisement is relatively moderate. A closer scrutiny of the results show that SEO competitiveness, SEO experience and SEO techniques were all significant predictor of online advertisement as shown in Tables 5. While regarding SEO connectivity it was not significant. This can be attributed to the fact that most of the companies lack the resources to design a long term strategy due to the complicated nature of SEO. Based on Table 3 and 4 we can conclude that the main hypothesis has been accepted, while regarding sub-hypothesis, the first sub-hypothesis was rejected, while the second, third and fourth sub-hypothesis were accepted as shown in Table 4.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.653 <sup>a</sup>	.427	.399	.42924

a. Predictors: (Constant), Fact4, Fact1, Fact3, Fact2

Table 4: Results of Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.358	.348		3.904	.000
Factor 1	.091	.072	.129	1.270	.208
Factor 2	.163	.075	.220	2.187	.032
Factor 3	.239	.096	.260	2.474	.015
Factor 4	.179	.069	.249	2.576	.012

## Conclusions

SEO contribute in increasing the opportunity to observe online advertisement by customers when they search engines like Google, MSN, Altavista etc for information about product or services. This could be extremely important especially in a country like Jordan with 87.3 % of internet penetration. Based on this fact, this research aims to explore the impact of SEO dimensions on online advertisement. Companies who are using the SEO for the purpose of online advertisement are getting more new customer than the companies using the other methods. After applying the statistical tools i.e. Factor analysis and later on Regression analysis. Factor Analysis provided four dimensions which were used later in Multiple Regression. Those factors were named as; SEO connectivity, SEO competitiveness, SEO experience and SEO techniques. Results show that SEO connectivity were not significant, while the remaining three dimensions were all significant. Results show that the objectives of the research are very much true and there is a visible moderate impact of the SEO on online advertisement in Jordanian companies utilizing e-marketing.

Since we have countless number of factors that affect SEO, it's very essential for companies to choose the appropriate tools to be used. For example, the company must choose carefully the web site's title, meta description, headings, and page content that search engines can recognize better than others. SEO can be beneficial by giving an advantage to high quality sites; such improvement in the quality of search results will attract more consumers. SEO is an important tool to increase a site's visibility for advertisers who can afford to pay more. Consequently, the main value of SEO is to avoid the potentially hefty payments for sponsored clicks.

## Funding

The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported in part by Applied Science University.

## References

- Arab Media Outlook 2011-2015: Exposure and Transition. Dubai Press Club.
- Abraham, M. (2008) The off-line impact of online ads. Harvard Business Review, Vol. 86 No. 4, p. 28.
- Berman, Ron and Katonay, Zsolt (2012) The Role of Search Engine Optimization in Search Marketing. Electronic copy available at: <http://ssrn.com/abstract=1745644>
- Cheffey, D., Ellis-Chadwick, F., Mayer, R., Johnston, K. (2006) Internet marketing Strategy, Implementation and Practice, Prentice Hall, Essex, page 349
- Evans, M. P., (2007) Analyzing Google rankings through search engine optimization data, Internet Research, Vol. 17 Iss 1 pp. 21 - 37
- Enge, E., Spencer, S., Stricchiola, J. and Fishkin, R. (2012), The Art of SEO: Mastering Search Engine Optimization, 2nd ed., O'Reilly Media, Sebastopol, CA.
- Jansen, B.J. and Spink, A. (2006) How are we searching the world wide web? A comparison of nine search engine transaction logs. Journal of Information Processing and Management, No. 42, pp. 248-63.
- Jafarzadeh H., Aybüke A. and D'Ambram J. (2011) Factors Affecting the Success of Businesses in Effective Utilization of Search Engine Advertising: Research-in-Progress. SigIQ pre-ICIS workshop
- Gandour, A. and Regolini, A. (2011) Web site search engine optimization: a case study of Fragfornet, Library Hi Tech News, 2011, pp. 6-13, page 7
- Ghazal Mohammad (2012) Online advertising expected to grow in the near future. The Jordan Times.
- Goldsborough, R. (2005). Get your site noticed without spamming. Black Issues in Higher Education, 21 (26), 40.



- Lourdes, Moreno and Paloma, Martinez, (2013) Overlapping factors in search engine optimization and web accessibility, *Online Information Review*, Vol. 37 Iss 4 pp. 564 - 580
- Lahuerta Otero, E., Muños Gallego, P. A., & Pratt, R. M. E. (2014). Click-and-Mortar SMEs: Attracting customers to your website. *Business Horizons*, 57(6), pp. 729-736. doi: 10.1016/j.bushor.2014.07.006.
- Madleňák, R., Madleňáková, L., Švadlenka, S., & Salava, D. (2015). Analysis of Website Traffic Dependence on Use of Selected Internet Marketing Tools. *Procedia Economics and Finance*, 23, pp. 123-128. doi: 10.1016/S2212-5671(15)00355-X.
- Nielsen-NetRatings (2015) Nielsen Net Ratings Search Engine Ratings: Natural Search's Growth Explosion, and What It Means for SEO in 2015, March, available at: <https://searchenginewatch.com/category/seo/>
- Netmarketshare (2013) Search engine market share, available at: <http://marketshare.hitslink.com/search-engine-market-share.aspx?spider%41&qprid%44> (accessed 2 January 2014).
- SEMPO Annual State of Search Survey (2010).
- SEOMoz (2009) Search engine 2009: ranking factors, available at: [www.seomoz.org/article/search-ranking-factors/2009](http://www.seomoz.org/article/search-ranking-factors/2009) (accessed 1 December 2012).
- SEOMoz (2011) Edition of the Search Engine Ranking Factors, available at: [www.seomoz.org/article/search-ranking-factors](http://www.seomoz.org/article/search-ranking-factors) (accessed 1 December 2012).
- Ramaraj Palanisamy (2013) Evaluation of Search Engines: A Conceptual Model and Research Issues. *International Journal of Business and Management*; Vol. 8, No. 6.
- Rainer Olbrich Carsten D. Schultz , (2014), "Multichannel advertising: does print advertising affect search engine advertising?", *European Journal of Marketing*, Vol. 48 Iss 9/10 pp. 1731 – 1756
- Rangaswamy, A., Giles, C.L., & Seres, S. (2009). A Strategic Perspective on Search Engines: Thought Candies for Practitioners and Researchers. *Journal of Interactive Marketing*, 23(1), pp. 49–60. doi: 10.1016/j.intmar.2008.10.006.
- Singh, S. Sharma, G. Singh, P. (2011) Impact of search engine optimization on the advertisement. SSRN library,(On-line), Available: <http://ssrn.com/abstract=1831120>.
- Shih, B.Y., Chen, C.Y., & Chen, Z.S. (2013). An Empirical Study of an Internet Marketing Strategy for Search Engine Optimization. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 23(6), pp. 528–540. doi: 10.1002/hfm.20348.
- Smithson, S., Devece, C.A., & Lapiedra, R. (2011). Online visibility as a source of competitive advantage for small- and medium-sized tourism accommodation enterprises. *The Service Industries Journal*, 31(10), pp. 1573-1587. doi: 10.1080/02642069.2010.485640.
- Vryniotis, Vasilis WebSEO analytics blog, Is Google Page Rank still important in Search Engine Optimization?, <http://www.webseoanalytics.com/blog/is-googlepagerank-still-important-in-search-engine-optimization/>, downloaded: February 18, 2015.
- Zgang, J. and Dimitroff, A. (2005) The impact of webpage content characteristics on webpage visibility in search engine results (Part II), *Information Processing and Management* 41, pp. 691-715, Page 692.