

**SEARCH ENGINE OPTIMIZATION FOR SMALL
AND MEDIUM SIZE ACCOMMODATION
WEBSITES IN SABAH**

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UMS

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ABSTRACT

This study researched into how small and medium sized accommodation (SMSA) firms in the tourism and hospitality industry in Sabah, can attain and sustain a competitive advantage in search engine marketing (SEM). A competitive advantage is achieved, if, in a specific market, the web page is ranked on the first page of the search engine (SE) results list – with the product or service customers look for. This study sought the key factors that increase the potential for a page one ranking for the SMSA's website, employing niche marketing concepts and the systems approach. The results of the study were then incorporated into a model depicting a systematic procedure for analysis and design. The SMSA should compete in carefully selected niche markets with diminished competition, so as to delimit the largely unknown set of variables associated with ranking a website through search engine optimization (SEO), to a known few, and focus on content that converges with the customer's expectation. Gaining insights into what would influence first page ranking involved determining what, and how, information is portrayed to the customer (the SE mimics the customer) already advanced along the buying funnel, as he traverses a site. The study extends traditional SEO thinking, from one of reductionism to systems thinking. In the latter, what emerges from the interaction of system elements decides how sites competing to be on page one of search results are ranked. The methodology incorporates mixed methods in a multiple case study design. Findings suggest that non-conventional factors play the major role in web page ranking in small, less competitive niche markets. During an impasse, however, when such factors nullify each other, the study points out that conventional variables become crucial at deciding which competing site surpasses the other. Low values of certain conventional variables, coveted in traditional SEO, will not present barriers to a first page ranking. The systems approach points out areas of leverage, and rendering SEO applications more tangible, in an uncertain and dynamic marketplace environment.

KEYWORDS: niche markets, niche marketing, search engine marketing, systems thinking, SEO, competitive advantage.

ABSTRAK

MENGOPTIMUMKAN SEARCH ENGINE BAGI LAMAN SESAWANG PERKHIDMATAN PENGINAPAN SAIZ KECIL DAN SEDERHANA DI SABAH

Kajian ini mengkaji berkenaan bagaimana firma penginapan bersaiz kecil dan sederhana (Small Medium Sized Accommodation - SMSA) di dalam industri pelancongan dan hospitaliti di Sabah, boleh mencapai dan mengekalkan kelebihan daya saing dalam kaedah Search Engine Marketing (SEM). Kelebihan daya saing tercapai jika di dalam pasaran tertentu, laman portal tersenarai di dalam laman pertama hasil Search Engine (SE) – dan produk dan perkhidmatan adalah yang dicari oleh pelanggan. Kajian ini bertujuan untuk mencari faktor utama yang boleh meningkatkan potensi untuk mencapai kedudukan dalam laman pertama untuk laman sesawang SMSA, dengan menggunakan konsep pemasaran niche dan pendekatan sistem. Hasil kajian ini kemudian diterapkan ke dalam satu modul yang menggambarkan satu prosedur yang sistematik untuk tujuan analisis dan rekabentuk. SMSA sepatutnya bersaing di dalam pasaran niche terpilih dengan keadaan persaingan adalah berkurang bagi tujuan membatasi set pembolehubah yang tidak diketahui yang mempengaruhi carta kedudukan laman sesawang melalui Search Engine Optimization (SEO), dan memfokuskan kepada kandungan yang memenuhi ekspektasi pelanggan. Melalui pengetahuan bagaimana laman sesawang disenaraikan dalam laman pertama enjin carian menentukan bagaimana dan jenis maklumat yang disampaikan kepada pelanggan (Search Engine adalah menyerupai pelanggan) adalah sesuatu yang mendahului expektasi kehendak pembelian pelanggan semasa mereka menelusuri laman sesawang. Kajian juga dilanjutkan kepada kepada cara tindakan SEO tradisional, iaitu daripada cara mendeduksi carian kepada cara sistem berfikir. Melalui cara sistem berfikir, hasil interaksi elemen-elemen dalam sistem menentukan bagaimana laman sesawang bersaing pada laman pertama carian untuk di susun mengikut keutamaan. Kaedah yang digunapakai adalah hasil kaedah campuran melalui beberapa rekabentuk kajian kes. Kajian menunjukkan bahawa faktor bukan konvensional memainkan peranan yang penting dalam penentuan carta kedudukan laman sesawang bagi pasaran niche yang kecil dan kurang persaingan. Akan tetapi semasa berlaku kebuntuan di mana setiap faktor membatalkan antara satu sama lain, kajian menunjukkan bahawa pembolehubah konvensional akan digunapakai bagi menentukan laman sesawang yang bersaing, yang mana lebih berkepentingan berbanding yang lain. Pembolehubah konvensional yang kurang nilai – lebih menyerupai SEO tradisional, tidak akan menyebabkan halangan kepada penyenaian kedudukan pada laman sesawang pertama enjin carian. Pendekatan sistem yang akan menunjukkan bahagian-bahagian yang lebih berpengaruh, yang menerangkan aplikasi SEO lebih ketara di dalam persekitaran pasaran yang dinamik dan tidak menentu.

KATA KUNCI: pasaran niche, pemasaran niche, search engine marketing, pemikiran sistem, SEO, kelebihan daya saing.

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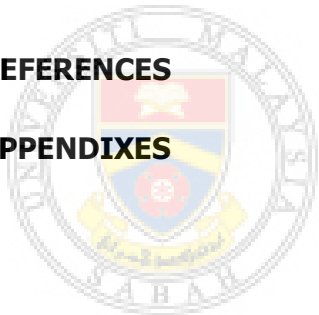
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LIST OF ABBREVIATIONS

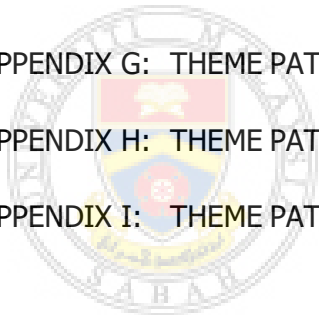
ATF	-	above-the-fold
GKWP	-	Google keyword planner
GST	-	General Systems Theory
KW	-	KeyWord
LSA	-	Latent semantic analysis
PPC	-	pay-per-click
ROI	-	Return on investment
SE	-	Search engine
SEM	-	Search engine marketing
SEO	-	Search engine optimization
SERP	-	Search engine results page
SME	-	Small and Medium-sized Entrepreneurs
SMME	-	Small, Medium and Micro Enterprises
SMSA	-	Small and medium-sized accommodation
WP	-	Web page



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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter presents the background of the research, followed by the statement of the problem. The research questions, objectives and scope of the study to address the problem then follow. A justification for the research is offered. Some key terms and concepts used in the research are defined.

1.2 Research background

Tourism is a significant source of income for many countries, bringing in revenues for the local economy from the sales of goods and services to tourists. Employment opportunities are created in tourism associated sectors of the economy. Tourism is the second most important industry in Malaysia (Chin et al., 2000). It is recognized by the government as a key economic activity, backing it up with funding, planning, co-ordination, regulation and enforcement. In 1987, the Ministry of Culture and Tourism was set up, which later expanded into the Ministry of Culture, Arts and Tourism (Rahimatsah, 2002), and allotted a high priority status to tourism.

In the Asia-Pacific region, as in the rest of the world, ecotourism has become the fastest growing sector of tourism (Rahimatsah, 2002; Eagles, 1995; Chin et al., 2000; Lindberg et al., 1997). In Sabah, ecotourism is the focus of the tourism industry (Bagul, 2005; Fletcher, 2009). It is an area in which Sabah is gifted, being very much endowed with unique flora, and wildlife that is diverse. Sabah has a culture which is multifaceted, with the more than 30 ethnic groups offering "rich and diverse cultural heritage" (Bagul, 2005, p. 6).

The service industries benefit from tourism. These include transportation services, entertainment venues, parks, shopping malls; and hospitality services, such as accommodations, including hotels and resorts. The Sabah Tourism Board is actively promoting Sabah as a tourism destination (Chan & Quah, 2008). There is increased growth in the tourism industry, aided by more flights to Kota Kinabalu from some of the world's major cities. The growth of the tourism industry has also brought about a corresponding

increase in the number of small and medium-sized accommodation (SMSA), forming a sizeable percentage of the hotel industry. SMSAs include bed and breakfast, backpackers' lodges and budget accommodation, and rated as falling under the Orchid Rating category – which does not qualify them star rating - and is applicable to tourist accommodation premises with basic facilities such as good, safe and clean accommodation and a friendly hospitable atmosphere (Chan & Quah, 2008).

Competition is increasing for the SMSA operators. There is competition resulting from oversupply, accentuated at the same time by such issues as lack of customer demand (during off season), and insufficient promotion by third parties (Chan & Quah, 2008; Chan & Quah, 2012). Catering only to a small number of niche markets or having only a small share of each market niche could be detrimental to a firm's survival. According to Stokes (2006, p. 325), "...dependency on a relatively small customer base makes their environment more uncontrollable, more uncertain than that of larger organizations".

Some SMSA concerns can be addressed by recent developments in ICT, which offers new possibilities for tourism and travel marketing (Gursoy, 2010). The Internet presents an avenue for gaining a competitive advantage in business. Porter (2001) suggests that the adoption of the Internet could complement traditional ways of competing. Porter's proposition (2001) that technological solutions enhance competitiveness by building on existing businesses is borne out by the successes of the "bricks-and-clicks" business model (Hamilton, 2007, p. 6). In this model, advantages are created for established "brick-and-mortar" companies when traditional and Internet methods are integrated.

Search engine marketing offers a means by which the SMSA can potentially reach a wider and more targeted market, all year round. Past studies show that the search engine as the preferred method of more than 80% of Internet users for seeking information (Sullivan, 1998). A website appearing on the first page of a results list, following a search query in the SE, with offers that satisfy a consumer's search, represents a competitive advantage for the SMSA seeking new advertising and distribution channels. The importance of a first page ranking in search results is underscored by studies which suggest that only about 27% of visitors move beyond page one of search results (Jansen & Spink, 2006). In search engine marketing, a web page ranked beyond the first page, essentially does not exist (Nielsen & Loranger, 2006; Sigala, 2011). Table 1.1 rates the potential visibility of

sites on page one of search results, based on their positions on the list (Paraskevas et al., 2011).

If visitors to the SME's web page are already further along the buying funnel, they constitute a targeted traffic, potentially contributing towards an increased in ROI (Return on Investment). The competitive advantage becomes more significant if the web page were to appear on the first page of search results in Google, the search engine with the biggest global search engine market share at over 60% (netmarketshare, 2015). Table 1.2 compares the market share of Google relative to other search engines over the period 2015. Table 1.3 indicates how dominant the same search engine is, in most countries (returnonnow, 2015). The foregoing suggests that, at the present time, search engine marketing should best focus on Google because of its global and local dominance, in terms of usage. It is arguably the search engine preferred by consumers for accessing the Internet and conducting search on the information it holds.

Search engines get their revenues from offering and charging ads spaces such as PPC (pay-per-click). PPC ads, when clicked upon by prospective customers, will send them to designated websites. Businesses, which use this method to channel customer traffic to their websites, pay the search engine when their ads are clicked on (Chen et al., 2011). Depending on how much they would be willing to pay the SE, they could literally pay to rank on page one of search results. Such sponsored ads, however, are viewed much less compared to organic results, and are increasingly being avoided by searchers (Sen, 2005; Quinton & Khan, 2009). Organic results, or natural results, are supposed to reflect relevancy to a searcher's query (Xing & Lin, 2004). To aid a site to rank well in organic search results, a process called Search Engine Optimization (SEO) is employed.

Table 1.1: Visibility of sites on first page of search results

Organic results	Visibility
Site 1	100%
Site 2	100%
Site 3	100%
Site 4	85%
Site 5	60%
Site 6	50%
Site 7	50%
Site 8	30%
Site 9	30%
Site 10	20%

Source: Paraskevas *et al.*, (2011).

Table 1.2: Desktop search engine market share 2015

Search Engine	Total Market Share
Google – Global	66.41%
Baidu	12.33%
Bing	10.16%
Yahoo – Global	8.76%
AOL – Global	0.70%
Ask – Global	0.22%
Lycos – Global	0.01%
Excite – Global	0.00%

Source: netmarketshare (2015).

Table 1.3: Search engine market share by country 2015

Search engines – 2015 Stats					
Country	Leader	Share	Runner Up	Share	Internet Penetration
Argentina	Google	92%	Yahoo	3%	75.0%
Australia	Google	94%	Bing	4%	89.6%
Brazil	Google	95%	Others	6%	54.2%
Canada	Google	87%	Yahoo	6%	92.5%
China	Baidu	55%	Qihoo 360	28%	49.5%
France	Google	92%	Yahoo	4%	83.3%
Germany	Google	94%	Bing	2%	88.6%
Hong Kong	Google	73%	Yahoo	24%	80.5%
India	Google	96%	Others	4%	28.3%
Indonesia	Google	96%	Others	4%	28.5%
Italy	Google	95%	Yahoo	2%	58.5%
Japan	Google	67%	Yahoo Japan	40%	90.6%
Malaysia	Google	93%	Yahoo	4%	67.5%
Mexico	Google	94%	Bing	3%	49.2%
The Netherlands	Google	94%	Bing	2%	95.7%
The Philippines	Google	89%	Yahoo	7%	43.0%
Poland	Google	97%	Others	3%	66.9%
Russia	Yandex	58%	Google	34%	61.4%
Saudi Arabia	Google	94%	Yahoo	2%	65.9%
Singapore	Google	92%	Yahoo	6%	82.0%
South Africa	Google	93%	Bing	4%	49.0%
South Korea	Naver	77%	Daum	20%	92.3%
Spain	Google	95%	Yahoo	2%	74.5%
Sweden	Google	94%	Bing	3%	94.8%
Thailand	Google	98%	Others	2%	34.9%
Turkey	Google	96%	Yandex	2%	56.7%
United Arab Emirates	Google	94%	Yahoo	2%	93.2%
United Kingdom / UK	Google	90%	Bing	5%	89.8%
United States	Google	72%	Bing	21%	87.9%
Vietnam	Google	92%	Bing	4%	48.3%

Source: returnonnow (2015).

There is a limit, however, to what can be achieved by (traditional) SEO, since details of the purportedly numerous variables that influence the ranking of a web page are not fully known or understood. The variables, in terms of numbers and significance, are presumed in a state of flux. SEO has been described as "interesting but less understood area in online advertising industry" (Xing & Lin, 2006, p. 27). Under certain conditions the SE revenues may be affected by SEO producing better organic results (Berman & Katona,

2010). This hints at a possible source of conflict, not unlike that between competitors, suggesting the plausibility of the search results being “moderated” (by the SE) to create an advantage for the SE. The environment then, within which search engine marketing is played out, is ever changing and unpredictable. However, by its very nature, the SE offers an opportunity for a firm to differentiate itself from the competition in the manner in which it pursues a competitive advantage in the industry.

The foregoing suggests then, that the obvious aim for the SME when taking advantage of SEM is to attain as high a ranking as possible in the SERP – on page one, preferably. The attainment of a competitive advantage and its sustainment can be affected by strategic positioning in the industry (Porter, 1996). Porter defines strategic positioning as doing different things, or doing similar things differently from the competition. In the context of the Internet, such a requirement would seem improbable, at first. The Internet, being an open environment, coupled with the proliferation of specialized applications, cannot safeguard the marketing efforts employed on any particular website. This would effectively render any competitive advantage gained over rivals, short-lived.

The intent of this thesis is to explore how the SMSA can achieve a competitive advantage in search engine marketing, in the products they offer, and in the context of the tourism and hospitality industry in Sabah. Specifically of concern is achieving a first page ranking in Google search results, whilst targeting those consumers already well advanced along the buying funnel. From the onset, the marketing environment provided by the search engine is considered dynamic and unpredictable, and that (traditional) SEO, generally reductionist in approach, does not provide a tangible account of how ranking on page one of search results is attained and sustained.

The study takes note of the inherent uncertainty in the search engine enabled marketplace; but viewing it as providing an opportunity for the SMSA to differentiate his marketing efforts. It extends SEO to incorporate a systems approach, viewing the elements as interacting within a whole, to achieve a specific goal. A model is then developed which can be used by the SMSA to implement niche marketing, through search engine marketing, with systems thinking as an enabler to attain and sustain a competitive advantage.

1.3 Statement of the problem

The literature does not adequately provide “informed decisions about which business applications of eBusiness technologies are appropriate given the unique context of each SME” (Parker & Castleman, 2007, p. 22). Specifically, it does not address that segment of the SME in the hospitality and tourism industry embarking on search engine marketing, in the context of Sabah, and in an environment which is both uncertain and dynamic. Past studies (Rao, Metts & Monge, 2003; Parker & Castleman, 2007; Parker & Castleman, 2009; Mohamad & Ismail, 2009) tended to emphasize on the adoption factors and barriers to e-marketing faced by the SME. Recently, some attention has turned towards this area (Magala, 2008; Quinton & Khan, 2009; Doiron et al., 2010), but have not made the processes involved in web page ranking, tangible, or more apparent - nor advance approaches that consider the plausibility of ranking based on the reader’s intuitive perception of a site’s convergence with his query.

Market research will reveal the markets, or niche markets, that the SMSA in the tourism and hospitality industry can profitably cater to. The same market data can also be instrumental at making a web page visible and generate traffic (McGaffin, 2008). The traffic is targeted if it is already well advanced along the buying funnel (Jansen et al., 2009; Charlesworth, 2009). The categorization of niche markets, and how they relate to the theories discussed by several authors, and the possible applications with which to implement the process, are rarely elaborated.

The literature on search engine marketing does not place emphasis on pursuing and sustaining a competitive advantage, even considering that the environment itself, albeit in a non-obvious fashion, offers that opportunity. Competitive advantage can be attained through enhancing operational effectiveness and strategic positioning (Porter, 1998). It is the latter that sustains it, however (Porter, 2001) - that is, by attaining an objective by doing different things or during the same things differently (Porter, 2001). Due to the open nature of the Internet, it increases competition (Porter, 2001): by increasing rivalry among existing competition; lowers barriers to new entrants; increasing power of buyers and suppliers; and increases power of substitutes – making it difficult to sustain a competitive advantage. The search engine provider, a revenue earner in the same marketplace it provides, can be construed as a competitor – it provides advertisement space for a fee. The search engine also has that attendant task of ensuring the relevance of the content users look for, and this includes circumventing search engine abuse.

Being a competitor, among competitors, and committed, at the same time, to ensuring the continued relevance of the search engine for its intended purpose, but finding itself in an environment that keeps evolving, the search engine cannot but react in a way that gives rise to a volatile marketplace. Market volatility and unpredictability affect web page ranking in the search engine. To achieve and maintain a competitive advantage in such a medium would require its "continuous monitoring," and then effecting "changes in SEM strategies" (Pan et al, 2010, p. 414), when necessary. Unpredictability effectively renders the process of SEO, a fuzzy process. For the SME, expending into e-marketing or search engine marketing without planning to achieve a sustainable competitive advantage, may portend an online demise reminiscent of numerous dot.com era companies (Kiang et al., 2000; Shin, 2001; Mahajan et al., 2003).

Three generic strategies have been cited in the literature for pursuing a competitive advantage (Porter, 1998; Porter, 2001); cost leadership, differentiation and focus. Shin (2001), carried out a study and identified several criterion necessary to succeed online. For instance, when the competition is significant (Shin, 2001), go for markets, "that are concentrated and... threats of new entrants and/or product substitutions are relatively weak" (p. 168). In addition, an Internet company should have a strong customer focus (Shin, 2001). The study also points to the desirability of a company incorporating several related products in its repertoire (Shin, 2001). Revenue sharing, such as performance-based marketing, similar to that discussed by Hoffman and Novak (2000) is also in the list (Shin, 2001). Outsourcing or entering into strategic alliances is a natural outcome of the former.

The findings by Shin (2001) that adopting a clicks-and-mortar strategy (integrating online and offline businesses), contribute towards a competitive advantage, harks to Porter's own suggestion (Porter, 2001). A competitive advantage derived from matching all activities together makes a strategy harder to imitate. Olsen et al (1998) suggest that as far as the accommodation industry is concerned, it has a difficulty in that the means to attaining and sustaining a competitive advantage can be copied. To overcome the problem, Olsen et al., (1998) submit something akin to Porter's (2001) contention that integrating together several unique offers makes them, as a package, difficult to duplicate. However, these, in themselves, can only partly add to the requirements of high visibility in the search engine.

Where the Internet is concerned, the niche market, or the keyword that denotes it, plays a role in gaining a competitive advantage. Traditionally, small firms had concentrated on niche markets, using them to penetrate large markets, or existing segments, to gain competitive advantage (Dalgic & Leeuw, 1994). Anderson (2006) and Constantinides (2009), amongst others, suggest that niche markets started to proliferate when the Internet came into being. In his "Niche marketing with keyword research" McGaffin (2008) demonstrates how traditional niche-marketing concepts can be applied on the Internet, and how markets can be searched for online. The correct choice of keywords, that is, keywords variously referred to as Long Tail (Anderson, 2006; Ledford, 2009), and the application of SEO (Chambers, 2006; Kritzing & Weideman, 2007; Paraskevas et al, 2011; Bodenlos et al, 2010), enable a targeted customer traffic to be generated from the search engine (Brynjolfsson et al., 2006; McGaffin, 2008; Jansen et al., 2009). The traffic is either generated at the company's website, or have it directed to it (Malaga, 2011; Duffy et al., 2005; Daniele et al., 2009).

For the SME extending brick-and-mortar business online, such as accommodation in the tourism and hospitality industry, high web page visibility in the search engine, in response to a search made by the market of interest, is required. The caveat, however, is that, the process of SEO is not fully understood; that is, the parameters used to moderate the relevancy of a web page in the search engine is not fully known. The exact number of variables involved and their significance, and how they change over time, is generally not in the public domain.

A previous lack of focus on programmes, approaches and tools specifically to aid the SME on e-commerce (Parker & Castleman, 2007), and the uncertainty with regards to the antecedents securing success in search engine marketing, would confront the SMSA intending to extend business online. However, several authors have theorized on the nature of the markets which could increase the likelihood for securing a competitive advantage in online marketing (Dalgic & Leeuw, 1994; Kotler, 2003; Porter, 2001; Shin, 2001; Anderson, 2006; Ledford, 2009; Jansen et al., 2009). By focusing on niche marketing, and selecting appropriate niche markets to cater to via their websites, the SMSA could potentially attain a competitive advantage in SEM.

In developing the research objectives, gaps revealed in the literature review were taken into account. Early investigations concerning the adoption of e-commerce by SMEs

were largely on identifying drivers and impediments to adoption. Little attention was paid on programmes, approaches and tools (Parker & Castleman, 2007), that would inform the SME embarking on search engine marketing. There was little or no mention made, on how the SME can attain and sustain a competitive advantage in search engine marketing, within a marketplace environment that is both dynamic and uncertain (Xiang & Law, 2013; Pan et al, 2011).

The literature discussed numerous variables that might affect website ranking in the search engine, but the general impression is that, they wax and wane, both in numbers and significance. Not all of these variables are known (Evans, 2007). Search engine marketing, therefore, is like a moving target that requires constant monitoring, and when necessary, affect changes (Pan et al, 2011) to attain and maintain a competitive advantage. In such an uncertain environment, dissimilar approaches in the pursuit of page one ranking in the SE cannot be avoided. This gives rise to an environment that offers an opportunity to pursue a competitive advantage by means that are potentially dissimilar from the competition.

In summary, there is a gap concerning what the key factors are at ranking a web page on the first page of the SERPs; specifically, how are they identified, what they are, and how are they verified as significant. In terms of approaches to search engine marketing, little attention had been paid beyond identifying barriers to adoption by the SME about to embark on SEM. Another gap that would arise revolves round the little to no mention made of attaining a competitive advantage in search engine marketing in the context of a marketplace environment that is uncertain and dynamic. This study aimed to address the foregoing in the context of the SMSA in Sabah partaking in the tourism and hospitality industry. It will also develop a model that takes account of the findings, to rank a site on page one of search results, using an approach that extends and complements (traditional) SEO.

1.4 Objectives of the study

The key research question investigated was, "How can small and medium sized accommodation sector websites, in the context of the tourism and hospitality industry in Sabah, attain and sustain a competitive advantage in search engine marketing?" In order to answer the inquiry, the following main and sub research objectives, specific to the industry in Sabah, were developed:

Main Objective:

Develop a model which will aid the SMSA to attain and sustain a first page ranking for his site, in search engine search results, in niche markets related to the tourism and hospitality industry in Sabah.

Sub Objectives:

- i. To identify keywords denoting "less competitive" and "more competitive" niche markets that can contribute towards a competitive advantage for the SMSA through search engine marketing.
- ii. To identify similarities and differences between SEO application for a page one ranking in search results in "less competitive" and "more competitive" niche markets; discuss their implications for the SMSA.
- iii. To determine conventional variables used in SEO that can affect the ranking of the SMSA website competing in niche markets related to the tourism and hospitality industry.
- iv. To explore non-conventional variables or factors that contribute towards a web page attaining a first page ranking in search results.
- v. To explore why a web page, not search engine optimized, is able to outrank one that is.
- vi. To identify the key factors, and how they are applied, in a systems thinking approach, and verify why a web page can outrank, or be outranked by, its nearest neighbor competitor.

1.5 Research Questions

- i. What are the keywords denoting "less competitive" and "more competitive" niche markets that can contribute towards a competitive advantage for the SMSA through search engine marketing?
- ii. What are the similarities and differences between SEO application for a page one ranking in search results in "less competitive" and "more competitive" niche markets; what implications do they have for the SMSA?
- iii. What are the conventional variables used in SEO that can affect the ranking of the SMSA website competing in niche markets related to the tourism and hospitality industry?
- iv. What are the non-conventional variables or factors that contribute towards a web page attaining a first page ranking in search results?

- v. Why is a web page, not search engine optimized, able to outrank one that is?
- vi. What are the key factors, and how are they applied, in a systems thinking approach to verify why a web page can outrank, or be outranked by, its nearest neighbor competitor?

1.6 Significance of the study

The findings in the study contribute towards theory and solving problems. SEO is extended, and complemented, from one which is generally reductionist, to one that employs a systems thinking approach. It aims to identify tangible factors that are involved in web page ranking, and that their application in design will aid the SMSA to attain and sustain a competitive advantage in SEM. Both these aspects are incorporated in a model – the main objective of this study, and whose lead up, the gaps revealed in the literature are also addressed. To achieve the objectives of this study, requires a shift from reductionist SEO to one which employs systems thinking.

SEO is reductionist, in a sense, because it attempts to analyse, hence solve, problems related to ranking in the search results list, by dividing them into simpler parts (variables). The process is largely trial and error, however, since the variables are mostly unknown (Evans, 2007). Analysis by SEO places emphasis on query term matching and incoming links – with the latter, an attempt to get a good value for another one of its variables, the coveted PageRank: which “works by counting the number and quality of links to a page to determine a rough estimate of how important the website is.....more important websites are likely to receive more links from other websites” (“How Search Works – Inside Search – Google”, 2011). The process is complex, however, with results sometimes deviating from expectations (Bifet et al., 2005; Fortunato et al., 2005; Moran & Hunt, 2005). Good values for PageRank, for instance, will not necessarily rank a site higher than one less endowed (Evans, 2007).

Employing SEO as a tool for analysis and design, shifts the focus away from the central question: does the site’s content converge with the customer’s query? This is especially significant since Google has professed an eventual goal for a search engine that is “smarter and faster, so it can understand that when you type [jaguar] you’re looking for the car, not photos of the animal” (Google, 2012), and has intimated that content be written for the human reader. The study applies a systems approach to gaining insights into what might be influencing a site to rank on page one of search results, essentially offering an

extension to traditional SEO. It then brings together findings to construct a model by which the SMSA could attain and sustain a competitive advantage in SEM.

In the systems approach, selected SEO type variables were not ignored, but were treated as parts (or elements), together with non-conventional factors. All participating elements are interdependent (Emery, 1969), with their significance being their positional value in the overall system (Emery, 1969). The emphasis here differs from that of traditional SEO, in that, not only must the value or significance of the parts be known, but where they occur in the system. In this study, those parts, or elements, are a "set of human activities related to each other so they can be viewed as a whole" (Checkland, 1981, p. 47). To articulate the concept, the system is considered an "open system," implying an emulation of a "living" system, which to survive, exchanges matter with its environment (Von Bertalanffy, 1972).

To advance the concept further, the "living" systems are autopoietic systems (Maturana & Varela, 1991), having autonomy and unity. The autonomy concept suggests that, renewal of system elements is effected by the operations of the system themselves. Due to those operations, unity, hence system identity is preserved. The web page is now viewed as a (living) system, having its elements arrayed in a predetermined format; taking in from, and discarding to, its environment, so as to "survive" and perform its ascribed goal. A site's content is a byproduct of human practices, or going further; the site's author's cognitive skills have extended into, or is embedded in the system.

Ranking then is due to the outcome of an interaction between the SE/customer, and the now "sentient" site, with the former interpreting how well the system elements portray convergence with query. This approach also subscribes to the position of the constructivists: that meaning is not discovered, but constructed and interpreted, and dependent on human practices (Crotty, 1998).

A case study, with the resulting data tabulated for each of the relevant factors associated with the competition on page one of the results list, would suggest several avenues for a web page, offering tourism and hospitality products, to attain a page one ranking in a particular niche market - virtual or otherwise. Several such tabulations, on niche markets closely related, will enable the SMSA to cumulatively increase the size of his market, and potentially improve business survivability (Dalgic & Leeuw, 1994). The research findings

allow a framework to be developed, whose utility is to recognize and verify the factors needed for the SMSA to attain and sustain a competitive advantage in search engine marketing - but specifically in the context in which the study was conducted.

1.7 Scope of the research

In this study, the focus is on the SMSA partaking in the tourism and hospitality industry in Sabah; specifically on attaining a competitive advantage through search engine marketing. The SMSA categories cover bed and breakfast, backpackers' lodges and budget accommodation, including hotels without star rating (Chan & Quah, 2008). Having said that, in addition to accommodation, the SMSA is presumed liable to offer a range of affiliated products, such as those contained in the destinations amalgam model (Buhalis, 2000; Cooper, 2005), which includes; attractions, amenities, ancillary services, and access (Cooper, 2005). Bearing in mind the foregoing, the study's scope was aimed towards seeking insights into how the SMSAs' sites can rank on the first page of search engine results lists, regardless of whether the sites were the official company site, or affiliate sites sending traffic to the former, on which are offered their products to selected niche markets within the tourism and hospitality industry.

In search engine marketing, where seventy three percent (73%) of website visitors do not go beyond page one of search results (Jansen & Spink, 2006), a site on that page, with offers that satisfy a consumer's search, represents a competitive advantage for the SME seeking to market his products. The literature discusses numerous variables that might influence a web page's ranking (Evans, 2007; Su et al., 2010) through search engine optimization (SEO), but there persists an uncertainty as to the actual numbers and significance of these variables. A significant part of the process of SEO, involves the identification of variables whose actual numbers and significance are largely unknown, and plausibly constantly changing (Schiller, 2008; Evans, 2007; Malaga, 2009). A comprehensive SEO may be expensive, if it were to involve the recruitment of "experts" and purchases of linkages from external sites.

The first part of the study, Phase 1, focused on those small niche markets that other companies had missed, ignored, or were deterred by their size - just as had happened in traditional marketing for the same reasons (Dalgic & Leeuw, 1994; Kotler, 2003). An assumption was then made, smaller online markets will deter most firms, especially those with the wherewithal to mount an indepth research and application of SEO. The overall

application of SEO, therefore, in these markets, by firms not so endowed with resources, will not be so prolific or comprehensive, and would involve a much smaller set of conventional variables. The study then sought to identify these variables, and their influence on web page ranking estimated. The foregoing refers to Phase 1 of the study, but the results informed Phase 2. In the latter, ranking a web page was no longer from the perspective of (traditional) SEO, which is reductionist, but through the application of the systems approach.

Small niche markets, neglected by most firms, increase the potential for the SME to establish a competitive advantage (Dalgic & Leeuw, 1994; Kotler, 2003). The study placed emphasis on searching for keywords that consumers use as queries when seeking tourism and hospitality related information online. Specifically Long Tail keywords (Anderson, 2006; Ledford, 2009), that in normal SEM work are taken to denote niche markets (McGaffin, 2008) were sought for. Having identified niche markets that the SMSA can cater to, the study investigated whether conventional variables – with poor values – posed barriers to ranking on page one of search results in these markets. If minimally valued variables do not prevent ranking on the first page of search, this would suggest that factors, other than conventional variables that are normally associated with traditional SEO, influence web page ranking.

Whereas traditional SEO seeks to convince the search engine of the relevance of a site to a query by users, Phase 2 of the study viewed the SE as mimicking, or impersonating, the very type of customer that the SMSA site was catering to. Google, in fact, suggests that content be written for the human user, and not the search engine (Google, 2013). Focusing on the type of consumers already well advanced along the buying funnel, the researcher empathized with the SE/customer, when seeking insights on how they, or it, would evaluate and rank each competing site. Towards that end, non-conventional factors that might contribute to ranking were sought, in addition to identifying conventional variables, and laid them out as fixed elements of a system that are interdependent, and interacting, to produce an outcome which none of the elements, on their own, or as an amorphous set, are capable of (Ackoff, 1971).

In this study, systems thinking (Ackoff, 1971; Kauffman, 1980) was employed to solicit for insights into how a web page can attain a page one ranking, when ascribed with that task (Ansari, 2004). The competing web pages were conceptualized onto a common

platform; that is, having the same elements, arranged in the same predetermined manner, but differing only in their respective values – and then viewed and evaluated as to how they achieved their ranking, from the perspective of the SE/prospective customer. Viewed as an organized system, given rise by a complex set of relations between its parts, or elements, the study sought a tangible account of how a web page would be evaluated by the SE/prospective customer, hence ranked based on those evaluation criteria.

The foregoing was conducted in the context of the SMSA in Sabah partaking in the tourism and hospitality industry. It took note of the deficiency, or gaps, in SME-specific literature on search engine marketing (Parker & Castleman, 2007), particularly in the Sabah context, and attaining and sustaining a competitive advantage in SEM, in general. It investigated how ranking on page one of search results, in a specific niche market, could be achieved, using an approach that differed from traditional SEO. It took note that; strategic positioning, defined as, doing different things, or doing similar things differently from the competition may constitute a competitive advantage (Porter, 1996). The study sought to verify the sufficiency of the identified key factors to explain why a site is able to outrank, or being outranked by, its nearest neighbor. It developed a model, that through the systems approach, can attain and sustain a page one ranking for the SMSA site in the search results list.

The parameters within which the study was conducted, and hence the model is based on are: the niche markets were in the context of the tourism and hospitality industry in Sabah; that they are denoted by Long Tail keywords (Anderson, 2006; Ledford, 2009); that it subscribed to both the post-positivist and constructivist/interpretivist paradigms. Post-positivism figured in the study to arrive at the conventional variables that would be involved in the systems thinking approach. Constructivism/interpretivism figured in the construction and interpreting of the constructs built upon both conventional and non-conventional factors, following a systems approach framework. The evaluating agent, that is the SE, was viewed as mimicking the customer who had entered the (Long Tail) query keyword, and it ranked competing sites based on how their content converged with it.

1.8 Definition of terms

"Above the fold": The upper half of the front page of a newspaper where an important news story or photograph is often located (wikipedia.org). As per web page, it refers to the area immediately visible when initially loaded without scrolling further down.

Anchor Text: Anchor Text is the actual text used within a link linking to a specific website.

Autopoiesis: the property of a living system (such as a bacterial cell or a multicellular organism) that allows it to maintain and renew itself by regulating its composition and conserving its boundaries (Merriam-Webster).

Bricks-and-clicks: Refers to businesses that offer online services as well as traditional outlets.

Bricks-and-mortar: Refers to businesses with a physical presence, but not an online or virtual one.

Competitive Strategy: This strategy involves positioning a business in order to maximize the value of the capabilities that distinguish it from its competitors (Porter, 1998).

Complexity: the quality or state of not being simple: the quality or state of being complex: a part of something that is complicated or hard to understand (Merriam-Webster)

Back-link (or inbound link): A back link is a hyperlink from an external site to the target site. All the major search engines consider the relevance of the text used in the back link (called the anchor text).

Emergent: arising unexpectedly, arising as a natural or logical consequence, newly formed or prominent (Merriam-Webster).

HTML: Hypertext Markup Language; used to author Web documents containing links, graphics, and multimedia.

Keyword Density: The term refers to the percentage of times a keyword or phrase appears on a web page compared to the number of words on the page (wikipedia.org).

Latent semantic analysis: Refers to an approach in automatic document indexing and retrieval. LSA (sometimes the term LSI is used) to overcome problems inherent to existing retrieval techniques that try to directly match word of queries to words in the document.

Long Tail: A term popularized by Anderson (2004) as referring to a strategy of selling large quantities of unique items, with each item sold in relatively small numbers.

Lynx (text browser): Refers to a text-only web browser, which Google suggests to use when examining sites, to see how most search engine spiders see them.

Mass Marketing: Refers to the process of selling the same product to masses of consumers (Dalgic & Leeuw, 1994).

Niche: A more narrowly defined group seeking a distinctive mix of benefits (Kotler, 2003).

Niche Markets: Refers to a very specific market segment within a broader segment. A niche market involves specialist goods or services with relatively few or no competitors (Perseus, 2003).

Niche Marketing: It is about positioning into small, profitable, homogeneous market segments ignored or neglected by others (Dalgic & Leeuw, 1994).

"Online marketing", "E-commerce" and "E-marketing": Terms in this study which will be taken to mean the same thing, though they are quite often, elsewhere given distinctively varying definitions. E-marketing is defined as "the process of advertising and selling products and services on the internet, for example, on a company website or by email" (Cambridge Dictionary, 2016).

Open system: a system that has external interactions. Interactions can take the form of information, energy, or material transfers into or out of the system boundary (wikipedia.org).

Reductionism: explanation of complex life-science processes and phenomena in terms of the laws of physics and chemistry; a procedure or theory that reduces complex data and phenomena to simple terms (Merriam-Webster).

ROI: Return on investment (ROI) refers to the concept of an investment of some resource yielding a benefit to the investor (wikipedia.org).

Search Engine Optimization (SEO): "the practice of optimizing web pages in a way that improves their ranking in the web search results, which are also known as natural or organic results because they are supposed to reflect relevancy in searchers' standards" (Xing & Lin, 2004).

SERP: Search Engine Results Page

Target Market: The part of the qualified available market the company decides to pursue (Kotler & Keller, 2006).

Targeted traffic: Refers to consumers who are already close to, or into the buying phase of the buying funnel being sent to a website/webpage where transaction can take place.

Traffic generator: Refers to a web page or website, which sends consumer traffic to a designated website, which, in this study, means the official SME site where some form of transaction occurs.

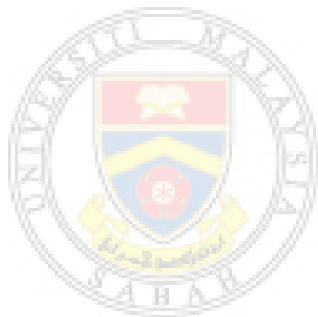
URL: It is short a form for; Uniform Resource Locator, and designates an address to the location of resources on the Web (i.e., the address of a web site).

Web page: Refers to a document on the World Wide Web. A unique URL, or Uniform Resource Locator identifies each page.

Visibility (Ranking in SERPs): The position of a web page on the list of results which a search engine returns following a query made for a given keyword. The ranking or position of the web page in the search listing is taken as the dependent variable. The higher the web page is on the list of search engine result pages (or SERPs), the higher its visibility.

1.9 Conclusion

The chapter presents the background of the research, statement of the problem, research objectives and its significance and scope. It emphasizes the importance of the web page being immediately seen, the moment a customer searches for a particular product that it offers. SEO, a procedure traditionally employed to improve a site's ranking, is discussed. A systems thinking approach, to extend and complement SEO, towards gaining insights into how outranking the competition on the first page of the search results list might be accomplished, is discussed. The next chapter reviews literature on issues that would impact the development of a conceptual framework, and concepts that would justify extending SEO, from one that is reductionist in its approach, to one that incorporates systems thinking, and hence address this study's main research objective – a model to assist the SMSA, in the tourism and hospitality in Sabah, achieve and maintain competitive advantage in SEM. In the process, gaps identified in the literature would also be addressed.



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CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter presents key issues that have an impact on the visibility of a web page in the search engine (SE). It suggests that due to the open nature of the Internet, it leans towards weakening overall profitability. It points to arguments that competitive advantage requires focusing on market segments or niches, differentiate, and be customer-centric. The concept of niche marketing is introduced. Search engine marketing (SEM), where appearance of a web page on the first page of search results portends a competitive advantage is then discussed. Search engine optimization (SEO), a process to aid web page visibility in the SE is presented. It suggests that SEO is mostly trial and error. Latent semantic analysis (LSA), a procedure for information retrieval, not requiring term or phrase replication as in SEO, is introduced. The systems approach and systems thinking are discussed as preliminary to extending and complementing traditional SEO, as a means to study and design of SMSA sites.

2.2 E-marketing and the SME

E-Marketing also known as Internet Marketing, Digital Marketing, Web Marketing, or Online Marketing, is the process of marketing a product or service using the Internet. It also includes marketing by e-mail and wireless media. Cambridge Dictionary defines e-marketing as "the process of advertising and selling products and services on the internet, for example, on a company website or by email" (Cambridge Business English Dictionary, 2011, p. 279). E-commerce is about "Conducting business online. Selling goods, in the traditional sense, is possible to do electronically because of certain software programs that run the main functions of an e-commerce Web site, including product display, online ordering, and inventory management" (University Missouri-St. Louis, n.d). E-commerce involves "customers, suppliers and external partners, including sales, marketing...." (Bartels, 2000, p. 41). E-business is "the business of buying and selling goods and services on the internet" (Cambridge Business English Dictionary, 2011, p. 268). E-business and e-commerce are terms that are sometimes used interchangeably - the latter is a sub-set of the former (Bartels, 2000). Figure 2.1 summarizes three possible relationships between e-marketing, e-business and e-commerce (Chaffey & Smith, 2008). Clearly, marketing is a common

denominator in all three configurations. Search engine marketing (SEM) is a variant of digital marketing employed to promote websites with a view to increase their visibility in search engine results pages (Chaffey & Smith, 2008).

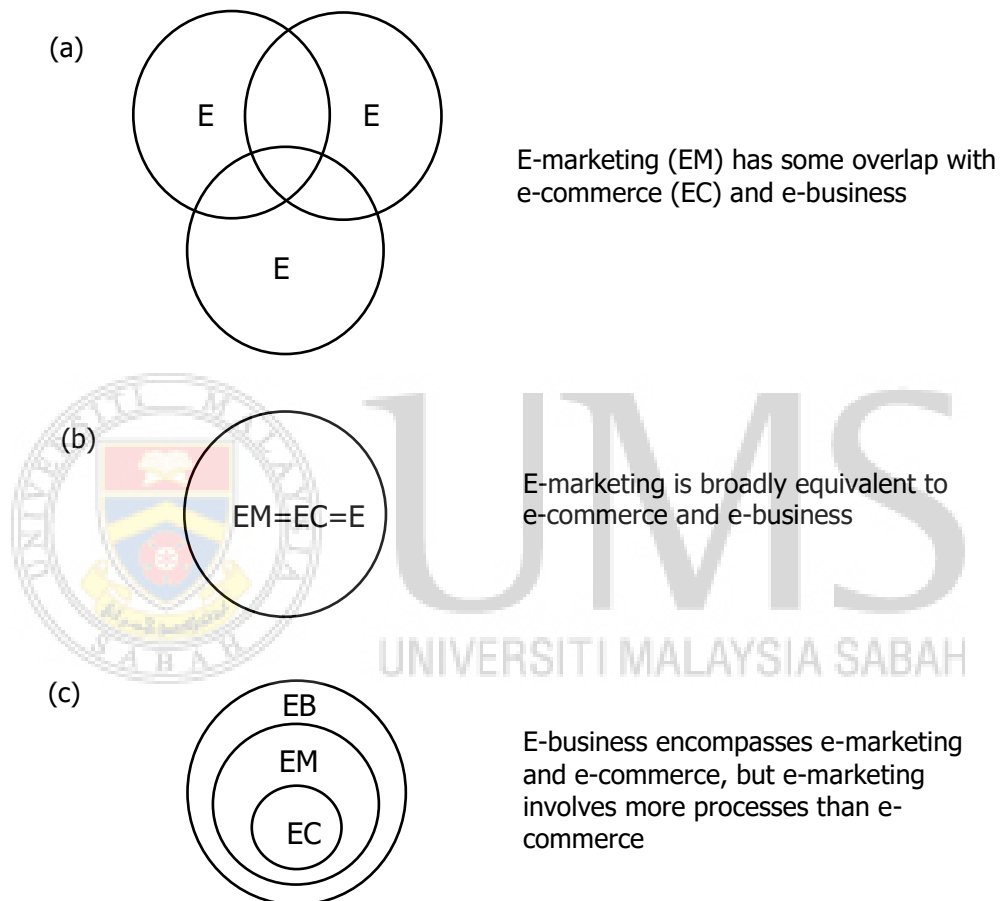


Figure 2.1 : Alternative relationships between e-marketing, e-commerce and e-business.

Source : Chaffey & Smith, 2008.

The literature puts forth several reasons why the small business adopts e-marketing. Proactive companies desire eliminating inherent disadvantages vis-à-vis the big firms. The obvious in their list are lowering operating costs, the chance to increase sales and profits, and the opportunity to promote the enterprise better and enrich the marketing mix (Jeffcoate et al., 2002; Downie, 2002; Dann & Dann, 2001; Poon & Swatman, 1997). The chance to increase the customer base, preferably with members from around the world,

and acquired at low cost would certainly be an incentive (Rao et al., 1998). But there are those that partake in e-commerce out of fear of increased competition from local competitors, the clout of larger firms, and an apprehension that markets will shrink or even the lack of a domestic market. Hence the forces eliciting utilization of e-commerce are not necessarily proactive, but rather reactive - a desire to offset certain disadvantages (Kardaras & Papathanassiou, 2000; Premkumar & Roberts, 1999; Ching & Ellis, 2004).

The small business may have those inherent disadvantages due to their size and lack of resources, compared to bigger firms, but their advantages over the latter are also real. SMEs have built-in advantages over bigger companies because of their inherent "make-up." They have "...traditionally been able to gain the advantage over larger competitors by developing personalized relationships with customers, customizing their offerings, and efficiently targeting niche markets" (Sharma et al., 2004, p. 295). Bigger companies recognize this, and are now emulating the small firms by fragmenting and downsizing, so as to better compete with the niche players (McKenna, 1991). At first glance, going online to exploit e-marketing, may not in fact be particularly alluring considering that competition from the large firms, whether downsized or otherwise, and smaller rival companies are still there, not to mention the Internet enabled competition from across national boundaries. Liang and Hung (1998) suggest that it will be difficult to profitably conduct a web traffic dependent business due to heightened competition.

Smith and Chaffey (2005), argue however that online marketing needs to be an integral part of the business, or risk being disadvantaged. Quinton and Harridge (2003) consider it a strategic business platform. The role of online marketing in the marketing mix of companies is on the rise as they respond to consumers spending more and more time online (Kotler & Armstrong, 2008). Making online marketing inherent to business may be a consequence to this development - the alternative is the risk of losing a competitive advantage. According to Porter (2001), there is a consequence for going online - it will result in increased competition within markets, but that competition brings forth strategy (Porter, 1985).

Multiple reasons have been cited for the SME wishing to partake in online marketing, or e-marketing. But the overriding argument remains that the consumers are going online more often, and that by neglecting this phenomena, the SME could default on a low cost, and an effective advertising and distribution channel. Online marketing, particularly search

engine marketing, does not necessarily augur success, however, as it presages increased competition.

Three studies give an indication of the state of SEM adoption, specifically in Sabah/Malaysia. An exploratory study by Bolongkikit et al., (2006) investigated the adoption level of e-commerce applications by SMEs on the West Coast of Sabah. At that time few studies had been conducted into e-commerce adoption by small firms in Malaysia, and Sabah in particular. E-commerce was employed mainly to display company information, the products/services on offer, and to conduct research on the competition. The study concluded that, in 2006, e-commerce adoption in Sabah was still very much in the early stages. Despite limited engagement, the study respondents acknowledged the potential benefits from a greater involvement with the available e-commerce platforms.

Chan (2012) made a study of Internet adoption by small and medium-sized hotels through a purposive sampling of 25 hotels from various districts in Sabah. A significant number of the respondents perceived gains from Internet usage that could benefit their business. Regardless, however, barriers to Internet adoption were discerned. The peculiarity of owner/operator, cost and return on investment, organization size, and access to Internet facilities were considered likely barriers. To offset the foregoing, it was surmised that training be provided with respect to internet knowledge and skills, and ICT usage. Financial assistance may have to be provided, since most SMEs were lacking in that category. In both Bolongkikit et al., (2006) and Chan (2012), no reference was made of e-marketing or SEM. Since the purview of e-commerce is inclusive of marketing, the less than strong engagement in e-commerce, from 2006 to 2012, plausibly suggest that the SME websites were employed, more as online brochures, and not "as sales and marketing tools" (Doiron et al., 2010, p. 5). SEM, arguably the most important channel for customer acquisition (Chaffey & Smith, 2008), likely did not significantly factor as part of their e-commerce platform.

Rosli (2012) explored how SMEs in Malaysia, engaged in the Food and Beverages (F&B), and Textile and Clothing (T&C) manufacturing industries viewed competitive strategy from the perspective of taking on global competition. His observations on the responses from 122 (SME) respondents, are: the SMEs placed least emphasis on the application of the Internet in business, a finding that bespeaks volumes on their preparedness or willingness to engage in global competition. Taking on global competition