

Evaluation of Information Sources: A Study of Sarawakian Business-To-Business Elite Managers

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Abstract

This paper reports the findings of an empirical study on the information behavior of 179 SME elite managers based in Sarawak, Malaysia. The purpose of the paper was to make available its findings for marketing managers to develop an appropriate promotion strategy that would reach such elite managers. This paper details SME elite managers ranking of important, reliable, and most often used information sources by industry, equity, and overall. The paper also notes the difference in personal and impersonal information sources importance, reliability and use, by industry, equity, and overall. It also notes respondents ranking of the top five used information source. The study revealed that most elite managers preferred their own experience, believed in it, and used it. Elite managers of SME's in Sarawak were found to rely more on personal rather than impersonal sources in gathering information, which they believe is reliable and is as or more important than impersonal information sources.

Keywords: Business-To-Business, Information Sources, Elite Managers, Small-Medium Industries (SMI), Sarawak, Malaysia

Introduction

A challenge facing marketing managers of business-to-business products and services is to determine the best way to conduct their sales messages to the decision-makers who make purchase decisions. Marketing managers need to carefully select media preferences of their target markets and the audience and/or readership profiles of available media such as television, radio, newspapers and magazines to deliver messages effectively.

Since the managers marketing business-to-business products face a number of unique market conditions, they must be specialized in their approach to serve their potential customers. In light of the few identifiable, and concentrated potential buyers, the marketing managers of business-to-business products and services should hone their communication objectives to ensure that the communication media they choose will result in strong links with their targeted buyers, thus resulting in sales.

Knowing the attitudes of business-to-business buyers toward information sources is important in developing countries, since the purchase decision process tends to be centralized in such countries in the hands of a few top-level managers (Tuncalp, 1999). Malaysia is no exception to the general phenomenon of centralized decision-making found in developing countries. Thus, in order to reach these decision-makers, marketers of business-to-business products and services should be aware of how company executives evaluate different sources of marketing information when they make buying decisions.

This study aims to evaluate the attitudes of companies' managers in Sarawak toward different sources of information when transacting business purchases. The first section of this paper explains the underlying theoretical basis of the evaluation of information sources. The next section covers the survey methodology used in the study. This section describes the approach used in designing questionnaires and putting together the samples. Then the paper states the findings and discusses it. The last section summarizes the discussion and focuses on the implication of the study's findings for the business-to-business marketing managers.

Literature Review

Business-to-business Marketing Communication

Business-to-business marketing communications is a mix of personal and impersonal communications aimed at the business-to-business buyer (Kaye, 1995; Leonidou and Adams-Florou, 1999; Tuncalp, 1999; Webster, 1991). These include TV, radio, magazines, newspaper, direct mail, trade shows, exhibitions, brochure, and billboards for impersonal media. Whereas examples for personal information sources include friends and work colleagues, family, relatives, neighbors, salespersons, and experiences. The effect of any of these promotional tools is a function of its interaction with the others, although each has a distinct role in moving the potential customer from unawareness of the company and its products through several stages of buying decision process to buying action.

Each of the business-to-business marketing communication media has a somewhat distinctive role to play in the execution of total strategy. The selection of specific media to be used at a given point must be derived from the definition of the target audience and the statement of communication objectives (McLuhan 1966; Webster, 1971; Hart, 1993; Tuncalp, 1999). Different media have differential effectiveness as a function of the type of response desired from the receiver and the stage in the product life cycle.

Past research has focused on information acquisition and utilization during the industrial adoption process and those information sources consulted during purchases at varied levels of perceived risk/decision uncertainty (Baker and Parkinson, 1977; Dempsey 1978). Others have looked at consumer choices of information sources (McNeal and Ji, 1999; Seo *et al.*, 2001; Weber and Ridley, 1997; Frieden and Goldsmith, 1989); business choices and use of information sources (Burke, 1996; Leonidou and Adams-Florou, 1999; Tuncalp, 1999; McAuley, 1993); the WWW as an information source (O'Gene, 1997; Jantz, 2000; Olorunsola, 1997; Chowdhury and Chowdhury, 2002; Sen *et al.*, 1996); and information sources obtainable and used in or for access to specific countries (Drew, 1995; Husic, 1999; Reid, 1992).

Most findings from past research emphasize the importance of personal sources of information and stress the ubiquitous and pervasive influence of the business-to-business salesperson throughout the procurement decision process. Despite the strong reliance on salesperson-generated information, Webster (1971) observed that buyers acknowledge such information content as biased and, in the extreme, may even discount portions of a sales presentation. Baker and Parkinson

(1977) have shown that as the procurement decision progresses there is a pronounced increase buyer's dependence on information furnished by personal information sources.

Relatively few studies have examined impersonal sources of information and the findings are less than conclusive. Nonetheless, both the importance of business-to-business advertising and its positive impact on buyers' perceptions of particular vendors have been supported empirically (Patti, 1979; Webster 1971; Hart, 1993). Furthermore, Ozanne and Churchill, (1971) and Kaye, (1995) suggest that buyers rely on impersonal sources of information to greater extents earlier in the decision process. As a procurement decision progresses, reliance shifts markedly to internally generated, impersonal information sources.

Webster (1971) found that from several studies of innovations diffusion support a general conclusion that impersonal sources of information are most relied upon at the awareness stage. Personal sources become more important for the evaluation and trial stages (Kaye, 1995). These general studies also lead to a conclusion that impersonal sources are most important in early stages.

The Uses of Information Sources

Past research has shown numerous factors affecting the uses of different information sources. Moriarty and Spekman (1984) stated that marketing scholars generally have focused on four factors: characteristics of individual decision-makers, organizational characteristics, characteristics of buying situation, and the phases in buying process. For example, innovative, young, better educated and less risk adverse managers are more likely to be sensitive to and aware of number of different information sources (Eagles *et al.*, 1982). Typically, such managers will search for externally generated information and are less likely to support the standard in sourcing criteria and approved lists of vendors (Ozanne and Churchill, 1971; Wind 1978). Whereas for organizational characteristics, the utilization of information source's are dependent upon profitability of the company, organizational type, and the extent of R&D activities. Marketing researchers (Cardoza and Cagely 1971; Dempsey 1978; Wind 1978; and Webster, 1991) suggest that industrial buyers engage in greater information search, in general and greater external search, in particular, when the buying situation engenders a higher degree of decision risk or turbulence like conflict or uncertainty. The pattern of information utilization is based on those product attributes and information sources deemed pertinent to buying problem.

Studies of the use of information sources by business-to-business buyers at different stages of the adoption decision process are limited. Manufactures' sales representatives were found to be the most important sources of information for business-to-business buyers at all stages, except awareness, in buying decision process (Webster, 1970, 1971 and 1991).

Beale (1997) revealed that nearly 50% of the population has negative attitudes towards advertising. This subpopulation sees advertising as both intrusive and pervasive. Through an understanding of the different characteristics of the tar-

get market, it is possible to make better or more informed decision about most appropriate media channels to reach target audiences.

A media plan should provide the best match between the target market and the audience reached by the vehicles in media schedule. The more complex the target market description or consumer profile, the greater the difficulty of matching it with appropriate channels of media, therefore the greater the risk in the message being misunderstood. Weillbacher (1984) argues that media evaluation based on product usage may be better than using demographics and psychographics. These may be inappropriate and inefficient when matching markets with audiences. As advertising is directed at influencing consumer behavior, product usage is more logical measure of media evaluation. Rothschild (1987) sees that demographic and psychographic factors as being relatively stable and enduring factors and thus as suitable influences upon the media selection decision.

Decisions about the choice of media are complex. While choosing a single media is reasonably straightforward, choosing media in combination and attempting to generate synergistic effects is not straight forward. Each media channel has a discrete set of characteristics that influence the way in which messages are transmitted and received. McLuhan (1966) and Webster (1991) argue the medium is message, as each medium messages the recipient in different ways and contributes to learning in different ways.

A prerequisite to reaching and establishing strong links with business-to-business buyers is determining attitudes toward various media channels. After all, the chances of marketers reaching and influencing business-to-business buyers are substantially improved when their message is delivered by the preferred information sources of the business-to-business buyers.

Thus it is important to evaluate this various type of media channels whether it is on an international, national, local or direct basis, as it can inform, remind, differentiate or persuade established or potential customers of the existence of a product or organization. This study therefore aims to determine the importance, reliability, use, and ranking of media utilized by business-to-business marketing managers in Sarawak in their decision process.

Study Methodology

Description of the study

The study attempted to evaluate elite management attitude toward business-to-business information sources. This is examined by determining the importance, reliability, use and ranking of media utilized by business-to-business marketing managers in Sarawak and to quantify it. The study's findings will enable marketers to note the use of such media by business-to-business decision makers as compared to the paucity of literature on consumer use of information sources.

Questionnaire Design

An exploratory study was undertaken to substantiate the findings indicated in the business-to-business data. A set of 15 factors comprising of personal and imper-

sonal information sources were developed. Managers were asked to evaluate the importance, reliability, and use. The information sources are: TV, radio, magazine, newspapers, direct mail, trade show, exhibition, brochure, billboard, friends/work colleagues, immediate family, relatives, neighbor, salesperson, and experience. An important potential information source, the Internet, was not used in the study. This is due to its limited availability in Sarawak industry.

The questionnaire was presented in both Bahasa Malaysia and English. It consisted of three parts. The first portion consisted of three questions designed to obtain information of importance, reliability, and use of the various forms of information sources. The second part of the questionnaire determined a rank order of use of such information sources and the third portion asked for the respondent's profiles. Each question was presented in a 5-point Likert Scale, where 1 represents 'Not at all,' 2 for 'Not so,' 3 for 'Uncertain,' 4 for 'Very,' and 5 for 'Extremely.'

Field Work

In order to obtain a reliable and representative sample, access must be gained directly to elite managers. Therefore this paper utilized students to approach companies and speak directly to elite managers in an effort to obtain useful response. This was found to be extremely successful as managers were more willing to discuss their business with students.

Purposive sampling was used to select business-to-business firms in Sarawak to be interviewed by student enumerators. Students from a local University in Sarawak were employed for the fieldwork phase of the survey, which used a drop-off and pick-up technique. Students were instructed to approach elite managers of business-to-business based companies, especially in the area of manufacturing, services, and trading. If more than one student visited a firm, only the first response obtained was used in the study.

For the purposes of this study, an elite manager is defined as the highest authority in the company that made the daily operational decisions, including business-to-business purchases. These included job titles such as General Manager, Factory Manager, Sales Manager, Executive Director, Director, Managing Director, Area Executive and Executive. The questionnaires were hand-delivered to the elite managers and collected upon completion. The students obtained the respondents business card, which was stapled together with the questionnaire. A random sample was taken from the students returned questionnaire and the respondents were telephoned to confirm that they filled out the questionnaire. Students were provided with a list of companies compiled by the Ministry of Industrial Development Sarawak, which acted as the basis for a population framework and served as the sampling frame. This list provided contact details of firms engaged in manufacturing, services, and construction. 179 firms were contacted and responded to the questionnaire.

Findings

Following are the findings of the study that has been analyzed by industry and equity, as well as an overall view. We conducted an Alpha Reliability Test at 95% level of

confidence. The test shows that the data was highly statistically significant and reliable at Alpha = 0.9390 (Hair *et al.*, 1998).

Table 1: Respondent Profile

Factor		%
Type of Industry	Services	23.5
	Manufacturing	51.4
	Trading	20.7
	Others	4.5
Length of Operation	<5 years	14.5
	6 to 10 years	27.9
	11 - 15 years	15.6
	15 years	41.9
Number of Employees	<25	42.5
	26 to 100	32.4
	101 - 250	11.2
	>250	14.0
Business Equity	Bumiputera	31.3
	Non-Bumiputera	57.0
	Foreign	10.6
	Combination	1.1
Job Title	Manager	32.9
	Director	27.4
	Owner	23.5
	Executive	13.4
	Other	2.8

Table 1 provides a depiction of respondent's profiles. Since the sampling frame of the study was based on data provided by the Ministry of Industrial Development, it is not surprising that 51.4% of respondents were from the manufacturing field. Most had been in operation for more than 10 years and the majority had up to 100 staff. The majority of respondents were from non-Bumiputera¹ firms, which closely resembles the population. Most respondents were managers (32.96% of respondents) with various titles such as Factory Manager, Marketing Manager, or just Manager. Managing Directors or Directors (27.4%) and Owners (23.5%) follow closely, which allows for the definition of elite management in our study. Details of the respondents are shown in Table 1. The breakdown of industries in this sample is representative of the population of SME's in Sarawak as a whole. In terms of size, as measured by number of employees, Table 1 shows that there is a high degree of similarity with the population, where the majority of firms employ less than 100 per-

sons. The split according to business equity is also significant as it depicts a good representation of the population.

Information Sources	Overall	Trading	Services	Manuf. +	Bumi +	Non-Bumi +
TV*	2.8	3.0	3.2	2.5	3.1	2.6
Radio*	2.6	2.9	2.9	2.4	2.8	2.5
Magazine*	3.2	3.0	3.5	3.1	3.5	3.0
Newspaper*	3.8	4.2	4.2	3.4	4.1	3.7
Direct Mail*	3.3	3.0	3.7	3.1	3.6	3.1
Trade Show*	3.1	3.4	3.4	2.9	3.4	2.9
Exhibition*	3.1	3.2	3.5	2.9	3.3	3.0
Brochure*	3.2	3.4	3.5	2.9	3.5	2.9
Billboard*	2.6	3.3	2.9	2.2	2.9	2.5
Friends**	3.6	3.7	3.9	3.4	3.9	3.6
Family**	2.9	3.4	3.0	2.7	3.0	3.0
Relatives**	2.7	3.1	3.0	2.4	2.9	2.8
Neighbors**	2.4	2.7	2.7	2.2	2.7	2.4
Salesperson**	3.4	3.6	3.0	3.5	3.3	3.4
Experience**	4.1	4.1	4.2	4.1	4.0	4.1
* Impersonal information source						
** Personal information sources						
+ Manuf. = Manufacturing based firms						
+ Bumi = Bumiputera held firms						
+ Non-Bumi = Non-Bumiputera held firms						

Table 2 details the findings of the study for the level of importance of the various information sources for the types of industries and its equity. Overall, experience ranks as the most important information source, followed by Newspapers, Friends, Salespersons and Direct Mail. The least important information sources overall are neighbors, radio, billboards, relatives and TV.

As to the industries studied, there exist differences in the importance of information sources. For trading, the most important information source is newspapers followed by experience, friends, salespersons and family. The least important information sources for trading are neighbors, radio, TV, direct mail, and magazines. For services, the most important information source is also newspapers, followed by experience, friends, direct mail, and brochures. The least important information sources for services are neighbors, radio, billboards, relatives, and family. For manufacturing, a whole different set of important information sources was uncovered. The most important was experience, followed by salespersons, friends, news-

papers, and magazines. The least important factors were neighbors, billboards, radio, relatives, and TV.

Bumiputera firms ranked newspapers as the most important information source, followed by experience, friends, direct mail and brochures. Non-Bumiputera firms on the other hand ranked experience as the most important information source, followed by newspapers, friends, salespersons, and direct mail. Bumiputera and Non-Bumiputera firms also differed on the least important factors. Bumiputera firms ranked neighbors as the least important factor, followed by radio, relatives, billboard, and family. Non-Bumiputera firms also ranked neighbors as the least important information source followed by billboards, radio, TV, and relatives.

Personal Information Sources

Data from Table 2 can be broken down into personal and impersonal information sources importance. It is interesting to note that when looking at only personal form of information sources, respondents rated their experience, friends and only then salespersons as being important. However, only manufacturing firms rated experience and salespersons as the top two most important personal information sources. The least important personal information sources were neighbors, relatives, and family.

Impersonal Information Sources

Overall, respondents rated newspapers, direct mail, and magazines as the most important impersonal information source. Newspapers remain the most important impersonal information source for all three industries surveyed. The least important impersonal information sources were radio, billboard and TV. Bumiputera and non-Bumiputera firms' only differed on the third choice for most important impersonal information sources. Bumiputera firms rated brochures while Non-Bumiputera firms rated magazines as the third most important impersonal information sources.

Table 3 details the means of reliability of the information sources. Overall respondents trust their experience, followed by newspapers, friends, salespersons, and magazines. The least reliable source of information overall are neighbors, billboards, relatives, radio, family, and TV. Trade, service, and manufacturing firm respondents stated that experience is the most reliable information source.

Respondents from trading firms believed that newspapers, TV, family, and trades shows are the more reliable information sources. Services based firm's respondents on the other hand found the most reliable information sources after experience are newspapers, brochures, friends and exhibitions. The most reliable information sources for manufacturing firms are experience, salespersons, newspapers, magazines, and friends. The least reliable information sources for trading firms are neighbors, direct mail, relatives, billboards and brochures. For service firms, the least reliable information sources are billboards, neighbors, relatives, radio and family. The least reliable information sources for manufacturing firms are neighbors, billboard, radio, relatives and TV.

Information Sources	Overall	Trade	Services	Manuf.+	Bumi +	Non-Bumi +
TV*	3.0	3.5	3.2	2.7	3.1	3.0
Radio*	2.9	3.3	3.1	2.6	2.9	2.9
Magazine*	3.3	3.2	3.4	3.3	3.3	3.3
Newspaper*	3.8	4.1	4.1	3.5	4.0	3.8
Direct Mail*	3.3	3.1	3.6	3.2	3.6	3.1
Trade Show*	3.3	3.4	3.5	3.1	3.3	3.2
Exhibition*	3.2	3.4	3.6	3.1	3.2	3.3
Brochure*	3.2	3.2	3.6	3.0	3.6	3.0
Billboard*	2.7	3.2	2.8	2.4	3.0	2.5
Friends**	3.4	3.4	3.6	3.3	3.8	3.3
Family**	3.0	3.5	3.1	2.7	3.0	3.1
Relatives**	2.8	3.1	2.9	2.6	2.8	2.9
Neighbors**	2.6	2.8	2.9	2.3	2.8	2.5
Salesperson**	3.4	3.3	3.1	3.5	3.2	3.5
Experience**	4.2	4.4	4.2	4.1	4.1	4.2
* Impersonal information source						
** Personal information sources						
+ Manuf. = Manufacturing based firms						
+ Bumi = Bumiputera held firms						
+ Non-Bumi = Non-Bumiputera held firms						

The most reliable information sources for Bumiputera firms are experience, newspapers, friends, direct mail, and brochures. The most reliable information sources for non-Bumiputera firms are experience, newspapers, salespersons, friends, and magazines. The least reliable information source for bumiputera firms are neighbors, relatives, radio, billboard, and family. The least reliable information sources for non-Bumiputera firms are billboards, neighbors, radio, relatives, and brochures.

Personal Information Sources

Data from Table 3 can be broken down into the reliability of personal and impersonal information sources. Overall, experience, friends, and salespersons are rated as the most reliable personal information sources. The least reliable personal information sources are neighbors, relatives, and family. All respondents rated neighbors, relatives, and family as the least reliable personal information source except for respondents from trading firms. They rated neighbors, relatives, and salespersons as the least reliable personal information sources.

Impersonal Information Sources

Overall respondents rated newspapers as the most reliable impersonal information source, followed by magazines, and direct mail. The least reliable impersonal information source was billboard, radio, and TV. It is out of the ordinary though that trading firms rated TV as the second most reliable impersonal information source after newspapers. All other industries and equity studied rated TV as not reliable.

Table 4: Statistical Means for Use of Information

Information Sources	Overall	Trade	Services	Manuf. +	Bumi +	Non-Bumi +
TV*	2.5	2.6	2.9	2.3	2.9	2.4
Radio*	2.4	2.5	2.6	2.3	2.6	2.4
Magazine*	2.9	2.7	3.2	2.9	3.1	2.8
Newspaper*	3.7	3.7	3.9	3.5	3.8	3.6
Direct Mail*	3.1	3.0	3.5	3.0	3.6	2.9
Trade Show*	2.9	3.1	3.1	2.7	3.1	2.7
Exhibition*	2.9	3.0	3.3	2.7	3.0	2.8
Brochure*	3.0	3.0	3.5	2.7	3.4	2.8
Billboard*	2.5	2.9	2.6	2.2	2.9	2.3
Friends**	3.3	3.2	3.5	3.1	3.6	3.2
Family**	2.8	3.3	2.9	2.6	3.1	2.9
Relatives**	2.7	2.9	2.8	2.4	2.8	2.7
Neighbors**	2.4	2.8	2.6	2.2	2.8	2.3
Salesperson**	3.4	3.4	3.2	3.5	3.3	3.4
Experience**	4.1	4.1	4.2	4.0	4.1	4.1
* Impersonal information source						
** Personal information sources						
+ Manuf. = Manufacturing based firms						
+ Bumi = Bumiputera held firms						
+ Non-Bumi = Non-Bumiputera held firms						

Table 4 provides the means for the use of information sources by respondents. The top five most used information sources are experience, newspapers, salespersons, friends and direct mail. The least used information sources are neighbors, radio, billboard, TV, and relatives. The top two most used information sources for trading firms and service-based firms are the same; experience and newspapers. However from then on it differs. For trading firms, salesperson, family, and friends are most often used. Services based organizations on the other hand obtain information from friends, brochures, and direct mail. Manufacturing firms most often used information sources are experience, salespersons, newspapers, friends, and direct mail. The least used information sources for trading firms are radio, TV, magazines, neighbors, and billboards. The least used information sources

for services are neighbors, radio, billboard, relatives, and TV. The least used information sources for manufacturing elite managers are neighbors, billboard, radio, TV, and relatives. The top two most used information sources for bumiputera and non-Bumiputera firms are the same; experience and newspapers. However, bumiputera firms use friends as the third most used information source, followed by direct mail and brochures. Non-Bumiputera firms on the other hand use salespersons, friends and then direct mail.

Personal Information Sources

Data from Table 4 can be broken down into the use of personal and impersonal information sources. Overall respondents rated experience as the most used form of information source, followed by salespersons and friends. However services respondents rated experience and friends as the top two most important personal information sources. The least used forms of personal information sources are neighbors, relatives, and family.

Impersonal Information Sources

Newspaper was most often used by all industries and equity studied. Overall, respondents stated that they most often used newspapers, direct mail, and brochures. Respondents least used form of impersonal information sources was radio, billboard, and TV. The various industries surveyed on the other hand showed a differing use of impersonal information sources, such as trade shows and exhibitions.

Information Sources	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
Newspaper	16.8	12.8	14.5	7.8	7.3
Experience	16.2	8.4	7.3	7.8	13.4
Salesperson	14.5	11.2	6.7	10.1	7.8
Friends / work colleagues	8.4	10.1	6.7	7.8	7.8
Direct Mail	10.1	5.6	4.5	7.8	3.9

Table 5 presents ranking of the top five information sources that respondents frequently use. As shown in Table 5, newspapers and experience was ranked as most frequently used information source, followed by salesperson, direct mail and friends and work colleagues respectively.

Discussion

The paper findings indicate that overall respondents utilize both impersonal and personal information sources collectively in order to make a decision. Nevertheless there are some findings that are interesting to note, such as the fact that friends are more important than salespersons. This may be relevant to the nature of business in Sarawak where know-who is more important than know-how. Experience is also still considered an important source of information, as many elite managers in Sarawak are reliant on themselves without being able to delegate. Elite managers are more insistent on their own experience without looking at other information. This may be

partly due to the nature of business in Sarawak that is contingent on friends and 'know-who.' Business in Sarawak is still small in scale and personalities are still important. As such, impersonal forms of information sources are less credible and cannot convey the required camaraderie.

Even though the various industries are still small in scale, the choice of information sources that are least important indicate the moving away from family run businesses of the past to a *more modern managed business*. Neighbors, relatives and family are becoming less important as an information source. The other forms of information sources that score low in our study are generally impersonal and not widely used in Sarawak (billboard), and in the light of how business-to-business activities are carried out, it is understandable why they are not considered as important sources of information.

It is clear that the top and bottom five means of the most important, reliable, and most used information sources overall are the same, except for some minor ranking differences in the various industries and business equity. Clearly experience is a main information source for business-to-business elite managers. This may be partially due to the fact that respondents are from SME's and are therefore more experience based entrepreneurs and businessmen.

The three most important and reliable information sources are experience, newspapers, and friends. However, the three most used information sources are experience, newspapers, and salespersons, not friends, even though they are considered important and reliable. This may be due to the availability of salespersons in providing the necessary information and canvassing new businesses. Friends may be used only outside the business situation, as an assessment of the salespersons sales pitch. It is therefore not surprising that one of the many tactics in doing business in Sarawak is to become friends with the businessmen, by having dinners, karaoke, and other entertainment situations.

As for the least important, least used, and least reliable information sources, respondents agree that neighbors, radio, and billboards are the top three. This clearly illustrates the business-to-business situation in Sarawak, which is moving more and more towards a professional industry. Neighbors are no longer an important source of information in a professionally run business. Radio and TV are consumer based information sources and therefore not relevant to the business-to-business situation in Sarawak. Billboards on the other hand scarcely exist in Sarawak, which explains why it is not seen as important. The least important impersonal information sources were also radio, billboard and TV. This comes as no surprise as these media are normally used to target consumers and not business-to-business decision makers.

Aside from experience, newspaper was most often used, considered important and also reliable, by all industries and equity studied. It seems that elite managers utilize newspapers as a major source of information. Nevertheless, the data also indicates that the various industries have different information sources importance, reliability, and use.

Aside from experience and newspapers, service based organizations prefer to obtain information from friends, brochures, and direct mail. This indicates a leaning towards impersonal information sources, which may be indicative of the nature of services. Services also considered direct mail and brochures as important and were most often used. Service based industries also ranked brochures as one of the top three more reliable information sources.

Trading firms on the other hand ranked family as most often used and reliable. This indicates that trading firms preferred a close-knit business arrangement. They most often used salesperson, family, and friends. This may be explained by the very nature of the trading firms in Sarawak, whom are mostly family owned and run. The close-knit nature of trading firms in Sarawak is conducive to obtaining information from experience, family and friends.

Aside from that, trading firms preferred to utilize trade shows and exhibitions and considered TV as reliable. It is out of the ordinary though that trading firms rated TV as the second most reliable impersonal information source after newspapers. All other industries and equity studied rated TV as not reliable, as it is seen as targeting consumers and not a business-to-business tool. Perhaps because trading firms are more directly concerned with consumer needs, which make TV more appealing for them as an information source.

Manufacturing firms on the other hand are stodgy in their information sources; preferring to use newspapers, direct mail, and magazines. The inclusion of magazines in the top three most important information sources is rather complicated. We assume that the respondents were referring to trade magazines, which would explain the importance of that information source. However, manufacturing firms rated experience and salespersons as the top two most important personal information sources. This again explains the business situation in Sarawak, where salespersons are integral in doing business, as a salesperson and as a friend.

From the perspective of business equity, Bumiputera and non-Bumiputera firms only differ on the use and reliability of friends. Bumiputera firms rank friends as both reliable and often used, whereas non-Bumiputera firms only rank salesperson instead of friends in the top three. Friends come fourth for Non-Bumiputera firms. This may explain the difference in the way business is done by Bumiputera and Non-Bumiputera firms. Non-Bumiputera firms are slowly becoming more professional while dominant Bumiputera firms are still dependent on the government.

Implication of Research

Respondents utilized a mixture of personal and impersonal information sources in their decision-making. The most important was experience. This may be justified by previous findings, which indicate that managers or owners of SME's are normally entrepreneurs (Webster, 1991; Cardoza and Cagely, 1971; Dempsey, 1978). However, even SME's have been characterized as being dominated by owner/managers and SME's top management is therefore also limited in their professionalism in key information gathering skills.

Only large firms employ professional managers who may utilize other sources of information for their decision-making. The findings also show a trend in

industries to utilize information sources that are relevant to the size of the firm and level of management professionalism. Trading firms still find family as an important source of information, partly due to the two factors indicated above. Services on the other hand indicate brochures as important while manufacturing firms are closer to the overall use of information sources. Bumiputera firms also seem to rely more on friends as compared to non-Bumiputera firms who rely on salespersons for information. This indicates a level of professionalism over and above that of Bumiputera firms. All respondents indicated similar least important, least used, and least reliable information sources. This can be expected, as business-to-business firms generally do not utilize such information sources, which are in the domain of consumer related firms.

Marketing managers must note the particular industry that they are targeting as well as the equity of the firm in order to select an appropriate information and sales strategy. Peculiarities of certain industries must be noted and utilized. Bumiputera firms act on information that is more personal (experience and friends) whereas non-Bumiputera firms will look at salesperson information. The level of professionalism in management will also be an indicator of what information sources can be utilized by marketing managers to reach their target market.

Respondents also consistently evaluated several information sources as being important. Experience is an important source of information due to the nature of the respondents, their business, and the environment. Actual product usage is important as it allows for the decision-maker to make qualified decision, especially if he/she is the owner or entrepreneur in the particular business. As such, marketing managers need to develop sales strategies that would allow for hands-on experience, simulation of product use, or a combination of activities that will allow managers to make a decision.

Following closely experience is friends or work colleagues who provide information to such managers. Marketing managers can easily exploit these sources of information by providing information to them that would lead to decision-making by the target market. Since Malaysian society is dependent on 'know-who,' word-of-mouth sales strategies can be utilized to gain business.

Newspapers are also an important information source for managers in Sarawak in their buying decision. As such, an effective promotion strategy would be to place strategic advertisements in newspapers. These advertisements need to be in balance with relevant word of mouth strategies and effective use of salespersons.

The study also found information sources that were considered the least used, least important, and least reliable in business-to-business activities. As such, marketing managers should avoid such information source media in their bid to reach such managers. Neighbors, radio, and billboards are the top three of such media, followed closely by TV.

Conclusion

This paper set out to demonstrate the use, importance, reliability, and ranking of personal and impersonal information sources among business-to-business firms' elite managers. The purpose of the paper was to allow for marketing managers to

develop an appropriate promotion strategy that would reach such elite managers. Drawing on previous studies and current research, the study depicted a strong tendency for business-to-business elite managers to utilize both personal and impersonal media in their decision making. The study also showed a strong similarity in media that is least used, least important, and least reliable. Whereas not explicitly studied, the findings of this paper indicate a business culture that is still family oriented (trading firms) with peculiarities for each industry and equity studied.

Limitation

This study employed a purposive sampling method that obtained data from a specific group of individuals in a specific sampling frame. This form of data collection limits the generalizability of such findings. Therefore the findings in this paper must be looked at in line with data from the Ministry of Industrial Development as well as an overall view of business-to-business activities in Sarawak. The study also did not look at why such forms of information sources were chosen, only limiting to the strength of each media chosen for each factor studied (use, importance, reliability, and ranking). Discussion of such in the paper is based on the author's view of business-to-business activities in Sarawak as well as past research on small and medium enterprises.

Further Research

In order to reach a particular target market, promotion activity is required. For any promotions to work, information of the target market is a vital component. This paper has depicted the information needs of business-to-business firms and their ranking of such media. This information can then be employed by media planners of marketing firms to design a promotion activity to reach business-to-business firms elite managers. However this study did not look into the reason why such media is preferred. A further detailed study can look into such a question especially with the peculiarities exhibited by trading firms as compared to manufacturing firms; to bumiputera and non-Bumiputera firms. This will allow for an in-depth understanding of the psyche of the elite manager and the firms concerned, in their quest for information. Further studies could also look into the type of information gathered from the different preferred media.

The findings also noted the lack of use of the Internet and Intranet as an information source in decision making for purchasing. Further studies could look into the use of computers in such firms, the flow of information, and reasons why the Internet and Intranet are still highly unused. It is also suggested that this study be replicated for consumer-based elite managers and firms. Such a study can be applied for the use of marketing managers in such situations as well as a comparison between business-to-business and consumer based firms and elite manager's decision making.

Endnote

1. The term bumiputera is directly translated as 'son of the soil' and is referred to specific native ethnic groups in Malaysia.

Reference

- Baker, M. and Parkinson, S. (1977). The Structure and Dynamics of Behavior in Organizational Boundary Roles. In *The Handbook of Industrial and Organizational Psychology*. Dunnette, M. (Ed.). Chicago: Rand McNally.
- Beale, C. (1997), Study Reveals Negativity Towards Ads. *Campaign*. 28 November. 8.
- Burke, J. R. (1996). Information Sources and their Usefulness in a Professional Services Organization. *Management Decision*. 34. 1. 60-65.
- Cardoza, R. and Cagely, J. (1971). Experimental Study Of Industrial Buyer Behavior. *Journal of Marketing Research*. 8. 329-334.
- Chowdhury, G.G. and Chowdhury, S. (2002). Information sources and searching on the World Wide Web. *Library Review*. 51. 6.
- Dempsey, W. (1978). Vendor Selection and Buying Process. *Industrial Marketing Management*. 7. 257-267.
- Drew, J. (1995). Chinese Business Information: A Review. *Management Decision*. 33. 5. 67-74.
- Eagles, J.; Blackwell, R.; and Kollat, D. (1982). *Consumer Behavior*. Hinsdale. IL: Dyren Press.
- Freiden, B. J. and Goldsmith, E. R. (1989). Prepurchase Information-Seeking For Professional Services. *Journal of Services Marketing*. 3. 1. 45-55.
- Hair, J. F. Jr., Anderson, R. E., Tatham, R. L., and Black, W. C. (1998). *Multivariate Data Analysis. Fifth Edition*. New Jersey: Prentice Hall International, Inc.
- Hart, N. A. (1993). *Industrial Marketing Communications: Business-to-business Advertising. Promotion and PR*. London: Kogan Page.
- Husic, G. (1999). Internet resources for the Kosovo crisis. *Reference Services Review*. 27. 4. 327-335.
- Jantz, R. C. (2000). Providing Access To Unique Information Sources: A Reusable Platform For Publishing Bibliographic Databases On The Web. *Library Hi Tech*. 18. 1. 28.
- Kaye, D. (1995). Sources of Information, Formal and Informal. *Management Decision*. 33. 5. 13-15.
- Leonidou, C. L. and Adams-Florou, S. A. (1999). Types And Sources Of Export Information: Insights From Small Business. *International Small Business Journal*. 17. (Apr-Jun). 3. 30-48.
- McAuley, A. (1993). The Perceived Usefulness Of Export Information Sources. *European Journal of Marketing*. 27. 10. 52-64.
- McLuhan, M. (1966). *Understanding Media: The Extensions Of Man*. New York: McGraw Hill.

- McNeal, U. J. and Ji, F. M. (1999). Chinese Children As Consumers: An Analysis Of Their New Product Information Sources. *Journal of Consumer Marketing*. 16. 4. 345-365.
- Moriarty Jr. R.T and Spekman, E. R. (1984). An Emprical Investigation of the Information Sources Used During the Industrial Buying Process. *Journal of Marketing Research*. 21. 137-147.
- O'Gene, N. (1997). The Impact Of Electronic Information Sources On Collection Development: A Survey Of Current Practice. *Library Hi Tech*. 15. 1. 54.
- Olorunsola, R. (1997). Electronic Delivery Of Information In Nigeria: Situation And Suggestions For Future Directions. *OCLC Systems and Services*. 13. 1. 12-16.
- Ozanne, U. and Churchill, G. (1971). Five Dimensions Of The Industrial Adoption Process. *Journal of Marketing Research*. 18. 322-328.
- Patti, C. (1979). The Role of Advertising in Adoption of Industrial Goods. *Journal of Advertising*. 8. 38-42.
- Reid, C. D. (1992). Doing Business In Europe: A Review Of Online Information Sources. *Marketing Intelligence and Planning*. 10. 6. 31-36.
- Rothschild, M.L. (1987). *Marketing Communication*. Lexington MA: D.C., Heath.
- Sen, S.; Padmanabhan, B.; Tuzhiliin, A.; White, N. H.; Stein, R. (1996). The Identification And Satisfaction Of Consumer Analysis-Driven Information Needs Of Marketers On The WWW. *European Journal of Marketing*. 32. 7. 688-702.
- Tuncalp, S. (1999). Evaluation of Information Sources in Industrial Marketing: Implications for Media Planning in the Arabic Gulf. *Journal of Business and Industrial Marketing*. 14. 1. 49-60.
- Weber, J. E. and Ridley, D. R. (1997). Assessment And Decision Making: Two User Oriented Studies. *Library Review*. 46. 3. 202-209.
- Webster, F. E. Jr. (1970). Informal Communication In Industrial Markets. *Journal of Marketing Research*. 7. 2. 186-189.
- Webster, E. F. Jr. (1971). *Marketing Communication*. New York: Ronald Pres. (Co.).
- Webster, E. F. Jr. (1991). *Industrial Marketing Strategy (3rd ed.)*. New York: John Wiley & Sons, (Inc.).
- Weilbacher, W. (1984). *Advertising*. New York: Macmillan.
- Wind, Y. (1978). Organization Buying Behavior. In *Review of Marketing*. Zaltman, G. and Bonoma, T. V. (Eds.). Chicago: American Marketing Association.