An analysis of the Taiwan retail market using Leites' method

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Links and analyzes qualitative and quantitative sources of information about the Taiwan retail market using an adaptation of Leites' method. Qualitative interviews are abstracted and integrated with quantitative secondary source data and survey data. Outlines, categorizes, and summarizes information useful for making management decisions about consumers, retail formats, products and services, retail development projects, market strategies, and commercial laws and regulations. Demonstrates an efficient means to survey general trends in newly developed retail and consumer markets and shows promise for implementation as a soft OR method to derive management strategies.

Introduction

Understanding the market environment in developing and newly developed economies is problematic since there are few journal publications and limited public data. Carr (1978) was one of the first researchers to identify this problem saying that the "lack of data forces a new approach for estimating market potential in developing countries". Since the questions motivating this research cannot be answered by a structured survey alone, a new method is implemented to collect data, draw conclusions, and formulate management strategies. The collection of primary information in Taiwan and other newly developed economies is often tedious, time consuming, and expensive, particularly because the large portion of the market research conducted is proprietary and there are too few comprehensive secondary sources (e.g. retail store counts by retail format) to facilitate the data collection process. Under these circumstances the cost of market information becomes significant in terms of access and acquisition.

Taiwan's retail infrastructure is undergoing dramatic and fast-moving changes, particularly in the development of malls and regional shopping centers. The rapidity of change and the lack of data can leave managers and policy makers without a clear picture of present or future trends. A new means of collecting and integrating data is applied to study the Taiwan consumer, the structure of the retail industry, retail products and services, major retail development projects, and the commercial laws and regulations. The methodology is designed to minimize the expense of data collection and uses a concurrent data collection and report writing scheme to reduce the time required for the initial report.

Taiwan is a densely populated island of over 21 million people on a land space crowded by steep mountains and disorderly city growth. On one hand, its industry growth is exemplary and noted throughout Asia as very modern. On the other hand, much of Taiwan's retail infrastructure is under-developed and traditional. The income of the inhabitants exceeds \$11,000 US dollars per person per year (DGBAS, 1996) but most consumers do not have access to modern malls or shopping

environments that match their incomes. Orderly retail development is hindered by a lack of data from which management and public policy decisions can be formulated. Thus, there are two practical questions underlying the research. First, can a valid survey of an island economy's retail sector be conducted quickly and inexpensively? Second, are the data sufficient and valid for strategy formulation and predictions? These questions are important because the solution promises a means to survey and quickly form management strategies where data is scarce or hard to obtain.

Literature review

The literature review introduces three different qualitative research methods evaluated prior to conducting the analysis of Taiwan's retail market. The four methodologies evaluated include an anthropological means to study developing economies (Carr, 1978), a computer-based program used to elicit and model ideas (Jones, 1994), a news abstraction procedure developed at the Foreign Commercial Services office in Beijing, China (Martin, 1996), and Leites' method, a Rand Corporation approach used to concurrently collect, abstract, and organize qualitative and quantitative data.

Carr (1978) proposed an anthropological research method to survey trade areas for consumer goods in foreign markets. Carr notes that the original idea is based on the work of Frank and Ruth Young (1973), that developed a means to measure community growth by analyzing the presence or absence of specialized institutions. Based on the anthropologists' work, Carr proposed that the more specialized and differentiated the institutions, particularly the commercial institutions, then the greater the market potential. Using Carr's approach, promising trade areas can be identified by conducting a "macrosurvey" that includes multiple measures of the economic, religious, and cultural development of the community. Carr's approach however, presupposes that the researcher has a solid understanding of the nature and dispersion of institutions. Thus, the method cannot be practically used to analyze the Taiwan retail market because there is no consistent

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Industrial Management & Data Systems 98/2 [1998] 48–54 source of information that describes the variety of commercial institutions. One report (Trappey and Lai, 1997) indicates that a large portion of the retailing consists of unregistered vendors, traditional stores and street markets. Carr's recommendation under these circumstances is to consider the use of aerial photography or satellite mapping but these means of data collection are too costly and time consuming.

The developers of Graphics Cope software (Jones, 1994) describe a software system that enables users to build and analyze cognitive maps for idea management. The cognitive map is a visual display that portrays how ideas about a problem are interrelated. Since the software provides a means to map the relationships between entities of interest and graphically portray these relationships, it offers a very natural environment for describing market and channel relationships. Figure 1, for example, shows the interrelationships between factors in the market for disposable medical clothing in Taiwan. An additional advantage of the software is that networks of different products in different channels can be aggregated to create a complex model of the market system. Given a complex or macro level model, the software provides a means to partition the network into meaningful clusters via a variety of clustering and data reduction algorithms. Clusters derived from the complex model provide new insights to underlying market mechanisms. In summary, Cope provides a visual means to aggregate data, describe relationships, and partition the data into more meaningful subsets. The drawback to using Cope is that by making the transition to a graphic diagram much of the written content is lost. Thus, Cope strips the information down to a minimal level and provides new information that must be interpreted and reported. One experiment with Cope (Trappey, 1996) demonstrates that the software is useful for analyzing a series of reports written according to the same format. For example, the US Department of Commerce

Customized Market Analysis (CMA) reports provide the same type of marketing information collected across many product and service categories (US Department of Commerce, 1989). Ormerod (1996) demonstrated that cognitive mapping can be adapted to concurrent data collection and analysis and successfully used Cope software to derive management strategies for a leading UK food and grocery retailer

The Foreign Commercial Services of the US Department of Commerce initiated a newsletter called the "China Commercial Brief" at the beginning of 1996. The brief began as a daily summary of relevant commercial news

gleaned from a wide variety of news and information sources. Sources targeted for the brief included the Foreign Broadcast Information Service (FBIS), leading Chinese language newspapers, international and regional English language newspapers, Foreign Commercial Service reports (e.g. industry sector analyses), trade show briefings and information collected from chambers of commerce and industry. Charles Martin (1996), the US Embassy's first secretary for the Foreign Commercial Service, proposed the following rules for abstracting news from newspapers and commercial sources:

- Search for valuable commercial information.
- 2 Do not include general information.
- 3 Avoid ideology and biased views.
- 4 Exclude old or widely circulated statistics;
- 5 Use information that comes from the source's perspective.
- 6 Include trend-setting local news.
- 7 Do not use journalistic language or jargon.
- 8 Review the previous abstract titles and keywords to keep new topics within bounds.

The news abstraction methodology works well for identifying commercial opportunities and for informing large numbers of commercial enterprises about market changes and conditions (China Commercial Brief, 1997). The rules, however, are not suitable for integrating a wide range of media sources such as books, photos, field interviews, and surveys.

Nathan Leites (1969), in his Rand memorandum entitled "The Viet Cong Style of Politics", demonstrates a research method used to concurrently collect and process qualitative and quantitative data. Although there is no published or detailed description of the research methodology, the research steps can be deduced from an analysis of the report. In essence, Leites' method is to collect, abstract, outline, categorize, and write about interviews. In summary, the field methodology used by Leites to collect information about the Viet Cong are outlined below:

- 1 Record interviews of Vietnamese familiar with the activities of the Viet Cong and North Vietnamese army. Leites collected 2,400 interviews totalling 62,000 pages over three-and-a-half years.
- 2 Abstract the interviews as they are recorded.
- 3 Concurrently create an outline of the types and content of the abstracted interviews.
- 4 Using the outline, categorize the interview abstracts into groups that express themes and patterns.
- 5 After data collection is completed, place representative abstracts into one part called "Illustrations and Elaborations". Impressionistic conjectures and

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share the wealth and provide the service with the distributor (17) manufacturers agents to buy a set (20) manufacturers administrators are request Taiwan military leaders hostile to the Taiwan agents and distributors quality per year (18) demand by or season (26) top Japanese (24) the operation is American or German very bloody such as heart surgery (27) doctors cross-train at universities (22) Japanese medical Japanese companies relationship between institutions and the clothing products fit better (23) strong the older leadership position (12) high-price in the market (5) demand by medical (13) a direct import strategy is taken professionals (6) US opportunity to <</p> distribute medical supplies in Taiwan (11) tariff schedule manufacture and - restricts market penetration .(25) shortage of labor and water supply market to introduce (7) Taiwan medical (19) sample the supply market is the product not mature benefits, technical (4) product merit, specifications channel . . . salesmen (2) doctors pull ▲ (21) more expensive to gowns and the covers products through push products through channel network of local re-use the medical (8) traditional agents and distributors (30) the cost of disposable products is high (9) salesmen use direct sales (10) demand by administrators, the nurse's work load seldom consult with hospital owners nurse and increase manufacturers of medical supplies administrators (3) Taiwan (28) the (29) garbage disposal local manufacturing (16) build laundry (14) A decrease in consumer income insurance policies (15) new medical and increase in facilities and facilities problems

A cognitive map of the disposable medical clothing market drawn with graphics Cope software

Figure 1

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- formulations are added to illustrate the representative abstracts.
- 6 Create another part called "Patterns" that represents the clearest explanations of the research question — the Viet Cong motivation and morale.
- 7 Present the report in reverse order of organization, presenting the patterns first and the illustrations and elaborations as supporting evidence second.

Leites' method is a means to collect data, abstract data, outline the abstracts by type and content, categorize abstracts into groups derived from the outline, illustrate the most representative abstracts, and explain the patterns that appear in an attempt to answer a research question.

In conclusion, Leites' method is a very flexible means of data collection that can easily incorporate other types of data abstraction and collection (e.g. cognitive maps). Newspaper and magazine articles can be analyzed using the US Foreign and Commercial Services' rules for abstracting the news. Likewise, Cope software can be used to organize the Illustrations and Elaborations section and to outline Patterns. Carr's methodology, although of interest, is least applicable since it requires comprehensive data about the commercial infrastructure.

I Methodology

Prior to selecting a methodology for the research, a two-person research team wrote specifications to:

- survey the current status of retailing in Taiwan and assess the competitiveness of foreign firms;
- provide detailed information about planned major retail projects; and
- provide strategic management recommendations for retail infrastructure development.

The report requirements include collecting illustrations of anticipated retail development projects, analyzing Taiwan retail product and service trends, and describing the Taiwan consumer. The consumer section of the report profiles consumer economics, the household, consumer decisions, time, and consumer psychology.

The methodology for the project required sufficient flexibility to allow for multiple researchers and concurrent data processing and analysis. Due to the time limitations, some data analysis had to be conducted during the data collection phase. Following Leites' method, a team of three external data collectors, three university research assistants, and two research directors, collected data related to Taiwan's retail industry for

three weeks. The data consisted of two file drawers of site interviews, news clippings (some dating back three years), books, lists, official documents, surveys, and photographs. During the data collection process, all information was considered valid and any information offered by respondents was considered relevant. This viewpoint created some clutter at the evaluation site but minimized the need to return to sources for additional information.

At the research and evaluation site, the research directors determined whether the data warranted abstraction. Data judged relevant to the specifications were filed as "consumer notes", "retail notes", "product notes", "project notes" or "legal notes" and then abstracted. Four illustrative sections were created to match the paper file and the abstracts were computer databased as received. When a section was exhausted, work began on explaining the patterns. The patterns explained six research areas according to the specifications (or research questions). The patterns include "the consumer", "the structure of the retail industry", "retail products and services", "major retail development projects", "market strategies" and "commercial laws and regulations".

Summary of results

In this section, the final results of the report (Trappey, 1997a) are summarized and presented in the same order as the original report.

The consumer

Taiwan's consumers have less time, more income, and radically different family structures than ten years ago. The analysis of the Taiwan consumer provided six topics of interest. The first topic (Time and Space) points out that less time leads to changes in diet and healthier consumers leads to less space on the island. The second topic covers consumer income and indicates that household expenditures are changing and income is increasing as the political environment becomes more democratic. Demographics and family structures are changing (topic three) and females are playing an important role in the economy. Along with changes in the consumer's external environment and family structure, there are important changes to the consumer's behavior (topic four). Topic five highlights the credit revolution, the growth of advertising, and the emergence of new lifestyles. Finally, topic six provides ideas for marketing products and services in Taiwan. Overall, the most significant finding about the consumer relates to the changing family structure.

Industrial Management & Data Systems 98/2 [1998] 48-54 Females feel the greatest time pressures as lifestyles change, although males are also feeling increasing time pressures. As a result, modern families combine their leisure activities with shopping activities. Fathers shop with the family if the stores offer merchandise of interest. The new hypermarkets like Gao Fong and Makro appeal to male shoppers with a growing mix of home repair and sports items. Now that shopping is becoming a family affair with larger amounts of goods purchased at one stop, the male frequently drives the car and carries the goods.

The structure of the retail industry

The structure of the Taiwan retail industry is best illustrated by discussing the history of the retail marketplace (topic one) and the channel changes occurring between the old and new retail formats (topic two). The old and the new retail formats are roughly balanced to date but the rapid entry of new formats and the liberalization of commercial restrictions indicates that the structure of Taiwan's retail industry will be rapidly transformed over the next ten years. The transformation of the retail structure is consistent with government policies to position Taiwan as a regional operations center and transform it into a "technology island" (Lee, 1997).

Many changes to traditional restaurants and menu selections occurred as international fast food chains spread across the island. Hamburger chains now lead the way in the Western fast food chain market with almost a 60 per cent market share -McDonald's (26 per cent), Burger King (14 per cent), MOS (9 per cent), and Wendy's International (7 per cent). The hierarchy for Western fast food is hamburgers, pizza, and fried chicken, respectively. However, new growth in the area of Chinese fast food and Japanese noodle and sushi chains is challenging the dominance of Western fast food chains. For instance, the 1995 Taiwan Chain Store Almanac shows that there are about 530 Western fast food chain stores belonging to 14 chains. On the other hand, there are 461 Chinese fast food chain stores (eight chains) and over 60 Japanese fast food stores.

As more local franchise operators learn to apply modern retail techniques and adapt traditional foods to the fast food format, the market share will likely shift from Westernstyle foods to post-modern adaptations of the local or Asian diet. There is an opportunity for US fast food retailers to experiment with new Chinese- and Japanese-style fast food franchises. The development of successful post-modern formats promises successful market entry across Asia.

Taiwan department stores lease floor space to individual merchandisers or chain stores and take a high percentage of sales. On average, less than a quarter of the floor space is used by the department store to sell merchandise purchased on its own account. Thus, the department stores act more as a mini-mall than the Western version of a department store that buys and sells most merchandise on its own account. There are several problems with the Taiwan department store model that are increasing the demand for modern malls. First, department store commissions vary from 10 per cent to 35 per cent of sales and these costs are passed down to the consumer. Second, the retailers in the department stores attempt to minimize floor space and minimize inventory holdings to reduce rents. But the end result is a merchandise mix short in breadth and depth. Third, independent tenants have few incentives to hold promotions, install modern displays, or train employees. Modern malls that lease sufficient space at reasonable rates and allow more competition may significantly change the current state of clothes and general consumer goods retailing. Mall development, along with a forecasted 114 billion dollar increase in retail sales for 1996 through the year 2000, will be the most important retail market shift.

Retail products and services

Taiwan's demand for products and services changes as behavioral patterns change (topic one). The most important behavioral change is the consumer's growing dependence on brands (topic two), causing retailers to implement new market strategies and use advertising. The behavioral changes also parallel changes to the food distribution channel and mark a shift away from traditional diets (topic three). Finally, the service industry is showing rapid growth as income levels continue to rise (topic four).

Taiwan is seeing new growth in brands and product variety. The breadth of goods in stores and the depth of merchandise continues to expand. With more places to buy goods and more goods to choose from, consumers tend to recognize value. Some goods such as orange juice were introduced as a luxury and high value added product. Over time, competition, economies of scale, and more efficient distribution, has led to lower market prices. Some local manufacturers, however, have dominated and vertically integrated the convenience store channel which tends to maintain high prices while limiting competition. The market is showing trends in the use of low price, high value strategies to build market share, brand awareness, and consumer loyalty. For example, advertisements for I-Mei's juice "demonstrate it is dedication to the consumer with a reasonable price".

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Major retail development projects

The development of malls in Taiwan has been "in the works" for over ten years. The Six Year Development Plan was the first case in which the central authorities formerly recognized the need for retail infrastructure improvement. The plan proposed the development of community and regional malls in 18 suburban and five urban areas. From 1991 through 1996, plans fell by the wayside and no malls were built.

Great promise was shown in 1997 as the year marking the next wave of retail change. The Ministry of Economic Affairs (MOEA) has approved 20 shopping mall projects with a total capital investment of US \$5 billion. In February 1997, construction started on the first regional malls, the Mall of Taiwan and the Breeze. Three additional projects have recently been added to the MOEA's evaluation list showing signs that mall development has finally begun in earnest. The International Shopping Center Development Council (ISCDC) of Taiwan predicts that there are at least 36 mall development projects under consideration (topic one). The second topic covers the projects approved by the MOEA, listing and illustrating the characteristics of the proposed malls. A survey was mailed to representatives of each approved project. Respondents provided some drawings and site maps for the mall development projects and each illustration was included in the report.

Market strategies

A market strategy describes how retail firms compete in the marketplace, how firms co-ordinate activities, and how firms manage new growth and expansion. The first topic describes the major trends and how firms will likely react to the shifts in products and store formats. The major trends are:

- Shopping as work shopping as leisure.
- High price value price.
- Burgers and pizza noodles and sushi.
- Department stores malls.

The second topic emphasizes collecting data, transforming data into knowledge, and applying the knowledge as the basis for co-ordinating and managing retail market expansion. Retailers exploring the Taiwan market have insufficient data to answer questions and formulate strategies. Since there are limited data about the retail markets, the consumer, and pricing retailers interested in the Taiwan market have to play a pioneering role in data collection and analysis. An effective market entry strategy includes establishing means for collecting data, transforming data into knowledge, and applying the knowledge to operations. Relevant directions for strategic analysis include:

- 1 Study the changes occurring between the old and the new retail formats in order to identify gaps in service and product offerings.
- 2 Analyze the wants created by a media promoting global goods in a market providing local goods.
- 3 Study the success factors of the market winners and the failure factors of the market losers. The market winners are McDonald's (consistency, child target market), Carrefour (everyday value, wet market substitute), and 7-Eleven (convenience, economy of scale, vertical integration). The market losers are the Japanese chain Yong Lau Nai Nong (money problems, lack of control), Mom and Pop Stores (limited source of supply, poor image and quality control), and department stores (shallow assortment, poor service, outdated fashion).
- 4 Evaluate possibilities for creating new retail formats and franchises for Asia. Experiment with Asian flavors, fashions, and ideas in search of post-modern retail concepts for the region.
- 5 Test group-appeal advertisements (ads for the masses) instead of advertisements targeting the individual.
- 6 Study ways of improving logistics, training, and security in a new environment.
- 7 Evaluate alternative retail location options including malls, retail streets, and freestanding locations. Study the location strategies of the existing retailers.
- 8 Know the sources of labor because employees are the critical element of retail success. The competition can copy the image but it is difficult to duplicate the management and the service.
- 9 Anticipate disputes. Investigate where others have had legal difficulties or disputes and take the necessary preventative measures.
- 10 Plan strategies that are profitable in the short term and can sustain long-term growth.

Commercial laws and regulations

Liberalization of laws related to the retail industry began with the Six Year National Development Plan of 1991. The Taiwan authorities issued documents publicly stating a need for large-scale, integrated retailing and community development. Developers were promised assistance obtaining land, receiving financial support, getting tax breaks, building distribution centers, and implementing improvements in commercial standards and law enforcement. Although the planned commercial modernization was not realized as promised, changes to the law did begin to occur.

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The plan to develop Taiwan into an Asia-Pacific Regional Operations Center (APROC) recognizes many issues hindering retail development. APROC, designed as a re-engineering program to revamp the legal and macro-economic environment, is a good forum to present recommendations. There have been significant changes to the law including the right of foreigners to own land under special circumstances. Topic one describes the nature of company law in Taiwan. Topic two presents the limitations to franchise law. Finally, topic three details the changes to land ownership law that coincides with the recent interest in mall development.

| Managerial implications

The application of Leites' method to Taiwan's retail market demonstrates that the methodology can be used for marketing and management strategy development. Independent market researcher companies estimated that a similar report would cost their organizations anywhere from 25,000 to 50,000 US dollars to satisfy the original research specifications. However, this research demonstrates that costs can be substantially reduced using Leites' method in-house. The cost, content (171 pages) and timeliness of the report (one month for completion) have been favorably evaluated by the contracting agency as well as by the 15 companies that purchased the report. The first draft of the report was presented at the Asia/Pacific Business Outlook Conference (Trappey, 1997b) and drew favorable comments from some of the world's largest retailers.

Ormerod (1996) noted that small groups of people working together to structure information not only provides new ideas but also identifies issues for debate. Thus, soft OR methods such as Leites' method provide managers with a different way of looking at things. Instead of producing information that reflects a limited quantitative aspect of the research topic, the report reflects the participants' perceptions of the Taiwan retail environment. The external validity compares favorably to a similar study conducted by the Queensland Department of Primary Industries (DPI, 1995). Several calls to companies that purchased the report and used the report for decision making indicates that the format and content provides sufficient information for management decision making. After receiving the report, one large brand management company re-evaluated the Taiwan market and one of the world's largest discount chains renewed efforts to open stores in Taiwan. In conclusion, the method offers a new means to survey markets and shows promise as a strategy development tool.

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