Retail Location Decision-Making and Store Portfolio Management

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Introduction

The Canadian retail economy has undergone significant structural transformation over the last decade. A number of factors have combined to drive retail change at the local, regional and national level. Corporate concentration has occurred across most retail sectors. This has resulted in a small number of major retailers controlling a large proportion of total retail sales, albeit with significant variation between sectors (Gomez-Insausti 2000). Widespread development of new retail formats and reconfiguration of the traditional nodes of retail activity has taken place, with large format retailers challenging the traditional mall and street-front retailers (Simmons 2000; Yeates 2000). Multi-channel and internet-related retail has evolved into an integral component of retail activity, with the prevailing retail business model advocating multi-channel strategies (Michalak 2000; Evans 2000). The impact of internationalisation, in particular, cross-border activity with the US (facilitated, in part, by government deregulation) has increasingly been evident, with waves of US retailers entering the Canadian market (Evans and Barbiero 1999). US retail groups are now present in all the major retail sectors in Canada. These drivers have resulted in structural changes in the Canadian retail system, which have physically manifested themselves in the “bricks-and-mortar” (and “clicks-and-mortar”) of the retail landscape. The truism that retailing is “dynamic and ever-changing” has taken on a new complexion, as the rate and impact of change taking place in the Canadian retail industry has significantly accelerated over the last decade.

In this paper, the focus is on retail location decision-making activities and store portfolio strategies of major retail organisations operating in Canada. Loca-
tion decisions are widely recognised as the most decisive factor in determining retail success or failure; as has been noted over many years, good locations are “the keystone to profitability” (Cox 1968: 2). They represent a point of major investment that needs to be managed, and carry with them long-term operational and strategic implications for the organisation. Once made, poor location decisions are difficult to remedy, and it is these factors that, in theory, “compel the retailer to make the decision carefully” (Ghosh 1994: 248). In the paper, the aim is to deconstruct the location decision-making process from the perspective of the management of store portfolios. Due to increasing levels of corporate concentration and competition, the pressure placed on Canadian retailers to make “good” decisions has risen markedly, as the costs and consequences of “bad” decisions have escalated. The availability and use of decision support tools by retail organisations operating and managing store portfolios in Canada is examined. The emphasis is placed on the varied use and role of location analysis techniques, data and GIS-based technologies within strategic decision-making activities.

The paper is divided into four parts. First, the strategic significance, scale and scope of location decision-making activities are highlighted. Second, the management of store portfolios is examined, and a framework of location decision types presented. The broad range of location decision activities undertaken by retailers is supported with survey evidence and retail press release and media vignettes. Third, the adoption and use of decision support technologies are reported. Finally, conclusions are drawn, with location decision-making presented as a complex process -- in essence, an interplay amongst stakeholders, decision support technologies and the retail landscape.

The argument is presented that location decisions have a long-term impact on the vitality and viability of commercial retail activities, and therefore, retailers need to manage their store portfolios strategically and to utilise decision support technologies to reduce risk. The strategic nature of commercial decision-making activities has a rich heritage, particularly within the economic geography of the 1970s (see for example, Smith 1971; Lloyd and Dicken 1972; Toyne 1974). Yet, over the last decade GIS technologies have facilitated decision support activities that previously were unimaginable, or at best, prohibitively time-consuming. The paper provides insights into how retailers are realising the potential offered by geographically-centred technologies for enhancing their decision support activities.

**Methodology**

The discussion is based primarily on (1) findings from a questionnaire survey; and (2) analysis of financial annual reports of ten major retailers operating in Canada. The Survey of Corporate Retail Planning was mailed to 475 senior executives and analysts employed in 226 Canadian retail organisations. The survey addressed a range of location decision-making issues, including store portfolio management. The sample was collated from a number of sources, primarily the 2000 Directory of Retail Chains in Canada. It should be noted that sample selection was limited,
in general, to those retailers operating at least 50 stores. Surveys were distributed in the Fall, 2000. In total, 85 surveys were returned, of which 75 were fully completed, with 56 organisations responding positively. The effective response rate for the surveys to individuals was 18%, and 25% when measured against the number of organisations contacted. The response rate compares favourably to similar large-scale surveys of Canadian retail organisations, with approximately one-in-five executives responding positively. Data in this paper are based on the individual as opposed to organisational response. The potential for double counting data was reduced since it was found that respondents working within the same organisation often had conflicting views on the nature and extent of decision making activities taking place in their organisation.

Retail Locations and Financial Risk

Retail locations provide retailers with physical access points to their markets, and can generate operating advantages that can prove difficult for competitors to assail or neutralise. As Ghosh and McLafferty (1987: 2) note: “in the extremely competitive retailing environment, even slight differences in location can have significant effects on market share and profitability… since store location is a long-term fixed investment, the disadvantages of a poor location are difficult to overcome”. The importance of location decision-making to retail organisations is further heightened when set against the trend of the average retailer operating from larger outlets, across a wider variety of locations, increasingly experimenting with new retail formats, and investing substantially larger amounts of capital on location decisions than they did in the past.

Location Decisions as High Cost Investments

Location decisions can involve substantial investments, and as a result have high risk associated with them. Typically, these decisions require the approval of a number of senior executives within the retail organisation, and often a range of other stakeholders, such as property developers, municipal planners and even other retailers in the case of partnership developments. The decisions are a major form of investment, which in most cases require high-level authorisation and are subject to broader capital budgeting issues within the given organisation or retail group (Guy 1994, 1997). For example, Canadian Tire recently announced an investment of $270 million in 40 new stores, $6.75 million per store (Canadian Tire Annual Report 2000). Similarly, the home improvement retailer, Home Depot, reported that the cost of new stores varied widely, principally due to land costs. They estimate that new stores cost on average $20.7 million per location, with pre-opening inventory costs of $5 million. The cost to remodel and/or fixture stores to be leased averaged approximately $7.2 million per store (Home Depot Annual Report 2000).
Table 1 provides a breakdown of locational assets for ten major retailers operating in Canada. The importance of location decisions is clearly underlined by the size of investment and the amount of capital that is grounded (i.e., not easily transferred). For example, Wal-Mart’s global land holdings are valued at $12.9 billion, building and leasehold improvements at $31 billion, and total leasehold liabilities (i.e., contractual lease agreements) at $8.2 billion. At a relatively smaller scale, Canadian Tire who operates 441 stores in Canada, holds over $0.5 billion in land, $1.1 billion in buildings and has leasehold liabilities of $379 million. These figures illustrate the long-term locational assets and liabilities held by retailers, with substantial capital invested in the “bricks-and-mortar” of their stores.

Location Decisions as Long Term Commitments

Retail locations represent in most instances a commitment to a locality, either in the form of freehold ownership or long-term leasehold, and as a result, have a certain degree of inertia associated with them. Five to ten year long-term lease agreements are the industry norm within the Canadian commercial property market, with short-term leases of five years or less. This ties retailers to locations for many years after the initial decision is made. As Berman and Evans (1983: 183) state: “essentially you are married once you pick a location…and divorce can be very expensive”. The terms of the marriage can be substantially more binding if the retailer holds the property freehold. In such circumstances, the location represents a major fixed asset, and carries with it (when viewed in aggregate) financial and strategic repercussions (Wrigley 1996). Simply, once a retailer opens a store they are tied to the locality for a number of years. As Clarke (1995: 5) notes:

“The location decision is not something which is just made as a one-off decision -- it is one that the organisation has to live with and manage to ensure continued profitability”.

This acts as a major disincentive and impediment to locational activity. As Hickson et al (1986) noted in a study of strategic investment decisions, location decisions were ranked as taking the longest to make and having the most significant consequences for the organisation. The binding long-term nature of the “location decision” rests uneasily with the traditional short-term opportunistic planning horizons adopted by retailers and the dynamic nature of the environment in which they operate.

The survey findings revealed that, on average, 27% of stores were owned
<table>
<thead>
<tr>
<th>Company</th>
<th>Retail Sector</th>
<th>Sales Rev ($ mill.)</th>
<th>No. of Stores</th>
<th>NetBook Value ($CdMillions)</th>
<th>Leasehold Liabilities ($CdMillions)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic &amp; Pacific</td>
<td>Food</td>
<td>15099</td>
<td>1214</td>
<td>205</td>
<td>625</td>
<td>- Closure of 249 stores with an estimated impact of $1.131 million on total sales</td>
</tr>
<tr>
<td>Canadian Tire General</td>
<td></td>
<td>4024</td>
<td>441</td>
<td>546</td>
<td>1131</td>
<td>- 45 new format stores opened with a planned $270 million new format store development planned for 2001 adding a further 40 stores</td>
</tr>
<tr>
<td>Chapters</td>
<td>Books</td>
<td>594</td>
<td>305</td>
<td>na</td>
<td>na</td>
<td>- 16 superstores opened, 30 traditional bookstores closed</td>
</tr>
<tr>
<td>Future Shop</td>
<td>Electrical</td>
<td>1683</td>
<td>88</td>
<td>na</td>
<td>na</td>
<td>- Opened 3 new stores, Upgraded 7 stores</td>
</tr>
<tr>
<td>Gap</td>
<td>Fashion</td>
<td>20077</td>
<td>5398</td>
<td>408</td>
<td>408</td>
<td>- Opened 731 stores, expanded 268, closed 73</td>
</tr>
<tr>
<td>Home Depot</td>
<td>Home Improv.</td>
<td>6755</td>
<td>1665</td>
<td>4769</td>
<td>7098</td>
<td>(construction in progress accounts for $415 million investment)</td>
</tr>
<tr>
<td>Hudson Bay</td>
<td>Dept.</td>
<td>7296</td>
<td>427</td>
<td>98</td>
<td>420</td>
<td>- 10 openings, 4 relocations, 12 expansions, 15 renovations, 19 closures</td>
</tr>
<tr>
<td>Company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loblaw</td>
<td>Food</td>
<td>2010</td>
<td>1111</td>
<td>923</td>
<td>1656</td>
<td>- Properties held for development or under development account for $409 million investments</td>
</tr>
<tr>
<td>Sears Canada</td>
<td>Dept.</td>
<td>6131</td>
<td>258</td>
<td>65</td>
<td>729</td>
<td>- 38 openings, acquisitions of T.J. at an estimated cost of $162 million</td>
</tr>
<tr>
<td>Walmart</td>
<td>Dept.</td>
<td>242305</td>
<td>5857</td>
<td>12900</td>
<td>31085</td>
<td>- 77 openings, 115 extensions/relocations, 140 refurbished (and 100 international openings/relocations)</td>
</tr>
</tbody>
</table>

2. Building and leasehold improvement combined.
freehold. Of the remaining (73%) leasehold stores, 56% were on long-term lease (5 years or more), and 17% were held on short-term lease (less than 5 years). Approximately 6% of the respondents owned their entire retail property portfolio, 18% leased half of their stores or less, and 82% leased the majority of their stores (of which, 31% leased all their stores). In sum, most respondents owned a small percentage of their stores, and had long-term leases for the bulk of their stores (see Figure 1). The findings suggest retailers operating in Canada are contractually tied to a large proportion of their store portfolio.

**Store Portfolio Management**

The “location mix” describes the variety of location decisions that a retailer can make, ranging from large-scale acquisitions of groups of stores to site-specific decisions, such as refurbishment. Despite a preoccupation in the retail location literature on opening and closure activities, the actual operation of a network of stores demands a range of locational decisions. As Clarke et al (1997: 2) note:

“For many companies the question is not so much where to open, but where to close; for others, where to extend or relocate, or, alternatively, to re-furbish; for a growing number, where and how to re-fascia, and for others, not where to build new stores but which competitors to acquire, or which parts of the company to dispose of”.

![Figure 1: Short and Long-Term Retail Lease Holdings of Respondents by Proportion of Property Portfolio](image)
Retailers are faced with a number of locational options. These can be broadly divided into corporate, market and location management type decisions.

**Corporate and Market Decisions**

These decisions refer to expansion and rationalisation activities. Changing the size of the store portfolio can be achieved on a site-by-site basis (market -- organic growth) or through the purchase / sale of groups of stores and operating divisions (corporate -- mergers, acquisition and disposal activities).

Organic growth is undertaken either via contagion, i.e., expanding in areas surrounding existing markets, or through hierarchical development, specifically, expanding through major to minor nodes of retail activity. Such decisions result in the roll-out of a network through a process of organic evolution, e.g., a retailer opening stores in Downtown Toronto, Montreal, Vancouver and Calgary (hierarchical), or opening in Downtown Toronto, Etobicoke, North York, Scarborough and Ajax (contagion). These decisions are typically planned and budgeted for over a number of years, as opposed to mergers and acquisitions that often occur in a knee-jerk reactionary manner.

In contrast to organic growth, mergers, acquisition and disposal activities typically involve large-scale change to the network of stores and have major strategic implications, particularly in the relatively small Canadian marketplace. These decisions are an ever-popular way of accelerating growth / decline for a number of retail organisations, reflected in the increasing levels of corporate concentration and the emergence of “global” retailers. Merger and acquisition activity is, however, normally followed by a period in which the retailer disposes of unwanted outlets brought about by the merger/acquisition. In Canada, these activities are regulated by the Competition Act (as enforced by the Competition Bureau), which defines acceptable levels of competition and attempts to minimise monopolistic commercial activity. For example, the acquisition of Indigo by Chapters in 2001 was deemed to breach the existing competition laws, as both retailers were major players in the book retail sector. Chapters was forced to sell a percentage of its store portfolio.

Cross-border expansion by US retailers (a form of hierarchical development), as seen by the entrance of category killers, such as Home Depot, Office Depot, the Gap and Wal-Mart, has had a profound affect on the Canadian retail landscape. An increasing proportion of Canadian retail trade is controlled by non-Canadian organisations, a phenomenon which has been raised as an issue of concern by the Retail Council of Canada. As a result, disposal activities (typically viewed as an attempt to “streamline” the business) and closure are becoming increasingly common amongst Canadian retailers, e.g., the demise of the Canadian retail institution, the T. Eaton Company, and the mixed fortunes of the Dylex Retail Group.
Location Management Decisions

The need for the planning and management of locational assets throughout the life-span of a given location decision is fundamental in creating and maintaining retail profitability. Location decisions such as refurbishments, remerchandising and refascias provide retailers with alternative options to simply investing in new locations (openings), or pulling out of others (closures). Survey and anecdotal evidence suggests that the majority of location decisions involve management of existing store portfolios as opposed to new store development. For example, in 2000, Wal-Mart opened 77, refurbished 140 and extended/relocated 115 stores; over two-thirds of their location decisions involved existing stores.

Relocating involves the closure and re-opening of stores within an existing market. The decision to relocate may stem from combining two stores in close proximity into one larger store at a new location; or alternatively, a better “retail pitch” may have become available within a given area, e.g., the development of a new shopping mall complex may shift the centre of retail gravity considerably. The extension of existing outlets accounts for a significant proportion of locational activity within certain sectors, e.g., a fashion retailer securing adjoining properties in a regional shopping mall. Extensions provide retailers with a means to gain sales square footage in areas where new build or lease opportunities may be limited, due to, e.g., competitive pressures for locations, excessive land prices or restrictive planning policy.

The refit of a store represents a more subtle way of altering the retail location. In most instances, decisions such as refitting and refurbishing can be viewed as the management of retail locations at the micro-level. This may simply involve replacing outdated fittings with their present-day equivalent, or alternatively, provide the opportunity to change the interior styling of the store, and thus the retail appeal. These decisions are typically triggered by the age of the store, e.g., a given retailer has a policy for the periodic update of their stores, with each store refitted every seven years.

The refascia of a store, i.e., altering the outside appearance of outlets such as changing the company logo and signage, provide retailers with an opportunity to modify a store’s image. This can either simply involve a signage change (refascia) or involve altering the signage, merchandise mix and refitting the store (creating a new retail banner). A range of fascias may be operated by a large retailer across a network of stores, with the choice of fascia or banner dependent on local catchment characteristics. These decisions are generally linked to changes in marketing and corporate strategy, with the organisation repositioning their retail offer. The Gap, for instance, operate a number of fashion banners, including Gap, Baby Gap, Gap Kids, Banana Republic and Old Navy.

Changing the product range and merchandising of a retail location provide retailers with opportunity to create a highly customised retail offer, which can accommodate local tastes. These decisions can be implemented extremely quickly, in comparison to the other structural type decisions that involve some form of construction. The merchandise mix is a critical component, e.g., a retailer may...
have the prime retail location, but unless the assortment of products meets the demands of surrounding customers, the store will not reach its potential. For example, in a cosmopolitan area such as Toronto, a grocery retailer may operate a number of store merchandise types that would vary dependent on the ethnic character of a store’s catchment.

The type of locational activity generally determines the level of risk, e.g., roll-out and rationalisation have broader financial implications for an organisation when compared with refit and remerchandising activity. This issue is developed in Figure 2 by providing a simple model of the relationship between locational activity against capital investment (the level of risk) and the decision horizon (the time it takes to make and implement the decision). Remerchandising, e.g., can be seen as both low risk and quick to implement (virtually, overnight), in comparison with roll-out (e.g., by acquisition of a minor competitor) which requires substantially larger investment and time (as a consequence of legal negotiations, management take-over planning, capital budgeting issues), and thus carries more risk. Similarly, roll-out decisions through organic growth have a shorter decision time horizon and involve substantially less risk when compared with roll-out through divisional acquisition, where a large number of stores may be involved. Organic growth represents a “tried-and-tested” means of development, in com-
TABLE 2 Comparison of Media Reporting and Retailers’ Locational Decision-making Activities

<table>
<thead>
<tr>
<th>Locational Activity</th>
<th>% of retail reports between March 2000 to 2001</th>
<th>% of retailers who have undertaken activity in last 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Press Releases</td>
<td>Media Articles</td>
</tr>
<tr>
<td>Acquisition (division)</td>
<td>15.6</td>
<td>15.7</td>
</tr>
<tr>
<td>Acquisition (group)</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Rationalise (division)</td>
<td>11.7</td>
<td>6.7</td>
</tr>
<tr>
<td>Rationalise (group)</td>
<td>0.0</td>
<td>4.5</td>
</tr>
<tr>
<td>New format opening</td>
<td>22.1</td>
<td>24.7</td>
</tr>
<tr>
<td>Store opening</td>
<td>33.8</td>
<td>18.0</td>
</tr>
<tr>
<td>Store closure</td>
<td>0.0</td>
<td>21.3</td>
</tr>
<tr>
<td>Relocation</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Extension</td>
<td>2.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Refascia</td>
<td>6.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Refurbishment</td>
<td>5.2</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Source: The Survey of Corporate Retail Planning 2000, CSCA, Ryerson

Comparison with an acquisition which may require the retailer to navigate in “uncharted waters”, and thus incur higher risk.

Table 2 provides a comparison between reported and actual location decisions. Retail press releases and media reports in three major Canadian newspapers were tracked over a one-year period for articles on the locational activities of retailers operating in Canada. In addition, survey respondents were asked which location decisions they had undertaken in the last five years. This provides both the formal and informal view of location decision-making. Retailer press releases and media retail commentary focuses largely on major expansion, rationalisation and the development of new retail format decisions, with the media also reporting specific store closures; these decision types are regarded more newsworthy for both the public and shareholders. The decisional reality, for the majority of retailers is seen in the large percentage who are involved in the management of their existing network of stores.

The nature of the location decisions being made at the national and international level as reported by survey respondents is shown in Figure 3. Clearly, international activity, i.e., decisions being made by retailers operating in Canada concerning operations outside of Canada are extremely low, with very few respondents reporting international activity. Of these retailers, the main activity was the opening of established formats. The lack of international expansion is not surprising, since Canadian retailers have largely been unsuccessful in their attempts to operate in foreign markets, and instead have had to concentrate efforts on dealing
with increased competition brought about by an influx of international (particularly, cross-border) retailers into the Canadian marketplace. The domestic focus stems from a number of factors, including:

- a series of unsuccessful internationalisation projects by Canadian retailers in the boom-period of the 1980s;
- the geographic position of Canada, with long distances to foreign markets and a border with the dominant US market and
- the relative size of Canadian retailers when compared against their US and European counterparts (with only 3 Canadian retailers ranked in the Top 100 retailers worldwide, viz. Loblaw, Empire Group Limited and the Hudson Bay Company).

The locational activities at a national level provide evidence to dispel the widely held view that location decisions simply involve store openings and closures. In fact, the dominant location activities (as measured by the number of respondents undertaking such decisions) are refurbishment and relocations, followed by the opening of established formats, new formats and the disposal of individual stores. The optimisation of existing stores is illustrated by the percentage of refurbishments, relocations, extensions and refascias. These decisions, in essence, reflect “on-going” management of capital, in the form of repositioning the store to meet the needs of customers and maintaining the quality of the shopping environment. Obviously, these do not show the underlying number of decisions; nonetheless, they do illustrate the importance of working the locational asset -- simply, the need for retailers to ensure that they are achieving the maximum return
on investment from their capital.

The increasing level of corporate concentration is reflected in the percentage of respondents undertaking major strategic decisions, with approximately one-third of the respondents involved in the acquisition of operating divisions and/or groups of stores. Such corporate retail expansion carries increased risk for the retail group, from a property ownership perspective. The growth and/or decline of the respondent’s organisation as measured by the reported change in the number of outlets operated were also surveyed. Approximately four out of every five respondents noted that the number of outlets had increased over the previous five years and is set to increase over the next five years. Only a small percentage reported that their locational activity was static. These findings coupled with the finding that on average 40 location decisions were undertaken each year by the respondents questioned (i.e., one decision every six working days) underline the scale and frequency of retail planning activities. One-fifth of the respondents made more than 52 decisions each year (i.e., one per week), and one-quarter 12 decisions or less (i.e., one per month). The majority of organisations made between 37 to 52 decisions per year, or one decision per year for every eight stores operated. The store portfolios of major retailers are therefore a constant state of flux.

**Retail Location Decision Support**

Canadian retailers are increasingly adopting decision support technologies, such as geographical information systems (GIS), to aid their store portfolio management. GIS are computer-based systems that facilitate the analysis of spatial data. It is estimated that approaching 90% of retail data is spatial, e.g., store and customer location, demographic and sales data. The business GIS marketplace in Canada has grown substantially over recent years -- due in part to the significant increase in desktop computing power and the availability of more user-friendly software. The survey collected data on the availability and use of retail data, GIS and a range of analytical techniques applied to location decision-making activities. This section is divided into three parts. First, the level of GIS adoption and development is reported. Second, retail data collection and use within decision-making is examined, and the level of integration of these data with GIS indicated. Finally, the nature and extent of location techniques in use by Canadian retailers are reported. These range from simple analogue methods to computer-based spatial interaction models. The role of GIS in supporting the development of more formalised and sophisticated approaches to location decision-making is also discussed.

**Retail GIS Users**

Fifty seven per cent of the respondents reported that GIS were used in their organisation (with 53% of the organisations surveyed using GIS). Despite the high level of GIS penetration amongst retailers, the technology represents a relatively new
tool in Canadian retail. Approximately half of the systems were adopted over the last five years, albeit with the exception of a small number of retailers who adopted GIS from the late-1980s onwards. GIS use varies by sector with 68% of respondents working within the “Grocery” sector using GIS, compared to only 29% in “Electronics, Music and Video” and 9% in the “Fashion and Footwear” sector.

Most of the systems were used in a small number of departments (53%) or in a single department (31%) -- typically, real estate, marketing, business development or market research. Only a small number of respondents reported that GIS were being used as a corporate resource across the entire organisation. Of note, a few of the organisations outsourced GIS, with GIS-based information required on an ad hoc (project-by-project) basis, as a couple of respondents stated, “we outsource GIS if we are unsure about a location” and “our market consultant uses GIS”. Anecdotal evidence suggests that GIS derived-data are used more widely than the survey data indicates. It is estimated that GIS output is used in over two-thirds of all the location decisions made by major retailers operating in Canada, with many retailers using site and market reports based in part on underlying GIS analysis (either undertaken in-house or by external consultants).

The nature of GIS use within Canadian retail organisations is reflected in the type of GIS applications that have been developed (see Figure 4). The number of applications used varied by sector; in particular, the grocery sector was the most developed with on average over 10 applications used, almost double the number
of applications when compared with other GIS users. The most widely developed applications of GIS were market mapping, site screening, catchment area identification, customer profiling and competitor analysis. These applications are predominantly used in a tactical context. The development of more strategic applications is envisaged over the next five years -- specifically, network planning applications which provide analysis of entire property portfolios, as opposed to on a site-by-site basis. GIS users undertook more strategic decisions (acquisitions and disposals) when compared to the non-users. The majority of GIS users indicated that there was potential to develop applications in other areas, in particular, merchandising, advertising and logistics.

The survey results mirror the research conclusions drawn by Hernandez (1998) in a detailed study of GIS by UK retailers. Specifically:

- GIS in the retail industry has been skewed towards certain sectors;
- GIS are largely not viewed as a corporate resource, and instead feed the data management and analysis needs of a small number of departments;
- GIS typically evolve within a host organisation and diffuse across retail sectors, with initial systems often purchased for a specific set of tasks within one department, gaining momentum over time within the organisation; and
- GIS are predominantly used for operational (site-specific) and tactical, as opposed to strategic type decisions.

Of those organisations not using GIS, a lack of awareness or simply never having considered GIS technology was reported by 58% of the non-users. The low level of awareness may in part be explained by the terminology used, with GIS technology packaged in varying configurations. This represents an area where there is potential for system vendors and academia to raise the awareness and further promote the application of GIS within the retail industry. Concerns were also indicated by non-users with regard to a lack of staff expertise, the cost effectiveness and the appropriateness of GIS within their organisation. For example, respondents noted that: “our stores are developed in well-known markets”, “the benefits for retailers who solely operate in shopping centres are vague”, and simply, “we are not interested in GIS”.

Retail Data

The Canadian retail data marketplace is characterised by a number of players. These include government and private agencies who undertake large-scale data collection, companies specialising in the value-added re-sale of data, and of course, retailers themselves acting as data collectors. The respondents were asked to indicate which data sets they collected / purchased, used and viewed as most important for location decision-making activities. These can be broadly divided into either those data that are internally generated or externally purchased. In total, twenty groups of data were identified in the survey, ranging from data sets of
competitor locations, loyalty card data detailing the buying behaviours of specific customers to planning data on new retail developments. On average, the respondents collected and/or purchased 10 data sets for use in location planning, with GIS users purchasing and collecting more data.

The collection, use and perceived importance of a range of internal data sets are shown in Figure 5. The list of data sets can be grouped into those which are operational and generated as a by-product of the daily activities of the organisation (e.g., customer transaction, store operations, store space planning, loyalty card and customer after-sales); and those that are internally generated for tactical and strategic purposes (e.g., competitor, market research and planning data). Customer transaction and store operations data were the most widely collected operational data sets, with nearly four out of every ten respondents viewing transaction data as the “most important” data set. Approaching half of the retailers collected loyalty card data (e.g., from loyalty schemes or store cards), with over 80% of these respondents regularly using the data. Of the tactical and strategic data, competitor (e.g., location, store type, pricing/merchandising information) and internally commissioned market research data (e.g., exit polls, customer satisfaction surveys) were collected by 70% of the respondents. Customer after-sales and planning data were neither widely collected nor perceived as important.

The findings for externally purchased data sets are shown in Figure 6. Census,
commercial market research and shopping tenant data (e.g., CSCI retail databases) were the most prevalent amongst the respondents, with Census information widely used and viewed as “most important”. Geodemographic data were purchased by over 40% of the sample, and used on a regular basis by the vast majority of these organisations. Retail expenditure data were purchased by half of the respondents, and along with census, geodemographics, market research and tenant data form the foundation for the vast majority of market analysis projects. In contrast, commercial planning data were only collected by 20% of the sample, and not regarded as an important data set, with this information generally obtained through real estate brokers, leasing agents and shopping centre developers.

Location Decision-Making Techniques

Location decision-making has traditionally been undertaken in a somewhat nonchalant manner. As Brown (1991: 367) states, “the location, location, location adage is more a regurgitation of received wisdom than a distillation of prevailing practice. The fact of the matter is that, despite its undoubted importance, retailers have been renowned for their cavalier approach to the location decisions”. It has been cus-
tomary for retailers to make a location decision based on qualitative assessments (Beaumont 1987), which may be no more sophisticated than “it looks like a good site”. The intuitive nature of location decision-making is captured by Rogers (1987: 74): “until comparatively recently, many if not most locations were chosen on the basis of gut-feel, obscure rules of thumb or, if it was a really important decision, by means of licking a finger and holding it up to the wind”. The tradition of location decision-making has been characterised by the adoption of “seat of your pants” approaches based on intuitive and highly subjective interpretations of the retail landscape (Hernandez and Bennison 2000; Meltzer and Smith 2000), stemming from the entrepreneurial and opportunistic whims of the decision-makers. These traditions are particularly deep-rooted within Canadian retail organisations. For example, the Ontario Retail Sector Strategy Working Group in 1995 concluded that Canadian retailers are less likely to undertake locational and market research, and less likely to have advanced skills in data use and software (when compared to US retailers). The report also noted typical Canadian retail characteristics to be risk-aversion, hierarchical management structures, a lack of competitive instinct and innovative spirit, a lack of awareness of research and data availability, and a scepticism and mistrust of certain sources of information.

Arguably, the entrance of US retailers within the Canadian market over the last decade has acted as a catalyst, promoting the adoption of more sophisticated and structured decision support. Canadian retailers now have access to a wide array of relatively low cost decision support technologies and associated retail demand and supply data. There exist a wide range of techniques available for use in retail planning activities. These include, e.g., experience and rules-of-thumb, checklists,
regression and gravity modelling. They range in their level of sophistication, data and computing requirements and speed of execution.

Eighty-seven per cent of respondents indicated that “experience” was a key technique; this includes simple rules of thumb, such as, “if the store is within 5 kilometres of a given competitor it will not be profitable”. Figure 7 suggests that Canadian retailers opt for the simpler retrospective techniques, such as checklists, ratios and analogues -- all of which are based on the premise that “past performance is a key indicator for future success”. This may also account for the one-third of respondents using regression sales forecasting analysis, which in its general forms takes a number of explanatory variables to ascertain a dependent variable, typically determining the level of retail sales at a given location.

The data suggest that many of the retailers surveyed used a combination of subjective and objective measures in their analysis of retail locations. The role of GIS in promoting the adoption of more structured and formalised approaches to decision-making are captured by the following comments. As one respondent noted, GIS have increased the speed and impact of analysis with, “market opportunities surfacing much quicker... the analysis is completed in a fraction of the time”. A common view was that GIS have added increased “analytical” capabilities (a “better equipped location analysis toolbox”) and made the data more “realistic”. The use of GIS were seen to reduce reliance on intuition and promote a “more scientific approach to location analysis and decisions” producing “numbers to back-up or verify gut-feel”. For a smaller number of respondents, GIS simply refined and increased the efficiency of existing techniques and methods, in essence,
“streamlining the analysis process”.

Conclusion

The paper has provided the decision context for the study of retailers’ location activities and conceptualised the range of options available to retailers (beyond simply opening or closing stores). The paper has attempted to “open-the-lid” on location decisions from the perspective of store portfolio management. The strategic significance of retail “location” and the financial consequences of these decisions on commercial activity have been stressed. Retail organisations have a large amount of capital invested in their store portfolios, including the value of land holdings and buildings, the cost of leasehold improvements and contractual leasehold liabilities. The survey findings presented illustrate that the majority of location decisions (in terms of the absolute number of decisions taken) involve managing the existing locational asset as opposed to increasing or decreasing the size of the portfolio. Retailers undertake a large number of location decisions each year, and in aggregate these decisions determine the nature and extent of the retail landscape. The structure of Canadian retailing is therefore extremely dynamic, and subject to increasing corporate change due to merger and acquisition activities. The landscape also undergoes a steady process of evolutionary change, reflecting changes in consumer behaviour and urban structures. For example, waves of retail development can be identified, from retail plazas in the 1950s to 1960s through to the mall development boom in 1970s to 1980s and more recently, the increase in the number of big-box and power centre developments. Therefore, due to the long-term nature of location decisions, retailers have to plan for and predict these changes, whilst simultaneously managing their existing portfolio to reflect current trends. In essence, the store portfolio reflects the financial value of the organisation, and its ability to react to market changes.

In recent years, pressures placed on retail organisations to adopt more structured and scientific approaches to decision support have grown considerably. There exist a range of technologies and techniques to handle and manipulate the large volumes of data that retailers collect and purchase. Over half of all major retailers operating in Canada have adopted and developed GIS capabilities in-house, with many retailers using GIS-derived output within their decision-making. The survey findings suggest that retailers using GIS are more likely to adopt formalised methods of location analysis, and utilise more data in their decision activities. Yet, despite technological and data developments, “experience” and simpler retrospective techniques remain central inputs to decision-making.

References


Simmons, J. 2000. *Retail Sales and Retail Restructure: Cross-Canada Compari-


