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Note on Store Location

Selecting a location for a retail store is a critical undertaking. A store needs to be in a building of adequate size, that is appropriate for the nature of the offering, and that is in satisfactory condition. It needs to be in a location that is convenient for a suitably large number of potential customers and preferably in a very visible location so as to serve a promotional role. All of these attributes must be available at a cost consistent with the profit potential of the business and involve a level of commitment that is compatible with the riskiness of the venture.

Despite all these provisions, store siting is one of the most well understood aspects of retailing. Roughly speaking, one may think of store siting issues in terms of macro conditions, that is, how attractive is the region around the store, and micro conditions, that is, how attractive is the store itself and its immediate vicinity. The macro issues determine the potential of the store to attract customers, the micro issues determine, in part, the willingness of those potential customers actually to visit the store.

Identifying Candidate Regions

The first Wal-Mart store was opened in Rogers, Arkansas. This location decision was not because that was the world's most attractive location for such a store, but because it was close to Sam Walton's home and had an affordable rent. But when a chain is thinking about its 20th or 30th store, a more systematic approach to finding good locations may be justified.

Demographics

Assuming your store concept has been well thought out, it should be possible to describe the target consumer. For example for a do-it-yourself store the target consumer might be a homeowner whose home is worth more than $100,000 and which was built before 1963. Where in the United States are there agglomerations of such people?

Information is available from a number of sources about the population in a region of interest. The United States conducts a population census every decade and the results are publicly available on computer tapes and CD ROM discs. In addition to the basic head count that is requested of every household, extensive census questionnaires are filled out by every 10th household. This means it is possible to compute accurate statistics concerning home ownership, home assessed value, major

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possessions, nature of employment, and family income. Many consulting firms incorporate these data in sophisticated programs that allow the user to print out census statistics on any region of the United States, defined even down to the level of city blocks. A region of interest may even be defined by using a light pen to sketch out a rough contour on a map shown on a monitor screen.

Census data is, on average, about six years out of date at the time it is used and is inconvenient to use if the U.S. tapes are used directly, or expensive if a research firm is hired. Two publications provide more up-to-date and convenient access to demographic information. *The Survey of Buying Power*, published annually by the magazine *Sales & Marketing Management*, gives current demographic information at the city level including extensive data about retail sales, by product type, and estimated buying power in the region. It also estimates future values of these statistics. The *Editor & Publishing Market Guide* gives far less information of a statistical nature but more physical information about a region such as the number of cars, banks, and a description of local industries. It also provides an extensive list of retail stores, which is invaluable for a first cut at the second key regional characteristic of a candidate region: the competition.

Competition

Perhaps your store is sufficiently new to have little meaningful competition, or perhaps it is a vastly superior rendition of an existing format. In these cases it may suffice to ignore existing competition. Otherwise it makes sense to reevaluate the buying potential of a region in light of the sales that are likely to be drawn off by competing formats. For example, suppose that we wish to open a bookstore in a city that we calculate has a book-buying potential of $25 per capita per year. (We might draw this conclusion by noting that regions with similar demographics have per capita sales at this level.) If we calculate that the city already has bookstores whose cumulative sales are equivalent to $24 per capita then there may be little left over for a new entrant. In summary, a first cut method for assessing potential demand is

Total Regional Buying Power – Existing Sales = Unmet Demand.

A simpler measure of regional attractiveness is the sales per square foot in existing competing stores. If sales are substantially higher than needed to make a satisfactory profit, it may mean there is enough to share with a new entrant. If a region is overstored, that is, has too small a population to justify the stores currently open, this will show up as a low average sales per square foot.

Even if there is unmet demand in a region, it is necessary to consider whether that demand will gravitate to your store. If the unmet demand is in one section of town, it makes sense that a store located there will pick up some of that potential. If the unmet demand is concentrated among a segment of customers, say children's books, parents may be prepared to drive past existing stores to benefit from your superior selection. But if the unmet demand is spread throughout the region and across all segments, it may mean that this region is less book-oriented than others. Or perhaps existing bookstores are poorly merchandised, but not so poorly as to encourage a person to drive across town to take advantage of your store.

A major issue in determining regional sales potential is to consider whether sales are "leaking" out of the region. Residents may be making purchases outside of the boundaries of the region, perhaps at a regional mall, perhaps through mail order, or perhaps on annual pilgrimages to a major metropolis. The question for a potential entrant to the area is whether the leakage will reduce, and by how much, once customers appreciate the entrant's offering.

Costs

The potential profitability of a region depends not only on the unmet demand, but also on the costs that would be incurred to operate there. A region might have very high store rental rates, or local taxes, or onerous regulations about opening hours in the evenings, on Sundays and on holidays. A region might be a great distance from an existing central warehouse. In particular it might fall just beyond a one day drive for company trucks.

A region might also offer operating economies if it is close to existing stores in a neighboring region. For example, if they are in the same television market then customers in the new region may already be familiar with your advertising, and, moreover, no new expenditures will be necessary. Existing store managers can more easily train and supervise staff for the new stores. A critical mass of stores might also increase bargaining leverage with a state or local suppliers.

Evaluating Trading Areas

For screening purposes we have considered regions as a totality, but a store will be at a specific site and so it is important to consider the potential demand at that particular location.

The trading area of a store is that region from which most of its customers are drawn. While terms are not precise, the primary trading area normally means an area responsible for about 70% of sales. The secondary trading area is that responsible for about the next 20% of business. Of course, such definitions do not lead to precise definitions of a zone; there are many possible ways to draw a region responsible for 70% of sales. A circular trading area may not make sense if barriers such as mountains, a river, or an expressway distort travel times or population densities. The Mall of America in Minneapolis, currently still a tourist attraction, may have a secondary trading area that encompasses most of the United States. The intent of course is to describe a region from which it is reasonable to suppose most of your customers live.

For an existing store, calculating trading areas is relatively simple by use of "customer spotting" techniques. It is straightforward to interview a sample of customers as they enter or leave the store. More dangerous (statistically speaking) is to interview a sample of people at some other location and ask them where they shop and where they live. The sample gained may not be representative of the customer base. At least one store asks customers at checkout to give their zip code. Stores with in-house credit cards already have plenty of information about charge customers, though cash customers may have different demographics. Those that take only bank credit cards might ask customers for their phone numbers (which can be used to identify residence). In some countries, car license plate numbers give away the owner’s town of residence. In many U.S. states, the department of motor vehicles will provide, for a fee, the name and address of a car owner if the license plate number is known. This can be useful for determining not only your own trading zone but those of your competitors, or for a mall that you may be considering. While zip code information is a little too aggregated, individual addresses may be too precise to be useful without laborious map reading. One device in customer interviews is to ask them which major road intersection they live near.

Estimating the likely trading area at a new location is much harder. It helps greatly if one knows the trading area of stores similar to that which is to be opened. Such stores might be others in the same chain or competitor stores. Statistics of interest from existing stores include the distribution of distance (in terms of time or some other measure of degree of difficulty) traveled by

customers, their demographics, and average purchase amount. Of course, travel time need not be the right measure of difficulty for commuting to a store. For example, customers of a specialty store at a mall may have traveled, not from home, but a few feet from the mall anchor store. Some customers of a supermarket may be stopping on their way home from work, having made a detour of one block. Shoppers at a downtown store may be workers in local office buildings. Finally, and most intriguingly, customers may prove to be those of your competitors, doing some comparison shopping.

There are a few theories that predict where people will shop, based on simplified issues such as distance to stores, and the relative sizes of competing stores. Reilly's Law of Retail Gravitation considers a customer deliberating between journeying to one of two towns (or malls). William J. Reilly posited that a customer's attraction to a shopping complex went up as the square root of the selling space available. (Actually his formulation was in terms of the population of towns, but the principle is the same.) The relative attractiveness of each town is equal to the square root of its selling space divided by its distance away. D. L. Huff proposed a model in which a customer's *probability* of shopping at a particular location was proportional to a ratio of selling space to the travel time required to get there. Of course, such theories are useful only in making rough guesses in the absence of more concrete sources of information.

Reilly's Law relates only to the relative attractiveness of store locations. The distance a person will travel to shop at a store varies greatly by person and by the nature of the purchase. For a small purchase such as a newspaper or a soda (a *convenience* good), there is rarely a need to travel far since most neighborhoods have a local store that carries such items. A customer has no incentive to travel even a mile or two in order to save 5¢ or 10¢ on such a purchase. For a washing machine, or a television (a *shopping* good), a customer might feel that it is worth traveling many miles to have the benefit of a more comprehensive selection and/or lower prices. People are known to travel up to 50 miles to visit regional shopping malls and warehouse clubs.

As Reilly suggests, people will travel further if there are more stores to choose from when they get there. This idea is sometimes called the *principle of cumulative attraction*. For shopping goods, a consumer will usually prefer to go to a single location where two or more stores may be shopped so as to compare selections and prices. Automobile dealers often congregate in a single location (the "automile"). Furniture stores also cluster together. If there are three stores of a competing nature in a town, two in one location and one some distance away, the two may have an advantage. Though the isolated store is presumably closer to more consumers, many people may prefer to drive past the isolated store in order to have the benefit of one-stop comparison shopping. Power retailers can afford to capture the advantage of the lower rents of isolated locations if they can convince potential customers that comparison shopping is unnecessary on the grounds that they carry a wide selection of goods at prices that are competitive.

Evaluating the Location

Store locations are usually classified according to the following hierarchy of association:

Free standing (or isolated): A store that is not close to any other stores. A store is free standing if, for example, a customer of that store is unlikely to walk from it to another store. Such stores make sense if in a residential neighborhood or office complex where for some set of people the location happens to be convenient. This includes isolated locations that have good *interceptor* qualities (for example, a supermarket that is on a commuter route).

Strip malls: A set of stores having a common parking lot usually arranged in linear fashion. Often leased from a common owner, the mall may have developed in incremental fashion. It will usually include stores selling routine goods such as a supermarket and drugstore and services such as dry cleaning and photo developing.

Downtown shopping district: A store that is one of many on streets near a city center. There is usually no common ownership of the buildings and only rarely some kind of effective association formed to tackle common concerns such as, perhaps, street cleaning. A neighborhood shopping district is similar but on a smaller scale. A small town might have two or three such centers.

Local malls: A set of stores, usually managed and owned by a single company, organized around an enclosed, possibly covered, common space. Typically having 20-30 stores and 100,000 to 250,000 square feet of gross leasable space, such a mall will have a trading area of some portion of a city and include a branch store of a local department store, a variety store, and a category killer such as Toys R Us.

Regional malls: Larger than a local mall, perhaps 300,000 to 800,000 square feet, and situated near highways to attract customers from a considerably wider area. The stores contain primarily shopping goods and include two or more anchor stores such as a department store (e.g., Dillard's) and a mass merchandiser (e.g., Sears). Such malls do not make sense as locations for supermarkets. Supermarket customers are not apt to combine their trip with a tour of the department store and they also need to park close to the store entrance (not always possible at a regional mall on a busy day). Neither are department-store shoppers likely to decide impulsively to pick up a week's groceries, especially if they are 20 miles from home. A mall is effective (and affordable) only if there is a sharing of customers among the member stores (i.e., there are economies of scale derived from the principle of cumulative attraction).

Super-regional malls: Those having more than about 800,000 square feet, referred to as super-regionals or mega malls. They are intended to attract customers from a 50-mile radius. Since customers may have spent upwards of an hour getting to these malls, it is important to include rest areas, food courts, and entertainment.

A site can be unacceptable if rush hour traffic snarls access for four hours per day, or if access is otherwise inhibited say by a median strip, or unhelpful one-way signs. A major store will often negotiate new traffic systems with the local authorities before signing a lease. A site is enhanced if the store or its sign can be easily seen for some distance away, or at the very least as one is driving by. Such visibility provides advertising and encourages impulse stops. A site's visibility might be latent: if the previous occupant of a free standing location made the place a local landmark, customers will be able to refer others to it quite easily.

As with any real estate purchase, it makes sense to do one's homework about any local problems: Is the local army base closing? Is a new mall opening up? Is traffic being re-routed? How do the demographics of the immediate neighborhood compare to the overall demographics of the trading area? If the store happens to be located in the one run-down part of town, customers may feel

unsafe visiting the location. It is worth hanging around the store location for a week or more. Is the parking lot a hangout for local gangs, a flea market on Sundays, does it flood when it rains? Which brings us to the question of the lease.

The Lease

While some free standing stores may choose to buy their own building, most stores are leased from the owner. This eliminates the need for up-front capital and reduces the time a store owner needs to spend on maintenance issues. There is some rationale for separating one's aspirations for riches via merchandising and via real estate speculation. Owning the building may make sense in a few circumstances, for example, if the financial success of the building is inexorably intertwined with the store in it. This may occur if the store has special architectural demands, or if the store is to be in a very isolated or otherwise risky location. While leasing a store requires no up-front capital, many companies capitalize the lease on their balance sheet, recognizing that the lease payments are just as much a liability as long-term debt. Analysts and lenders typically capitalize retail leases when calculating debt-coverage ratios.

A lease commonly covers the following issues:

Price: It is usual for the price to be quoted in dollars per square feet (usually total square feet) or as a percentage of sales. Many stores have leases that require payment of the higher of some base rent per square foot and a percentage of sales. By this device a landlord can effectively evict a store with low sales (because the rent is the high relative to the sales) or participate in the store's success.

Length: A lease might be for a fixed period of time with options for renewal. If the renewal option is not automatic, the contract might spell out conditions about how the lease is to be renegotiated at the end of that time. The store might have first right of refusal on any deal the landlord offers to another store, for example.

Contingencies: Of great importance are the terms under which a store may break a lease. Even successful chains sometimes err in their choice of location. A lease is an operating commitment and the lessor is highly placed in the hierarchy of claimants in bankruptcy proceedings. A lease will often require that a store not "go dark," that is, the lessee cannot simply close down operations and make lease payments on an empty store. A lease might, however, permit the store to sub-let the building or to operate a different format; for example, Woolworth's might close its variety store but re-open as a World Foot Locker.

Details of lease negotiation should not obscure the fact that no lease is favorable enough to make a poor location viable.

Forecasting Demand

Estimating likely demand at a location is not an easy task. Every location seems to have, at least after the fact, some special circumstance that makes it out of the ordinary. If the store is the first of its type, rough estimates may be gained by considering the sales per square foot in neighboring stores, or by estimating per capita revenue from population in the trading area. But evidently such estimation techniques do not consider the effects of poor assortments or indifferent customer service.

The task is a little easier if the new store is one of a chain, for then the new location can be compared to existing ones, and sometimes to that of a competitor's store. The analogy method (sometimes called the peer method) proceeds by identifying that store which, all in all, seems to be the closest, demographically, to the candidate.

It may be that no store seems sufficiently similar to make an immediate comparison plausible. Perhaps, though, by understanding patterns of sales across existing stores a useful extrapolation might be made to the new location. For example, sales per square foot or sales per capita or sales per household might be found to be more or less constant at existing stores. More likely is that a complex theory is developed in which, say, sales per capita varies with average income per capita and/or other factors.

Regression analysis is the methodology most often used to provide specific relationships between sales and measurable explanatory factors. Regression analysis is particularly useful for aiding understanding. An analysis might suggest that "all else being equal" stores that share a parking lot with a supermarket have higher sales than those that do not. Or it might reveal that stores open 24 hours per day do no better (in sales per square foot, say) than those open 18 hours per day.

There are two main drawbacks to the use of regression analysis. The first is that the value of the conclusions depends critically on the number of stores in the sample. Twenty stores might be a minimum for gaining anything more than a rough insight into any relationships between factors. Fledgling chains need siting help long before they reach 20 stores. The second drawback is that the scientific trappings of the computer output often leads users of regression to place too much faith in the predictions that arise from the model. With a database of 20 stores, say, it might well be true that the 5 stores sited near a church did better than the others, but will this relationship really hold up for the next 20 locations?

A common result is that the model works beautifully on existing stores, but not on new stores. A model is not validated until it has successfully predicted sales of stores not originally in its database. To avoid the delay that this step inevitably entails, it is useful, if possible, to "hold back" 2 or 3 existing locations from the sample of stores included in the analysis. These may then be used as a check on any conclusions drawn by playing the role of "new" stores—that is, new to the model.

Forecasting Profitability

Unless sales are important for strategic purposes, the primary forecasting job should be that of predicting the profitability of a location. It makes sense to set up a spreadsheet that accounts for initial costs, operating costs including lease costs, cost of goods, and so on. These should be expressed in relation to sales as appropriate. Note that sales may not equal demand if out-of-stocks are common, or if service is slow. The analysis should indicate that the store will provide a cashflow that exceeds the company's cost of capital, that is, has a positive net present value.

Many people will analyze the "expected case" scenario, but retailing is a risky affair. It makes some sense to consider the costs incurred of opening in a location that fails to be profitable. On the brighter side it also makes sense to consider the costs of expansion should the location prove even better than expected.