THE SCIENCE OF
SITE SELECTION

Using Technology to Efficiently Plan Real Estate Strategies

ROBERT W. BUCKNER

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Dear Readers,

Welcome to this exclusive sneak preview of my upcoming book on new advancements in the science of site selection.

In this first excerpt from my new book, I detail how technology can be used to efficiently plan real estate strategies. More specifically, I highlight the importance of using spatially-enabled, location-centric software and data to help real estate executives make accurate, reliable and insightful decisions about where to place profitable sites. I also include real-world examples of how a real estate executive could apply this functionality to develop a real estate strategy that addresses a retailer's unique location requirements while maximizing its sales potential and market share.

The forthcoming book will include all the latest and greatest methods for effectively planning and maximizing site selection strategies. It is an exciting time for retailers and this book provides the tips and tricks to take retailers to the next level.

Robert W. Buckner
Vice President, Analytical Services
MAPINFO CORPORATION

Using Technology to Efficiently Plan Real Estate Strategies

Historically, selecting the right commercial site has been a reactionary process requiring considerable judgment. Real estate executives have been inundated with deal submittals from real estate brokers—a process that has served the enterprise well as the brokers often functioned as its "eyes and ears" in the marketplace. Further, brokers did much of the heavy lifting with respect to ferreting out developable parcels or available space.

However, there is a downside risk implicit in this process—a risk that emerging technologies and methodologies can help mitigate as will soon be explained. Often, by the time a broker presents an available site to the real estate executive, that location has already been chosen by another enterprise and is unavailable. Moreover, because brokers have a vested interest in serving their best customers first, executives of a start-up company or other second-tier customer may be overlooked when a new opportunity arises.

When strategizing for a given market, it is most important that the real estate executive understands the impact that selecting a specific location within that market has on the enterprise's other market opportunities. A prime example of this would be selecting a "home run" location so centrally located to the retailer's best customers, it delays or precludes the cultivation of other promising opportunities within that market area—clearly not a sound long-term strategy. While the performance of such a "cherry-picked" location may be rewarding in the short term, it exposes the location to potential sales and profit erosion from competitors that may move in and surround it. Such a result will pick away at market share, customers, and, ultimately, profitability, which must clearly be avoided.

Developing an optimal real estate deployment strategy for a market has also traditionally been an incredibly burdensome process. Those enterprises that have been disciplined about this process can relate to the magnitude of this task. Consider the real estate executive who has worked hard to comprehend

a market and all the variables that affect decisions relating to a store deployment. This executive fully understands the distribution of sales potential and potential customers throughout the market, the competitive environment, available real estate, emerging growth areas, areas of decline, access patterns, etc.

In order to quantify assumptions affecting the market deployment strategy more effectively, the executive would likely charge the real estate team with generating sales forecasts for numerous sites and alternative locations. As a result, the executive and sales team would understand the interplay and sales cannibalization that exists between the various site alternatives. After months of hard work, the team arrives at a deployment recommendation that will best serve the long-term interests of the retailer only to discover that a competitor has just purchased one of the sites integral to the strategy. Now, it's back to the drawing board! In such a scenario, is it any wonder that the process of developing real estate strategies is often not as effective as it should be?

Fortunately, technology has found a way to eliminate this situation. Developed over the last several years, spatially-enabled, location-centric software can now automate much of the drudgery associated with evaluating multiple real estate deployment scenarios. In addition, most of these software packages provide for an open development environment, thereby facilitating the incorporation of customized routines and methodologies. Armed with these tools, the real estate executive can be much more thorough when developing real estate deployment strategies, and more nimble in reacting to unanticipated changes that invariably occur in the marketplace. Perhaps most importantly, the real estate executive can be significantly more proactive in directing their subordinates or brokers in the search for sites. Brokers also may benefit from this proactive technical capability, as it greatly enhances the likelihood that the deals they submit will be accepted.

Throughout the remainder of this chapter, we will explore some, but certainly not all, of the approaches that can be incorporated into software that will allow the real estate executive to be more strategic. Rather than provide a programming "how to," however, the goal here is to alert the reader to the possibilities for making real estate deployment strategies more precise for both long- and short-term and more flexible.

The techniques we will discuss all presume that the enterprise, be it a retailer, financial institution, restaurant operator, etc., possesses a fundamental knowledge of who their customers are. Simply stated, the goal of real estate deployment systems is to understand where the customer and correspondingly, his/her sales potential is located within the market and what deployment strategy will best serve him/her. This understanding can be as basic as an observed assessment as to the typical demographics of individuals most likely to shop your stores, eat in your restaurants, use your banking services, etc. Or it can be based on sophisticated customer databases replete with their purchase amounts, transaction composition, place of residence or work, and demographic/psychographic profile. Obviously, the more detailed and accurate the customer information, the greater the likelihood that location decisions based upon the data will be successful.

Since the goal of this chapter is to enable the reader to envision how real estate evaluation systems can facilitate the deployment process, we will presume the pre-existing presence of a robust customer database. Using modeling techniques such as regression and correlation analysis, a custom customer profile of this database can be ascertained. While this process was addressed in an earlier chapter, we reiterate that the goal of developing a customer profile is to identify the demographic and/or psychographic characteristics coincident with individual store performance. It is worth noting that it is just as important to know the profile of consumers poorly related to store performance within markets, as it is to know those consumers who have a positive correlation with performance. This knowledge helps to provide direction on areas to avoid within markets, as well as areas to target. Therefore, when modeling a customer profile, it is advised that the profile be based on customer data for all stores—bad as well as good performers—or at minimum, a representative sample of such stores. Otherwise, it will be impossible to create a complete understanding of your best and worst customers.

A very common oversight in the development of a custom customer profile is that it is constructed without regard for the distance customers must travel to shop at the store of their choice. The question often arises as to what distance traveled has to do with developing a customer profile. The simplest way to explain this issue is to use a hypothetical example.

Presume that a retailer has a very simple profile in that the higher the customer income the more they are likely to spend at their store. Also presume that the farther a customer travels, the less frequently the customer visits the store and the smaller his/her annual expenditure at the store. This is not a great leap of faith—we observe this over and over regardless of client, customer profile, or industry segment **(FIGURE 1)**.

For our hypothetical income-dependent retailer, stores located in middle-income neighborhoods have a high proportion of middle-income customers because these consumers live closest to these stores. However, we would also discover that higher-income customers residing in the trade area periphery visit these stores with much greater frequency than the average customer and, thus, are positively correlated with sales performance. If we had not controlled for the distance the customer travels, we would have erroneously concluded that the concept has a middle-income customer profile. Instead, by using regression analysis to control for distance traveled, the relationships between demographics and store performance become much clearer.

Once a customer profile is determined, it is a relatively simple process to identify the locations of consumers that are in or out of profile within the market and map their locations using either dot or thematic mapping **(FIGURE 2)**. This mapping "tool" can be used by the real estate executive to quickly visualize the best opportunities in the market.

As a quick aside, many businesses do not have such robust data regarding their customers. While household-level customer data is certainly optimal, comparable types of analysis and the benefits implicit in these analyses can be achieved without household level data. As mentioned earlier, even simply hypothesizing the profile of a typical customer and mapping this qualitative customer profile facilitates the deployment strategy process. However, a more quantitative customer profile can be developed even if a customer's address information is not available.

For example, if telephone numbers are available, they can be geocoded to derive addresses with a reasonable level of accuracy. Additionally, if ZIP Code

FIGURE 1

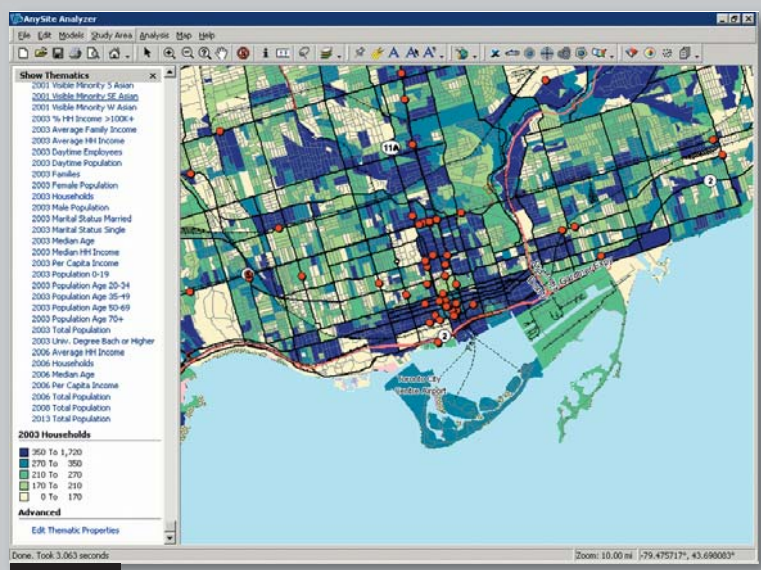


FIGURE 2

information is available, customer profiles can be inferred by analyzing the demographic characteristics consistently present in ZIP Codes that contribute the greatest or least number of customers. A similar approach, wherein customers are asked to point to their residences on a map, has been used to develop customer profiles. Again, while this does not result in a specific address for each customer, the profile can be inferred by analyzing the demographics consistently present for the block group in which each customer resides. Thus, the block group demographics serve as a surrogate for the demographics of the individual customer's residence. While less accurate, the directional relationships resulting from inferential customer profiling are very strong.

If a restaurant, retailer, financial institution, etc. is fortunate enough to have a customer database that includes transactions, including annual sales by customer and composition of transaction, then a custom estimate of sales potential can be made for every household within the market using previously discussed modeling techniques. If transactions cannot be linked directly to individual households due to a lack of address information, custom potential estimates can still be made for units of geography such as block groups or ZIP Codes within the market. This is obviously superior to simply knowing where the best customers are located within the market because it attaches a revenue potential to every household or unit of geography in market. Once potential estimates are calculated, their distribution can be mapped using either dot (each dot equals $X of potential) or thematic mapping. Using this more sophisticated mapping tool, the real estate executive can quickly observe where the greatest areas of opportunity are for enterprise stores using a custom estimate of potential unique to the concept **(FIGURE 3)**.

It should be noted that there are several significant shortcomings associated with both the customer profile and the sales potential mapping described above. First, both implicitly assume that the distance a customer travels to shop has no bearing on the frequency of his/her visits or annual expenditures. Thus, while the maps do an excellent job of visualizing where the best pools of customers or highest sales potential pockets are in the market, they do not quantify how many customers or how much sales potential a prospective site would capture. Additionally, they have no regard for the presence or absence of competitors or

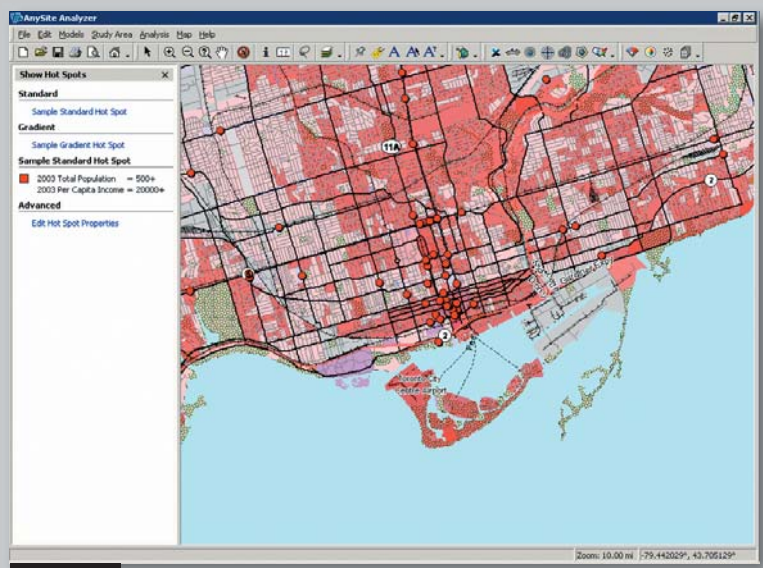


FIGURE 3

sister stores. Clearly, proximate sister stores and competition would capture a portion of the sales potential. Will there be enough left to successfully support the site under consideration?

These shortcomings can be overcome by combining some of the forecasting methodologies and techniques described in the preceding chapters (i.e., analogs, normal curves, regression, gravity, and SIM forecasting methodologies) with appropriate data and spatially-enabled, location-centric software. For example, as noted above, a map depicting the distribution of sales potential throughout a market does not help to quantify the sales potential that is "up for grabs" for a specific site.

Will the site draw customers from beyond a 2-mile radius? Will it draw only a short distance into the urban core of the market but a farther distance into the more rural portions of the market? Without knowing the answers to these types

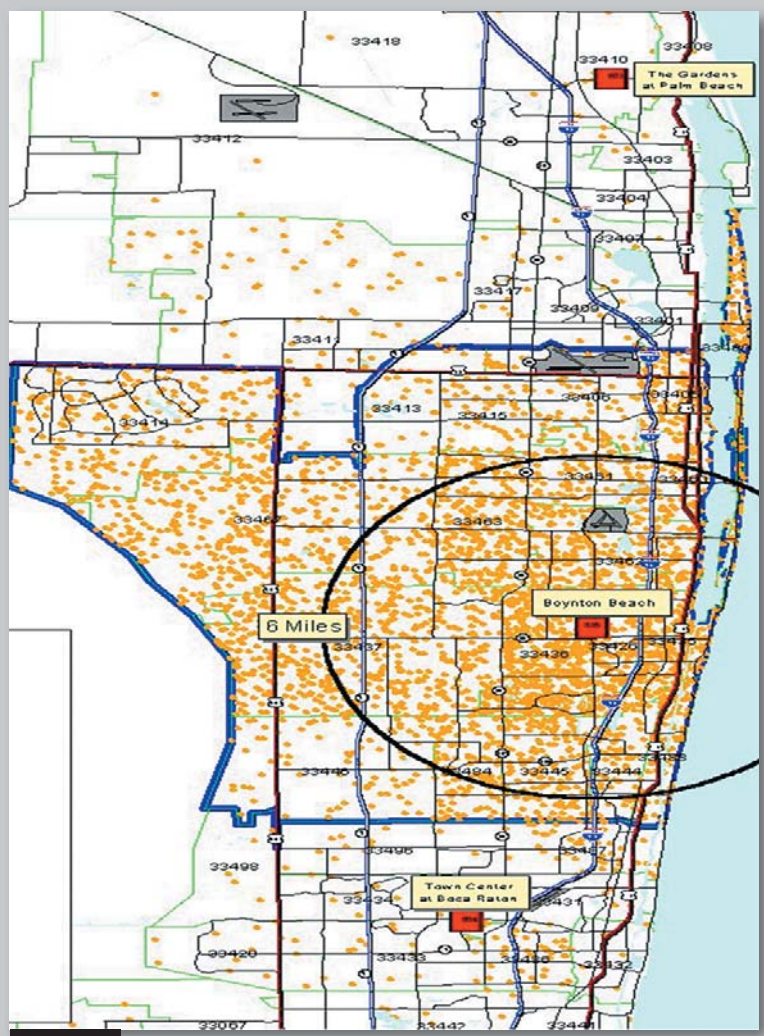
of questions, the real estate executive is forced to visualize a trade area for each site under consideration and mentally aggregate the sales potential available within the trade area.

By studying the actual trade area extent of existing stores, using sales distributions for each existing store captured in the customer database, a set of trade area definition rules can be established (FIGURE 4). (The specifics regarding this process were addressed in detail in an earlier chapter). From these rules, a simple trade area definition model can be developed and incorporated into the spatially-enabled, location-centric software. These trade area definition programs reflect the drawing power unique to each retailer, restaurant operation, financial institution, etc. and typically consider factors known to impact the trade area extent of a store, including but not limited to the following:

- The presence or absence of competition and/or sister stores
- Road hierarchy/speed limits
- Physical barriers
- Absence of adequate sales potential

Additionally, these programs can reflect the impact that various situational characteristics have on a site's ability to draw over geography. In particular, if a site is located in a densely developed urban core, it will likely serve a relatively small geographical trade area; whereas, a site in an ex-urban area will likely serve a large trade area. These types of situational characteristics need be considered when estimating trade areas for new sites, and this functionality can be readily programmed into the software. As a result, the real estate executive is now able to visualize the trade area extent for virtually any site under consideration in the context of its unique competitive environment, situational characteristics, and access patterns.

Further, the software can generate a report summarizing each site's trade area potential. While very valuable, this capability still takes a somewhat "shotgun" approach to strategic real estate deployment and site selection. Despite these tools, the real estate executive still needs to specifically identify which sites to evaluate, and the analytical tools discussed thus far do not proactively identify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6 Miles
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Town Center at Boca Raton
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FIGURE 4

the best site opportunities. Nonetheless, they are a major improvement in efficiency by helping the real estate executive almost instantaneously grasp the sales potential for numerous trade areas.

For many real estate executives, this functionality is enough. However, for those who want to proactively identify opportunities rather than test hunches, the functionality of analytical tools can be enhanced significantly. For example, what if the spatially-enabled, location-centric software could be programmed to proactively identify those sites within a market with trade areas encompassing the greatest aggregate sales potential? In fact, such software packages can be programmed to move systematically throughout the market and define trade areas for hypothetical sites "on the fly." The output of this process is a report that lists the sites and their corresponding trade areas that capture the greatest aggregate potential within the market.

Specifically, this program starts by assuming a hypothetical site in a particular segment of the market. For this explanation, we will assume that the initial hypothetical site evaluated by a retail real estate executive is located in the extreme northeastern portion of the market. The trade area definition rules specific to the retailer have been programmed into the software. So the geographic extent of the trade area for the initial hypothetical site is defined by the trade area potential, proximate competition and sister stores, accessibility, and situational characteristics associated with it. The aggregate trade area sales potential is determined for the hypothetical site, the system then moves to the next hypothetical site, and then the next, and so on—all the while recording the aggregate trade area sales potential.

MapInfo-Thompson has employed this process successfully when hypothetical sites are presumed to be located no closer than 1-mile increments from one another (Envision a 1-mile grid overlayed across a market with hypothetical sites located in the center of each grid). We have also successfully used the geographic or population centroid of units of geography, such as block groups, census tracts, or ZIP Codes as hypothetical sites. Additionally, point files such as shopping center locations can be used as hypothetical sites. Regardless of how the hypothetical sites are identified, the process is the same. A trade area

for each site is defined using pre-determined trade area definition rules, and the aggregate trade area sales potential is determined for each hypothetical trade area. As such, this approach blankets the market with hypothetical stores and allows the real estate executive to select the combination of sites that simultaneously conforms to available/developable real estate and has the greatest aggregate potential. As an aside, while it is theoretically possible to evaluate hypothetical sites and define corresponding trade areas for virtually every intersection within a market, this level of detail would cause serious performance problems with respect to the program. Moreover, it is not practical, and, frankly, is overkill.

Although this process significantly enhances the efficiency of developing real estate deployment strategies within markets, it also has shortcomings. While the system identifies areas of significant sales potential for the concept in question, it does not ensure that a store developed at these sites will generate strong sales performance. This is because the potential figure returned for each trade area has no regard for how the sales potential dollars are distributed geographically throughout the trade area.

For example, consider two trade areas, A and B, that encompass roughly equal pools of sales potential; for purposes of this illustration, presume the expenditure pools are $10 million. However, if we examine the geographic distribution of Trade Area A's expenditure pool, we discover that a disproportionate share of the potential is located within 1 mile of the site, whereas most of Trade Area B's expenditure pool is concentrated at the extreme edge of its trade area. We would expect that the site serving Trade Area A would generate greater sales than the site serving Trade Area B, even though both trade areas have comparable sales potential. As this example demonstrates, where the sales potential is relative to the sites can be as important as how much potential exists within the trade area. The issue of how much potential each site is capable of capturing is further complicated by factors such as:

- **Competition.** As a general rule, the more convenient a competitor is to large concentrations of sales potential, the more potential it captures, leaving less for the proposed site.

- **Accessibility.** If the consumer base implicitly linked to sales potential cannot conveniently access the site, it will capture a relatively low proportion of the potential.

To mitigate these issues, a sales forecasting model which accounts for the distribution of key factors known to influence sales performance—such as sales potential, in-profile customer demographics/psychographics, competition, accessibility, and situational characteristics associated with each site—can be incorporated into the spatially-enabled, location-centric software (FIGURE 5). This step provides much greater clarity to the real estate executive. Now, the best strategic deployment can be determined in the context of the anticipated sales performance of each hypothetical site rather than a simple estimate of aggregate sales potential.

In this chapter, we have attempted to enlighten the reader as to the benefits of combining technology with tested modeling techniques to develop sound real estate deployment strategies more efficiently. The chapter intentionally started with more rudimentary approaches and used them as building blocks to elicit a clearer understanding of more sophisticated approaches. It is important to note that significantly greater functionality is achievable using today's spatially-enabled, location-centric software. Specifically, it is possible to enable this software to proactively identify the best combination of sites that will serve a market without intervention by the user. For example, it is possible to specify and program minimum performance threshold requirements such as sites that will achieve at least $5 million in performance and, concurrently, will cannibalize no existing store by more than 12% (FIGURE 6). It is even possible for the user to assess an entire market without regard for its existing network of stores so the real estate executive can compare the optimal deployment with reality. This process allows the executive to plan the modification of existing location deployment as leases expire, in order that the ultimate deployment better serves the market.

The functionality of these tools is impressive and almost limitless. However, their greatest benefit is that they enable real estate executives to focus on what they do best - thinking strategically about the marketplace rather than dwelling on the minutia associated with reviewing demographics and deal submittals. The result is the execution of real estate deployment strategies that are better targeted to serve the market's short- and long-term needs.

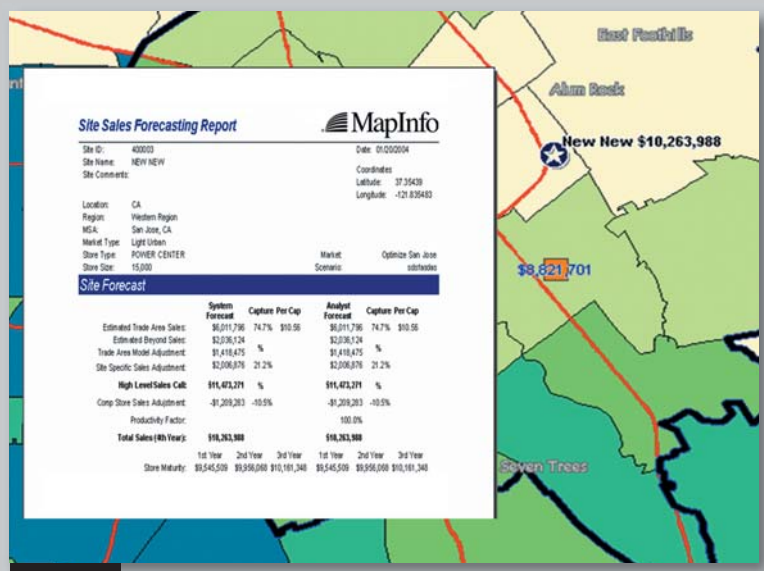

FIGURE 5

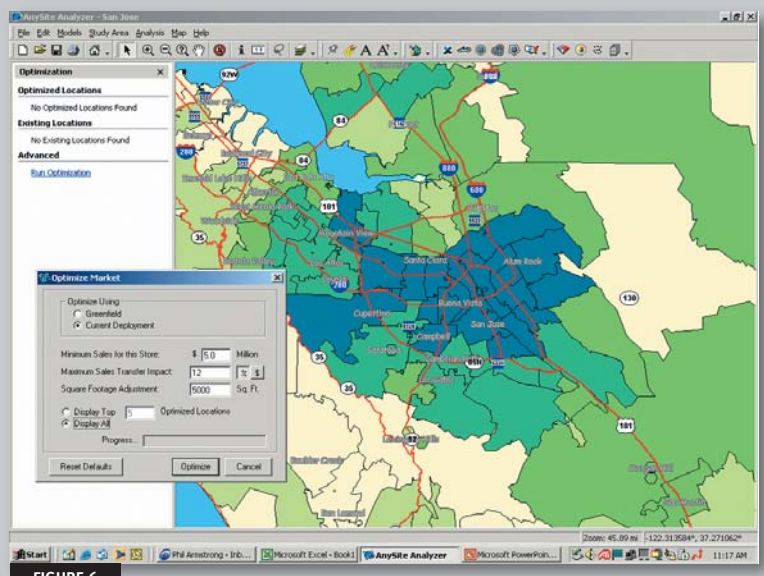

FIGURE 6

Real World Applications:

The following case studies provide "real world" examples of retailers that have successfully integrated advanced site selection and predictive analytic technologies into their day-to-day operations and strategic planning processes.

CASE STUDY

Jo-Ann Stores

Summary

Headquartered in Hudson, Ohio, Jo-Ann Stores, Inc.® is the nation's largest category-dominant retailer serving the retail fabric and craft industry. The company serves approximately 76 percent of U.S. households that engage in crafts and hobbies by offering a large variety of competitively-priced, home decorating fabrics, notions, crafts, seasonal and home accessories, floral and framing products. Founded in 1943 with its first store, Jo-Ann now operates approximately 915 stores in 49 states and 70 Jo-Ann superstores in 16 states.

In 1995, Jo-Ann opened the first of its Jo-Ann superstores, which offered an expanded and more comprehensive product assortment than traditional Jo-Ann stores. The superstore concept covered an average of 45,000 square feet versus an average footprint of 12,000 square feet for the traditional stores. When the company came to realize the superstores were generating greater than four times the revenue and greater than 30 percent more sales per square foot than traditional Jo-Ann stores, it began to look seriously at further national expansion of the superstore concept.

The need for expansion was clear, said Executive Vice President/Operations Mike Edwards, but the details of what approach to take were far less obvious.

"The superstore concept had been up and running for six years," Edwards said. "We were very comfortable with it. But we needed to know, as leases for the traditional stores came due, how to prioritize our real estate decisions to support

a full superstore rollout. The most critical questions to MapInfo-Thompson were 'How many stores of each prototype can we support?' and 'What markets do we prioritize for development?'"

First, Jo-Ann asked MapInfo-Thompson to define its customer profile by identifying similarities and differences among those who shopped at traditional Jo-Ann stores and those who preferred the superstores. Then, the company requested analyses of demographics and performance figures, broken down by location, for traditional Jo-Ann stores. Then MapInfo-Thompson used the findings of the customer profile to quantify the contribution to sales performance of different demographic and psychographic variables, thus allowing Jo-Ann to quantify the sales potential for any given location as a superstore concept. Ultimately, of course, Jo-Ann Stores wanted to know which markets—and which locations within those markets—offered the best opportunities for a successful superstore rollout.

Result

MapInfo-Thompson began unlocking the potential of the company's massive database. "We had not fully utilized our own customer database," Edwards said. "I mean, there are three million names in there, along with POS data. It was a great untapped resource for us."

It had long been assumed by Jo-Ann management that customer profiles for their traditional stores and their superstores would look considerably different. The underlying assumption was that superstores drew customers from distant areas that would have different demographic characteristics. Surprisingly, MapInfo-Thompson's analysis of Jo-Ann customers found that assumption was not true. Customers of both store types actually fit the same profile.

The significance was not lost on Jo-Ann executives—they now had scientific evidence that they could transform many of their traditional stores into superstores, increasing their per-square-foot revenue and sales without alienating any of their customers. "The first thing that surprised us was just how large the opportunity was," said Edwards. "It also helped us to back up and look at our markets from an analytical perspective, so we could know where to go in the next five years."

The experience drastically altered the way Jo-Ann Stores did business. Edwards said, "Where we were previously deal-driven, we are now customer-driven. It used to be 'Can we do the deal based on the economics?' Now we study the density, competition, trade area, and effective households and use that as a screening model to better understand our potential longer-term results."

With MapInfo-Thompson science as its guide, Jo-Ann Stores continued the aggressive proliferation of superstores. Today, after a two-year break from expansion, the company is again ready to enter a period of growth. "MapInfo-Thompson has built a revenue forecasting tool that we can use to more precisely determine the potential of each store we open," Edwards said. "It takes significant risk out of the decision-making as we go forward, and it's one of several data points we look at before we go to sign a lease."

As for the all-important ROI, Edwards said the final impact of the work MapInfo-Thompson has done may not be known until Jo-Ann opens 30-40 stores under the new model. But he acknowledges, "If we're anywhere near the forecast, it will have been worth it. One bad decision can cost us several million dollars, so if this deters us from making just one bad decision in five years, it will pay for itself ten times over."

Interestingly, the superstore rollout has not signaled the death knell for traditional Jo-Ann locations. Thanks to the increased understanding of its customers, Jo-Ann has strategically relocated or, in some cases, expanded many of its traditional stores. As a result, net sales per traditional store have increased markedly over the last five years.

MapInfo-Thompson's client management team worked onsite with Jo-Ann Stores staff to lead them through the process of turning customer data into usable information. Using MapInfo AnySite™, Jo-Ann Stores was able to determine how many stores the company could support and what markets it should prioritize.

Upon receipt of all necessary data from Jo-Ann Stores, MapInfo-Thompson was able to create a useful set of analyses in approximately one month—easily in time for an important meeting of the company's board of directors.

A second phase—a revenue forecasting system—was rolled out subsequently, with MapInfo-Thompson providing on-site training and support in the form of technical expertise and mentoring. The solution, which helps Jo-Ann Stores determine sales potential for chosen locations, resides on three laptops and one desktop computer.

It was reported that one employee at Jo-Ann said MapInfo-Thompson was "like a new religion around here." Edwards laughed, "It's not a new religion, but it is a cultural shift. It's like going from intuition to science."

The MapInfo Advantage

While competitors were pushing "cookie-cutter" solutions, MapInfo-Thompson offered Jo-Ann Stores a customized solution that used their own massive customer transaction database as the foundation to unlock the hidden value of the data. From this and other traditional datasets, MapInfo-Thompson produced a forecast system that will help direct the strategic expansion of the company for many years to come.

Mike Edwards said Jo-Ann Stores chose MapInfo-Thompson for its "experience with other big-box, large-format retailers and its expertise in terms of strategic management. We felt that the existing client base was very credible. We could learn from that and see value in it." ●

CASE STUDY

Charming Shoppes

Summary

Founded as a single store in Philadelphia in 1940 and now with more than 2,200 women's apparel stores in 45 states, Charming Shoppes® is the largest plus-size specialty apparel retailer in the United States. Charming Shoppes has three distinct brands—Lane Bryant®, Fashion Bug® (including Fashion Bug Plus®) and Catherine's Plus Sizes®—that cater to all areas of the diverse plus-size customer segment. Approximately 70% of Charming Shoppes' sales revenue is derived from the fast-growing, highly-profitable, plus-size market.

Through Charming Shoppes varied fashion concepts, they offer everything from budget to higher price-points, classic to trendy fashion tastes and mall to strip-center shopping venues for a wide range of ethnically diverse women. Charming Shoppes also serves younger customers through Fashion Bug, Monsoon and Accessorize brands. The company employs nearly 25,000 people nationwide.

In 1997, Charming Shoppes VP-Real Estate Finance Andrew Galasso was charged with developing a strategic plan for the company's Fashion Bug clothing stores. Galasso and his team shopped around for analytical consulting groups that could help them devise a plan for expansion while taking a more scientific approach toward site selection. "You know, compared to the old 'throw the map on the car and drive around technique,'" he said.

Charming Shoppes wanted to expand its retail presence and compete more effectively in the plus-size market, which was the fastest-growing sector in women's fashions. So Charming Shoppes hired Thompson Associates—now part of MapInfo—and asked them to help the retailer gain a better understanding of the competitive, site and demographic characteristics that influence sales.

Presented with this challenge, MapInfo-Thompson staff began by attempting to identify the key drivers of the Fashion Bug brand, including:

- Demographic characteristics of Fashion Bug customers (in-profile and out-of-profile)

- Competitive landscape of the apparel industry (including plus-sizes), as well as the proximity of major competitors' (e.g., Dot, Dress Barn™) stores to Fashion Bug locations

- Site characteristics (e.g., visibility, signage, traffic volume) of existing Fashion Bug stores

In an effort to ultimately determine Fashion Bug's customer, competitive and site profiles, MapInfo-Thompson focused its analysis on all measurable variables of store performance. MapInfo-Thompson conducted extensive demographic profiling based on market type and density, and also studied the impact of distance on customer patronage.

In addition, MapInfo-Thompson measured the impact of competition and site characteristics on store performance, thereby quantifying trade area potential and the leverage provided by site characteristics. Among the site characteristics analyzed were co-tenancy related issues and variables such as visibility and ingress/egress. Upon completing the analysis, MapInfo-Thompson staff were able to relate to Galasso and Charming Shoppes management the impact of specific combinations of demographic, competitive and site variables.

Result

Much of the work was done using the analytical tools of MapInfo-Thompson, and findings regarding site selection largely confirmed what Galasso had previously suspected. "There were no major surprises," he said, "but we took a scientific approach to document a gut-feeling. Not only to document it but to translate it into a model."

Armed with hard evidence, Galasso and his team felt they had a strong foundation for devising their expansion plan. The impact on Fashion Bug's site selection process was profound, Galasso said. "We became more proactive as opposed to

reactive. We started identifying holes in markets and waited for shopping centers to be built in that market. The main value, though, was the thorough education of the management team and how that catapulted us all to be on the same page. It wasn't about gut feelings anymore—it was about scientific data."

MapInfo-Thompson's involvement didn't end there. Charming Shoppes wanted a turnkey system for modeling, so MapInfo-Thompson took the results of the statistical analysis and embedded it into their system. "The deliverable was this predictive model and full application of MapInfo [including MapBasic programming]," Galasso said, "along with a myriad of files—ZIP codes, demographics and NRB mall and tenant data."

The Thompson model utilized MapInfo Professional as its GIS front-end to provide necessary demographic inputs. "My entire world was translated into GIS," Galasso said. "I bought every bit of MapInfo data I could buy so I could load it up, create maps, do distance analysis, find out how many regional malls were in a vicinity and so forth. I could plot a site in MapInfo, get some information on the closest sister stores, produce some maps and put it into an on-site predictive model."

Lastly, in an effort to provide a more enterprise-wide mapping solution, MapInfo-Thompson provided Charming Shoppes with a portable GIS solution for their field staff. Why? "We wanted to create desktop tools for our deal-makers to use," Galasso said. "We wanted our people to be able to pop open their laptop in the middle of the desert and run demographic analyses, do thematic mapping, find the distance to other stores, make a general retail map for that market." MapInfo-Thompson's effect on the way Charming Shoppes does business has been plain to see. The short- and long-term value in refining the company's site selection process cannot be underestimated.

MapInfo-Thompson's Predictive Analytics Group created a model to help Charming Shoppes simplify complex analyses and make important business decisions. The model—which continues to change in order to embrace new technologies—incorporates AnySite, Site Screening Model, MapInfo Professional, MapBasic Programming and assorted MapInfo geographic/cartographic files.

What began as a short-term research project ultimately became a powerful long-term strategic tool for Charming Shoppes.

The MapInfo Advantage

MapInfo-Thompson offered Charming Shoppes a highly customizable model that enabled Charming Shoppes to analyze massive amounts of data and make tough, scientific business decisions based on empirical evidence. It combined the wealth of information already in Charming Shoppes possession with relevant purchased datasets.

"Before entering into engagement with MapInfo-Thompson, we really didn't know what tools were out there for us to use," Galasso said. "MapInfo-Thompson had a unique combination of real estate, mathematical, statistical and geographical skill sets. And they had outstanding people with real integrity."

The model MapInfo-Thompson created continues to make Galasso's job easier, as his staff has subsequently used it to do extensive analysis for Charming Shoppes other brands. ●

CASE STUDY

Corner Grocers

Summary

Founded in 1923 and headquartered in Dallas, Corner Grocers has 3,000 locations across the United States and Canada. Over the past several years, the company has been actively engaged in updating its formats and concepts, adding a variety of amenities including 24-hour availability, in-store banking, one-hour photo services, specialty foods and pharmacies.

Sales were down in some areas. Corner was considering closing some of its locations but was willing to consider alternatives. The company was also interested in honing in on sites where it might open new stores, and in determining what might help maximize the profit potential for each unit. Specifically, Corner asked MapInfo to build a customizable solution that could help it determine, by location, how various amenities—e.g., one-hour photo services, specialty foods, pharmacies—might impact sales in certain regions.

"We're a company on the way up, not the way down," said Corner CEO Gary Walters. "We've got a history of growth and we want that to continue. So we wanted to know where the best opportunities for expansion existed. And, before we gave up on our stores that weren't living up to expectations, we wanted to know why and if there was anything we could do to save them."

Corner also wanted to make better use of the massive amounts of customer data it had collected over time. The company had been capturing information from customer loyalty cards for several years and wanted to better understand how the loyalty cards were being used in different locations, and to ascertain whether consumers' needs were being met at those locations. Corner asked MapInfo to help assimilate loyalty card data with point-of-sale data and reconcile it into pointed marketing questions that could yield useful answers.

Result

In order to help Corner isolate key differentiating factors, MapInfo created a solution that compared problem locations with those successful locations that offered similar demographic and lifestyle characteristics. Working together, Corner and MapInfo were able to identify the characteristics that were most critical to profitable sites.

One of the most striking findings was that overall sales were often most profoundly affected by which amenities were offered at a particular location. In other words, the presence of one-hour photo services, 24-hour pharmacies or ready-to-go dinners could be more critical to success than factors such as population density or the proximity of competitors. "We were startled by what the data told us," said CEO Walters. "We learned quickly that, instead of looking at all our stores as being the same, we needed to treat different locations differently. In certain markets, for example, we increased the size and visibility of our pre-cooked meals and added three self-checkout aisles. Sales went up dramatically."

Now, with MapInfo's help, Corner can accurately determine consumer interest in a variety of amenities and make more informed decisions regarding market share and sales potential for each site. "The model that MapInfo built for us," Walters said, "could pinpoint what was best for a particular location, and what our market potential was under a number of scenarios. Not only did MapInfo help us decide which locations would best support an ethnic foods section, for example, they helped determine what products should be on the shelves and how much of them we should stock."

As for the mountains of information gleaned from Corner customer loyalty cards, MapInfo created a solution that made the data accessible and usable. With password-controlled access to a browser-based tool and point-and-click access to preformatted and ad hoc reports, marketing questions and reports which previously took three or four days to process now only take 30 seconds, transforming previously unused customer information into a powerful, instantaneous tool at the fingertips of marketing department staff.

Importantly, Corner has been able to quantify its mistakes—and learn from them. The average cost of building a new store is roughly $5-10 million, so if Corner can use MapInfo tools to better understand its customers and determine in advance what amenities to offer, it can literally mean the difference between success and failure in some cases. “In the end,” Walters said, “what MapInfo really did was help us maximize our profit potential in each area. You can’t really put a price on that. If our MapInfo solution kept us from making just one bad open or close decision, it more than paid for itself.”

In order to address questions about market potential, MapInfo created custom models that combined Corner’s loyalty and point-of-sale data with a variety of MapInfo’s demographic data sets and the MapInfo PSYTE neighborhood classification system. The marketing information system that taps into Corner’s point of sale and loyalty data is built on TargetPro, MapMarker, MapXtreme, PSYTE and other demographic data.

“The most impressive thing to us was that MapInfo was able to pull it all together in a matter of weeks,” Walters said. “You can imagine how important each day is to a business that’s losing money, so that really meant a lot to us.”

The MapInfo Advantage

There was significant competition for this project, but Corner chose MapInfo for its demonstrated expertise and its ability to provide all the requisite software, data and services. It is worth noting that MapInfo had previously built a long relationship with Corner.

The MapInfo-created solution enables Corner to analyze massive amounts of data and make tough, scientific business decisions based on that. It combines the wealth of information already in Corner’s possession with relevant, purchased datasets.

CASE STUDY

Ekornes USA

Summary

Ekornes USA is the American subsidiary of a Norwegian furniture manufacturer that distributes through retailers in dozens of countries. The parent company is particularly noted for its line of ergonomically correct "Stressless" chairs and sofas.

Ekornes USA sells through a network of approximately 375 dealers with 550 outlets scattered across the United States and Canada. The company, which employs 43 people in a 100,000-square-foot New Jersey facility, did roughly $50 million in 2002 sales.

Ekornes USA came to MapInfo several years ago with a mandate from its European office to reevaluate its dealer network. According to President Kevin McGuinness, Ekornes USA primarily sought answers to the following questions: "Where are our nearly 350 dealers across the United States? Are they in the right places? Do we need more or less of them?"

The company had been struggling to figure out how to accurately evaluate dealer performance, McGuinness said. "This isn't a beauty contest. We don't care whether they're short or tall, skinny or fat. We want to evaluate how successful they are based on their potential business."

"For instance, a dealer in the mountains of North Carolina may have a very different business opportunity than a dealer in Phoenix or Seattle. Previously, we had no way to quantifiably compare them to one another. We knew that, if we could come up with a method, it would give us a reasonable indicator of how much growth to expect from each dealer."

In order for Ekornes executives to know which dealers were underperforming and which were overperforming, the company first had to pinpoint who its best customers were and where they lived. "We had begun to question," McGuinness says, "why it was so difficult for us to sell in cities and so easy to sell in suburbs.

Why did we have such different levels of success in different places? We wanted to grow. We wanted a better sense of where we could grow and how our dealers could grow with us."

"We needed a map, and we needed a flashlight."

Result

MapInfo used Ekornes USA sales data to create a customer model, or profile, that helped the company study the location of existing dealers relative to market potential—and to better understand where they might have too many dealers serving a market or where they might need additional dealers to service untapped potential.

Using the PSYTE® segmentation system, MapInfo helped Ekornes pinpoint who their target customers were and shift business resources to dealers in areas most heavily populated by those customers. "The first major finding," McGuinness says, "was that cities have a far lower density of people who would be interested in buying our products than suburbs do."

And who are ideal Ekornes customers? "They tend to be between the ages of 45 and 65," says McGuinness. "They tend to be couples whose kids are no longer living at home. Their family income is $75,000 and above. They lead an active and affluent lifestyle. They take more—and better—vacations and tend to visit other countries frequently. They go to the theatre and read more than the average person. And as an age group, they tend to act and feel as though they are 10 years younger than they are."

Ekornes also learned that 1 out of 3 purchasers bought the chairs and sofas for health reasons. This was an important insight into the company's struggles selling in urban areas, where people tend to be less health-conscious. "It's also hard for our urban dealers to market in big cities because it's so expensive," McGuinness says, "while suburban newspapers are practically giving ads away."

Ekornes USA is now using MapInfo software to look at drive-time zones for each dealer, using average drive times of 30-60 minutes to analyze how many potential

customers exist in each area. Ekornes has also created a database that tracks ZIP codes of existing customers and has shared that information with dealers in an effort to help them meet growth projections.

What effect will these findings have on the shape of Ekornes USA's dealer network in years to come? "Well, we're not going to turn away our urban distributors," McGuinness says. "It's more a question of how are we going to distribute our resources and spend our advertising dollars."

McGuinness says it's still too early to quantify the effect of the MapInfo solution on Ekornes USA's ROI, but he fully expects the improved targeting and more efficient dealer network to double sales within three years. "We haven't really implemented MapInfo fully yet," he says. "We're still mapping out all our dealers. But when we see that the UK business doubled in the three-year period after engaging MapInfo, it gives us every confidence of seeing the same results here. If you are able to tell your dealers where the business is and how much is there, you can have a reasonable expectation of how much business you want them to produce."

MapInfo's client management team worked on-site with Ekornes staff to lead them through the process of turning customer data into usable information. Using MapInfo TargetPro® and MapInfo's PSYTE neighborhood segmentation system, Ekornes USA was able to create a profile of their various customer groups, and that profile was compared to the profile of the trade area around each Ekornes retailer. The end result is a model that Ekornes USA uses to study performance against potential, to see which distributors are meeting potential, to see where potential for various products is exceeded and to identify pockets of untapped potential.

Once Ekornes received TargetPro and had the ability to devote the necessary internal resources, the company was able to create a useful set of analyses in a matter of weeks. MapInfo provided on-site training and support, both in the form of technical expertise and mentoring. The solution MapInfo delivered to Ekornes resides on a laptop computer running Windows® 2000.

In the end, McGuinness says, "MapInfo gave us the map and the flashlight."

The MapInfo Advantage

MapInfo won the Ekornes USA account based on reputation and previous success in the form of the good work MapInfo had done for Ekornes' UK office. MapInfo offered Ekornes USA a highly-customizable solution to help analyze massive amounts of data and make tough, scientific business decisions based on that analysis. Initially with MapInfo's help—and ultimately on their own—Ekornes staff were able to use MapInfo tools to get the answers they needed and gain a clearer understanding of where their business is headed.

ROBERT W. BUCKNER
VICE PRESIDENT, ANALYTICAL SERVICES, AMERICAS

Bob Buckner, formerly president and chief executive officer of Thompson Associates, has been involved in market research projects for retail and shopping center developers since 1976, both as a member of the retail community and as a consultant. In January 2003, Thompson was acquired by MapInfo Corporation. At MapInfo, Bob took the role of Vice President, Analytical Services. In October, 2003, Bob was promoted to Vice President, Services for the Americas.

Previous to Thompson, Bob was manager of the market development department of Darryl's Restaurants, a division of General Mills; a vice president of Howard L.Green & Associates, Inc., a retail consulting firm; and a business analyst for Chatham Supermarkets.

He is a frequent speaker at seminars sponsored by the International Council of Shopping Centers and has authored numerous articles on market analysis and site selection. He holds a bachelor's degree in geography from Wayne State University.

About MapInfo

MAPINFO CORPORATION IS A GLOBAL SOFTWARE COMPANY THAT INTEGRATES SOFTWARE, DATA AND SERVICES TO HELP CUSTOMERS REALIZE GREATER VALUE FROM LOCATION-BASED INFORMATION AND DRIVE MORE INSIGHTFUL DECISIONS. MAPINFO SOLUTIONS ARE AVAILABLE IN 20 LANGUAGES THROUGH A NETWORK OF STRATEGIC PARTNERS AND DISTRIBUTION CHANNELS IN 60 COUNTRIES.

MAPINFO SERVES THE NEEDS OF THE RETAIL, RESTAURANT, AND REAL ESTATE INDUSTRIES THROUGH ITS PREDICTIVE ANALYTICS GROUP. IN 2003 MAPINFO AUGMENTED ITS STRENGTH IN RETAIL ANALYTICS BY ACQUIRING THE THOMPSON GROUP, A FULL-SERVICE RESEARCH ORGANIZATION WITH OVER 40 YEARS OF EXPERIENCE SERVING THE NEEDS OF THE NATION'S PREMIERE RETAIL, RESTAURANT, REAL ESTATE, AND FINANCIAL SERVICES MARKETS.

TODAY, MAPINFO-THOMPSON IS PROUD TO COUNT MAJOR RETAILERS SUCH AS THE HOME DEPOT, TALBOT'S, APPLEBEE'S, CHARMING SHOPPES, AND JO-ANN STORES AS CUSTOMERS.

MAPINFO-THOMPSON IS THE LEADER IN RETAIL MARKET RESEARCH BECAUSE OF ITS ABILITY TO CONSISTENTLY PROVIDE CLIENTS WITH THE INFORMATION THEY NEED TO MAKE SUCCESSFUL LOCATION, MARKETING, MERCHANDISING AND OPERATIONAL DECISIONS.

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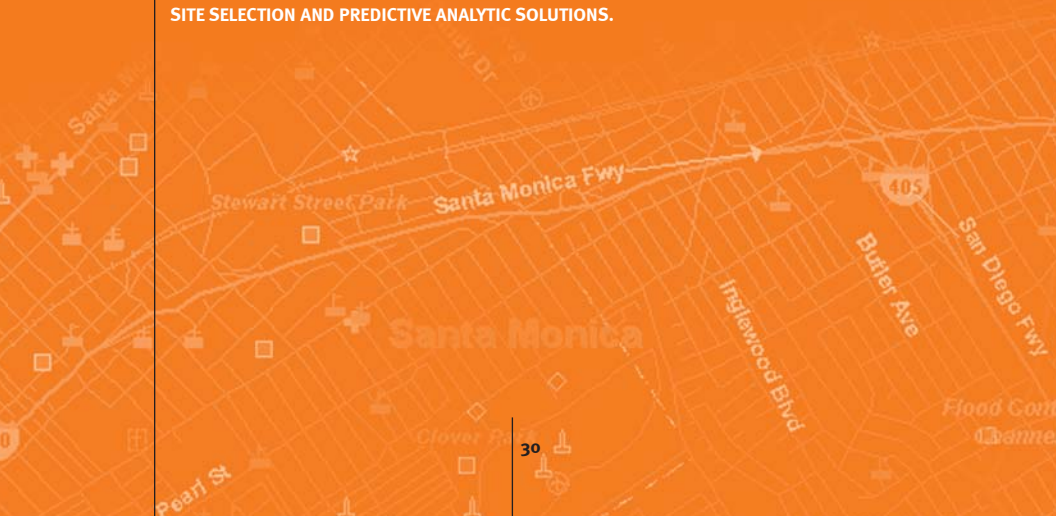

"MapInfo-Thompson helped us take a scientific approach to document a gut-feeling. Not only to document it but to translate it into a model."

—ANDREW GALASSO, VP REAL ESTATE FINANCE, CHARMING SHOPPES

"It's like going from intuition to science"

—MIKE EDWARDS, EXECUTIVE VICE PRESIDENT-OPERATIONS, JO-ANN STORES

"Now we can quickly find the best locations in any market. Local real estate professionals then advise us on site availability. If we didn't have the study and software from MapInfo-Thompson, these sorts of analyses could take us months or even years to conduct. And it would cost us much more time and money in travel"

—TOM LALLY, VICE PRESIDENT OF DEVELOPMENT, TACO BUENO

"We've taken the guesswork out of determining fair and non-overlapping sales territories for our dealers. We're also finding gaps in our network where we can add more dealer locations. In addition, we can better measure each dealer's performance against our retail goals for sales and market share in the territory."

—STEVE MENNETO, DIRECTOR OF DEALER DEVELOPMENT, POLARIS

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