The Future of Retail:

Understanding the Geography of the Marketplace Helps Businesses Thrive

By Simon Thompson, ESRI

The marketplace today can be a veritable minefield for retailers. Consumer confidences tied to fluctuating world markets, political events, and rising and falling values of resources all impact the bottom line. Every company is affected, from multinationals to franchises to the local corner store.

What businesses need to do well in this fluctuating economy is integrate seemingly disparate factors that should be considered when operating a business successfully. Factors such as who the customers are and where they are located, what the supply chain looks like, how the store should be laid out, what merchandise should be sold there, how much of it should be inventoried, and what personnel is necessary to make the store successful are all related. Failing in one category will affect another.

The ability to analyze all these factors requires the proper perspective. Retailers need a framework for analysis that can be applied to everything from site selection and customer analytics to supply chain management and market analysis.

Geographic information system (GIS) technology serves as that framework. The technology supports data management and visualization, handling complex models and serving the outcomes to many users. GIS is a technology that can be implemented and used across the retail process, from planning and building to buying and shipping. With GIS, businesses can reduce costs, make better decisions, and improve communication.

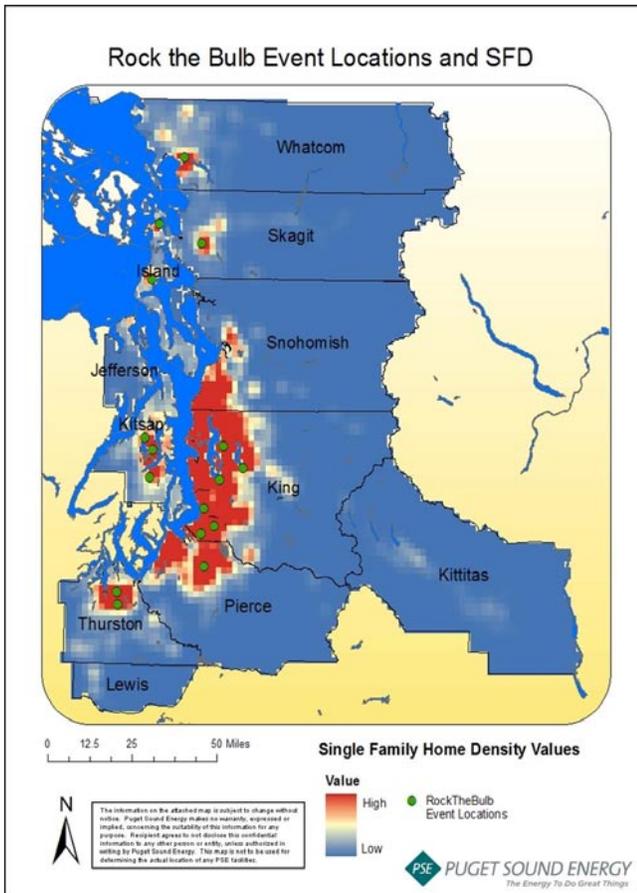### Preparing for a Healthy Business

Collaboration is key in this connected world. No longer is a business expected to perform due diligence alone when prospecting for a new location. Instead, public and private organizations are coming together with the common goal of creating thriving communities that meet customers' high expectations for shopping and recreational experiences.
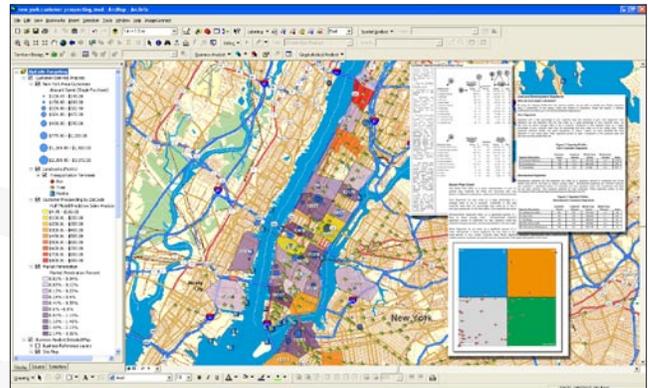
The area in and around New York City shows market penetration in darkening shades of purple, customer prospecting from yellow to red, and the amount New York City customers spent in small to large blue circles.

Perhaps we learned a hard lesson with the foreclosure crisis. Many neighborhoods that were once thriving are now filled with empty houses and brown lawns and are ripe for crime. Vacant retail and office spaces are a common scene across many communities. Having the foresight to make a sound and lasting business decision based on community information is important.

Instead of planning retail expansion alone, retailers are working with the communities they are interested in entering to ensure that the areas are able to support their business. Pueblo County, Colorado, for example, has created a consulting service that brings together its GIS department's consulting services team and business owners interested in opening up shop in the community. The group comes together to find out the concerns of business owners including looking at targeted advertising to reach specific sets of consumers and finding good sites for new store locations. The GIS team analyzes and maps data to find the best solutions to their questions.

Rock the Bulb Event Locations and SFD

The GIS team at Pueblo County recently worked with a local Web-based business that wanted to improve market penetration nationwide. Working together, the team developed strategies to increase business in 14 of the company's top markets with advertising across media that included television, radio, subway platform ads, and direct mail. The team also identified the top residential ZIP Codes where people are searching for the company's products online and used that information to create Google AdWords and optimize its Web site for search engines. The campaign is successfully bringing in new revenue, and within a month of the campaign, the business created four new jobs.

Another example of collaboration to create environments where retail can thrive is Allegany County, Maryland. The county's Department of Economic Development created a database of retail employers at active shopping centers that is available for anyone to view at www.alleganyworks.org. This information can be combined with a prospective tenant's need for available space, location, owner information, and other details that are important when recruiting business. With a simple click of a mouse, information is readily available that once took months for organizations to find.
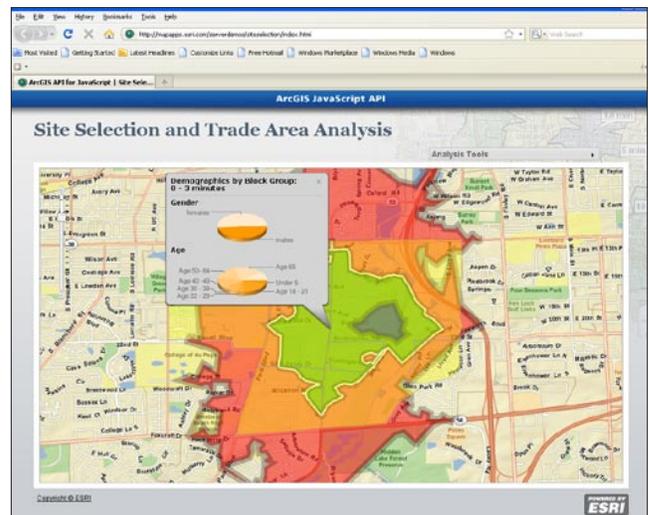
Finding the Right Customers for Your Products

Companies with successful brands today are listening to customers and understanding what they really care about. The difference is these companies are finding that traditional and previously proven forms of marketing, such as mass mailing, are no longer as effective as they once were. GIS allows retailers to visualize where their existing customers are, down to neighborhood and household levels, and analyze demographic, psychographic, purchasing, and spending characteristics for accurate customer segmentation. In turn, this information can be used to find more customers who share these characteristics.

An example of a successful marketing campaign using GIS is Puget Sound Energy (PSE), Washington state's oldest local energy company. To support a particular marketing program, the company looked at stores and their proximity to customers. Creating a radius, PSE selected customer and census-level household information to see if the stores were near service areas that housed a select number of customers who would be interested in exchanging old incandescent lightbulbs with new compact fluorescent light (CFL) bulbs. Using this data for planning and budgeting, PSE was able to estimate the number of participants who would attend. In essence, GIS allowed PSE to leverage additional value from its existing customer data, creating new capabilities that guided the company's marketing program efforts.

Common business challenges, such as site selection and trade area analysis, can be solved with the push of a button using GIS.

FedEx creates real-time, synchronzied views of its delivery vehicles making execution easier and improving customers' experiences.

Any business can achieve what PSE has just by looking at its customer information with a geographic perspective. Every record in a company's database contains information that can be used to identify where customers are located and their unique buying habits. Recognizing patterns and trends in a customer base helps create a perfect model that ensures that marketing messages are on target and effective.

The availability of free mapping utilities, Web mapping APIs, and online hosted communities of geographic data and services means that no one has to view data on a linear spreadsheet again. Mapping applications can be embedded in any of a host of applications, making geographic intelligence adaptable to any workflow and business process.

Optimizing Business Processes

There is no better organization to exemplify the necessity of GIS in the supply chain than the company that guarantees to deliver on time—FedEx. FedEx is a worldwide network of companies that provides customers and businesses with solutions for all their shipping needs. FedEx Custom Critical, one of the FedEx companies, relies on GIS to meet delivery deadlines including those that go beyond simply shipping an item from one location to another. FedEx Custom Critical customers often have urgent shipping needs or require specialized care and handling. GIS is used to help meet these challenging delivery requirements and timelines.

Urgent shipping needs include perishable goods requiring a stable temperature or items needing specialized equipment such as cryogenic containers. Special driver skill sets can also come into play, such as understanding how to handle museum artwork or having government security clearances. Adding these factors to a delivery pushes the company beyond simple route management. GIS tracking is a key

ingredient in operations. By leveraging GIS, the FedEx team is able to create real-time, synchronized views of its delivery vehicles that result in flawless execution and an outstanding customer experience. Optimizing these business processes with GIS meets the company's enterprise objectives and has driven innovation with proven techniques.

Any company, from a regional store wanting to improve customer satisfaction through deliveries or home-based services to global businesses needing to ship many products to multiple locations, can benefit from integrating GIS into trucking and delivery. Whether using GIS to provide a common operating picture or manage mission-critical operations, businesses can drive innovation and derive more value from the data they are using every day.

The New Integrated Retailer

GIS is a platform that allows retailers to make decisions and share information across departments and externally with suppliers and affiliates. Unlocking the power of information by leveraging it with an enabling technology like GIS means everyone can view the same data; use replicable models; and open communication channels to employees, partners, and customers. To learn more about how retailers are using GIS in every aspect of their business, visit www.esri.com/retail.

Author Biography

Simon Thompson is responsible for global marketing strategies for ESRI's commercial sector. He is a keynote speaker, author, and seminar leader who has lived and worked on five continents.

Current Store

Proposed Store Site 2

Proposed Store Site 1

Is this the right location for your new store?

Selecting the best site for your new store depends on more than just location. You also need to understand how performance of your existing sites will impact your proposed sites, and determine the demographic makeup and spending habits of consumers in that area.

ESRI® Business Analyst™ solution products are bundled with extensive business, consumer spending, demographic, and segmentation data that you can combine with your own sales and customer data. This helps you to analyze your market quickly and accurately, decide which goods and services you should offer, and choose the best site to attract new customers to avoid cannibalizing your existing store sales.

Business Analyst is an affordable and scalable suite of software products composed of server, desktop, and Web-based applications that can easily be deployed throughout your organization for improved collaboration and decision making.

Built on ESRI's proven geographic information system (GIS) technology, Business Analyst solutions provide you with advanced analysis and visualization tools so you can better understand your market penetration and predict customer patronage for your planned site.

ESRI is the market leader in providing GIS business solutions to organizations around the world.

Visualize drive times and customer demographics for your proposed new site.
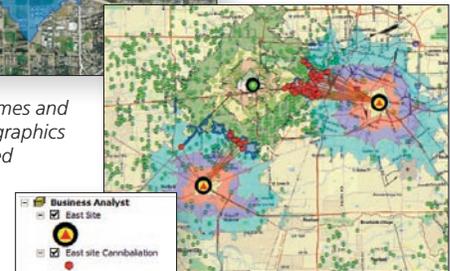
Analyze and compare proposed store sites to your existing store to minimize cannibalization.

To find out how Business Analyst products can help you, visit
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