Esri News
for Business
Fall 2014

A Yogi, a Truck Driver, and a Realtor Walk into a Conference . . .

How a New Kind of Business Intelligence Is Driving Business Success

A new kind of business intelligence drives success, creating happy people, healthy communities, and a better bottom line for firms as diverse as The Wendy's Company; Con-way Freight; and Lululemon Athletica, Inc.

Representatives from those companies, along with Bank of America, Nike, and others, showed how they achieve those goals using geographic information system (GIS) technology and location analytics, telling their stories at the 2014 Esri Business Summit in July. Nearly 400 business managers and executives attended the event at the Hilton San Diego Bayfront in California.

Companies like Lululemon, with a mission statement of "Creating components for people to live longer, healthier, fun lives," use GIS to better understand who their customers are, where they live, and the best places to serve them.

↑ Booth Babcock from Lululemon (left) joins Esri's Simon Thompson to discuss how starting small with technology makes sense.

Starting in Child Pose

Booth Babcock, the integrated planning manager for Lululemon, said his company puts community first. Lululemon is a high-end, international athletic apparel company headquartered in Vancouver, British Columbia, Canada. The company was founded in 1998, as Babcock said, "by a bunch of yogis," to fill a gap in the clothing market for active women participating in sports.

Babcock said the company was looking for a solution that could help guide its growth and was fast and affordable. The company found that Esri Business Analyst Online (BAO) was that solution.

"We wanted to sign up and instantly have access to mapping," said Babcock. "We're not really software guys, but after 20 minutes, we were up and running."

Lululemon doesn't have a loyalty card program. As the company continued to grow and open new storefronts, it was important for the business to understand who made up the customer base. BAO provides the data Lululemon needs for its North American market.

The company strives to provide outstanding service to its customers, called guests, so implementing a lengthy survey at checkout wasn't an option. Instead, the company decided to ask for each guest's postal or ZIP code. Using this information, Lululemon was able to map where customers were coming from and understand the demographic makeup of the guests from those areas. This gave Lululemon a sense of the people who were frequenting its stores. They weren't exactly who company executives had expected.

Instead of only the young, single women and men with high disposable incomes living in upscale urban communities that the company initially started serving, Lululemon's guests also included a lot of suburban moms and dads. Understanding who its customers really were helped the company seek retail locations that it traditionally might not

continued on page 3

Contents

Fall 2014

Esri News for Business is a publication of the Business Solutions Group of Esri.

To contact the Esri Desktop Order Center, call 1-800-447-9778 within the United States or 909-793-2853, extension 1-1235, outside the United States.

Visit the Esri website at esri.com.

View *Esri News for Business* online at esri.com/business or scan the code below with your smartphone.

Advertise with Us

E-mail ads@esri.com.

Submit Content

To submit articles for publication in *Esri News for Business*, contact Karen Richardson at krichardson@esri.com.

Manage Your Subscription

To update your mailing address or subscribe or unsubscribe to Esri publications, visit esri.com/publications.

International customers should contact an Esri distributor to manage their subscriptions.

For a directory of distributors, visit esri.com/distributors.

Circulation Services

For back issues, missed issues, and other circulation services, e-mail requests@esri.com; call 909-793-2853, extension 1-2778; or fax 909-798-0560.

A Yogi, a Truck Driver, and a Realtor Walk into a Conference . . .

continued from cover

have considered—easily accessible malls as well as busy urban streets.

Now Lululemon can study different markets in the United States and Canada and find its customers. "This works well because we can replicate the same workflows over and over," Babcock said. "And it's not a black box; we can do whatever we want with it."

The best part? According to Babcock, starting small with BAO meant that Lululemon, like other companies, can handle the occasional misfire in style. Lululemon can drop a project and move on. This helps the company's bottom line look good (as well as that of its customers, thanks to those great, black stretchy pants the company is known for).

↑ Jeff Rivera, vice president of national account sales for Con-way Freight, presented a road map for creating a lean organization with ArcGIS.

Going from "Can I Do It?" to "I Did It!"

Karan Singh, director of research and strategy of General Growth Properties (GGP), agrees that starting small—in this case, implementing ArcGIS Online instead of a larger solution—was the key to going from "Can I do it?" to "I did it!"

GGP operates 120 regional malls across the United States, including some of the most well-known shopping centers: Tysons Galleria in Washington, DC; Glendale Galleria in Los Angeles, California; and the Ala Moana Center in Honolulu, Hawaii.

The company's analysts use ArcGIS Online to view each mall and drill down to individual stores to analyze store performance. Brokers within GGP use this information to convince potential retail tenants why the GGP managed mall is the best location for them. Integrating locational, market, and geographic data with sales and tenant-level analytics gives the analysts and managers a better way to manage the right mix of stores and provide the best variety of retail, entertainment, and food choices to the people in the area.

"Our demographics change every day," Singh said. "One day, we might be engaging with Lululemon, and the next with Brighton Collectibles, so it's important that we understand the people who come and shop at our malls and that we present this to our retail customers."

A Better Work Environment

The benefits of GIS outlined during the four days of the conference were many, and they didn't stop at just helping the bottom line.

Jeff Rivera, vice president of national account sales at Con-way Freight, talked about how integrating GIS into its lean business culture helps improve the working conditions of drivers like James "Jackpot" Sutfin. Sutfin has worked for Con-way, a $5.5 billion freight transportation and logistics services company based in Ann Arbor, Michigan, for almost 30 years.

Sutfin has driven three million miles without an accident or an injury—an incredible feat in light of all the things that can go wrong on the road including rigs that break down, traffic congestion, and customers late with shipments. And when Sutfin is late or misses a delivery window, it is frustrating for both him and the customer.

Esri is helping Con-way understand what obstacles drivers like Sutfin encounter and make those unknown barriers—traffic, late customers, and road closures—visible. Using ArcGIS, managers are able to see where there are unnecessary wait times, heavy traffic, or bad routes and time windows for delivery, helping the company to save time, money, and eliminate these time gobblers or what Con-way managers refer to as "waste." This improves morale and job satisfaction among the drivers and, ultimately, provides better customer service.

"Esri provides a clear solution to transform how we route our drivers so we can eliminate waste and increase value," said Rivera. "Esri solutions helped us work with our customers differently."

Taking the Guesswork out of Site Location

John Crouse, director of real estate services for The Wendy's Company, the popular fast-food chain, uses GIS and location analytics to better understand its customers' behaviors and make more

continued on page 4

A Yogi, a Truck Driver, and a Realtor Walk into a Conference . . .

continued from page 3

informed decisions. This is a challenge because Wendy's doesn't collect customer data through loyalty cards or other means. He told the audience that in the past, to figure out where new restaurants should be opened meant guessing about who its customers were.

Today, there is no more guessing. Wendy's relies on Esri's Tapestry Segmentation data to provide insight into who its customers are so the company avoids opening restaurants in the wrong locations (i.e., where it may attract fewer people).

Tapestry provides accurate, structured classification of neighborhoods in the United States based on proven segmentation methodology and socioeconomic and demographic characteristics. The system combines the who of lifestyle demography with the where of local neighborhood geography. Users can see where important changes are taking place and where population has stayed the same.

Using GIS and location analytics, Crouse's department can provide critical information to make the best real estate decisions.

"GIS takes the subjectivity out of our work and helps us do things that benefit the company," Crouse said. He estimates that in the first two years, the company saved up to three-quarters of a million dollars.

Taking It to the Streets

Chick-fil-A is another fast-food chain that relies on GIS to open up successful restaurants. Steady growth since the first restaurant opened in 1967 has led Chick-fil-A to become the largest quick-service chicken restaurant chain in the United States, with more than 1,700 locations in 39 states and sales of more than $4.6 billion annually.

Instead of pushing the end products of data and maps to the field, it has taken GIS to the field. Chick-fil-A conducts predictive analytics with ArcGIS. Staff can view and edit data in the field using web maps on computers or mobile apps, providing a foundation for operator-driven growth.

Headquartered near Atlanta, Georgia, this privately owned fast-food restaurant chain relies on operators instead of franchisees to open and run the restaurants.

Chick-fil-A's Chan Lee, a senior analyst, spoke about the company's success and dedication to its operators, attributing the achievements of Chick-fil-A to them and its devotion to the communities where the restaurants are located.

The operators take the company's core value of "making a positive impact on communities and the people in them" to heart. They are known for fund-raising for local charities and donating to local schools.

It is important to ensure that other Chick-fil-A restaurants aren't opened in communities where a Chick-fil-A is already established. To avoid that, the company conducts market analytics using the Esri ArcGIS platform.

"We really care about our operators and our customers," said Lee. "So we are very careful about placement and cannibalization. The only way to ensure we don't have cannibalization is through GIS."

Don't miss next year's Esri Business Summit in San Diego, California, to be held July 18–21, 2015.

Visit esri.com/bizsummit for more information and to register.

↑ Chan Lee provided a peek at Chic-fil-A's successful business model.

↓ John Crouse says ArcGIS helps The Wendy's Company locate restaurants in the right places.

Shell Provides Spatial Data and Maps across Organization

ArcGIS Gives all Subsidiaries Insight into Business, Reduces Risk and Saves Costs

Esri awarded Royal Dutch Shell with the Enterprise GIS Award during the opening session of the Esri User Conference (Esri UC) on Monday, July 14, 2014, in San Diego. Shell was acknowledged for its advanced use of GIS, notably its centrally managed deployment of the Esri ArcGIS platform to all subsidiary companies around the globe.

"Geoinformation and GIS have become a key foundation layer in our global enterprise," said Jack Verouden, chief surveyor for Shell International Exploration and Production. "GIS plays a crucial role in the creation of new business insights; reduction of risk in business, health, safety, and environment; as well as saving costs.

"Great examples of our implementation of Esri ArcGIS include MyMaps, which provides our staff around the world easy access to integrated global data, and the common operational picture, which is essential in incident command system implementation for emergency response," continued Verouden. "We are proud to receive this recognition at the Esri User Conference, witnessed by 16,000 GIS professionals."

Shell uses ArcGIS to deliver integrated geoinformation assets to a broad and diverse user community beyond the traditional technical users in exploration, development, and production. As a result, even novice GIS users at Shell can access current, accurate, and authoritative geoinformation. Now, many people throughout the organization are able to make decisions related to a broad variety of business opportunities and challenges such as seismic lines and site planning, surface geology mapping, facilities engineering, emergency preparedness and response, pipeline routing, and retail.

"Shell was one of our very first users in the petroleum industry," said Esri president Jack Dangermond. "In the past few years, it has dramatically expanded GIS across the whole organization, and it is continually proving to be at the forefront of innovation."

Shell, a global group of energy and petrochemicals companies operating in more than 70 countries, is known for its use of advanced technologies and innovative approach to helping build a sustainable energy future.

For more information on Esri UC, visit esri.com/uc.

Business Sense

Simon Thompson
Director of Commercial Industry, Esri

I've had a chance to review many of the post-Esri Business Summit interviews and was struck by the comments of Jon Voorhees from Bank of America, one of our biggest and brightest financial services clients. He said, "While we may be ahead of most of our competitors, we are so far behind where the technology can provide for us today. And we've got to catch up, because someone's going to pass us in their ability to think better; have better insight; and, therefore, make better, faster decisions."

Two things stand out for me about technology—location analytics and business:

- Any organization is only as good as its ability to **apply** the business value it gets from technology.
- You need to continually evaluate **how** you make decisions and **challenge** the status quo.

We're all accustomed to new features and changes in software, and companies invest in training to learn those features, but it strikes me that not enough companies realize they need to evolve their business thinking too. As @PhilSimon points out, "In the Age of the Platform, complacency is just about the worst mistake you can make. If you don't cannibalize your own business, your competition will."

And that's the crux; technology will only take you so far. It's people that matter and how they think. How you empower them to take the company in new directions, to apply novel ideas and use technology in more intelligent, smarter ways—that's what keeps your business fresh and competitive. Esri continues to make it easier for our users to produce powerful, insightful visualizations and analytics, and that arms people with new skills and opportunities to apply location analytics to get ahead and keep ahead.

"How May I Help You?"

From Customers to CXOs—Starbucks Delivers World-Class Service

↑ Above: Lawrence Norton, Business Intelligence, Starbucks. Above Right: Patrick O'Hagan, Manager of Global Market Planning, Starbucks.

More than 70 million customers stop at a Starbucks coffee shop somewhere in the world every week. Customers are the center of what this company does—it has spent over 40 years building its relationships, creating a place for communities, conversations, and connections. Every day, Starbucks strives to provide a world-class customer experience in its coffee houses.

Back in the corporate IT department, it has the same mission—to provide its business customers with world-class business intelligence and information products. Whether it's coffee or IT, the customer is at the center of what Starbucks does.

How is Starbucks able to do this successfully? Lawrence Norton, Starbucks's business intelligence leader, focused on strategy and solution delivery as he spoke at the 2014 Esri User Conference (Esri UC) Plenary Session. "At Starbucks, we came to the realization that one size does not fit all, whether it's coffee or IT. For our business customers, this means a location strategy that includes everything from web maps to applications and everything in between," explained Norton.

Starbucks started bold—like many of its coffee offerings—with GIS. It tackled one of its business customer's most critical challenges right out of the gate—how does it continue to grow responsibly as a company while supporting the 20,000 stores that are already open worldwide?

To identify new store locations, more than 700 Starbucks employees—called partners—in 15 countries use an ArcGIS technology-based market planning and business intelligence solution called Atlas. Atlas provides partners with workflows, analysis, and store performance information so that local partners in the field can make decisions when identifying new business opportunities.

One System for Opening New Stores

To explain the concept of decision making at this local community level, Patrick O'Hagan, the manager of global market planning, demonstrated Atlas to the Esri UC audience. He brought up the city of Nanning, Guangxi, population two million, on an interactive map. Currently, there are eight Starbucks stores in this city, and it is the responsibility of one of Starbucks's local partners in the field—Penny Chen—to make good decisions about opening new stores here with the help of Atlas.

Currently in China, there are 1,200 Starbucks stores, and the company is opening a new store almost every day. Information like trade areas, retail clusters and generators, traffic, and demographics are important to Chen when she is making her decisions.

After analyzing a new market and neighborhood, Chen can look at specific locations. O'Hagan demonstrated how Chen would do this by zooming in to an area in Nanning where three new office towers will be completed over the next two months. O'Hagan explained that after viewing this area on the map, a workflow window can be created that will help Chen progress the new site through approval; permitting; construction; and eventually, opening.

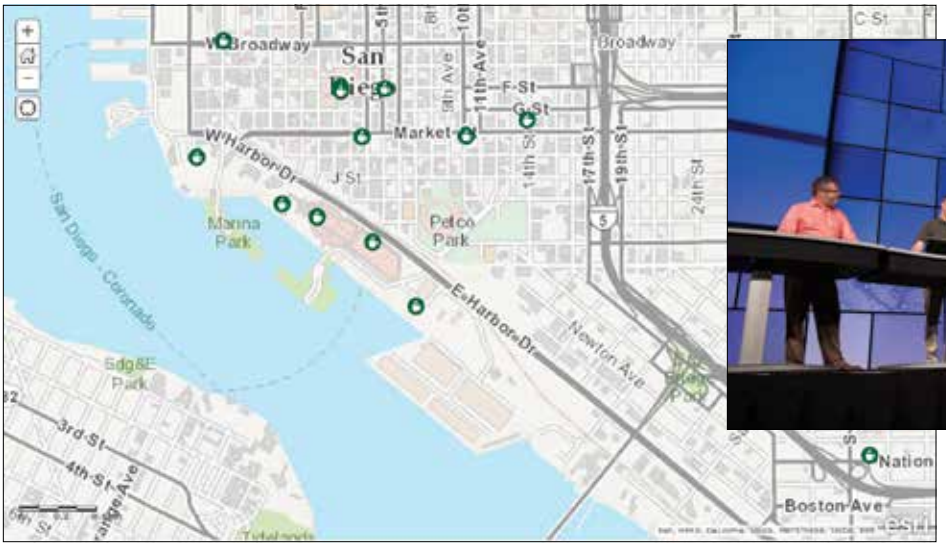
"This is how we start with the idea of a new store and bring it all the way through to the cutting of the green ribbon," said O'Hagan. "And the same thing happens here in the US. In fact, our most recent store opened on July 3 in Los Gatos, California."

Staying Locally Relevant Takes More than Luck

But Starbucks's business partners in store development don't just build new stores—they are constantly renovating and improving existing stores to keep them locally relevant. One example is Starbucks's Clover brewing system.

"When you order a Clover, you watch as the stainless steel filter lowers into the brew chamber. Hot water is added at a precise temperature to brew your coffee for an ideal length of time," explained Norton. "A thermal blanket surrounds the brew chamber to keep water within one degree of the ideal temperature. The result is the best cup of coffee you will ever taste—hot, aromatic, and incredibly flavorful."

Norton showed the Esri UC audience a map of five-minute drive times to existing Clover stores in the United States. He then overlaid areas of high coffee expenditure to show potential targets where Starbucks might consider offering the Clover brewing system.



Left: Locations of Starbucks near the San Diego Convention Center. Above: Starbucks Story Map at the Esri UC.

Being an Outlier Has Its Advantages

Next, Norton brought in a map displaying outlier analysis of smartphone ownership. Light green areas displayed islands of high smartphone ownership. There are several areas in the southern United States where smartphone ownership is generally low, but in a few areas, pockets of high outliers can be found. Most of Starbucks's coffee houses are in those locations.

Starbucks wants to persuade these customers to start using the Starbucks mobile app. It has noticed that in areas where customers pay using the mobile app, lines move faster and overall customer satisfaction is increased. Plus, if customers use the mobile app, they can collect stars for rewards, including the ability to select beer and wine.

Yes, Beer and Wine Are Coming to Starbucks

Norton displayed a map of pilot locations along with information on wine-away-from-home purchase patterns. As Starbucks looks to roll out the Starbucks evening menu, which includes beer and wine, to more locations, it can target existing coffee houses in areas with this type of high spending pattern.

Anticipating Future Events Increases Customer Service

Starbucks is integrating its enterprise business systems with GIS solutions in web services to see the world and its business in new ways. Norton showed an example map from Esri partner AccuWeather's forecasted real-feel temperature data. This forecasted temperature data can help localize marketing efforts. If there will be a really hot week in Memphis, Starbucks analysts can select a group of coffee houses and get detailed information on past and future weather patterns, as well as store characteristics. This knowledge can be used to design a localized promotion for Frappuccinos, for example, helping Starbucks anticipate what its customers will be wanting a week in advance.

Major events also have an impact on coffee houses. The weekend after the Esri UC, 150,000 people descended on San Diego for the Pride Parade. Local baristas served a lot of customers. To ensure the best possible customer experience, Starbucks used this local event knowledge to plan staffing and inventory at locations near the parade.

From Local to Global—Creating a Sustainable Business

Starbucks strives to have a positive impact everywhere—from local communities and where farmers grow the beans to roasting plants and neighborhood cafés. Sustainability and social responsibility are as important to the company as they are to its customers.

Norton took the audience on a journey from bean to cup using a story map. The journey began in Malawi, nicknamed the warm heart of Africa due to its tropical climate and warm people. Norton showed images of the farms where the coffee is grown, harvested, and processed by local farmers.

To support the farmers in their communities, Starbucks developed coffee and farmer equity practices and focused on workers' rights, economic transparency, and waste management. To help facilitate these standards, the company built farmer support centers all over the world.

Once the beans are processed, they travel from the Port of Nacala, Malawi, to Seattle, Washington, where the beans are tested for quality, roasted, packaged, and shipped to coffee houses all over the globe. When the beans are sold, programs like Ethos Water and RED's Global Fund help serve communities in Africa and across the world.

For more on how Esri helps retailers, visit esri.com/retail.

Superior Weather Insight Drives Sales and Profitability

Most business executives know weather can crucially and unexpectedly impact their businesses, but they are unable to understand the relationship between specific weather conditions, locations, and their distinct needs and leverage those factors toward profitability.

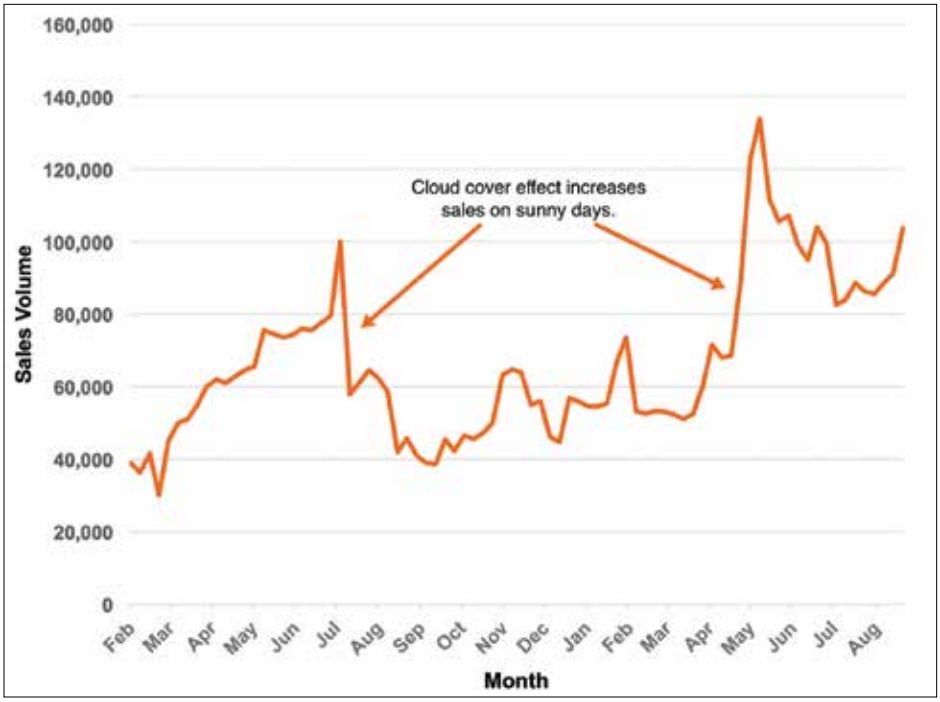
How can weather impact the profitability of a business? Through location analytics, AccuWeather helps businesses minimize the compression effects of weather and optimize profitability, as they relate to product sales, distribution, and supply chain management. Understanding the weather's impact on business creates a marketplace advantage and simultaneously reduces losses from uncontrolled expenses.

AccuWeather has found in its own analysis that it is commonplace for sales to fluctuate 20 percent based on weather. AccuWeather allows businesses to turn both positive and negative weather events into a competitive advantage and profits.

Weather varies by region, year, and season. Organizations that base sales projections on previous-year sales without accounting for weather and climate variability miss a key component impacting their profitability. The result could be ineffective marketing and promotion, unnecessary expenses, and subtle but detrimental effects on brand image.

Weather is more than temperature and precipitation. "Many times, clients will come to us requesting data on temperature and precipitation, and they are shocked when we tell them basic metrics like temperature and precipitation are often not the best predictors for businesses," stated Steve Root, president and CEO, WeatherBank, Inc.

AccuWeather integrates more than 200 custom weather metrics into its analysis to determine what has the most significant impact on a business.



↑ Figure 1: Analysis shows consumers bought more drinks on days with less cloud cover.

Additionally, the relationship between weather and a client's business depends on product and location. Software such as ArcGIS displays geographic differences and helps illustrate the complex relationship weather has on consumer behavior and the profitability of businesses.

Location, Location, Location

Weather varies significantly by region. The same weather conditions will impact businesses differently based on locations and products, making location analytics essential.

For example, consumers in Dallas will react very differently than consumers in Chicago when experiencing two inches of snow. This is extremely helpful to retailers who carry seasonal merchandise, because it helps them stock their product during the appropriate season and in optimal quantity.

A major retail client of AccuWeather was able to stock snowblowers more efficiently because of location-specific weather triggers developed from analytics provided by AccuWeather.

AccuWeather conducted an analysis for two markets in a warm, south-central state and a warm East Coast state for a nonalcoholic beverage company in the United States. Weather has a significant but different impact on sales for both markets. In the south-central state, the amount of cloud cover was the strongest predictor of sales.

In the eastern state, the amount of precipitation was the strongest predictor for sales activities. The effect of warmer weather days also varied by city and product type, and these variables needed to be taken into account.

The location analytics services from Esri and AccuWeather provide clients with unique and actionable insights, allowing companies to leverage weather variances for increased profits.

Analyzing Your Way to Success

AccuWeather helps clients uncover relationships and patterns of historical weather events, such as seasons and extreme occurrences, by performing weather regression analysis. Once the impact of weather is defined, clients will use that insight to better explain sales patterns and manage the weather impacts effectively.

After learning how businesses can hone weather analytics, they can implement profit-maximizing strategies. For example, weather-related triggers were developed to alert a major retailer of an upcoming weather event that would drastically impact battery sales—Hurricane Sandy. AccuWeather was able to alert the retailer a full week before other weather sources of the upcoming catastrophe, resulting in sizable profits for the company and a steady supply of batteries for the community.

AccuWeather prescriptive analytics are tailored to the needs of a range of business verticals—from predicting call volume for staffing call centers to helping golf courses increase rounds of golf played to staffing restaurants more efficiently based on weather-related sales volume.

Blue Skies for Profitability

Combining weather with location analytics allows enterprises to uncover valuable insights, thereby creating actionable, strategic plans that hedge against negative impacts of severe weather and maximize opportunities for increased productivity and profits. Ultimately, these insights constitute a competitive edge for enterprises over competitors that are not leveraging the same types of insights in their markets.

Working with a weather provider like AccuWeather allows users to know their weather and know their business better.

The Consumerization of IT, or That's How I Do It at Home

Mike Satterthwaite, Alliance Partner Marketing Manager, Hyland, Creator of OnBase

You've probably heard the phrase "the consumerization of IT" at some point in the last year or two. It's a notion that many organizations recognize. But what does it really mean?

IDG Enterprise defines this consumerization movement as the propensity for users' experiences with technology as consumers to impact their expectations regarding their technology experiences at work. In other words, we've become so accustomed to a certain user experience in our personal lives that we expect the same type of experience in our professional lives.

For example, if you are heading to dinner with friends and want to know which restaurant nearby has the best pizza or vegetarian food, chances are you know how to find that information rather quickly. We've become so spoiled with the volume of information available at our fingertips in our lives away from work that we expect the same thing while on the job. And with today's dispersed work force, accessing content from essentially anywhere is critical.

According to the IDG Enterprise Consumerization of IT in the Enterprise Study 2014, a whopping 83 percent of organizations plan to invest in mobile technology in the next 12 months. For some organizations, this means the addition of mobile devices for their work force—whether it's a smartphone or tablet device. Many even allow them to bring their own device to work.

But having the ability to work away from your everyday workstation is not exactly a new concept—laptop computers have been around for decades. However, it's no longer just about being able to continue working when you leave your cubicle or office. It's more about how we search for information and expect it to be displayed.

The geospatial information found within an Esri solution, along with related documents and data, is no exception to the consumerization of IT movement.

↑ Esri ArcGIS maps and related content are at your fingertips wherever you go.

Gone are the days of field-workers printing off their location map with the data points or infrastructure information they need, along with copies of correlated documentation such as easements, site

continued on page 11

New Opportunities for Retailers

As the US population evolves, the consumer marketplace is becoming more competitive and segmented. Increased diversity, aging, changing household types, lower income, and reduced home values are among the population changes that have profoundly influenced how consumers shop. Savvy retailers are well aware of these changes and need accurate segmentation information to craft successful marketing strategies. How can segmentation data help retailers? More than ever, retailers need to answer the who, what, where, and how questions about their current and prospective customers. Segmentation data can help retailers to identify who their best customer types are, what they buy, where to find more like them, and how to reach them.

For more than 40 years, segmentation has been used to assist organizations with marketing applications such as customer profiling and prospecting, site selection, direct-mail campaigns and analysis, and territory analysis. The effective use of segmentation can increase business and reduce marketing costs.

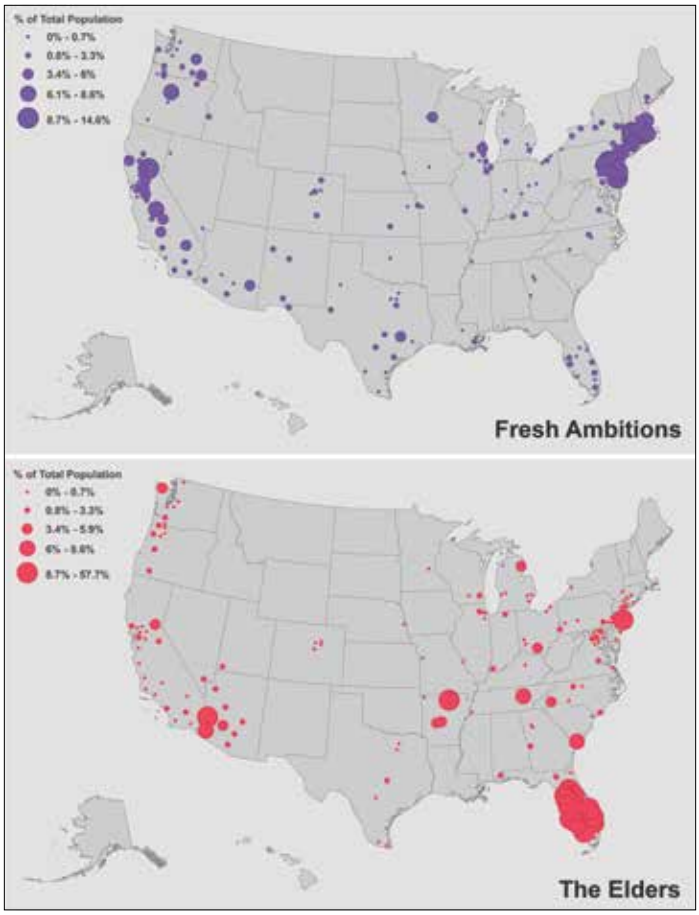
Segmentation provides an accurate, revealing look at existing and prospective customers and their trade areas to identify the best marketing opportunities. Segmentation can also uncover less profitable areas to avoid, thereby saving time and marketing dollars.

A successful market segmentation system must be able to accurately distinguish between consumer behaviors. To supplement the demographic view of people in an area by age, income, employment, housing, or family types, segmentation data can provide an added dimension about their lifestyles and lifestages.

Segmentation is based on the principle that people will seek others with similar tastes and lifestyles—"like seeks like." For example, singles would probably not gravitate toward suburban neighborhoods of married couples with children. As the lifestages of people change—singles marry, have children, become empty nesters, and retire—they move on to other neighborhoods where people share these lifestages. Where can retailers find this type of proven, successful segmentation data?

The next generation of Esri Tapestry Segmentation data reveals the diversity of the US population and can identify seniors, immigrants, income disparities, singles, college students, and those who are serving in the military. Tapestry provides an accurate, structured classification of US neighborhoods based on proven segmentation methodology and socioeconomic and demographic characteristics. The system combines the who of lifestyle demography with the where of local neighborhood geography. Users have a consistent view of the entire American landscape, seeing where important changes are taking place and where population has stayed the same.

For consumer segments that are a growing influence in the US marketplace, retailers must learn how to locate and communicate with consumers in racially and ethnically diverse areas and with the more segmented senior consumers.



As the baby boomers age and move into retirement, seniors are becoming increasingly important, influential consumers in the US marketplace. Tapestry Segmentation has identified six very different segments of seniors. Most of their lifestyles are dictated by age, income, and population density.

Ethnic diversity links other segments. Tapestry captures the subtleties of these consumers even though they differ according to age, location, affluence, family types, and housing. Las Casas, Barrios Urbanos, Valley Growers, and NeWest Residents represent the strong Hispanic influence in this group in addition to a broad mix of diversity found in City Strivers and High Rise Renters neighborhoods. International Marketplace neighborhoods are developing urban markets with a rich blend of cultures and household types. Family is central to residents of Southwestern Families neighborhoods; more than half of the residents have children; many live in multigenerational households.

Residents in ethnically rich Fresh Ambitions, International Marketplace, and Metro Fusion neighborhoods are recent arrivals; more than half were born abroad and immigrated

to the United States within the last 10 years. Most rent apartments in high-density areas of large cities. Fashion- and cost-conscious, they love to shop everywhere, from upscale retailers to warehouse stores. Young people in High Rise Renters, City Commons, and Las Casas neighborhoods earn modest incomes, rent apartments in multiunit buildings, usually have lots of children, and stay connected with the folks in their countries of origin.

Another emerging trend is the increase in single households. Although the obvious commonality among these segments is their single status, differences occur in their incomes and locations in areas of varying densities.

- Laptops & Lattes residents are highly educated, affluent singles who love big-city life without the responsibilities of home ownership and child rearing. Tech savvy, they own laptops and go online daily, especially to shop.
- Trendsetters residents are singles who live alone or share the rent with a roommate, living life to the fullest in older, big-city neighborhoods. They're spenders—they must have the latest, hippest, and greatest—and they shop in stores, online, and by phone. They own the latest laptops, cell phones, and MP3 players and go online daily.
- Metro Renters residents are young, educated singles who are just beginning their professional careers in big cities. They live alone or share the rent with a roommate. They travel; go online; work out regularly at health clubs; practice yoga; and shop for clothes at Banana Republic, Nordstrom, and Gap.
- Old and Newcomers neighborhoods are in transition. Renters in their twenties and retirees live in these areas. Many have moved within the past five years. Activities reflect their disparate ages; they play golf, go to college ball games, or join fraternal orders.

This type of information is invaluable to retailers so they know which products to stock and the types of media and messaging that will reach each consumer segment. Tapestry Segmentation data can help retailers identify, target, and reach segments of consumers with the right messages, about the right products, at the right time. Can your data do that?

Esri provides access to Tapestry Segmentation data across the ArcGIS platform in reports, web maps, infographics, data enrichment, and software so retailers can easily understand local markets.

For more information about Tapestry, visit esri.com/tapestry.

The Consumerization of IT, or That's How I Do It at Home

continued from page 9

photos, CAD files, and permits. Now they want, and in many cases need, to access that information instantaneously.

So how do you put mapping in the hands of your field work force? And how do you give access to the corresponding documents and other information needed to perform their jobs?

It starts with Esri. It has clearly made an investment in the consumerization of IT. Beginning with the development of ArcGIS for Server and now ArcGIS Online, the power of the Esri ArcGIS platform is available without the dependency of a centralized workstation. Whether you use a desktop, browser, smartphone or tablet, you always have access to your maps.

Now that you have the power of Esri without the limitations of a designated workstation, how else can you enhance the user experience, add additional value, and make your mobile work force even more productive? Provide workers with the missing documents and data needed to complete jobs right on the spot. Even better, provide the ability to collaborate on documents, push them through an automated work process, and give others within the organization instant access to that information. Allow them to create new documents, photos, videos, etc., which link to the geospatial data on their Esri maps.

↑ Field-workers now have access to the same content as those in the office.

Using a robust enterprise content management (ECM) solution, with a proven integration with the Esri platform, lets you link your structured and unstructured content with your Esri maps—transforming a powerful GIS solution into a complete

continued on page 13

27 New Segments Available in Tapestry

Find Out How the Housing Boom and an Aging Population is Changing the Face of the US

Esri has released the next generation of its acclaimed Tapestry Segmentation system. Ten years of analyzing events, like the housing boom of the early 2000s and its long-term impacts on the US population, are reflected in this release. Using the location-based intelligence delivered within the Tapestry market segments, retailers, marketers, nonprofit workers, and government organizations can gain crucial insights by identifying and targeting the best customers and prospects. Users can save money by marketing to the right people and knowing where to spend resources to serve those most in need.

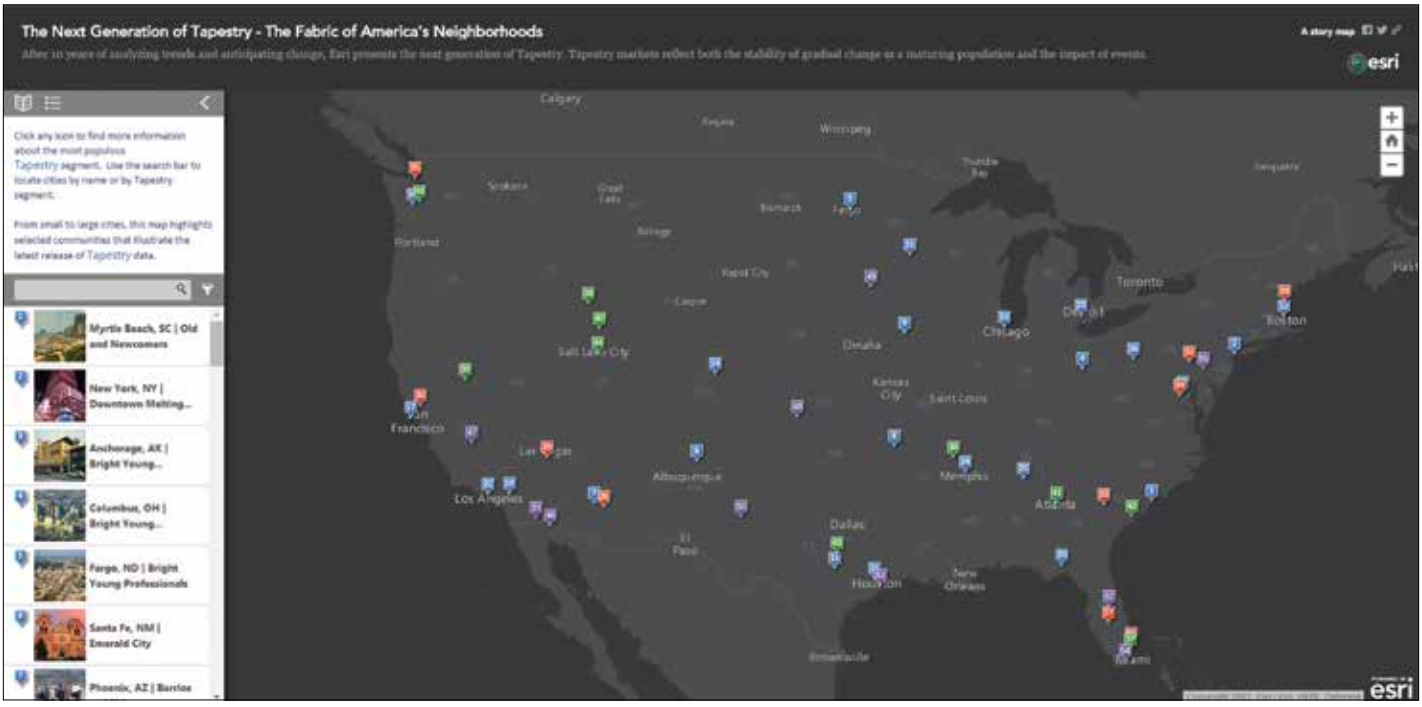
Tapestry provides accurate, structured classification of US neighborhoods based on proven segmentation methodology and socioeconomic and demographic characteristics. The system combines the who of lifestyle demography with the where of local neighborhood geography. Users have a consistent view of the entire American landscape, seeing where important changes are taking place and where population has stayed the same.

What's changed? Trends being seen in the United States today include reduced incomes, lower home values, and an increasingly diverse population. A steady shift in household types from traditional to nontraditional families and an aging population are also portrayed. To see how Tapestry profiles these changes in 55 US cities in this Esri Story Map app, visit http://mediamaps.esri.com/tapestry/deploy/.

"Tapestry segments reflect both the stability of gradual change in a maturing population and the impact of big events like the Great Recession," said Catherine Spisszak, data products manager at Esri. "Though many segments are new in order to depict this change, most segments remain the same, so users can easily transition to the next generation of the system."

Esri provides access to Tapestry data across the ArcGIS platform in reports, web maps, infographics, and data enrichment, so anyone can easily understand local markets.

For more information, visit esri.com/tapestry.



Bring Location Analytics to Your Enterprise

Esri Maps for SAP BusinessObjects Boosts Your BI

Esri has released Esri Maps for SAP BusinessObjects, a new solution that brings the power of location analytics to SAP BusinessObjects. Esri Maps for SAP BusinessObjects lets you integrate dynamic maps directly into SAP BusinessObjects dashboards for fast and efficient analysis, visualization, and sharing of key business data.

"People gain new insight and make better decisions when they can easily map data and take advantage of location analysis," said Jack Dangermond, president, Esri. "Esri Maps for SAP BusinessObjects adds instant value to the business data you work with every day. It provides easy integration with the Esri location platform."

Esri Maps for SAP BusinessObjects lets people pull together location data from multiple sources. People can visualize previously disparate data on one map directly inside a BusinessObjects dashboard. No coding is necessary.

Moreover, the solution drives advanced analytics and exploration using information-rich maps. Businesses of every stripe can quickly assess performance using numerous map visualizations of business data, such as color-coded (thematic) mapping, clustering of data, and heat maps. The resultant business maps make it easy to spot trends within seconds that might otherwise be missed, such as sales areas that could be underperforming or exceeding quarterly objectives.

Professionals can use maps to filter and update results in other dashboard charts and tables on the fly. For example, select regions or points on the map you want to explore, and quickly see the corresponding data selected throughout your dashboard.

Product Pricing and Availability

Esri Maps for SAP BusinessObjects is a new addition to the Esri Location Analytics family, which includes Esri Maps for IBM Cognos, Esri Maps for MicroStrategy, Esri Maps for Dynamics CRM, Esri Maps for Office, and Esri Maps for SharePoint. Multiple deployment options are available based on the requirements of an organization, whether it needs a solution that is completely on-premises or one that leverages online content and services.

Contact your local regional Esri office for details.

The Consumerization of IT, or That's How I Do It at Home

continued from page 11

enterprise solution. This integration enables workers to access information from their familiar Esri interface without toggling between applications.

So imagine the next time you are out in the field. You receive notification of a needed repair through an automated work order form, then use the Esri map on your smartphone to locate the asset and drive to the site. But once you arrive, you're unsure exactly how to conduct the repair. By simply clicking the asset location on that Esri map, you bring up corresponding documents—including the repair manual. Once the repair is complete, you mark the work order as such and attach a photo you've taken on your phone to verify the repair's status. Then you push the form back through an automatic workflow so the original requestor becomes informed that the work is complete. You are free to move on to the next job without ever having to return to the office.

↑ Work doesn't have to stop because you stepped away from your desk.

Now imagine how long this process would have taken without the consumerization of IT.

Data—The Secret Sauce for Economic Development

By Keith Mann, Product Marketing Manager for Esri Location Analytics, and Brent Roderick, Product Specialist

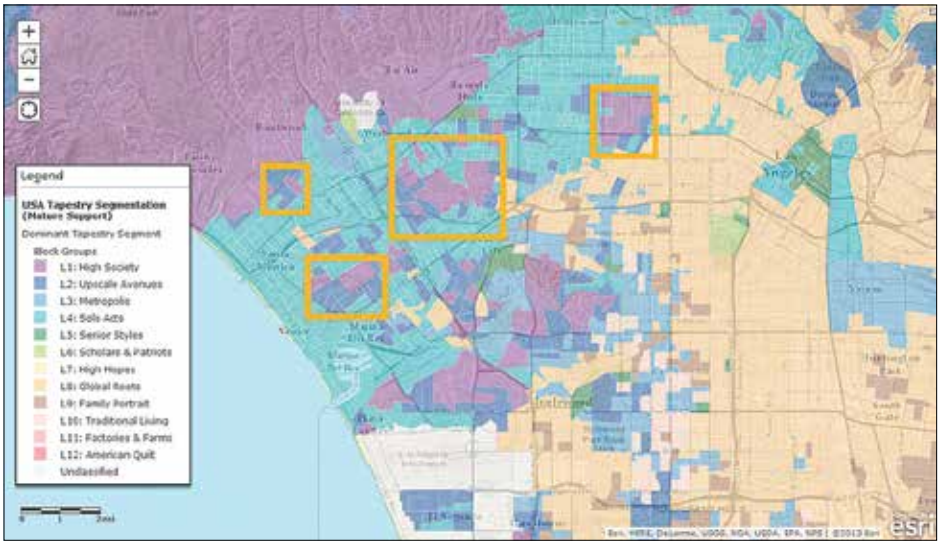
Shocked patrons read the "We Are Closed for Business" sign on the locked door of a darkened restaurant. This scenario is a common one in many communities. More serious than the closing of a favorite gathering place was the impact on the city's local business environment. More than 100 people were suddenly unemployed, business and tax revenues were lost, and a large building stood empty. Empty buildings that once housed businesses drag down the prosperity of the community.

Local economic development agencies need to attract new businesses to empty sites as soon as possible, but where to start? How can the site of a failed business be transformed into an enticing location with tons of potential?

The answer: Show them the data. But what kind of data?

Data about the types of people who live, work, and shop near a site is gold to potential business operators. To better assess the viability of business, they need data that answers basic questions about the demographics, lifestyles, and spending habits of the population in an area.

↑ This map of Los Angeles County illustrates the ranges of Median Household Income. Rectangles represent areas matching the demographic criteria for a new restaurant.



↑ Four suitable areas are identified on this map based on LifeMode summary groups in the Esri Tapestry Segmentation system.

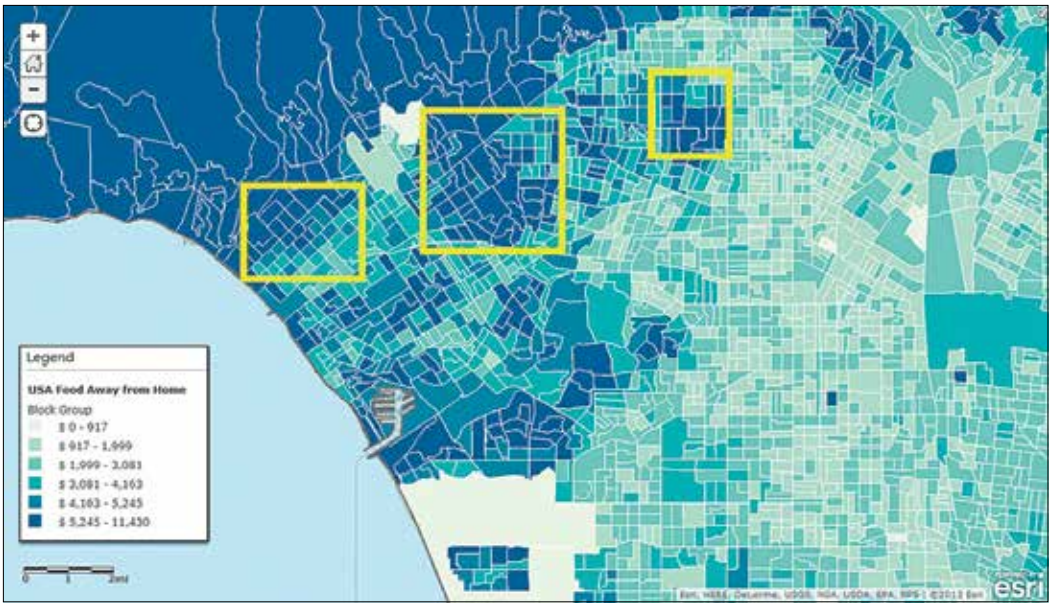
Who Are They? (Demographics)

Esri's Updated Demographics data provides the characteristics of a population by giving a breakdown of variables such as age, gender, income, housing, family type, education, and employment. This kind of information can characterize populations and answer questions like

- Are they retirees or young families?
- Are the majority single or married?
- Do they have children?
- Do they have significant disposable income or are they struggling to get by?
- Are they new arrivals or have they lived in the area for a long time?

This type of information enables a city's economic development staff to better promote a site by showing prospects a real and quantified description of the types of customers that are nearby. Analysts can provide maps based on the demographics of age, income, and household type that show who lives where.

When evaluating the potential of an area, this type of demographic data lets analysts consider groups, like seniors or daytime populations that work in the area, separately as additional revenue sources. With this information, economic development staff can see the types of restaurants that do well. And restaurant development companies can locate areas that contain populations within targeted income or age ranges.



↑ Esri Consumer Spending data for Food Away from Home in Los Angeles County was used to identify three target areas.

What Do They Do? (Lifestyles)

While household income visualized on a map is a good start, for more detailed information about the preferences and habits of a population, lifestyle data (also called segmentation data) can be added to demographics.

Lifestyle data adds a new perspective to demographics. It is based on the principle that people with similar tastes and lifestyles are likely to seek others like themselves and cluster together in a community. People typically move through various life stages: they marry, have children, become empty nesters, and retire. They tend to relocate in neighborhoods where others are at a similar life stage. Even though individual residents may come and go, a neighborhood's character, once established, tends to remain stable over time.

After using Esri Tapestry Segmentation data to identify the types of neighborhoods in the area, the city staff in this example might learn that the typical resident near the closed restaurant likes sports; watches movies at home; eats out fairly often at family-type restaurants; drives a moderately priced vehicle; and goes online for information, banking, and shopping.

Adding this information to the mapping analysis could narrow the types of prospective restaurants and allow the city to pitch the site to businesses likely to find the site appealing. Armed with lifestyle information, the staff could show restaurant chains not only the demographics of the targeted areas but also their lifestyle and media preferences. This information provides valuable insights into the likelihood that residents in an area will eat out and the best ways to communicate with them.

How Do They Spend Their Money? (Spending Data)

Spending data provides detailed information on how the local population uses its income. Esri's Consumer Spending data compares spending by households in an area for a variety of categories to the national averages for those same categories. Market Potential data measures area demand to national averages. Studying the indexes for each database can help determine actual spending by adult or household, and the potential demand for different types of restaurants.

Site Selection Analysis

Location is a critical element for any site selection or trade area analysis. Studying the competitive landscape is necessary to ensure that a new restaurant wouldn't cannibalize current ones. When the staff members in this scenario ran Esri's Business Locations data for restaurants in the area, they found everything from fast-food to fancy sit-down places and determined a new restaurant in the empty location could be viable and would not damage the business of existing restaurants.

Drive time—how far people would drive—was also considered. Most of the targeted population lived within 20 minutes of the site. Proximity to an interstate and a rather upscale shopping area were added assets.

Putting It All Together

Incorporating demographic, lifestyle, spending maps, and other information in the analysis enabled the staff to quickly see the types of restaurant companies they should focus on in promoting the empty building. A family-style restaurant with a varied menu and a bar where patrons could visit and watch sports would be a good candidate for the site in this scenario. Staff members compiled a list of restaurants that met the criteria and created presentations using charts and maps.

Demographics, lifestyle, and spending data can provide answers to the who, what, where, and how questions that businesses can use to evaluate potential sites efficiently and avoid a scattershot approach. This information can also help cities market commercial sites by identifying and pitching to businesses that would be a good fit for an area. In either case, data, spatial analysis, and maps provide actionable answers to business questions.

For more information visit esri.com/data.

380 New York Street
Redlands, California 92373-8100 USA

Presorted
Standard
US Postage
Paid
Esri

143216 49M10/14sp

Put the *Where* in Your Enterprise

Deliver Better Outcomes with Esri Location Analytics

esri.com/locationanalytics