

# BusinessGeoInfo

Banking Edition

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GIS for Business Solutions

## ESRI Data Products: A Valuable Resource for Banks

Today's banking institutions must meet their customers' needs at all touch points: on the phone, at the traditional teller window, at the ATM, at the point of sale, and at the new Internet storefront. Fast-paced technological change is responsible for new market segments and, consequently, new challenges for banking and financial institutions. Which customers contribute to profitability? Which don't? Who has potential to do more business? Who doesn't? How does a bank acquire new customers while retaining established ones? How do banks promote online services without making them seem like substitutes for personalized service, all while adhering to government regulations? Those banking and financial institutions that can rise to the challenge of broadening and deepening their relationships with customers will be the winners in the current highly competitive, merger/acquisition environment.

One element remains constant at the core of all banking business: data is plentiful; customer knowledge is scarce. Mining for the right information requires skill and experience that banks may not have. Customer records enriched with demographics and consumer spending, geographic, and segmentation data enable the enterprise to make smarter strategic decisions. The more banks understand about who their customers are and how they live, the more they understand about their needs and how best to serve them. And the better customers can be served, the more they can be acquired, developed, and retained, leading to greater profitable relationships.

Banks keep very detailed customer records, but these records exist in independent business systems that are organized around products rather than around the customer. In the United States, business systems are tied together and organized around the customer household in the Marketing Customer Information File (MCIF), and similar record keeping standards exist globally. These customer-centric files give banks a distinct advantage over other business sectors that don't have that

data and/or are not as efficient in the collection of customer data for marketing purposes.

Customer data that includes address and contact information, the financial products and services used, and associated detailed account and financial information is the starting point for more informative and profitable customer analysis. GIS spatially enables the customer database to create greater efficiency, indicate new profit centers, and lower investment risk.

ESRI's Community Coder enriches the customer database with powerful additional data to help banks understand who their customers are and what they need. Based on where the customer lives, Community Coder adds accurate demographic data to each customer record including age, income, family type, education, employment, housing, race, ethnicity, and more. Further, ESRI's Community Tapestry lifestyle data combined with Community Coder adds the power of lifestyle segmentation to each customer record, essentially telling a bank or financial institution which consumption category the customer falls within. Summary demographic reports are included in Community Coder. A bank's own customer databases enhanced with ESRI's geospatial technology tells it both where the customers are and what they "look like." ESRI offers a wide range of enhancement data and automated reporting that identifies new marketing opportunities and quantifies risk.

ESRI technology also makes it easier for banks to comply with federal and state regulations. For example, federal mandates require banks and financial institutions to demonstrate that they serve all population segments in their delineated communities. Demographic data provided by Community Tapestry can be used to craft racially and ethnically appropriate product strategies and target messages to any demographic and psychographic segment, including minorities, and households within any income group. These demographic data variables can also help in institutional planning, such as anticipating workforce

requirements to serve minority populations and multilingual needs, before specific branch locations are approved or opened.

Consumer spending data from ESRI informs many different companies and industries how households in their various market segments consume services. This reveals buying habits for various categories of general merchandise and services. For financial institutions, ESRI offers basic reports as well as the MarketBank premium market potential data from ESRI partner RPM Consulting. These reports specifically identify the amount of disposable income available to purchase financial products and services. ESRI quantifies the financial goods and services so it is possible to perform analysis that identifies new potential markets, markets that are underexploited, and markets that are saturated and mature. This data is available from ESRI in a database format and via online Internet subscription reports from Business Analyst Online Consumer Spending Reports. Business Analyst Online reports include total dollars spent and average per household spent for financial products and services such as savings accounts, mortgages, and auto loans. A spending potential index compares the amount spent in any specific geographic area with the U.S. average. This allows immediate identification and ranking of areas based on potential and the rapid construction of marketing and service plans to respond to the need or opportunity.

Market potential can be looked at from many perspectives. *Market reports* highlight the number of adults and households that would be expected to consume financial products and services such as online banking, home mortgage loans, and mutual funds. A *market potential index* measures the relative likelihood of adults and households in a specific geographic area to exhibit certain consumer behavior patterns compared to the U.S. average. Once again, this type of information is available in many different formats and applies to many different activi-

ties. Banking institutions can combine their own internal databases, which may contain the exact age, income, race, and educational and marital status of a customer, with richer segmented data like Community Tapestry. Combining and analyzing the two datasets allows the bank to see how well they are performing in any particular market or geographic region compared to the local average or estimated market potential. Scoring the return on investment or potential allows the bank to identify specific areas in which it is prudent to invest more resources or identify areas that are not achieving full potential to recommend downsizing or redirecting resources to more closely balance expectations and achieve targets. Market potential analysis can be performed for any savings, investment, credit, or loan product to generate a map of hot spots in which the bank is performing well and cold spots of lower potential and profitability.

Just knowing exactly where customers are is important, as this unlocks the power of spatial analysis and lifestyle segmentation. At its most basic use, ESRI's Community Coder geocoding software pinpoints the exact address or latitude-longitude coordinate for any customer information. In the United States, the Federal Information Processing Standards (FIPS) codes and other market or demographic segmentation codes can be appended to the customer records and stored within the bank's own customer files. Internationally, the United Nations Classification of Individual Consumption According to Purpose (COICOP) code provides a common statistical methodology to look at expenditure and potential on a pan-European or global basis. This allows the bank to immediately have access to how the customer performs compared to others in their ZIP Code or market area. Access to this information is always available and does not require connection to the GIS software or any other database. Combining geographic information with demographics and consumer expenditure data allows banks to see how their customers compare to the average member of the community. The banks can generate an understanding of the typical customer and compare that with their ideal. By gaining a more insightful understanding of who their customers are and how they compare to others in the same area or those who use different financial services, the bank is better able to balance and focus resources on profitable opportunities.

Geocoding can also be used to identify where different types of customers are physically located and where they perform various activities. This knowledge not only helps banks determine where to locate branches and ATMs but also better understand the demand for assorted services. A bank can create an "ant farm" of the typical

ways customers use their network of branches, ATMs, and financial service packages. To create the ant farm, the bank geocodes transactions and business use—where transactions take place, at what time of day, what volumes occur, and by whom. All these transactions create a pattern of use that highlights concentrations and flows to and from services, reflecting the true usage and demand for the services rather than some theoretical potential. This is immediately more intuitive and understandable than color-coded ZIP Codes, business graphics, or endless tables of data.

For example, the population surrounding a specific branch may be more mature or elderly: customers who prefer more traditional service and want to do business with the bank in person. In that case, perhaps the bank can more profitably promote other services ahead of Internet banking.

Understanding where customers live and where they perform specific activities, such as cash withdrawals or deposits, allows a banking institution to more appropriately align services and resources with need and market demand. A customer can be encouraged to purchase and use services because the bank is in a convenient location and going there will not impact heavily on the customer's day-to-day routine. Rather than requiring customers to go to their home bank or take time out from work to visit an alternative location, a bank, credit union, or other financial service organization can be seen as bringing the services to customers to fit into their lifestyle. This can open up new market opportunities and generate new revenues, yet these are difficult to identify by traditional market analysis tools.

That is why segmentation is so valuable. Segmentation data breaks down and identifies customers into different consumer types based on important demographic and socioeconomic characteristics. By applying a segmentation code to customer records, new insight can be gained into which customers would be receptive to up-selling and cross-selling opportunities. Analysts can identify the customer segments that might respond best to promotions or be receptive to niche products. In addition, customer segmentation can identify the preferred media through which to reach and retain these customers.

ESRI's segmentation system, Community Tapestry, divides all U.S. neighborhoods into one of 65 segments based on demographic and socioeconomic attributes. Other datasets with different classifications are available across the world and are supported by ESRI software and analysis. The Community Tapestry "slices of America" can be used at the detailed neighborhood level or grouped together to form a picture at various levels of detail. For a broader view of markets, the Community Tapestry segments are grouped into

12 LifeMode summary groups based on lifestyle and affluence while the 11 Urbanization groups are coded according to population density and affluence. This means that financial institutions can search for and identify customers based on their geographic concentration or distribution as well as the spread across different segments and lifestyles.

By applying Community Tapestry segmentation models, a bank can learn that specific customers may not respond well to direct mail promotions but that they customarily read the newspaper's financial section, prefer to use a financial planner, and contribute regularly to a retirement program. For more information about Community Tapestry, visit [www.esri.com/tapestry](http://www.esri.com/tapestry).

Armed with detailed customer information and new methods of linking clients to preferences and likely activities, banks can be much more successful in designing products and services that best fit their most profitable customers' needs. GIS solutions from ESRI help a bank keep their best clients, reach them in a more effective and appropriate way, and find more like them. In this highly competitive business environment, banks need every advantage they can get. A thorough knowledge of customers' needs and requirements gained from GIS analysis underlies the geographic advantage.



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