



# The Arizona Republic

## GIS Supports Market-Focused Selling at Newspaper

### Problem

Newspaper needed to target customers more specifically for advertisers

### Goals

- Target specific markets for individual advertisers.
- Create different versions of inserts for various stores.
- Select demographic criteria.
- Target subscribers and nonsubscribers.

### Results

- Query time on data has been decreased from hours to minutes.
- Number of advertisers has increased.
- Amount of advertising from legacy accounts has increased.
- Overlapping advertising areas have been found.
- Analysis is performed more quickly.

*"The GIS data that we can now show our advertising customers, along with raw numbers, has really made selling inserts easier. It has aided our customers' competitive edge."*

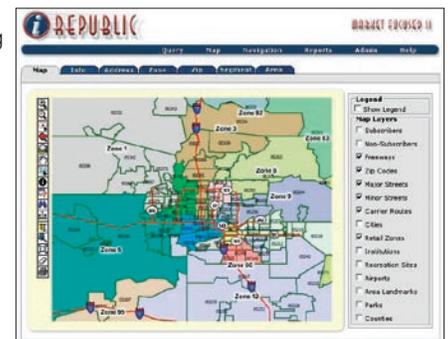
Jay Visnansky, Senior Systems Analyst,  
the Arizona Republic



*The Arizona Republic brings news and information to approximately one-half million households and targeted advertising materials to 1.275 million households in Maricopa and Pinal counties in Arizona each week. Of the Arizona Republic subscribers, 800,000 receive advertisements by mail, and 475,000 are reached through an insert in the paper itself. The newspaper covers all its customers, subscribers or not, through an innovative total market coverage product called the Buyer's Edge that allows it to reach everyone throughout the Phoenix market.*

### The Challenge

The Arizona Republic needed to fine-tune targeting of customers for its advertisers. Some advertisers wanted the ability to target their ads to certain segments of the population (for example, dog owners) or just to certain areas. A drugstore, for example, requested to target customers within a certain number of blocks near its storefront. The drugstore did not want to pay to advertise to people living on the other side of a bridge or on the opposite side of a major street, realizing these people will visit a store easier to access, though not necessarily as close.



*The initial screen at logon shows the Phoenix metro area and the selling area.*

Other chain merchants, including retail merchants and grocery stores that have multiple locations, also want to "version" their ads for different parts of their coverage territory. The owner wants to put one set of items on sale at one store and a different set of items on sale at another. This means advertising salespeople at the Arizona Republic needed to be able to produce the means for their customers to target ads precisely.

### The Solution

Already a user of ESRI® software, the Arizona Republic was looking for a solution that would allow it to query its customer base quickly, taking location into account. The company stayed with ESRI and selected ArcIMS®, Web-based geographic information system (GIS) software; ArcSDE® for maintaining its large datasets of customers and location information; and MapObjects® for creating custom-built applications. Senior systems analyst Jay Visnansky and principal application analyst Karen Parrilla created applications ranging from newspaper route configuration to applications for easily viewing custom map layers. These layers consisted of information about subscribers, nonsubscribers, and carrier routes along with streets, retail zones, and area landmarks. One of the layers was created using ArcEditor™. While the customer information is maintained by the Arizona Republic, the location information (streets, retail zones, etc.) is on a subscription basis from Tele Atlas and is updated quarterly.

The combination of ArcIMS and ArcSDE gives the Arizona Republic a thin-client architecture, making queries on the data very fast. By storing data in one central ArcSDE and Microsoft® (MS) SQL Server, salespeople no longer need to download the entire marketing database to a

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## ESRI Software Used

ArcSDE  
ArcIMS  
MapObjects  
ArcEditor

## Other Software Used

MS SQL Server  
MS Visual Studio .NET  
MS Internet Explorer  
Internet Information Services

## Data Used

Tele Atlas streets, ZIP Codes  
Tele Atlas MatchMaker SDK

## Hardware

Database Server: Dell PowerEdge 2650,  
dual processors, 6 GB memory,  
Windows 2000 Server,  
2 x 36 GB RAID 1 Storage

Application Server: Dell PowerEdge 2650,  
single processor, 4 GB memory,  
Windows 2000 Server,  
5 x 73 GB RAID 5 Storage

## For More Information



### ESRI

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PC or laptop. Instead they log on to the database and produce targeted marketing information for advertisers in just a few seconds. Before ArcSDE, this process could take up to an hour or more.

This system supports between 200 and 250 registered users across the Phoenix Valley. "It is easy to use, thanks to the open architecture of ESRI's software products," says Visnansky. "We were able to build custom forms for query, display, and reporting."

Today, a salesperson logs on and views a map interface of the *Arizona Republic's* coverage territory. A legend and the map layers are displayed, and tools for manipulating the map are available. A query can be created in a pop-up box chosen from the pull-down menu. For example, the salesperson can input the street address of a customer's storefront and the area radius (in miles) the customer would like to look at for potential advertising coverage. The software standardizes the address and calculates its latitude and longitude coordinates.

The radius is displayed on the map along with carrier routes, ZIP Codes, subscribers, and nonsubscribers. The software calculates how many and which subscribers and nonsubscribers are located in the radius. If an advertiser is interested, he/she can select a pull-down list of demographics to target customers even more precisely. Then, specific values for the demographic can be selected. For example, if an advertiser is interested in looking at income, he/she can choose that demographic variable, then the value such as income between \$50,000 and \$74,999. If requested, more demographic variables can be queried such as pool owners in the income bracket he/she selected. Using GIS, advertisers are able to specifically market to the customers they would like to target.

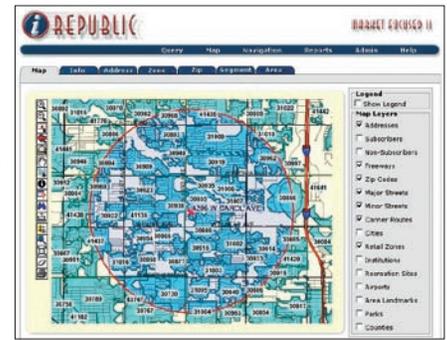
## Results

By providing this information more quickly to advertisers, the newspaper company has been able to increase both the number of advertisers and the revenue from legacy advertisers.

The Buyer's Edge allows advertisers to hit every household in Maricopa County by U.S. mail and through delivery in the *Arizona Republic*. Advertisers also have the capability of picking ZIP Codes around their specific locations. This allows full saturation around store locations and provides versioning capabilities at the store level.

Zip Code	Subscribers	Non-Subscribers	Total
85001	100	200	300
85002	150	250	400
85003	200	300	500
85004	250	350	600
85005	300	400	700
85006	350	450	800
85007	400	500	900
85008	450	550	1000
85009	500	600	1100
85010	550	650	1200

The Data Grid with the Resultant Numbers Displayed for the Area Selected



This map interface shows the store address that has been selected along with the newspaper carrier routes in the area. The radius indicates the one-mile selection that was made. The carrier route numbers are also displayed.



A One-Extent Zoomed-in View of the Selected Area with the Subscriber Layer Selected

Salespeople at the *Arizona Republic* can pinpoint customers even more by selecting carrier routes that deliver to the profile the advertiser is looking for. This gives the *Arizona Republic* the ability to target prime market areas demographically and also provide versioning capabilities at the store level.

For the most targeted market-focused selling, advertisers can target customers using criteria for their perfect customer by address-specific delivery. This gives advertisers the ability to get their message to the exact customer they want.

Learn more at [www.esri.com/business](http://www.esri.com/business).