**Improving Decision Making: Using Database Software to Design a Customer System for Auto Sales**

* **Software skills:** Database design, querying, reporting, and forms
* **Business skills:** Sales lead and customer analysis

This project requires you to perform a systems analysis and then design a system solution using database software.

Ace Auto Dealers specializes in selling new vehicles from Subaru. The company advertises in local newspapers and is also listed as an authorized dealer on the Subaru Web site and other major auto-buyer Web sites. The company benefits from a good local word-of-mouth reputation and name recognition and is a leading source of information for Subaru vehicles in the Halifax area.

When a prospective customer enters the showroom, he or she is greeted by an Ace sales representative. The sales representative manually fills out a form with information such as the prospective customer’s name, address, telephone number, date of visit, and make and model of the vehicle in which the customer is interested. The representative also asks where the prospect heard about Ace—whether it was from a newspaper ad, the Web, or word of mouth—and this information is also noted on the form. If the customer decides to purchase an auto, the dealer fills out a bill of sale.

However, Ace does not believe it has enough information about its customers. It cannot easily determine which prospects have made auto purchases, nor can it identify which customer touch points have produced the greatest number of sales leads or actual sales so it can focus advertising and marketing more on the channels that generate the most revenue. Are purchasers discovering Ace from newspaper ads, from word of mouth, or from the Web?

Prepare a systems analysis report detailing Ace’s problem and a system solution that can be implemented using PC database management software. The company has a PC with Internet access and the full suite of Microsoft Office desktop productivity tools. Then use database software to develop a simple system solution. Your systems analysis report should include the following:

* • Description of the problem and its organizational and business impact
* • Proposed solution, solution objectives, and solution feasibility
* • Costs and benefits of the solution you have selected
* • Information requirements to be addressed by the solution
* • Management, organization, and technology issues to be addressed by the solution, including changes in business processes

On the basis of the requirements you have identified, design the database, and populate it with at least 10 records per table. Consider whether you can use or modify Ace’s existing customer database in your design. Then use the system you have created to generate queries and reports that would be most useful to management. Create several prototype data input forms for the system and review them with your instructor. Then revise the prototypes.