Don't Do It Yourself…

MS Access is a tool for designing and managing databases as well as building business applications. Most love it; some are skeptical about its value.

Microsoft Access is a wonderful tool for database application development. In fact, it is the best in terms of price and development time. A few hours of work, and one can deliver an application that will save considerable time in managing data. In addition, it is easy to maintain and grow in accordance with a user's changing needs. This assumes a developer who has extensive knowledge of MS Access; otherwise, it can take much longer to get good results. MS Access is rich in features and functionality, and it takes time to master.

Some people believe that MS Access is not a desirable technology for custom applications, especially in multi-user environments. This common misconception stems from the fact that MS Access is advertised as "easy" -- many databases were developed by amateurs with little knowledge of the product. As a result of poor database design, inefficient queries, and improper setup, users may experience performance problems and even get the wrong data in their reports. In many cases, the power of Access was not utilized and problems that arise are blamed on MS Access instead of poor design.

Another extreme with MS Access is having it and not using it at all. It is like having a luxury car and never driving it -- just using MS Excel for managing your data. MS Excel is a great tool to start. It allows recording related data on separate sheets, applying formulas for calculations, sorting by different criteria, and a lot more. As the lists grow in size and quantity, they often become hard to manage –time is spent on organizing records instead of managing the business. At this point, it is time to move the data to a database.

A power user – someone with good knowledge and experience of MS Access - can design and customize a database for their own use. However, he/she might be not a good candidate to build an application to be used by others.

In my view, the best way to use MS Access in business environment is to let an experienced MS Access specialist do the design and deployment. An inexperienced user would do more harm than good trying to set up a MS Access database for business use. It would take a lot of trial and error to make it work –time better spent on business development tasks. There are a lot of things one needs to know to do it right, and it should be handled by a professional.

MS Access is a good platform to develop line of business applications of various scales for small businesses and project- or function- oriented applications for medium and large businesses, not just for simple prototyping, as many perceive. The ability to use the VBA programming language and SQL database language allows producing any outcome that the business needs.

MS Access allows implementing:

- data validation
- drill-down functionality on rich forms
- aggregation of different types of data on a single report
- dynamic pivot tables
- generation of dashboards with various graphs
- attachment of other relevant documents to a record
- integration with other applications
- handling of tens and even hundreds of thousands of records on a decent computer

All this can be done without a complex server infrastructure -- not to mention all the overhead involved in managing a server and a SQL server. This applies to business settings with few users and not very demanding security requirements. For mission-critical data that needs strict security and where the number of concurrent users of the application is more than ten, SQL Server is an excellent, though expensive, choice.

In case MS Access is not designed and used properly, the database may get corrupted. There are certain techniques that shall be implemented for minimal chances of corruption. A proper database backup strategy has to be put in place to allow data recovery in case of failure.

To implement security while working in a multi-user environment, user access rights can be set up based on user Windows accounts - so that users can see only the data that they are authorized to see.

To summarize, a reliable business application should provide at least the following features:

- pleasant and functional user interface
- ease of use
- accurate, clean data
- error free data processing
- rich reports
- good performance
- proper deployment
- user-level security
- reliable backup

These tasks are from the realm of professional development. However, they are often delegated to power users and some of them are not applied at all. Well versed power user can successfully manage database that he created on his own desktop. However, if the application is important for the business and/or it must be shared among many users – seek professional assistance in evaluating and making best use of it. For line of business applications - don’t do it yourself - let a professional do it for you.