Is Your Data Modeling Maximizing Your Productivity?

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Our company purchased a data modeling tool to improve productivity and quality. Like most tools in the market, it enforces standards, validates input, compares models/databases, and generates reports and Data Definition Language (DDL). We recognize the value the tool provides. But we discovered by utilizing the supplied Application Programming Interface (API), we could improve productivity and quality even more. Using Microsoft Access and the API, we created our Data Modeling Toolbox.

In order to make best use of the tool, we realized additional features should be added to the Data Modeling Toolbox. The existing reports were numerous but we wanted one that supplied the developer with the table/entity, attribute/column information, all relationships and indexes. We were able to create the report we wanted including the ability to easily select the metadata is displayed in the report. We also included the option to place the data in the report into a well formatted spreadsheet. This has made supplying our customers' reporting needs flexible and efficient.

Our data modeling tool has all the bells and whistles when entering the information in the screens but that's a lot of clicking and typing. Our requirements are supplied to us mainly via spreadsheets. So, we developed a program in our Data Modeling Toolbox to read the spreadsheet and insert the metadata into the data model for new tables or addition columns to an existing table. Once that is done, the data modeler draws the relationship lines and manually makes updates or deletes to existing columns. This eliminates errors caused by manually typing and time savings is significant.

The data modeling tool does have a spell check for each object or an option to export selected data to a spreadsheet, spell check the spreadsheet and import the metadata back. All of this is time intensive so we programmed our Data Modeling Toolbox to read in the metadata of interest from the data model, invoke Microsoft Office Spell Check, make the changes and put the changes back into the data model. Within a few minutes all entity/attribute names and definitions can be spell checked.

Our Data Modeling Toolbox has many other functions incorporated that help us do a better job. There is effort needed to learn how to use the API and program the functions desired. But the improvement to quality and productivity are worth the effort and allow us to fulfill the data modeling function with a relatively small staff.

There are many data modeling tools available to enterprise architects. However, it may be required to provide added functionality in order to maximize productivity.