Master Model

What is a Data Model and how does this relate to the concept of Big Data?

When discussing the full iPM Epic suite, and in particular creating visualizations (i.e. on-screen, interactive reports), you may hear INDATA representatives referring to the "Master Model" provided as part of iPM Epic.

So what is the "Master Model" and what is a data model in the first place? Put simply, a data model pulls in information from one or more underlying data sources (i.e. SQL database tables, spreadsheets, etc.) and presents the data in such a way that makes it easy to navigate and interrogate by non-technical business users. It removes the complexity of how the underlying data is actually stored, i.e. spread out over many tables in what is referred to by database designers as "normalized form," which is optimized to support online transaction processing (OLTP), not data interrogation and reporting. In a data model, data is "de-normalized," i.e. flattened, into distinct categories optimized for interrogation and reporting. For each full iPM Epic client, INDATA provides a "Master Model" that takes the complexity out of interrogating data and reporting (creating visualizations) based on INDATA's data as well as other commonly used data sources (i.e. market data providers or proprietary data contained in spreadsheets, etc.)

In addition to making complex data easy to understand and navigate by non-technical users, the underlying technology which hosts the data model was engineered specifically for real-time interrogation of "Big Data," i.e. extremely large data sets, which provides both speed and scalability to users of this technology. Specifically, all of the data supporting the model is pre-loaded into RAM (Random Access Memory) located on a dedicated iPM Epic server.   Querying this data held in RAM is exponentially faster than reading it from the spinning disk where it is permanently stored.

Ultimately, a well-designed data model (i.e. the Master Model provided by iPM Epic) together with the robust interrogation tool that comes with Epic provides INDATA clients with a powerful solution allowing for what is commonly referred to as "Self Service Business Intelligence."

More about the "Master Model" Provided for Full Epic Users

As previously noted, each INDATA client who implements the full iPM Epic suite receives the "Master Model." This model was created and implemented over countless hours. In simplistic terms, the Master Model gives tables and fields user friendly names. For example, instead of users seeing a table named "rimsprt" and a field labeled "prt_shares" (which is how the data is stored in the underlying IndataDB_Main

database), they are presented with a category named "Holdings" and a field named "Shares" within the Epic Analysis user interface. Relationships between data categories are also defined so that, for example, when a date is selected from the dates category, visualizations can then filter only data from the Holdings for the selected date(s) which are then displayed and can be interacted with to show how the data changed over time "on the fly" within a given visualization/report.
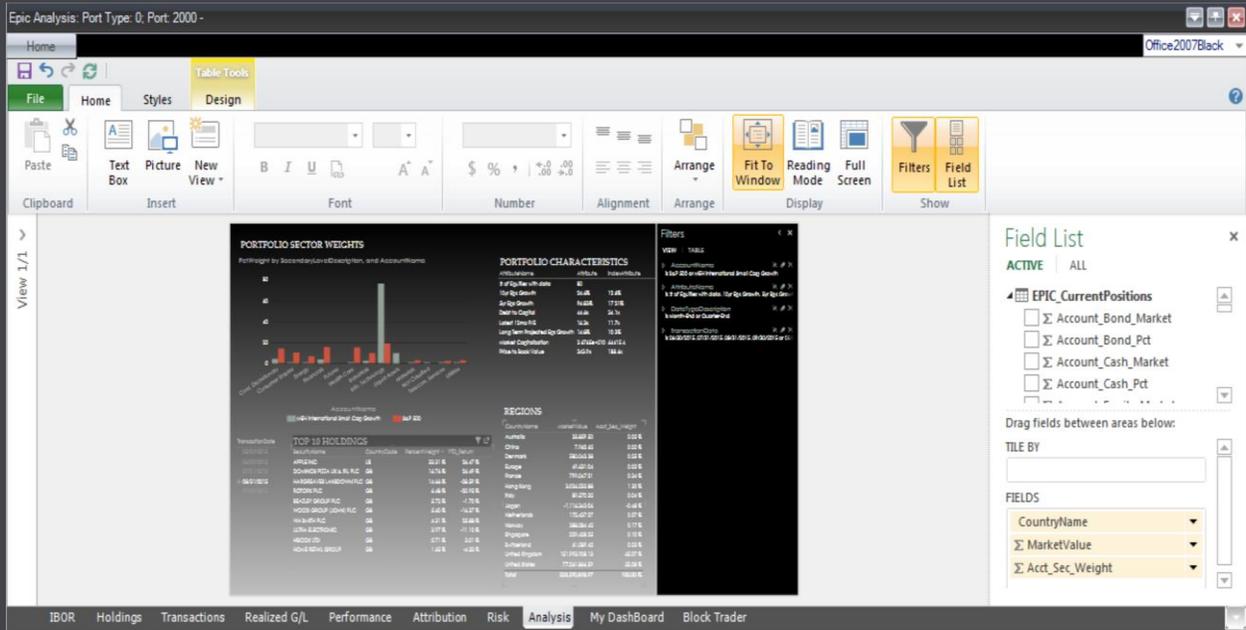
More importantly, all INDATA clients also have data unique to their firms which is fragmented (i.e. spread out across different sources, both databases and spreadsheets), difficult to access, and tough to manipulate. In many instances, this data could and should be better leveraged for a variety of important purposes from investment decision making to reporting and marketing. To enrich and expand upon the data available within iPM that is now included in the standard Master Model, our iPM Epic Data Professionals can incorporate this data into the client's Master Model, as well as create entirely new models as needed. Epic Data, iPM Epic's Enterprise Data Management (EDM) solution, is a key tool for automating the importing and warehousing of third party and proprietary data making it readily available for use. With a Master Model in place based on big data technology, each iPM Epic client is provided with an enterprise data source that can provide immediate and meaningful ROI firm-wide.

For More Information on iPM Epic, please contact your INDATA Representative at (888) 454-4060 or email info@indataipm.com