A Better Way to Implement Applications

When people think about Integrated Data Environments (IDE), the natural tendency is to immediately think of Analytical Data Warehouses which, when done correctly, provide clean, relevant, timely information for users who need to answer questions. This is absolutely part of the value of this environment, but many people do not consider the impact that an IDE can have on their operational processes and applications as well.

Over the years, we at MCTK have been involved in several projects where an application was being implemented and that application needed to have access to a variety of different data sources. A good example would be a blending tool for a refinery where, to come up with an optimal blending solution, the system needs to get tank and material information from a data historian like PI, scheduling information from systems like Welltrax and RightAngle, laboratory analysis information from LIMS, pricing information from market sources such as OPIS and Platts, and many others. The typical process during an implementation like this is to build data pipelines between these sources and the application being implemented in a long, drawn-out development process that is application specific.

Is there anything wrong with that? No. At the end of the process, you have a functional application that is integrated with corporate systems. This is what you set out to do. We would argue, however, that this is the wrong question. The question we should ask is: Is developing these custom connections between source and application on a project-by-project basis the **BEST** way to accomplish our goal? At MCTK, we would argue that it is not. Here is our reasoning:

- This approach is a one-off. Those pipelines and the Master Data rationalization that will allow them to be used are specific to an application and will be difficult if not impossible to reuse for other applications that need access to the same data. In

other words, when you build the next application, you must do all this work over again.

- Once the pipelines are built, without an IDE, much of the value of this work is lost. Ask yourself how many people in a company would like to be able to see lab data but do not have access to the LIMS? Or market pricing data? Or scheduling data. By putting the data into an open IDE, you make it readily available for anyone who wants to create value from it.

- This approach leads to data and codebase siloes which are complex and expensive to support.

We at MCTK believe there is a better way. By sourcing data into an IDE and then using that IDE to support the data requirements of downstream applications, you create a situation where the value of each project is captured and made available to future projects.
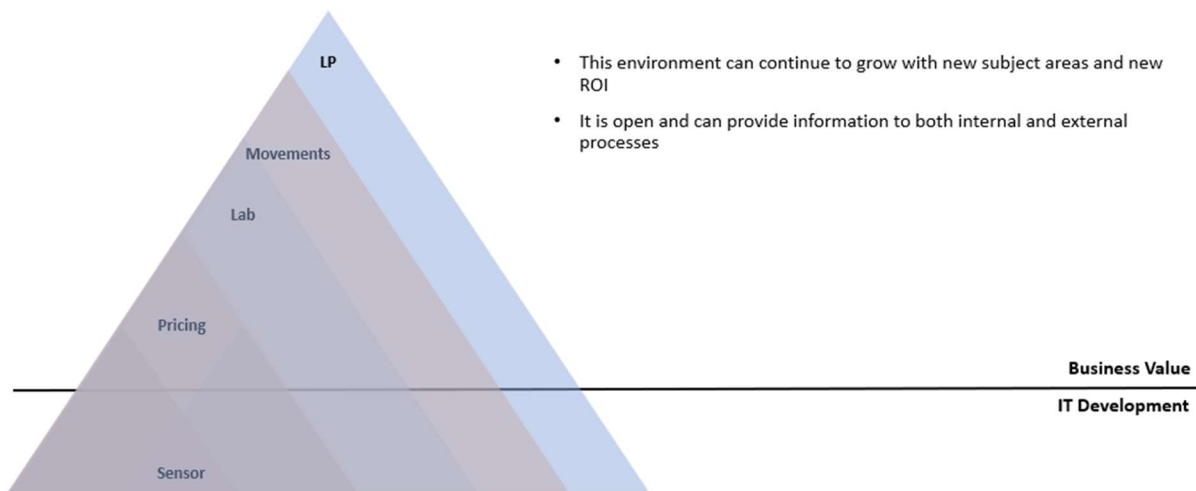
Also, having this information easily accessible to anyone who wants it using standard tools prevents the creation of local Excel data stores and this competing sets of data all vying to see which one is accurate.

So, this sounds good, but what is it worth? An audit conducted by a client implementing a Crude Supply Optimization system concluded that having an MCTK developed IDE **saved the company 9 months of development time and $7M** in direct costs and **"significantly greater savings in future costs that could not be directly quantified"**.

Don't throw your effort away. Get value out of it forever. Let our consultants at MCTK show you how.