Launching a Data Warehouse Project?
Some Lessons Learned...

PART TWO
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In the previous issue, we described why many organizations are embarking on Data Warehouse/Business Intelligence (BI) projects and shared some important lessons learned from our consulting experience. Recently, we have been working with a consortium of four United Ways (Calgary; Lower Mainland, BC; Winnipeg; and Toronto), who have together taken a leadership role in this area within the charitable organization sector, to develop and implement a federated data warehouse. Here are a few further insights from our experience to help you through a Data Warehouse/BI project:

Keep expectations current – At the time when a project is being launched, especially one to build a data warehouse/BI system, expectations can be a little abstract. What exactly will be produced and how will it really support the organization? The expectations and true deliverables may not crystallize until much later, when there are some sample analytics that can be presented and discussed. At that point, the implications for the organization and how the system may help answer previously unanswerable decision-making scenarios or business questions become much clearer. The time lapse from project initiation, combined with the emergence of more tangible expectations as the project proceeds, warrants revisiting the expectations and deliverables with project sponsors and stakeholders at key points. In turn, this may mean a change in project direction, scope, schedule or budget. Ultimately, it helps ensure clarity and avoids misdirected investment.

Provide sufficient time and support for data validation – Data validation is a critical step in quality assurance and user acceptance testing. It is essential for establishing confidence in the project and the presented analytics (proper data loads from the various data sources; correctness of data extractions and transformations; generation of reliable reports, views and dashboards; etc.). Sufficient time and support must be allocated to the user community (typically, expert users who have the necessary understanding of the data and calculations) to fully assess the delivered analytics and identify needed fixes and changes. Since this kind of project is inherently dependent upon and will succeed or fail based on the confidence attributed to the data and the presented analytics, the data validation step cannot be short-changed. Keep in mind, too, that data validation can be a tough, frustrating process, so maintaining momentum and enthusiasm will sometimes be challenging.

The best approach calls for a combination of: a well-structured and communicated process; a user community which formally sets aside the needed time and prioritizes this task accordingly (with full management backing); and, a project team ready to support the users and follow through diligently on the inevitable fixes and changes.

Strike the right balance between local and centralized development – As with many IT projects, users will be interested in, even demand, some degree of user-driven (local) authoring, customization or development capabilities. Local staff understand their data and how it can best inform decisions. Empowering users can lead to expanded benefits and faster turn-around in addressing local needs. It helps give those users a greater incentive to adopt the data warehouse/BI system and a larger stake in its ongoing viability. At the same time, it can off-load the central IT organization from myriad requests for relatively small changes or enhancements ("would you please add field x to report y..."), which can pile up quickly and feel overwhelming.

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The right balance between local and centralized development will look different from organization to organization and project to project. One option is for the central IT organization to focus on the selection of reporting tools, implementation of new data sources and major (common) development components; the tools, data sources and general infrastructure would then enable local authoring or development of reports, views, etc.

Finding this balance requires careful consideration of: who specifically would be empowered (any user? expert users? specialized technical resources?); what tools and processes would they need; what support or training would be required; what testing, privacy/security and maintenance issues would need to be addressed; and, how would their roles and responsibilities integrate with those of the central IT organization (and vice versa).

Whether you are considering launching a data warehouse/BI project or have already begun development, the lessons above should be helpful in achieving your vision and successfully meeting the needs of your stakeholders.

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