

## **Design Tip #88 Dashboards Done Right**

By Margy Ross

With their graphically appealing user interfaces, dashboards and their scorecard cousins are demo superstars. Dashboards have really grabbed the attention of senior management since they closely align with the way these people operate. What's not to like about the promise of performance feedback on every customer or supplier facing process in the organization at a glance. It's no wonder execs are enthused.

But there's a dark side to dashboard projects. They're extremely vulnerable to runaway expectations. They're risky due to the cross organizational perspective inherent in most dashboard designs. And they can be a distraction to the DW/BI team; rather than focusing on the development of an extensible infrastructure, dashboard projects often encourage a data triage where key performance indicators from a multitude of processes are plucked and then pieced together using the systems equivalent of chewing gum and duct tape.

Dashboards and scorecards done right are layered on a solid foundation of detailed, integrated data. Anything less is ill-advised. Dashboards based on manually collected, pre-aggregated, standalone subsets of data are unsustainable in the long run.

If you have an existing data warehouse that's populated with the requisite detailed, integrated data, then you should tackle any proposed dashboard development project with gusto. Dashboards present a tangible opportunity to deliver on the promise of business value derived from your data warehouse. The dashboard interface appeals to a much broader set of users than traditional data access tools. In addition, dashboards provide a vehicle for going beyond rudimentary, static reporting to more sophisticated, guided analytics.

But what do you do when your executives are clamoring for a sexy dashboard, but there's no existing foundation that can be reasonably leveraged? Facing a similar predicament, some of you have bootstrapped the dashboard development effort. And it may have been initially perceived as a success. But then middle managers start calling because their bosses are monitoring performance via the dashboard, yet there's no ability for them to drill into the details where the true causal factors of a problem are lurking. Or management starts to question the validity of the dashboard data because it doesn't tie to other reports due to inconsistent transformation/business rules. Or the users determine they need the dashboard updated more frequently. Or your counterpart who supports another area of the business launches a separate, similar but different dashboard initiative. The quick bootstrapped dashboard will be seriously, potentially fatally, stressed from the consequences of bypassing the development of an appropriate infrastructure. Eventually you'll need to pay the price and rework the initiative.

While it's perhaps less politically attractive at first, a more sustainable approach would be to deliver the detailed data, one business process at a time, tied together with conformed master dimensions, of course. As the underlying details become available, the dashboard would be incrementally embellished to provide access to each deployment of additional information. We understand this approach doesn't deliver the immediate "wow" factor and requires executive patience. While executives may not naturally exhibit a high degree of patience, most are also reluctant to throw away money on inevitable rework caused by taking too many shortcuts. Having an honest conversation with business and/or IT management so they fully understand the limitations and pitfalls of the quick-and-dirty dashboard may result in staunch converts to the steadier, more sustainable approach.

Those of us longer in the tooth remember EIS, or Executive Information Systems, that blossomed briefly in the 1980s. EIS suffered from exactly the same problem we are discussing here. The carefully prepared executive KPIs were not supported by solid detailed data that could withstand drill down. Any good executive is going to ask “why?” And that’s when the data warehouse and its dashboards need to sit on a solid foundation.