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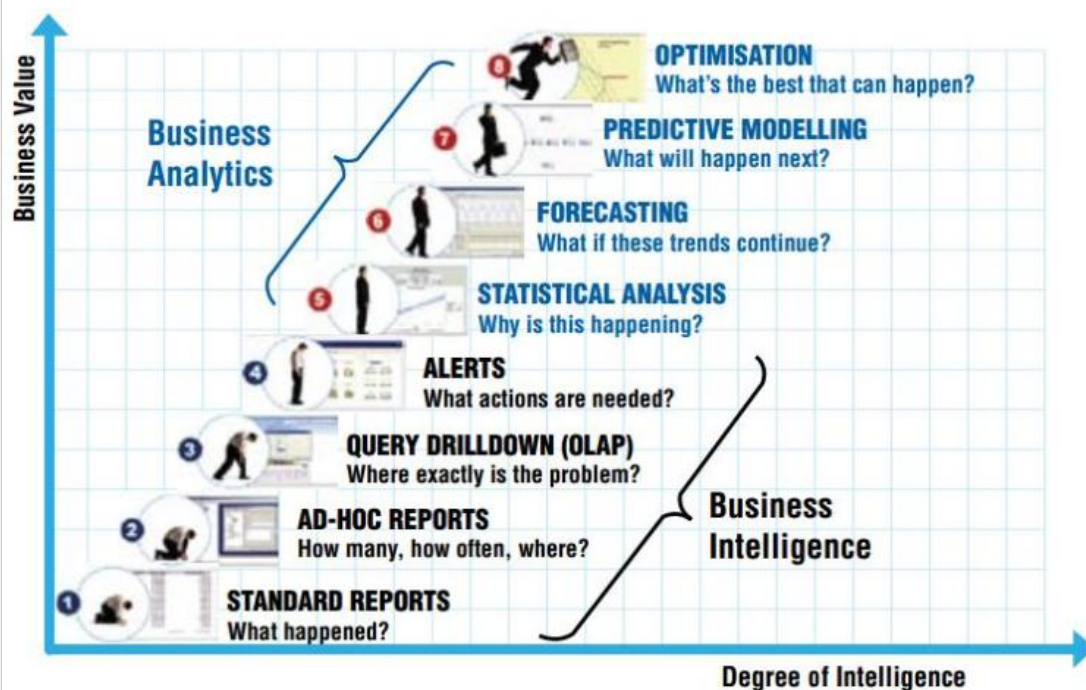HOME   AI   ML   DL   ANALYTICS   STATISTICS   BIG DATA   DATAVIZ   HADOOP   PODCASTS   WEBINARS   FORUMS   JOBS   MEMBERSHIP   GROUPS   SEARCH   CONTACT

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Eight Levels of Analytics for Competitive Advantage

- Posted by Michael Walker on September 6, 2012 at 11:30am
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Optimization answers the question: How do we do things better? What is the best decision for a complex problem?

Example: Given business priorities, resource constraints and available technology, determine the best way to optimize your IT platform to satisfy the needs of every user.

Optimization supports innovation. It takes your resources and needs into consideration and helps you find the best possible way to accomplish your goals.

Predictive Modeling answers the questions: What will happen next? How will it affect my business?
Example: Hotels and casinos can predict which VIP customers will be more interested in particular vacation packages.
If you have 10 million customers and want to do a marketing campaign, who's most likely to respond? How do you segment that group? And how do you determine who's most likely to leave your organization? Predictive modeling provides the answers.
Forecasting answers the questions: What if these trends continue? How much is needed? When will it be needed?
Example: Retailers can predict how demand for individual products will vary from store to store.

Forecasting is one of the hottest markets – and hottest analytical applications – right now. It applies everywhere. In particular, forecasting demand helps supply just enough inventory, so you don't run out or have too much.

Statistical Analysis answers the questions: Why is this happening? What opportunities am I missing?

Example: Banks can discover why an increasing number of customers are refinancing their homes.

Here we can begin to run some complex analytics, like frequency models and regression analysis. We can begin to look at why things are happening using the stored data and then begin to answer questions based on the data.

Alerts answer the questions: When should I react? What actions are needed now?

Example: Sales executives receive alerts when sales targets are falling behind.

With alerts, you can learn when you have a problem and be notified when something similar happens again in the future. Alerts can appear via e-mail, RSS feeds or as red dials on a scorecard or dashboard.

Query Drilldown (or OLAP) answers the questions: Where exactly is the problem? How do I find the answers?

Example: Sort and explore data about different types of cell phone users and their calling behaviors.

Query drilldown allows for a little bit of discovery. OLAP lets you manipulate the data yourself to find out how many, what color and where.

Ad Hoc Reports answer the questions: How many? How often? Where?

Example: Custom reports that describe the number of hospital patients for every diagnosis code for each day of the week.

At their best, ad hoc reports let you ask the questions and request a couple of custom reports to find the answers.

Standard Reports answer the questions: What happened? When did it happen?

Example: Monthly or quarterly financial reports.

We all know about these. They're generated on a regular basis and describe just "what happened" in a particular area. They're useful to some extent, but not for making long-term decisions.

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