

Analytics Spectrum - II

Spectrum of Business Analytics - Part II

Dashboards - Answer to What's happening now?

Dashboard is an Organized and well-presented summary of key business metrics. They are usually interactive so that the user can find out the exact information he is looking for. Dashboard, in ideal state should provide real time information about performance. Following is an example of how a dashboard might look like:



The whole science of creating data model, dashboards and reports based on this data is also known as "*Business Intelligence*".

Tools used for creating dashboards:

For limited size of data, dashboards can be made using Advanced excel. But, typically Organizations use more advanced tools for creation and dissemination of tools. Business Objects, Qlikview, Tableau, Hyperion are names of some such softwares.

Skills required for creating dashboards:

- Strong structured thinking: The person will need to create the entire architecture and data model
- Business Understanding: If you don't understand what you want to represent, may God help you!

Predictive Modeling - Answer to What is likely to happen?

This is where you take all your historical trends and information and apply it to predict the future. You try and predict customer behaviour based on past information. Please note that there is a fine difference in forecasting and predictive modeling. Forecasting is typically done at aggregate level, whereas predictive modeling is typically done at a customer / instance level

Tools used for Predictive modeling:

You can start with basic predictive modelling in Excel. For more advanced modelling, SAS is the most commonly used tool followed by SPSS, R, Matlab.

Skills required for Predictive modeling:

- Strong structured thinking
- Business Understanding
- Problem Solving

Big data - Answer to What can happen, given the behaviour of the community?

Imagine applying predictive modeling with a microscope in hand. What if you can store, analyze and make sense out of every information about every customer. Not only this, any analysis you perform would be at customer level (rather than at a segment level) and hence you can roll out highly relevant personalized information quickly. What kind of social media community is your customer attached to? What kind of searches is he performing? Big data problems arise when data has grown on all three Vs (Volume, Velocity and Variety). You need data scientists to mine this data.

Tools used in Big data:

This is a very dynamic domain right now. A tool which used to be market leader 6 months back is no longer the best. Hence, it is difficult to pin down specific tools. These tools typically work on Hadoop to store the data.

Skills required for harnessing big data:

- Strong structured thinking
- Advanced Data Architecture knowledge
- Programming skills
- Ability to work with unstructured data

Test Yourself

Q3. The analyst (from the same insurnace company we discussed in last chapter) analyses the situation and finds out that overall Headcount of Sales people (Financial planners) employed by company were down by 30% compare to last year. Basis this insight and various other parameters, the analyst comes out with prediction of expected performance at an agent level.

- Option 1: Reporting
- Option 2: Dashboarding
- Option 3: Detective Analysis
- Option 4: Predictive modeling

Show/Hide Answer

Q4. The management is impressed by the analysis and has agreed to track a list of metrics going forward. They want a nice graphical representation of these metric always available to them. What is the right solution to this requirement?

- Option 1: Reporting
- Option 2: Dashboarding
- Option 3: Detective Analysis

• Option 4: Predictive modeling

Show/Hide Answer

Additional read: What is big data and how is big data architecture designed? (http://www.analyticsvidhya.com/blog/2013/07/big-data/?utm_source=Analytics101)

(content.php?topic_id=6&module_id=3&course=analytics101) (content.php?topic_id=8&module_id=3&course=analytics101)

internshala.com (http://internshala.com)