

BI – Dashboards and What Not

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(In this article I am continuing the dialogue of the MD of a large company with Mr. Basu who is the head of one of the large Business Units of the company. Mr. Basu has invested a lot of money in Business Intelligence solutions, and he is quite sure that he will surpass his MD's expectations. But even now the MD is one up on him.)

The current year has been good for business, and the topline and bottom line have considerably improved. The MD is back from his visit to the HO and is in a good mood. He is awaiting his regular review meeting with Mr. Basu. Being Friday, he is dressed casually in light beige corduroy trouser and a green T-shirt.

MD's Secretary : Good Morning Mr. Basu, MD is waiting for you. MD seems to be in a good mood today.

Basu had sent him the links to an attractive looking dashboard on business performance. He is confident that he will get accolades from the MD.

Basu : Good ..Morning Sir.

MD is facing his window looking at the ocean waves. Soft music is on. Without looking at Mr. Basu he starts his dialogue.

MD : Mr. Basu your inventory part number AML-PU-1203 is showing very low inventory turn.

Basu is taken by surprise. How does the MD know such a low level detail?

MD : (continuing) and so is part number PZK-PU-2348.

Basu : Anything wrong Sir?

MD turns around and sits in his comfortable chair and smiles at Mr. Basu.

MD : Mr. Basu, I have seen your dashboard and I am quite impressed with the same. But it still does not give me actionable information.

Basu : But sir, in the dashboard you can see that the Inventory Ratios are well within control.

MD : Basu did you hear of the anecdote of the accountant who wanted to cross a river and almost drowned ?

Basu : No Sir..!

MD : Well the accountant asked the farmer standing near the river how deep was the river. The farmer replied that in some places it is shallow and some places it is deep. So the accountant asked, what the average depth is. The Farmer replied that the average depth is about 5 feet. So the accountant confidently started crossing the river, and was about to drown in the place where the river was 30 feet deep. Thankfully the farmer saved him.

Basu : I have not understood the significance of this sir.

MD : Basu, a dashboard shows an overview of information. It only gives a broad direction. Just by viewing the dashboard, it is difficult to judge whether details are good or bad. And remember that you have to get into details if you have to remain in control.

MD : (continuing) While I do agree that the inventory ratios are within control and in line with our AOP (annual operating plan), but remember that our job is not just to be in line with the AOP, but to surpass it. And to do so, we have to pay attention to details.

Basu : Sir, I am understanding a little bit, but please explain further.

MD : Basu, how will you improve inventory performance beyond you current performance ? You will have to segregate your items doing well from the items not doing well. And then concentrate on the items doing well. Well when there are 45000 items in your inventory, it is not possible to see all this in the dashboard. The dashboard will become very slow and ineffective.

Basu : Then what do I do ?

MD : It is also not possible that your inventory manager to see each item behavior in the ERP and identify items which need to be corrected.

Basu : (breaking into a cold sweat)..Then what do I do ?

MD : Don't worry Basu, I have taken some steps to help you. I have asked our BI consultant to write an Analytical Report on the same data which is being used for your dashboard. All that he has done is to create an Excel Pivot Table report on Inventory turns. He has added some 'intelligent dimensions' which quickly segregate the good guys from the bad guys.

MD presses a button under his desk. MD's secretary rolls in a tray of coffee and digestive biscuits. She also connects MD's pc to a large LCD screen, and an Inventory turns report comes alive on the screen. The MD does some filtering and a drag and drop to show the relevant view.

MD : Basu, now if you see the screen, the overall inventory balance and the inventory turns are as per the dashboard. But if you see there are almost 1100 items which are having very low turns. If you take care of these items, then your inventory position will improve beyond the budget, and I am sure that the group CFO will give you a pat in the back !

Basu : This sure is interesting. But I wonder how these items show low turns when we have got a very good Material Requirement Planning (MRP) process running in our ERP. It does not permit a stock build up.

MD : Basu, proof of the pudding is in the eating. Just following a process does not automatically mean that the result will be good. The fact is that there are 1100 items having low turn. It is possible that while your MRP process is good, your Bill of Materials (BOM's) have not been updated. There could be so many reasons. So the end result has to be continually monitored, and the process accordingly modified. Now you can take some of these items, and verify them in the inventory and you may find that these have got purchased recently even though there was no consumption in the past few months. This is because of an error in the BOM.

Basu : Y..Yes...that may be possible. I shall immediately take corrective action on this.

MD copies the report on a USB pen drive and gives it to Basu.

MD : Fortunately the technologies which our BI consultant uses enable a portable version of BI reports. So here is the USB pen drive. You can analyse the inventory and find many such conclusions. Let me have your detailed report on how you will further reduce your inventory by Monday morning 9 am. Have a great weekend !

Basu : Th..Thank you sir. I shall surely study this over the weekend.

Basu comes out of the meeting wiping his forehead. He looks menacingly at MD's secretary when she wishes him a good weekend.

Observations :

In my practice in BI, I have seen the BI is equated with Dashboards containing attractive scorecards, gauges, graphs and maps based dashboards having red/green/yellow indicators and what not. Recently I also saw a dashboard where the user could slide the sales and as sales increased we could see the profitability increasing. I wish everything was so simple.

Dashboard is only a very top level indicator. It is not designed to show you everything. It is like the cover of a book. You cannot judge the book by its cover, you cannot judge a movie by its trailer!

Design Principles:

- 1 BI dashboards must have supporting reports where by the analyst can do a deep dive into data in order get a full grip on the problem. Trying to build in a huge amount of analytics into a dashboard is counterproductive as it can slow down the performance.
- 2 BI dashboards should be designed in a way that they give an indication that something is wrong somewhere. For example the Inventory turns KPI which shows that the overall inventory turns are (for example) 12, should be drilled down into showing number of items where items are classified by inventory turn buckets e.g. items having less than 8 turns, 8-12 turns and > 12 turns. Now the dashboard shows that there is something wrong. An analytical report attached to the dashboard can now drill down to identify the items having low turns.
- 3 BI reports should not only be 'good looking' but they should also be actionable. They must lead to methods by which business benefits are derived. And therefore while designing these reports you must meet up with actual business users and find out how they use the reports to go about achieving their results. You must support them with summary as well as detailed report at a click of a button, so that they can concentrate doing their work, rather than find out where information is in the report.

About the Author:



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