

BI – Sales Analysis

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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. The screen shots are not necessarily of the dialogue, but will be illustrative enough to show you what can be done)

Mr. Basu has been summoned to the corporate headquarters by the MD, who has just returned from a foreign trip. Mr. Basu's BU has done well during the recessionary times, just about managing to meet the top line as per the annual operating plan. He is a bit concerned, as the MD's tone over the phone sounded a little worrisome. Ignoring the smart salute of the security guard, he quickly rushes to the elevator, and punches the button of the top floor.

The secretary ushers him into the MD's cabin. MD is looking out of the glass wall facing the city and the beautiful sea shore.

MD : How are you Mr. Basu ?

Basu : I am fine sir. And how are you ?

MD : I am fine, but could be better. I have had a very tough time with our headquarters abroad. They are insisting that this time there has to be a 25% growth on the top line. I explained to them the recessionary trends etc. But they are not willing to listen.

Basu : Sir 25% growth is not possible. We are barely meeting the AOP this time.

MD : Basu, in words of Dhirubhai Ambani, I am not accustomed to the words 'not possible'. Let's analyse our sales last year, and find out how we can improve it.

Basu : Sir, I have hired a good business analyst. I will take his assistance in analyzing the sales of last few years, and get back to you in about 10 days time with a plan.

MD : Fine, but remember that if we have to increase the top line by 25%, then our plan has to show an increase of 40%.

Basu : Yes, sir. Give me 10 days.

The secretary stifles a smile when she sees Basu coming out, harassed and sweaty, wiping his forehead with his handkerchief. The other BU heads that had come earlier also came out in a similar manner. The heat is on she thinks.

Basu's division handles a wide portfolio of products which face competition in the market. There are a lot of players. While his company is a market leader, there is a huge pressure coming in from non-branded players and foreign imports. How do I even make a plan of 40% growth which will have support of my sales team and will pass the hawk eye of the MD?

Ten days later Basu is back in the MD's cabin with a thick file of various sales analysis reports. Basu is thinking : the Business Analyst has done a good job. Now I will dump these reports on to the MD and make him realize how difficult it is to plan for a 40% increase. After 10 days of day and night work, we have barely got a 10% planned increase.

MD has his laptop in front of him. He takes the thick folder offered by Basu and puts it on one side.

MD : Basu, what has been our year on year growth for the last three years ?

Basu : Sir, please see Page 3. We have given this. Our YOY growth has been just about 15%. Last five years data has been given sir. I don't think we can achieve 40% growth. I have checked with all my regional managers, and they all agree with me. Last year our growth was just about 10% due to recession.

MD : Basu give me the region wise YOY growth rate.

Basu : Sir, please see Page 10. Each region mainly shows similar growth rate. Sir, please negotiate with the foreigners. Promise them only 10% growth. We will then try to achieve 15% so that they will be pleased.

MD : Basu, we don't have that option. It's do or die. I am not going to have no for an answer. Now tell me what your product wise growth rate is for the last five years.

Basu : Sir, I don't have that data. That will take a long time to make. We have so many products and thousands of invoices. That will take a full team of people.

MD : Don't bother Basu. I have done all your work. I have built a Sales Analysis with Intelligent Dimensions which will show us the way.

MD drags the product dimension at the row level. The system immediately shows product wise growth rates. He pulls in the growth buckets before the products. The system now shows bucket wise growth rates.

Sales & Contribution Analysis		Selection	
		item_gain_loss	save Delete
fin_yr_cd	2009-10	ProdCatg	(All)
year_period	(All)	ProdCode	(All)
emis_period	(All)	division_info	(All)
cust_info	(All)	sale_district	(All)
ProdGroup	(All)	Zones	(All)
		sales_office_info	(All)
		dis_channel_info	(All)
		currency	(All)
		i_item_gain_loss	(All)
		i_Contribution_Buc	(All)
Values			
i_cust_gain_loss	sector	Qty	SaleAmt
Cust-Exist-Increase	Sector-10	38,275	84
	Sector-11	180	19
	Sector-12	76,438	570
	Sector-13	523	221
	Sector-14	927	57
	Sector-15	37,877	354
Cust-Exist-Increase Total		154,220	1306
Cust-Exist-Reduce	Sector-10	7,354	29
	Sector-11	159	12
	Sector-12	37,270	185
	Sector-13	19,580	161
	Sector-14	1,088	33
	Sector-15	1,482	681
Cust-Exist-Reduce Total		66,933	1101
Cust-Gain	Sector-10	9,884	39
	Sector-11	57	7
	Sector-12	5,027	40
	Sector-13	2,224	279
	Sector-14	734	39
	Sector-15	61,475	321
Cust-Gain Total		79,401	726
Cust-Lost	Sector-10	1,506	17
	Sector-11	37	
	Sector-12	5,020	31
	Sector-13	5,960	183
	Sector-14	330	19
	Sector-15	3,394	148
Cust-Lost Total		16,247	397
		TranPrice	ContriAmt
		Contri%	SaleShare
		ContriShare	

Figure 1 : The above screenshot shows an illustration of how comparison between two years sale identified customers who gave the company increased business and where the business reduced. It also identifies new customers gained and those which are lost. The user can drill down to the customer and item level also.

MD : Basu, while your overall growth rates are 10-15%, it can be seen that some products are showing phenomenal growth rates of over 50-60%. I see that these are new products.

Basu : Uh..Yes sir, some products are selling well. But these are products which require a lot of training to the staff and the customers. With the huge selling pressure, we do not get time to do this training, so we stick to the traditional products.

MD : Basu, so put budget for training your staff. Make training camps for the customers also, and push these products more. You will get much better top line, because these products actually save cost to the customer.

MD removes the product dimension and brings down the responsibility dimension. All the sales person come at the row level and the 5 years sales in columns. He brings down the bucket dimension so that all sales person get classified by yoy growth rates.

MD : Basu, while your overall growth rates are about 10-15%, there are several people in your team who are showing significant growth rates, in fact almost 40-45%.

Basu is scratching his head. Now where did the MD get this information. Out of almost 250 sales engineers, how do I find out all this.

Basu : Yes sir, there are a few new people we had taken. They have a huge drive and have been very successful in convincing our customers to move over to our products. But three of such people have left sir.

MD : Basu, most of your people are being driven by the AOP growth percentages. Once they achieve the 15% growth as expected from the AOP, then they get satisfied and don't drive themselves beyond that. While these youngsters whom you have employed, don't carry such baggage, and are driving themselves to get noticed by the top management and take the fast track in their career.

MD drags the responsibility dimension. The responsibility dimension is HO, Regional Office, Zonal office, Branch Office, Product Manager, Salesman.

MD : Basu, your sales hierarchy is also too long. The salesperson has got 5 people sitting on top of him. Obviously the best people are leaving, because they are feeling suffocated. Any new ideas they get will be taking a huge time to clear, because of the long hierarchy. I suggest you have only a two level deep hierarchy. Implement a system by which a person can freely communicate with the product manager and the HO. Give them freedom in pricing within a price band without getting price clearances each time. Make special incentives for people who are achieving beyond the AOP targets. Ensure that we don't lose the bright minds. However to get a proper handle, next time give me an analysis of discounts given as compared to sales achieved.

Basu : Yes sir, I will do so sir.

Basu's division makes generic products which can be used in several applications. MD brings down the application dimension, so that all the sales get classified by application.

MD : Basu, there are several applications which are showing negative growth, but there are many whose growth is tremendous, almost 50-60%. Why is that ?

Basu : Sir, I will have to check this in detail. Sir are you having some special, expensive sales analysis tool ?

MD : I will tell you that in a moment.

MD drags the customer dimension to the right of the application dimension. The report shows that while there were several customers last year for some applications, all these customers have not given business in the current year.

Application	Qty	SaleAmt	TranPrice	ContrsAmt	Contr%	SaleShare	ContrShare
Cust-Exist-Increase							
Application-001	26	144	73	72	50%	41.21%	44.97%
Application-2	4,572	26	17	9	33%	7.31%	5.36%
Application-3	21,696	45	23	22	49%	12.95%	14.01%
Application-4	1,397	26	15	13	45%	8.05%	7.99%
Application-6	4	36	18	18	50%	10.29%	11.30%
Cust-Exist-Increase Total	27,695	279	146	133	48%	79.81%	83.63%
Cust-Exist-Reduce							
Application-2	34				33%	0.04%	0.03%
Application-3	19,464	40	21	19	47%	11.49%	11.79%
Application-4	329	6	3	3	47%	1.08%	1.90%
Cust-Exist-Reduce Total	19,847	47	26	22	47%	13.38%	13.72%
Cust-Gain							
Application-001	16	14	14		6%	4.14%	0.03%
Application-3	2,305	5	3	2	46%	1.35%	1.37%
Application-4		1	1	1	47%	0.26%	0.41%
Cust-Gain Total		21	18	3	14%	6.89%	1.81%
Cust-Lost							
Application-001	1				-36%	0.10%	-0.07%
Application-3	951	2	1	1	50%	0.56%	0.61%
Application-4	43	1			56%	0.26%	0.29%
Cust-Lost Total	995	3	2	1	41%	0.92%	0.84%
Grand Total	51,132	260	191	159	46%	100.00%	100.00%

Figure 2 : The Report shows the applications for which the customers business has increased / decreased and customers gained / lost. The user can drill down to the customer level also.

MD : Basu, you are having a customer exodus in some applications ?

Basu : Sir, there are several non-branded companies which have come up with some very cheap products and the customers are getting lured to them. There are various applications where the product quality is not the highest priority. So customers go in for that. But where the product quality matters, our sales are zooming up.

MD drags the sales person dimension between the application and the customer dimension.

MD : But I see that you have put many sales persons on those losing applications. There are so many of them fighting a losing battle. However for the high growth application there are just a handful. With the result that the market in the high growth application is remaining untapped, while we are fighting a losing battle in the other competitive applications.

Basu : (sweating profusely) Yes sir. In fact I myself put more people on the competitive applications thinking that very aggressive salesmanship may win our customers back. But that did not happen.

MD : Basu, put more of the bright salespersons on the high growth applications and tap the hitherto untapped markets. Secondly, remember that when you can't beat them, join them. In the competitive applications, create a cost breakdown of your product, strip of all fancy features and give a entry level model which will have low contribution but will penetrate the market and destroy competition.

Basu : Yes, sir.

Basu : Sir when I hired by business analyst he was using Microsoft Business Intelligence tools, with which he generated all the reports which I have given to you.

MD : (smiling) What a coincidence Basu. I am also using the Microsoft Business Intelligence tools, with front end in Excel. I don't feel like using any other tool than Excel. I have grown up with that.

Basu : (wide eyed) But sir, your tool has so many features, it sounds like an expensive tool.

MD : Not at all expensive my dear Basu. The tool has the same features as yours. The key differentiating factor is intelligent dimensions. The key is not in using expensive tools, but in using tools creatively. I believe Socrates said something like this ... ask the right questions and you shall get the right answers. So I had a very detailed sitting with my BI developer and asked him several questions. Then I left it to his creativity to generate what they call 'intelligent dimensions' which answer a lot of my questions and permit me to do so much ad hoc analysis. Remember Basu, it is not the weapon, but the man behind the weapon that counts.

Basu : Yes sir. Can I have the business card of your BI developer ?

MD : Certainly Basu, here it is...

Basu : Thank you, Sir !

I like to believe that Basu implemented the several tips given to him by MD and in about 10 days time brought in a revised forecast of sales which was 50% higher than the previous year's sales, and that too with the full backing of his sales team. He revamped his sales organization making it flat and responsive and created an incentive system which encourages his team to go much beyond the annual operating plan.

BI Design Principles

BI designers, you need to get into the minds of the users of the reports. Don't give them a Rubik's cube of infinite permutations and combinations. Give them actionable information. Remember that intelligent dimensions make the information actionable.

Also remember that BI reports, are continuously evolving. New perspectives are required so that the business always remain on the top. Management must permit BI designers to attend some of the management meetings so that they understand the thought process and are able to identify and implement intelligent dimensions in their reporting.

About the Author:



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