

2011

Need for 3rd party BI tool for SAP BW

Case Study

This Case study tries to showcase the problems faced while using SAP BI tools and how those problems can be solved using 1KEY Agile SAP connector

MAIA Intelligence



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Abstract

In Today's corporate world most of the companies are entirely dependent on ERP for internal working. ERP solution forms the backbone of the company. Expectations from the ERP solution are increasing day by day. Daily tons of data is fed into system. Companies are investing millions of dollars in ERP solution or have invested in date to improve the way they conduct their business. While ERP provides significant benefits, organizations are finding that in order to achieve critical decision making business goals, they often need to supplement it with additional external reporting capabilities for its end user. SAP is considered to be one of the best ERP solution providers. SAP also comes with additional BI reporting tools. But are these tools capable enough to deliver reporting capabilities in true sense? Are there any constraints to these reporting tools? Can these constraints be resolved? Let us review all these questions and find out what lies beneath and what the possible solution is.

SAP – BW

SAP is the world's largest business software company. SAP focuses on six industry sectors: process industries, discrete industries, consumer industries, service industries, financial services, and public services. It offers more than 25 industry solution portfolios for large enterprises (under SAP R3) and more than 550 micro-vertical solutions for midsize companies and small businesses (with SAP B1). Various products provided by SAP are SAP CRM, ERP, PLM, SCM, SRM, etc. The most widely used modules are Financials and Controlling (FICO), Human Resources (HR), Materials Management (MM), Sales & Distribution (SD), and Production Planning (PP), etc.

SAP also provides a range of business intelligence solution.

- SAP Business Objects Suite (BOBJ)
- SAP Analytics
- SAP Business Information Warehouse (BW)
- SAP Business Intelligence (BI)

Leveraging SAP data for Business Intelligence

Business Intelligence (BI) has not only reached critical level of priority from point of corporate managers but also has reached a new level of importance from point of operational decision makers. Capturing data has become relatively easier with various ERP solutions available in market but converting this data into information which can be put to use is the need of the day. Effective BI is not just simply storing vast amount of data. BI can be the difference between guesses and decisions based on facts. BI not only helps companies get the insight they need and other important trends, it also delivers the necessary analysis and forecasting tools to generate key information and manage business performance. Yet, the fast fluctuations in external demand clearly shows that many BI system can no longer meet today's growing requirements for managing performance.

In general, one question has gained central importance: How can companies access data from their numerous operational systems and integrate

it with internal and external information from different transactional and decision support systems for analysis?

Requirements of Business Intelligence system

Although requirement for BI tool change from company, industry, individual user, partner etc. perspective but there are few requirements which remain same. They are as follows:

- a) **Live Analysis:** BI is moving closer to operational level. In order to provide an all round view of the entire enterprise, companies need to incorporate past, highly aggregated KPI's as well as detailed operational data in their analysis. This requires integration of most current/ Live data.
- b) **Scalability:** As the enterprise grows, BI capabilities need to be enhanced. Thus BI need to have scalable technological architecture.
- c) **Analysis across multiple systems:** Often companies utilize multiple disparate systems for specific department task. Multiple modules, multiple versions and multiple instances increase complexity. Providing a single view of entire data is important.
- d) **Quick Response:** Time is money. If BI tool takes up lot of time to obtain result to queries, it could result in failure of BI system.
- e) **Data quality:** Poor data quality forms one of the major reasons in failure of BI tool.

And also if the BI solution is to be considered operational BI, it should have the following characteristics:

1. Accommodate thousands of users while being affordable in terms of software license costs.
2. Provide flexible reporting that improves decision-making by a wide range of users
3. Be able to access any enterprise data source.

We need to analyse if all this properties are being satisfied by SAP BW or is there a need for 3rd party tool.

Unique Challenges of using SAP BI tools

Following are the challenges faced while using SAP BW capabilities for reporting purpose:

A. Access to entire organization:

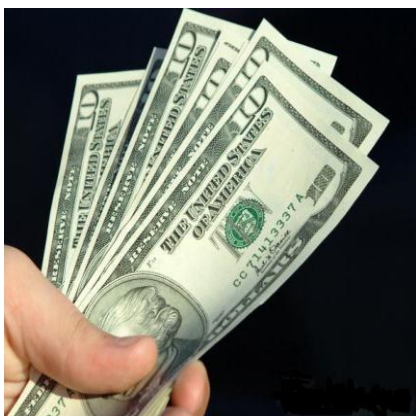
Usage of SAP is restricted to selected few in the companies. This few users would forward reports that are available or provided by SAP to the concerned person. Dependency is increased on selected few. Operational BI requires BI tools to be accessible to entire organization.



Like for example, at one of the customer places CEAT, wanted entire organization to be able to view reports along with external vendors. The SAP's prohibitive licensing restricted access to all users.

Even another client, SRL limited, wanted to be able to share reports with collection centres as well as corporate clients if needed. Also as SRL offices are spread across India and foreign countries, Internal customers should also be able to access reports without any interruption.

B. Cost:



As the number of users increase, the cost of license also increases. Maintaining the application also becomes expensive over long period of time. SAP provides basic reports through its own BW tools and also provides option to buy Business Objects or COGNOS based BI tools which are more costly.

CEAT faced similar challenge as they could not fulfil the requirement of the growing number of users internal as well as external dealers

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requiring access to reports due to cost constraints enforced by the cost of licences to be bought.

SRL limited also experienced similar issue when they shifted from their legacy system SRP to SAP. SAP would require technology expert to develop reports which would increase cost and also require licenses which would make generation of reports a very costly affair.

C. Complexity:



Using SAP tools requires lot of training. SAP products are highly technical, highly engineered solutions which require specific expertise as well as significant configuration to run. This leads to a frequently cumbersome IT-centric approach to run even the most basic business processes within SAP.

This was certainly one of the drivers behind SAP's decision to partner with pure-play BI solutions providers, bundle Crystal Decisions reporting tools, and include some reports pre-packaged with SAP Business Intelligence.

CEAT business heads as well as managers at SRL accessing reports in SAP had to be dependent on IT team as it requires ABAP programming which is complex and requires expertise. Also ABAP programmers are difficult to find and increase recruitment cost.

D. SAP BI tools access only SAP data:

SAP tools provide reports based on data available in SAP. Even where SAP is the core transactional system, many organizations still have other ERP, CRM, supply chain, HR and even financial accounting systems that need to be accessed.



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Companies require reports to be generated from data consolidated from all the systems used by enterprise.

Niranjan Bhalivade, CIO, CEAT Limited says that *“Successful business management consists of managing information from across multiple areas of the business. CEAT requires SAP and non-SAP CRM data for production, finance, sales & distribution, marketing data. SAP R/3 provides reports related to data available with SAP,”* he further adds.

E. Customization and Flexibility:

SAP provides acceptable day to day operation reporting but if business requirement changes these static reports need to be changed. Business is dynamic with new product lines, new production methods, new distribution channels and ever demanding customer needs cannot be fitted in a rigid system.



SAP reports are difficult to customize and requires skilled ABAP programmers. Business objects and Cognos also provide BI tools for integration with SAP but are complex and costly to use. Most of the reports available in SAP may require to be customized for usage. For example, CEAT required dashboard like features to instantly read and interpret and easily share info with external entities. These were not available in the standard SAP R/3 application.

F. Longer Implementation cycle:



SAP requires longer implementation cycle due to complexity involved in configuration process. Also Business objects / Cognos BI tools take longer implementation time for integrating with SAP and generating reports. Reports are generally needed on immediate basis by business heads in companies to take decisions quickly on basis of data available.

CEAT also required reports on immediate basis which would not have been possible in case of a high end sophisticated complex tool. Also extracting data from SAP using queries consumed considerable amount of time. SAP loads all data in a single screen in excel format. Higher the number of records, greater is the amount of time spent waiting for data to load. Also searching for a particular record from hundreds of record becomes a tedious task.

SRL wanted to provide BI facilities to its business users in a very shorter period of time. Providing BI in SAP would have taken a lot of time in implementation, training and handover to IT team of SRL.

Solution

Now that we have walk-through the challenges and issues related to reporting with standard SAP tools, let us have a look at how 1KEY Agile BI Suite including 1KEY Agile SAP connector is able to overcome challenges and provide additional benefits to customers.

1KEY Agile SAP Connector

Leverage SAP investments with 1KEY BI: 1KEY SAP Connector interacts with SAP Data-structure for reporting purpose. The Connector interacts through RFC; BAPI's and provides the business user with secured analytical and reporting environment. 1KEY Agile BI Suite along with SAP Connector provides the organization to publish the information across the organisation and the WEB based on the information needs of the user.

1KEY Agile BI Suite

1KEY Agile BI Suite is a single layer, ground up developed, interoperable, end-to-end BI software. It is a comprehensive Business Intelligence application catering to Strategic, Tactical & Operational data analysis & reporting needs of multiple vertical industries. An integrated offering with a choice to pick and choose modules enables organizations to deploy BI framework with minimal investments.



Defy the Challenges using 1KEY

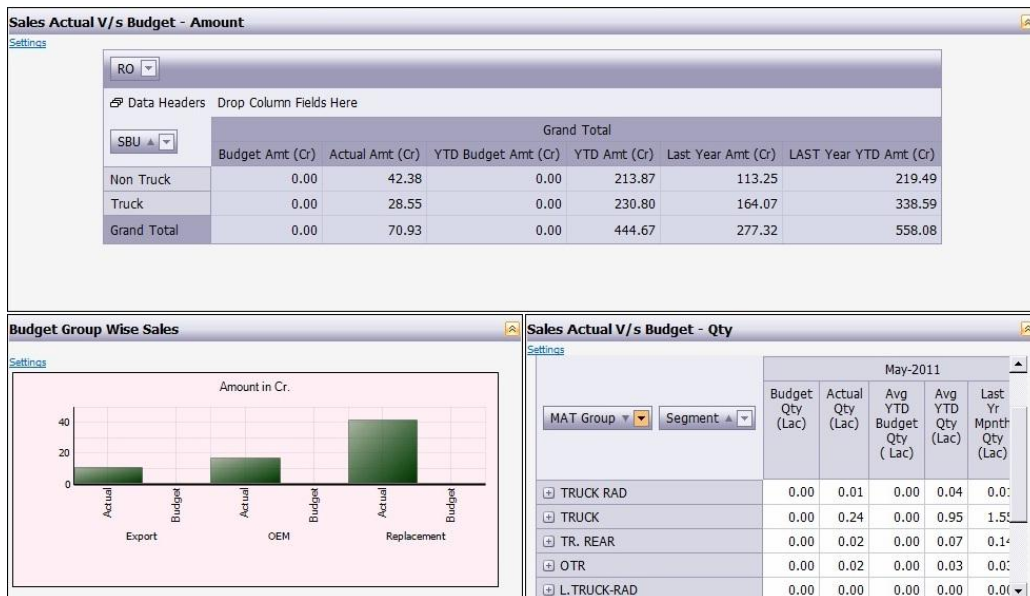
1. Access to entire organization and Cost

The ultimate objective of 1KEY is to empower the STO (Strategic, Tactical & Operational) levels of all organisations as all of them are equally important and need to fire synergistically for the growth of any organisation. 1KEY makes it possible by providing distinctive varieties of customizable functions and reports for employees at all level. 1KEY costing is based on customer friendly licensing metrics with the entire suite coming as part of Licensing, Thus making the solution cost effective and available to the entire organization.

Upendra Naik, Manager IT, CEAT Limited says that *'Cost was one of the major driving factors behind selection of 1KEY. Compared to competitors, 1KEY provided cost effective value for money business intelligence solutions.'*

G. Radhakrishna Pillai also says that *'SRL believes in practice 'World Standard at Indian Price'. I think 1KEY also offers the same thing. That's one of the reasons for selecting 1KEY BI.'*

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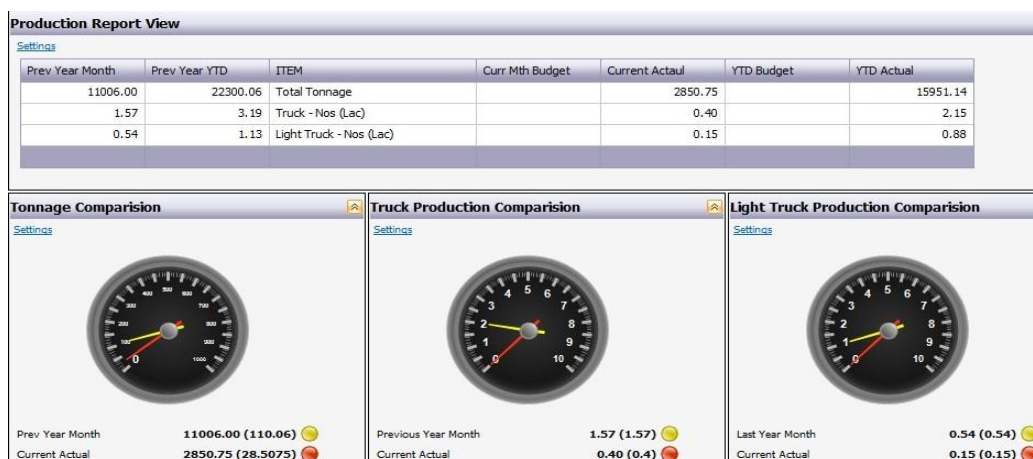
2. Customization, Flexibility and Simplicity

1KEY provides facilities to easily create presentation-quality reports to meet formatted reporting requirements. 1KEY reduces or eliminates the need for IT and ABAP programmers for report creation and saves time, money, and resources through easy end user-driven report creation. Create and distribute unlimited reports via the web or email as PDF files, Excel or Word documents, and other formats using 1KEY.

Naik says that *'The agility of developing a report on 1KEY BI has helped quickly respond to the report needs from users giving us a peace of mind and simultaneously it has also empowered business users to do on-the-fly slicing and dicing, drill-down of information for ad-hoc analysis in variety of report formats with ease on a daily basis.'*

Dinesh Kumar, Manager IT, SRL Ltd. says that *'1KEY has helped IT team of SRL to fulfil almost all of the requirements of business users. With low cost investment and easy to use interface, 1KEY has met all our expectations.'*

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3. Access to SAP & non-SAP data and Shorter Implementation cycle

1KEY combines SAP BI and non-SAP data into a single report, helps users to pull information from multiple repositories and provide an enterprise view of corporate data. It standardizes on one solution for formatted reporting with access to multiple SAP modules and components, as well as other data sources. 1KEY also reduces time needed for implementation from months to days/weeks, thus making reports available on immediate basis and help management take quicker decision.

1st implementation of 1KEY BI at SRL was carried out within 1month which involved setting up 1KEY at SRL, integration with SRP and providing demos and training to users and assisting them in generation of reports. 2nd implementation of 1KEY which involved integration with SAP was also completed successfully within 3-4 months.

“Information is said to be the most important resource of managers and decision makers. Nowadays the difficulty is not in getting the information but rather how to select the relevant information from the abundance of data and information. 1KEY BI gives us single source for critical information throughout the organization, so we can spend less time debating data and more energy making critical decisions.” says Niranjan Bhalivade.

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List of probable reports with 1KEY from SAP data

Below is list of reports that can be used by manufacturing industry using 1KEY.

1. Borrowings
2. Sales Contribution
3. Cost-Centre-wise OPEX
4. CFA wise Profitability
5. Vendor Outstanding
6. Details of sundry Debtors
7. Creditors as on Date
8. Borrow Outstanding for the month
9. Customer wise Sales report
10. Prompt payment discount report

Borrowing

Show Customization Window
Page 1 of 3 (21 Items) < [1] 2 3 >

Drop Filter Fields Here

AMOUNT	NO.	PERIOD	1	2	3	4	5	6	7
YEAR	M_NAME	DESCRIPTION	Apr-2009	May-2009	Jun-2009	Jul-2009	Aug-2009	Sep-2009	Oct-2009
2009-10	CAPEX LOANS	BOB RADIAL PROJECT LOAN (HALOL) BR							
		BOI RADIAL PROJECT LOAN (HALOL)							
		ICICI RADIAL ECB PROJECT LOAN (HALOL)	6070.19	6070.19	6070.19	6070.19	6070.19	6070.19	6070.19
		IDBI RADIAL PROJECT LOAN							
		PROJECT BUYERS CREDIT	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	LONG TERM LOANS	CORPORATION BANK TERM LOAN	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00	5000.00
		ECB - ICICI BANK	3216.50	3216.50	3216.50	3216.50	3216.50	3216.50	3216.50
		IDBI TERM LOAN OLD	825.00	825.00	750.00	750.00	750.00	750.00	675.00
		ILFS/EXIM TERM LOAN	5000.00	5000.00	4687.50	4687.50	4687.50	4375.00	4375.00
	SHORT TERM LOAN	CASH CREDIT	1039.00	1759.00	619.00	1408.00	666.00	2623.00	1244.00

Cust Wise Sales Report

Show Customization Window
Page 1 of 255 (2546 Items) < [1] 2 3 4 5 6 Z ... 253 254 255 >

Drop Filter Fields Here

NAME1	Amt Total
GOUSIA TYRE SERVICE	3220.38
MAA ANNAPURNA TRANSPORT AGENCY LTD	327581.62
3 STAR TYRE	450523.38
A N P TYRES & SERVICE	370827.39
A P S R T C, UPPAL	195417.02
A P STATE AGROS (CUD)	2670000.00
A P STATE AGROS IND. DEV.COR (CUD)	10097.79
A P STATE DAIRY DEVELOPMENT. CORP.	10097.79
A P STATE ROAD TRANSPORT CORP. (C)	77110.05
	1157000.00
Grand Total	1702287829.28

Stock On Hand

Show Customization Window
Page 1 of 17 (166 Items) < [1] 2 3 4 5 6 Z ... 15 16 17 >

Sales Office | Sales Group | Sales District | Material number | Mat Group | Storage Locations

Mat Group Name	Material	PUNC	Grand Total
ADV (TUBES)	BR 700-19	6.00	6.00
	BR 800-19	99.00	99.00
CAR CON	565-12 /4 BSW C800 ENDURA	9.00	9.00
	640-15 /8 ALL TRACK	8.00	8.00
CAR CON (TUBES)	BR 450/565-12	100.00	100.00
	BR 520/590-14	13.00	13.00
	BR 590/640-15	50.00	50.00
CAR RAD	145/70 R 12 MILAZE TT	2.00	2.00
	145/70 R 13 71 T MILAZE H	55.00	55.00
	155/70 R 13 MILAZE TT H	9.00	9.00
Grand Total		5,010.00	5,010.00

Total Purchases for the Period

Show Customization Window
Page 1 of 32 (311 Items) < [1] 2 3 4 5 6 Z ... 30 31 32 >

HAMOUNT | SPLINDICATOR | KTORK | DOC_TYP | SAMOUNT

Vendor	Name 1	Name 2	City 1	Street 1	Street 2
0016000005	ACH MANAGEMENT CONSULTANTS PVT LTD		MUMBAI		
0016000006	ADITYA NARAIN		NEW DELHI		
0016000007	AJIT R KANTAK ADVOCATE		PANAJI		
0016000016	ARUN M. JALISATGI		THANE(W)		
0016000018	ASAD ALVI		DELHI		
0016000026	C.A.DEOLALKAR		NASIK		
0016000027	C.D. PATEL & CO.		AHMEDABAD		
0016000034	DARRYL LEWIS		MUMBAI		
0016000036	DEEPAK MINHAS-S.T.CONSULTANT		CHANDIGARH		
0016000037	DEPENNING & DEPENNING		CHENNAI		

11. Finance and Lease charges
12. Total purchases for the period
13. Details of Sundry Creditors
14. Production Report
15. Claim Summary
16. Sales for Past period
17. Customer RO wise
18. Total Sales for the period
19. Due-Date follow up statement
20. Stock in Hand

Conclusion

There is no doubt that, SAP has been one of the best tools available in the industry for managing operations of businesses including manufacturing. But, like any other transaction recording system, and when it comes to on-the-fly reporting analytics for operational business users, it may not be able to stand to the expectations, as we have seen. These challenges can be overcome by looking at third party BI tool. MAIA Intelligence with its 1KEY BI products and solutions has been successful in overcoming the challenges and proving beneficial for SAP customers.