To SAP or Not to SAP: BI and Data Warehouse Options for SAP Customers

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Speaker: Steffen Vierkorn, Head of Research and Consulting, BARC

Moderated by Kyle LeRoy

Kyle LeRoy: Hello, and welcome to a SearchSAP.com presentation, 'To SAP or Not to SAP: BI and Data Warehouse Options for SAP customers'. This presentation is being brought to you by IBM. For more information on IBM, you can click on their logo, in the lower portion of your screen. My name is Kyle LeRoy, and I am the moderator for today's presentation.

Before we begin the presentation, I would like to review a few items with you. The slides for this presentation will be pushed to your screen automatically. If you have any questions throughout the presentation, you can type them in the "Ask a Question" area, which is located on the right side of the viewing console, and they will be addressed at the end of the presentation. If you have any difficulty reading or viewing the slides, there is an "Enlarge Slide" button that you can click on, which is located just below the slides. If you experience any technical difficulties with this presentation, there is a "Help" link that you can click on, over on the lower right-hand corner of your screen.

I will now hand it over to Vinay Nair to begin the presentation. Vinay?

Vinay Nair: Thanks Kyle, and thank you, everyone! And, good morning, afternoon, evening, wherever you are! Thank you for taking the time to attend today's webcast, by BARC. As Kyle mentioned, my name is Vinay Nair and I'm with IBM, and I'll be introducing your speaker today, and moderating the Q&A session at the end.

To SAP or Not to SAP: BI and Data Warehouse Options for SAP Customers

Steffen Vierkorn
Head of Research and Consulting

BUSINESS APPLICATION RESEARCH CENTER

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Today's speaker is Steffen Vierkorn. He is the Head of Research and Consulting for BARC, Business Applications Research Center. Steffen has been working in the industry for over 10 years and he spends a lot of his time and consulting hours with customers doing technical testing and testing out real scenarios. He is also responsible for all of the business intelligence and data warehousing research for BARC. For those of you who are not familiar with BARC, BARC is a leading independent software industry analyst firm that specializes in researching areas, including data management and business intelligence. BARC has offices mainly…basically in Germany, but then U.K., Austria, and Switzerland. And, just due to their location and proximity to Germany, they have a lot of SAP customers as clients, who are looking for guidance on the future of their BI strategy, which brings us to the topic of today. Steffen will be sharing with us a lot of the advice and experience that he has been collecting over all of the consultations with SAP customers and providing options for their BI and data warehousing strategy.

So, without any further adieu, I'd like to invite Steffen to commence his presentation. Steffen?

Steffen Vierkorn: OK. Thank you, Vinay! Welcome, everybody, to my presentation about possible architectures around SAP data and possible options to report on top of SAP data with different BI solutions. I would like to start, to give you some background, what's going on at the moment with SAP customers and what they are…what issues they have at the moment, what challenges they have. So, first of all, I think business intelligence is gaining importance. So, we see it's still a growing area. We see that companies try to do more and more business intelligence, to bring business intelligence to more and more departments, not only the Finance department. It's really an important part now of the whole business. And, we see that business intelligence, the market volume, is still increasing and that there is a high potential in it. And, we see in several surveys we do at BARC that business intelligence is one of the main topics for the CIO and the CFO in companies, and that more and more departments have high interest in business intelligence solutions. Many have now looked at SAP and are SAP customers that...yeah, they have got a long experience in this area. And, especially SAP customers are normally very focused on SAP BW, do reports on their SAP data.

Background · BARC

- Business Intelligence is gaining importance
  - Business and IT awareness still growing
  - High potential due to increasing market volume

- SAP and Business Objects are longtime BI solution providers
  - SAP BW (strong focus on SAP sources)
  - Business Objects (designed for multiple sources)

- SAP and Business Objects have bundled their BI portfolio in 2007/2008; acquisition of Sybase in 2010

SAP BW is the data warehouse system from SAP and it has really strong connectors to the underlying SAP ERP systems, or other SAP source systems, and can extract data and

information very easily for SAP customers. On top, there are different tools available. They are mostly for reporting and analysis, and some are for planning scenarios. SAP decided to acquire Business Objects in 2007/2008, and they decided to really focus more on standard technology, because the SAP BW was, or is still, very focused on SAP source systems or SAP data. Business Objects is more open and has an open approach to access multiple sources in a company to really do reporting, analysis, or planning process on top of that. Additionally, next to the acquisition of Business Objects, SAP just announced that they will acquire Sybase, and Sybase has some more additional components in the portfolio for business intelligence and data warehousing.

So, I would like to hand it over to Vinay again and we would like to ask some questions about usage of SAP and SAP BW in the company.

Vinay Nair: Absolutely! Thanks Steffen! I mean, in the spirit of being interactive, what we want to do is we want to collect some data on your background and some of your challenges so we can provide more contextual information in the presentation itself. So, in the next…Kyle, can you push the next slide here, to the poll question? OK. So, we'd appreciate it if those of you on the call would answer the question. The question is, "Is your organization currently using SAP ERP systems or an SAP BW system?" And, those of you who are consultants on the call, who are representing customers, you could talk on behalf of your customers. And, we'll give you about 30 seconds just to answer some of the questions.

OK, so, Kyle, would you be able to push some of the data to the slide, please? Yeah. There you go, Steffen. Can you see some of those results?

Steffen Vierkorn: Yes. So, just some comments on that. So, what we see here is…that's very typical, that SAP BW is mostly used in combination with SAP ERP systems because of the strong connectors they have to the underlying ERP system available, to extract data and the existing data model that's available in BW.

Vinay Nair: OK. OK, so it seems here that the majority of the audience here today is using SAP ERP and BW together. And, BW is also a big tool.

OK, so let's push it to the next poll question. "Is your organization currently using SAP ERP systems or SAP BW system"…sorry, "Is your organization using SAP BWA or alternative in-memory engines to improve the query performance?" Here, we kind of want to get an idea of some of the tools you're using to improve your performance. Kyle, can you push the results?

Steffen Vierkorn: OK. What's interesting here is that 50% of the answers saying that they are using BWA, and that's a very typical situation, again, for BW customers, because SAP BW is often struggling with query performance and the in-memory engine helps to improve that. What we see here is that most BW, or 50% of the BW customers are concentrating on using the offer from SAP directly because it's a good integration to the SAP BW system.

Vinay Nair: OK. That is...I think this gives us a good background of the kind of background of some of the attendees on today's call, so we can definitely cater a lot of our information toward this audience.

Steffen Vierkorn: Mm…hmm.

Vinay Nair: So, why don't you continue, Steffen?

Steffen Vierkorn: OK. Thank you! So…jump one back. So, what's the situation at the moment and what's the BARC advice to SAP customers? In general, SAP took really a major leap towards delivering a different BI portfolio when it acquired Business Objects. So, it's really more open address, so enhanced, especially in the front-end layer, additional tools to their portfolio. They tried to deliver more self-service oriented business intelligence, compared to the BW interfaces normally SAP BW customers are used to. And, what I think is very important for SAP customers, that are using SAP BW, that all future development are focused now on the Business Objectives portfolio. So, it's really a strategic direction for SAP to go forward with Business Objects for reporting and analysis. Yeah, and in general, the new portfolio is more comprehensive and open, and that allows SAP customers more than before the acquisition of Business Objects to think about different architectural options. So, before it was normally a very straightforward SAP BW architecture, with the front-end on top. Some customers use third-party solutions on top of that, but that changed a little bit, especially because SAP changed their own strategy.

Review the situation
- SAP took a major leap towards delivering a different BI portfolio when it acquired Business Objects
- SAP directed all future developments on the SAP BusinessObjects BI product line
- SAP's new BI portfolio is more comprehensive, open and competitive and has a stronger focus on business users

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**Address rising challenges and seize opportunities**
- Understand the most important architectural options for creating a data warehousing strategy in SAP environments
- Know how to migrate existing tools and applications to a new BI environment

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What we see is, at the moment, as a challenge in the SAP customer base, that it's really not so easy because they are missing some experience how to set up an open data warehouse architecture. Normally, SAP customers are used to getting a kind of application, a predefined application, that's BW, and they can start reporting and analyzing after some installations of BW, and there were a lot of predefined content in the system, and they had some connectors to the underlying SAP ERP system. That changed with Business Objects because it's a more open approach and it's possible to set up different architectures, where we see that a customer really has to address these questions and they have to decide how to go forward. Additionally, what we see in SAP accounts is that most SAP customers are using SAP BEx analyzers, so the (inaudible), typical analysis tool, for nearly all requirements around business intelligence and data warehousing. And, at the moment, a lot of customers are struggling with the question "which tools should I select out of the Business Objects portfolio, because it's a full BI suite," or if they have a look on the market, "which tools should I select when I go forward with standard reporting, with ad hoc reporting, or other requirements?" It's not the single tool approach they are used to when they were using SAP technology.

What we see, when we have a look on the BI program of SAP and Business Objects, that SAP and Business Objects acquired some players from the market and integrated these tools in their own portfolio. So, Business Objects, for example, acquired more than eight tools before they

were acquired by SAP, and they integrated all of these technologies in one suite. So, at the moment, it still is kind of a heterogeneous suite, so it's not fully integrated of all of these components, because the origin is in different technologies. SAP, next to Business Objects, acquired Outlooksoft for performance management and Pilot Software, another player for strategy management. These two software solutions, they acquired in 2007, are strategic next to SAP Business Objects in their strategic tool portfolio for the next years.
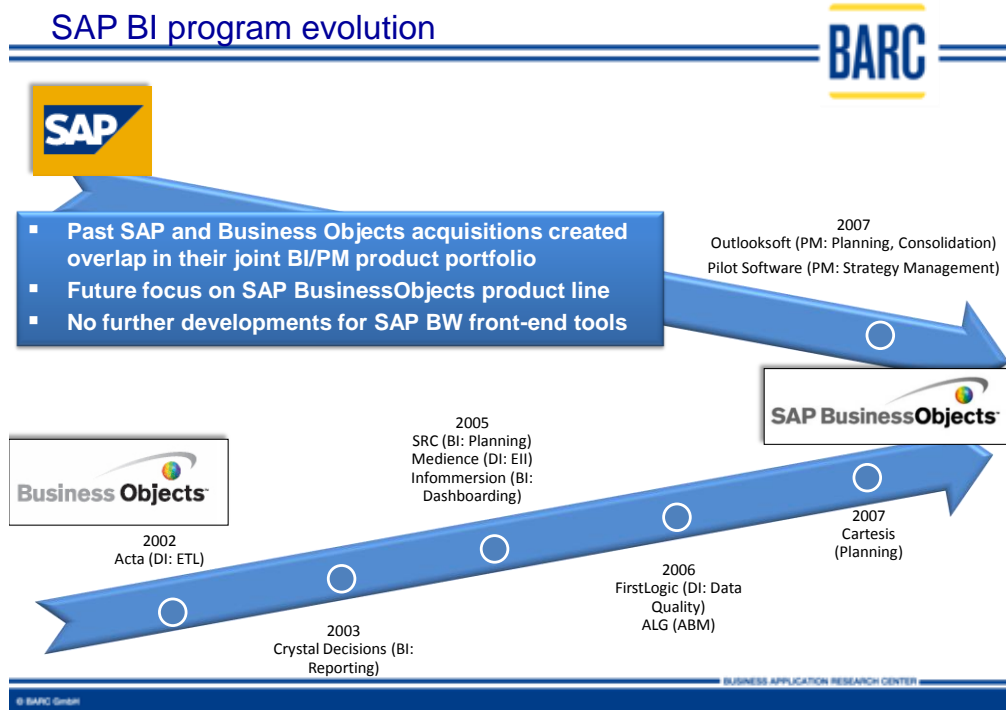

When we have a look on the tool portfolios exactly, I think it makes sense to really try to split the different categories. What you can see on the slide is a chart that has dashboarding, standard reporting, ad hoc reporting, data analysis, planning and simulation, and data mining. We are using these categories at BARC to discuss requirements with customers, because when you have a look on the slide you'll see complexity on the one side and flexibility for the end users on the other side. And, you can discuss requirements you have in your companies around business intelligence. So, often users need less complexity because they just want to consume information on a good-looking dashboard or interface, and the end users don't need too much flexibility for that. So, that's a typical scenario, I think, for a dashboard or cockpit. It's the same with less flexibility and less complexity. I think it's a scenario of standard reporting. But, in standard reporting, you have often the requirement to really pick the perfect formatting for report. So, it's not a case for this screen. You really want to bring it out and it has to be highly formatted, and you need a lot of control over that.
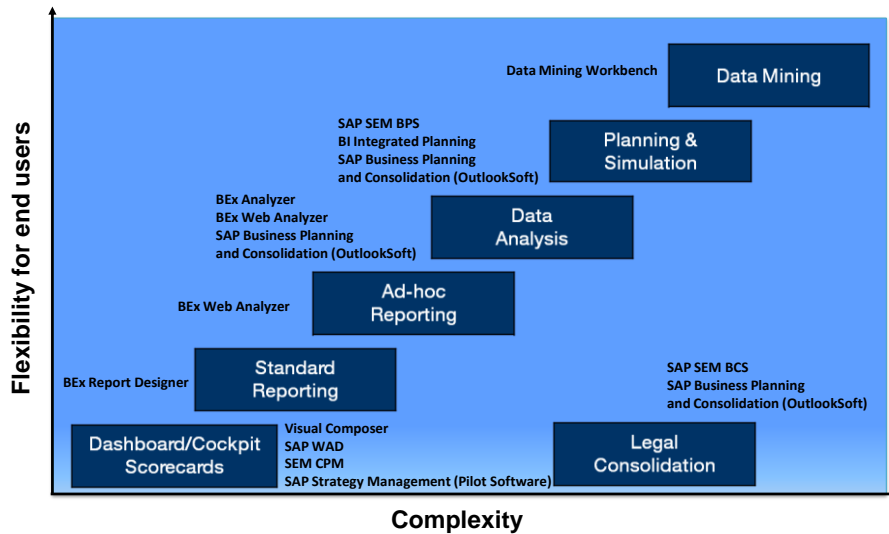
So, the next category, ad hoc reporting, the first category where end users really need a little bit more interactivity with the data, so they need flexibilities. They want to calculate on numbers, measures, and TTIs. But, the tool hasn't to be too much complexity, because it's important that the end user can use these kinds of tools with less training.
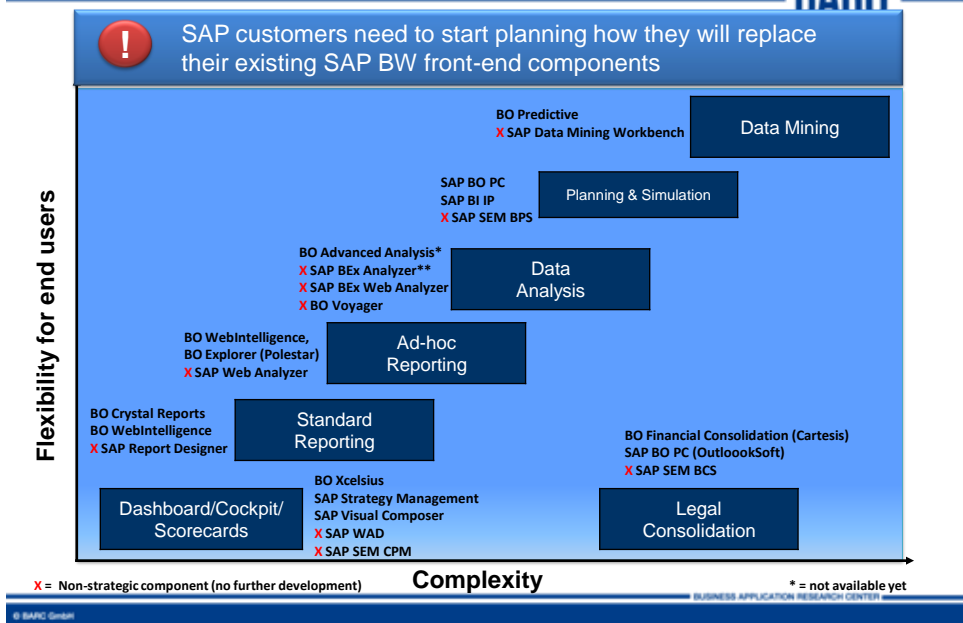
So, the next category is data analysis. I think that's something for power users. They really have to know the underlying data model. They have to know which methods are available in the tools and how they should use it. And, normally these kinds of users are the information producers in companies and often deliver then information to the other user categories, or set up then on top of the data analysis resource, summary reporting, or dashboards on that.
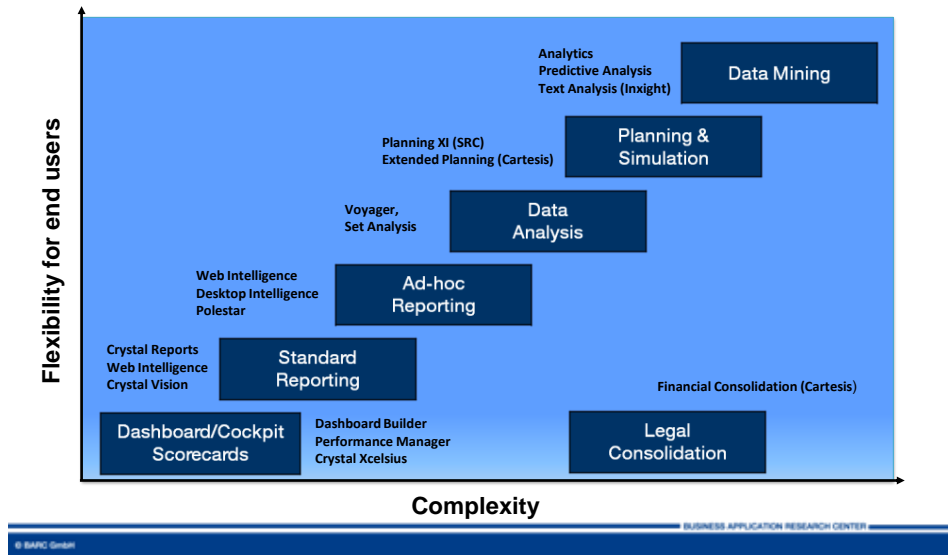
So, planning and simulation, the next category, is to set up these scenarios, performance management. Normally, power users develop own data models, processes, workflows. They have often to set up an own security for that and then deliver that out to the company to do and support the planning process. Data mining, I think, is the next step, after data analysis. We talk here about advanced analysis, to really get more insight to the data, with specific methods and statistical sanctions on that. So, I don't want to talk to much about legal consolidation here. It's a special topic for some specialists in the company, with less flexibility.

So, when you have a look on this slide now it's that you can categorize the SAP BW portfolio to each of these categories. For example, SAP provides that BEx Web Analyzer for ad hoc reporting, they provide BEx Analyzer for data analysis, and they provide some other tools for dashboarding/cockpit scenarios. So, before the acquisition of Business Objects, SAP already delivered a full portfolio of tools for all of these categories. After the acquisition, when you have a look on here, Business Objects…sorry, before the acquisition, Business Objects already delivered a full portfolio too, and you can have a look on that. And, I think the most popular products are Web Intelligence, or Web-based ad hoc reporting tool, and Crystal Reports for standard reporting. And, I think when you go ahead and look on the SAP portfolio, you've heard about the product Xcelsius. Xcelsius is the product that is positioned for dashboarding/cockpit generation. So, after the acquisition, SAP had really to decide how to go forward with the strategic portfolio and how they will combine all of these technologies to one portfolio.

SAP customers need to start planning how they will replace their existing SAP BW front-end components

BO Predictive
X SAP Data Mining Workbench — **Data Mining**

SAP BO PC
SAP BI IP
X SAP SEM BPS — **Planning & Simulation**

BO Advanced Analysis*
X SAP BEx Analyzer**
X SAP BEx Web Analyzer
X BO Voyager — **Data Analysis**

BO WebIntelligence,
BO Explorer (Polestar)
X SAP Web Analyzer — **Ad-hoc Reporting**

BO Crystal Reports
BO WebIntelligence
X SAP Report Designer — **Standard Reporting**

BO Financial Consolidation (Cartesis)
SAP BO PC (OutloookSoft)
X SAP SEM BCS — **Legal Consolidation**

BO Xcelsius
SAP Strategy Management
SAP Visual Composer
X SAP WAD
X SAP SEM CPM — **Dashboard/Cockpit/Scorecards**

Flexibility for end users (vertical axis)

Complexity (horizontal axis)

X = Non-strategic component (no further development)   * = not available yet

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What SAP did is that they mainly focus now on the SAP Business Objects product portfolio, and in that portfolio the strategic components are mostly from the original SAP Business Objects toolset. So, that means that the former Business Objects product has now a strategic role in the portfolio. When you have a look on the slide, I just want to highlight some important components. I think the strategic component for dashboarding is the BO Xcelsius, so flash-based solution where you can deliver highly formatted reports to customers, and Crystal Reports, and Web Intelligence for the other areas there. But, I just want to highlight here is that it's very important that customers, SAP customers, start to plan how they will replace the existing SAP BW front end. So, at the moment, the strategic direction of SAP is clearly not to go forward with the existing BW front end. They are really focusing on the Business Objects portfolio. That means for SAP customers that they have got some time to rethink their strategy and to decide how they will go forward with the new strategic portfolio, and the customers have to decide how they want to use these components. And, what you can see here, and I already mentioned that, that the most popular product out of the former BW portfolio was and still is the SAP BEx Analyzer, so a clear analysis product that, because of the flexibility of the customer, decided to set up dashboards in the analysis product. And, they decided to do some standard reporting in the Excel interface. And, that means that SAP BW customer really has to think about what are their SAP customers doing with the SAP BEx Analyzer. And, what we see in the SAP customer base is that it's not a very good idea to really just wait for the success of SAP BEx Analyzer and to say, "OK, I will go forward with a new strategic component in this area because SAP BEx Analyzer is not only used for data analysis. It's often used for all of these categories." Even
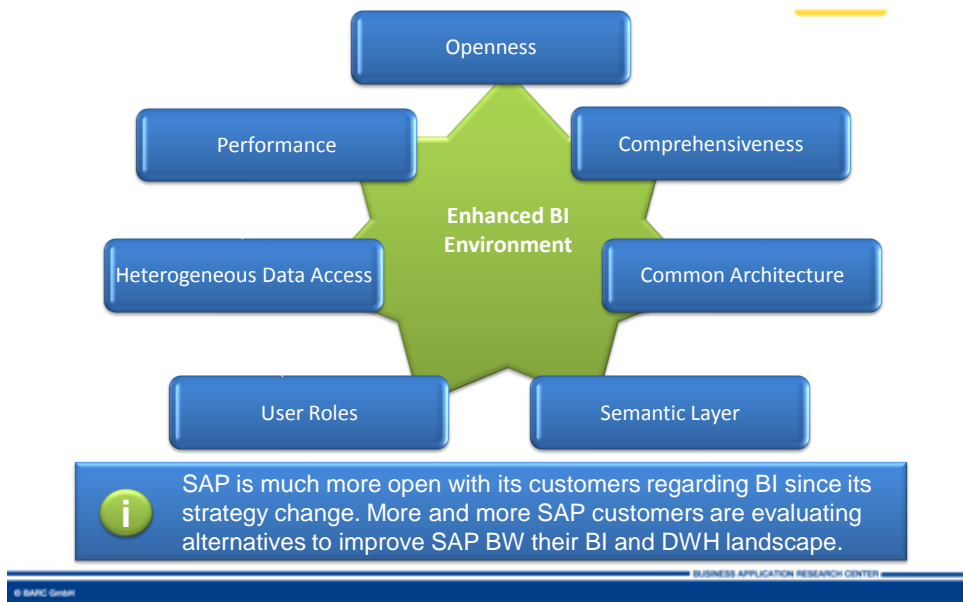
some planning scenarios are often done in the SAP BEx Analyzer product of the formal SAP BW new portfolio.

So, the question is now "what's the advice, how to go forward with the evaluation of the new portfolio." And, we have here a clear process. We support customers in that process. And, for all…our advice to SAP customers, to really think about their requirements, to write down what they want to do, what tool categories they need, and after that they really have to decide "which kind of users do I have." And, that's sometimes a really hard challenge for existing SAP BW customer because they are not used to think in a different end user roles, and they normally are not…did not do an evaluation of the SAP BW frontend portfolio. So, often, and I mentioned that, the BEx Analyzer is used for everything, and they just rolled out that product. And, that means that they now, after the acquisition, they have to lay back and to rethink their strategy, and to decide which tools they would like to pick out of the portfolio, or which tools they should choose out of the market, because there are a lot of vendors out there that can have access to BW and they support a really good business intelligence on top of BW. Business Objects, just before the acquisition, had already a connection to BW. But, from a technical point of view, they are not so big different between all of these players on the market. Even Business Objects uses, and with most products, the same interface, for example the interface Cognos, or IBM Cognos, is using.

After that, our advice is clearly, to the customer, have a look on the tool portfolios and match that with the requirements, and the different end user tools, and then pick out the components you would like to set up or you would like to roll out for the business intelligence scenario. After that, define a clear migration roadmap, which products you want to replace, and especially when you want to replace it. Because, what we see, especially in the Business Objects portfolio, that there are a lot of technical issues still around and it's not so easy to just go forward, because it's quite hard to have the same functionality that our BW customers used, from the original BW frontend tool, that you can get the same functionality in the Business Objects portfolio.

List requirements

Identify end-user roles

Choose the right solution / vendor

Define the migration roadmap
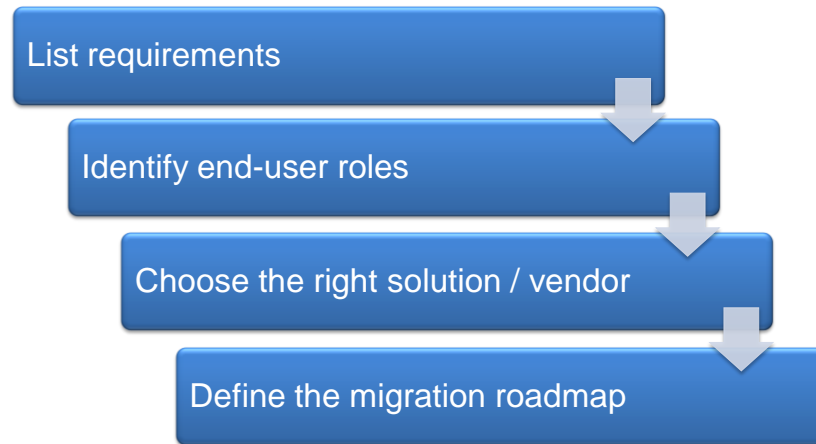
In general, what SAP did is that they really opened up with their BI strategy. So, it's not only SAP BW oriented. We already heard about some advices to customers to set up an open data warehouse, because that makes more sense for SAP customers, and I think one of the strengths of BW is really the connection to the underlying ERP system or to other SAP systems. And, if you can't really use these components in BW, you have to think if it's worth to go forward with an SAP BW installation or not. So, in general, in our BI survey, one of the largest surveys around business intelligence, we ask the question "how much data is stored in BW and from which source system," and the result is that 70% of all BW installation has more than 70% of SAP data integrated in their BW. So, it is clearly used architecture for SAP data. So, in general, SAP advices all of the customers to rethink their strategy, and they do that in a much more open way than they did that before the acquisition of Business Objects.

Opportunities for SAP customers — BARC

- Openness
- Performance
- Comprehensiveness
- Heterogeneous Data Access
- Enhanced BI Environment
- Common Architecture
- User Roles
- Semantic Layer

SAP is much more open with its customers regarding BI since its strategy change. More and more SAP customers are evaluating alternatives to improve SAP BW their BI and DWH landscape.

OK, Vinay, I want to hand it over to you, about the next question.

Vinay Nair: So…sorry, I was on mute, but essentially what we want to do is get some feedback from you, in terms of what your go-forward strategy is. "Is an SAP Business Objects solution on your go-forward plan or are you still deciding?" We'll take some time to fill out these questions and we'll push them out, and then we could go on to the options. When the attendees have finished answering the question, could you push the results? OK.

Steffen Vierkorn: OK, so it's, again, a result I would expect. So, what we see in the SAP customer base is that a lot of customers are still thinking about how to go forward with the strategy. And, often…so, our experiences with SAP customers is that they expect the same functionalities they have with SAP BW frontends, with the SAP Business Objects frontends, and after first testing and the first proof of concept they find out that it's not the same support they get from the Business Objects tools on top of BW. And, we often tell our customers to really rethink their strategy. That goes down to different scenarios. Even data warehouse scenarios they rethink, or which vendors they should select from the market. So, our experience at BARC is that the customer really decides often on the best tool, and there are a lot of tools out there on

the market that can have access to SAP BW, and that's not only Business Objects, so that's a different scenario.

Vinay Nair: Absolutely! It looks like we're catching this audience at the right time in their decision making because over 42% of the people on the call are still at the point where they're making that evaluation. So, I think the advice that you're going to mention in the next few slides are going to be very timely for them.
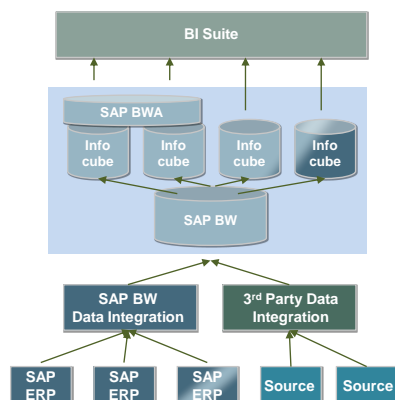
Steffen Vierkorn: Mm…hmm. OK, so I would like to go forward with the data warehouse architecture discussion. I talked about the frontend solutions that are available and the new strategy SAP has in this area, but what we see is that SAP customers already invested a lot of money in BW installation, and it's not the easiest way for SAP customers to really throw that away, but they see all of the issues they have with the SAP BW technology, especially when it comes up that they have to hand non-SAP data to BW. That becomes often quite complex and difficult for them to do that. And, I would like to show some architecture scenarios we see out in the market there which are possible, next to or with SAP BW.
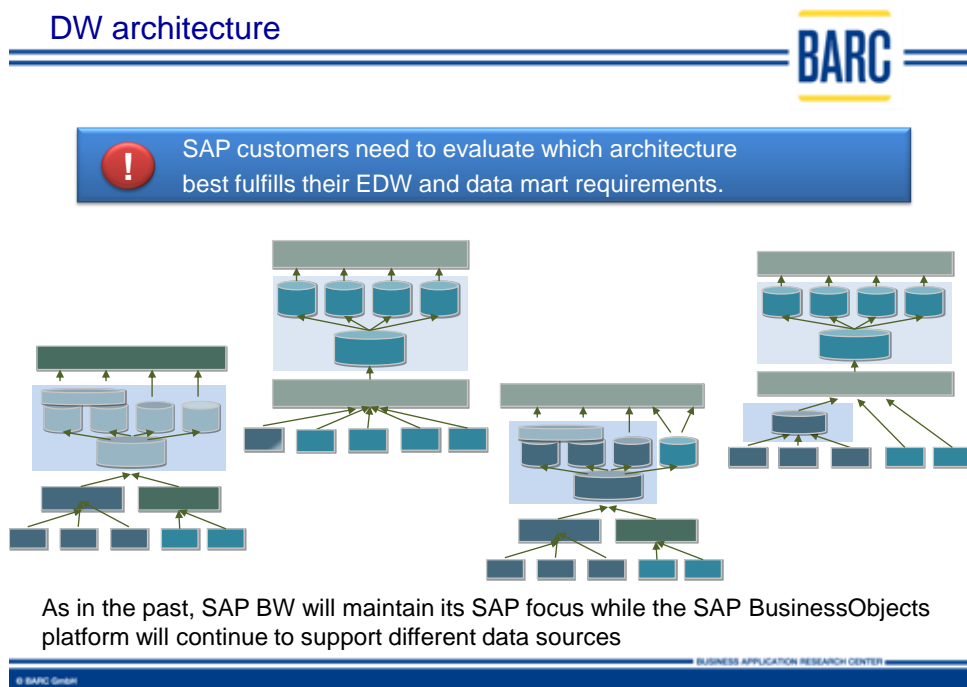
So, I would like to start in the beginning with a very typical scenario, and I think you know that, it's a very traditional one. What we see here is that customers still…some customers still go

forward with an SAP BW only architecture. That means they really concentrate on that as the only data analysis technology they are using in the company. I think the pros there are that you really can use the business contact, so that's a predefined data model that SAP is delivering. It's normally focused on an underlying SAP system. So, for example, you get some financial data models and reports based on the modules in your ERP system. And, I think an additional pro is here that you can use BW as the framework for some other SAP applications. There are some available. They are based on BW systems. And, when you run all of these technologies, it's not so complex to introduce them, because you already are used to the technology, you have the infrastructure for that, and you can easily go forward with that.


This approach, I think, that third-party solution in this architectural scenario can improve your business intelligence, and I talk here about third-party BI and I talk about different vendors. So, it could be, for me, Business Objects is a kind of a third-party solution because it's not the same. It's not on the same level, technically integrated like the BW frontend on the BW system. So, we talk here about IBM Cognos, MicroStrategy. So, there are around 10 vendors available out there that are certified to access the BW system. And, in our survey, the result is always that customers go forward with that to access BW with a third-party solution on top of that. In this architectural scenario, there is no data stored out of BW, though it's directly in the SAP system, and you go via interfaces directly with queries in or on top of the SAP BW data. So, I think the negative aspect here is that BW is very SAP oriented. That means if you want to enhance some

non-SAP data, you're struggling sometimes with the data integration process. So, BW doesn't support too much data integration features, so these are more basic features. You can enhance the SAP data, but what the market shows and when we talk to customers, most customers run SAP BW very SAP data oriented. So, they don't integrate too much non-SAP data. It has a very clear orientation to that technology.

Additionally, what we can see now, from more than 10 years' experience, that it's quite difficult to manage larger data volume. So, we know much more mature data warehouses, based on other technologies than BW, and I would say the most or the largest BW installations are around 15 TB to 20 TB of data, and then if you look on the market, there are much more larger data warehouses out there, based on other technology. Additionally, I think a con is here that the interfaces to BW, so for the frontend, are not really standardized. So, it's a specific native interface. For example, you have here three interfaces. You can have access to the data with the frontend. The first one is OLAP BAPI. Most vendors using that interface, when they do a lot with BW on their customer base, some vendors out there, they're using only ODBO or XMLA. But, in most cases, when we see that a vendor has got real experience with BW, they are using the OLAP BAPI interface. On the other side, query performance, we already talked about that, is a challenge for a BW installation and SAP brought out to BWA and in-memory cache engine that supports a better query performance, and it has got a good connection to the SAP BW system, but you have to license these components additionally. That means to get a better query performance you have to pay extra money. Or, you have to do some aggregates in the BW system, but that means you have to maintain that and you have to care for that.
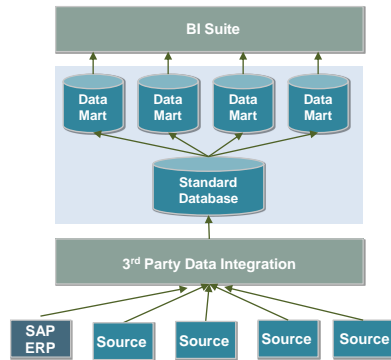
Pros
- Better scalability and performance options (data, users)
- Flexibility (data integration, data modeling, data management)
- Openness (best-of-breed approach possible on all layers)
- More front-end options

Cons
- Business Content: Little or no predefined content for SAP data sources
- Changes from SAP ERP patches/releases have to be handled manually or with third-party solutions
- Weaker system integration into SAP environment

i Good for SAP customers with considerable data from other sources

What hurts customers additionally in this architectural scenario is that there are some missing features, for example, simulation. It's not really possible, and then you want to do it in an extensive way with the BW system, or if you really want to support that in your planning process, because BW doesn't support the performance and there are some tools missing to really get good support in this area. So, in general, we can say that it's a good architectural option when your primary focus is on SAP source system and if you want to do primarily reporting and analysis on top of SAP data sources.

The next scenario we see in the market out there is that customers go forward with non-BW architecture. So, you can use all of the technology that's available out in the market here. You can use a specific technology that helps you with your requirements. You can choose a data integration tool and database, or additional data mart technology, and you can put on top of a BI suite. This approach is much more open. It's a best-of-breed approach, and you can select really the best players for your requirement in each layer. The content architectural option is that you can't use the business content, so the predefined models that are available with BW, and you can't use the connectors to the underlying SAP ERP system because BW is providing these, but you can't use it in an architecture when you don't run a BW. And, in general, you have got a weaker system integration in the SAP environment, so you can't run it on a NetWeaver platform and other components of the SAP product portfolio. What we see here, and this is definitely a

good architecture, when you don't have to report too much based on SAP data and you are mainly focused on an alternate approach.

So, the third architectural option we can discuss around SAP is that you combine now two technologies. So, the first two scenarios were more a black and white discussion. Now, what a lot of customers do at the moment is that they think about their technology and they try to enhance their existing BW scenario. And, that's a typical discussion we have with customers and we see in our research, that customers try to enhance some specific functionality or want to improve some areas of their data warehouse BW installation, and to think about how they can do that. What they can provide with such an architecture is that they can provide, in some cases, much more flexibility for the business users out there on a data mart level. The applications can run side by side, so you can meet specific requirements. For example, this would be a typical scenario, what you can see here in the chart, when you decided to run the performance management solution next to BW, because BW has performance management tools, so that is integrated in BW but that's very unflexible, and the typical requirement is around that you need a lot of flexibility, that your business wants to decide on their own how to set up a planning scenario, so there are additional technologies out there. For example, there is TM1 or S Base, or other solutions out there that can run a very good planning process, and that's very flexible, and even some business departments can administrate these solutions by themselves.

DW architecture
Hybrid approach: SAP BW plus additional DB

BARC
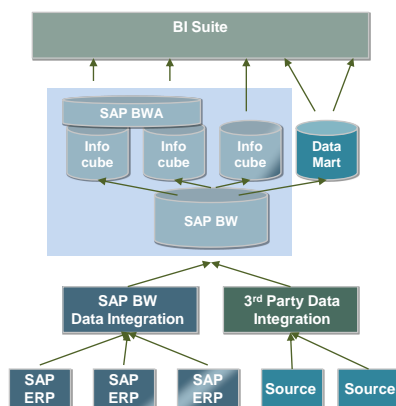
Pros
- Flexibility for business users on data mart level
- Applications can run side by side to meet specific requirements (writeback, performance, etc.)
- Integration of SAP Business Content
- Clear data logistics despite mixed technology
- Third-party BI suite: Better access to multiple sources (e.g. BO, IBM Cognos, MicroStrategy) and support for business requirements

Cons
- Problems integrating heterogeneous, non-SAP data sources
- Difficulty managing large data volumes
- More complexity due to two different environments for modeling, administration and operations
- Complex SAP BW interfaces
- Additional data management processes
- Possible costs for open hub service licenses

BI Suite

SAP BWA

Info cube | Info cube | Info cube | Data Mart

SAP BW

SAP BW Data Integration | 3rd Party Data Integration

SAP ERP | SAP ERP | SAP ERP | Source | Source

ⓘ Good for SAP customers with special requirements that SAP BW does not support

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What you can use here, next, at the enhancements, you can get additional technology. You can still use the business content and the data connectors to the underlying SAP source systems, and you can use these functionalities that are delivered by SAP. You have to decide how you want to report on that architecture, but the good news for SAP customers is that there is technology out there that can have access to two or more technologies. So, for example, when I talk about the IBM Cognos or Business Objects, they can run queries against BW and against third-party technology, and in this way it's possible to really deliver a single point of reporting or analysis, because users have access to the same interfaces and the tool that's running, then, a query on different technologies behind that architecture.

So, the cons in this architecture are that you really have still the challenges to integrate non-SAP data to this architecture, because the single point of truth is still SAP BW and normally SAP customers try to integrate all of that data into BW and extract then it out to a data mart or additional technology to enhance the functionality. You are still struggling with all of these limitations BW has, and I already talked about the large data volume and the query performance. This architecture can only support some requirements. I talked about planning. Additionally, it would be for advanced analysis, where you can use an additional toolset. But, you can reach, yeah, a single point of reporting. This would be actually on top. But, you still have to decide, and I think that's a very important point, in which environment you want to set up your reporting, analyzing, or planning. What we see is that, yeah, it's a discussion then in the teams, within the customer, how they want to go forward with the different requirements and which technology. But, if you do that, you can really get very good functionality and a very good support for your requirements out of this architecture.
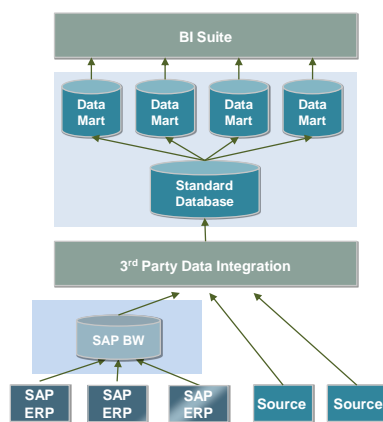
Additionally to that, you have to care about additional license costs for SAP BW. In BW, there are the so-called open hub licenses in the SAP contract, and that means if an SAP customer is using data out of SAP BW in a third-party application, they normally have to pay additional license fees, if the users that are on top of that application haven't an SAP license to access SAP ERP systems or BW. And, our advice to our customers is always to talk to their SAP Key Accounts if that license is necessary in specific situations or if the customer can go forward with just extracting data out of SAP BW. So, this architectural scenario, we think it's good advice for a customer. That has specific requirements. They want to enhance their BW scenario and they want to improve it in some areas, and we see that this a very popular scenario out in the market at the moment.

The next scenario is another one we see sometimes in the market, when a customer still wants to get the advantages out of a BW system. That means that they want to use the connectors to the

underlying SAP system or they want, in some cases, to use the business content to report on that. Some customers decided to use BW, but they decided to strip it down to a kind of a data integration layer. So, they just use BW to get the data out of the underlying ERP system and then to extract that to an open data warehouse technology. And, I think the pros here are better scalability, because in general the single point of truth is a standard technology, standard database from the market, and you make it very flexible to integrate SAP and non-SAP data, because you can use a data integration tool for that and for SAP data you are using SAP BW to extract the data.

It's a very open approach. That means you can combine the technologies. You can set up a best-of-breed architecture for that, and you have got a lot of frontend solutions that can have access to that environment, because normally you don't report really on top of a BW. You are using that only…in that scenario, you are using only BW as a data integration part. Yeah, the cons here, it's a little bit more complex because you have to run two environments, BW for the data extraction and the open one for the data warehouse and BI requirements. You have got an additional data management process for that. You have to care about that BW, where it delivers the necessary data for that. And, in this scenario, you have to care about the open hub license too, because that means you are using BW technology to extract data and you then extract it after that step for an open technology, and then you have to care about the users that have access.

So, as summary on that, you have good different architectural options.

DW architecture
Summary

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i   **"SAP BW only"** is a widely used architecture. But integrating non-SAP data sources requires significant time and effort.

i   **"Standard Database only"** provides enhanced flexibility and scalability options. The time and costs of a complete migration, however, would probably scare off most SAP customers.

i   **"SAP BW plus additional DB"** provides better flexibility in specific scenarios but still has to address SAP BW's limitations in data integration and management.

i   **"SAP BW as Staging Area"** combines the good SAP integration in SAP BW with the enhanced flexibility and scalability options of a standard database. However, this approach is more complex because it runs two different BI environments.

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There are some more options out in the market, for example to set up BW next to an open approach, but that's only in a combination of the discussed scenario, and the pros and cons are nearly the same as in the scenario we discussed, in the other scenario. So, SAP BW is only…it's a widely used architecture, because of the strategy, performance strategy of SAP, and you can really have a good access to SAP data. But, to enhance that, that means that you really have to care about how you will do that and it's quite complex in some cases. Then, the database only, so an open approach, to go away from SAP BW means you can set up a best-of-breed architecture and you can…truth of technology in every layer you would like to use for that, but then it's a little bit more complex to have access to the underlying SAP systems. So, the SAP BW plus additional database, we talked about that. It's enhancement. You really enhance some functionality, to really improve your landscape with specific features. We talked about a specific scenario that was the planning process, but there are other scenarios out there that really make sense to combine those technologies. And, the last one, SAP BW as a staging area, that means that you strip down BW, use the positive features from BW to extract data, maybe sometimes to report for some specific reports directly on that BW, but mainly you use it to extract data out of the underlying SAP systems and then integrate that after that step in an open data warehouse.

In general, there is no blueprint how to set it up, but that's a good starting point. So, discuss the situation, maybe to discuss these scenarios with your vendors out in the market there. Ask Cognos what's the advice for that, how to go forward with the Cognos technology, for example, or do the same with the Business Objects or MicroStrategy team, that is ask them how to go forward, because they can support these different scenarios. And, what we see is that…yeah, especially SAP, Business Objects, and Cognos are widely used in the SAP customer base, and there is a lot of experience around how to set up such things.

So, I just wanted to talk some more minutes about the migration process, so what's possible.

Migration
What you can/cannot recycle

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- Migration is possible
  - Queries: Some solution providers are able to migrate BEx Query meta data to their respective semantic layer and build applications on top of the layer and the BEx Queries / BW Cubes.

- Migration is NOT possible
  - Enterprise reports: Reports designed with the BEx Report Designer have to be rewritten in the respective reporting tool
  - Web templates: BEx Web Application Designer templates have to be rewritten in the respective reporting tool
  - Planning objects: BPS and BI-IP objects, such as layouts, functions and planning processes have to be rewritten in the respective reporting tool

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But, in general, when we talk about BW you can migrate queries in general, so that means that you can reuse queries. But, our advice to customers is to really test it in a kind of proof of concept, that you really have results based on your queries, what is supported and what's not. Because, BW can be set up very different and that means if some customer can run a query with their third-party solution, that doesn't mean that it works the same within your environment. And, our advice is to always to set up a technical proof of concept. So, what's not possible, and I think that's no big surprise, you can't migrate any report definitions or anything else. But, that means from Report Designer, from the BEx Web Application Designer, or planning objects, it's not possible to migrate that to neutral. But you have to set up that, and you have to set up that in

a Business Objects environment, or a Cognos environment, or MicroStrategy. So, there is no really big difference around that at the moment.

So, another important question we always hear from customers, when should they start with that.

Migration
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So, our advice here is, clearly, if there are no outstanding applications requests, the customer should start with applications that have the best chance for success, so not the most complex one, more easy one, maybe not the application that you have to roll out to every employee, that really your staff can train with the first rollout and get some more experience around how to combine BW with a third-party technology. And, when I talk here again about third-party, I always talk about Business Objects, Cognos, and other tools, because in our opinion the only native product really, on top of BW at the moment, are the native BW frontend and all other tester used interfaces, and though it's not really integrated though, and this meaning it's a third-party solution. And, on the other side, when you have short-term application requests in your company, our advice is to develop all new applications in the new environment, because the other one is only on maintaining and no more enhancements, so it really makes sense to concentrate then on a new technology and, in general, try to bring all applications, if there is a change or if there are enhancements to the new technology, and roll that out in the company.

So, in conclusion, SAP customers really have to care about their architecture and they have to care about the business intelligence more than in the past, because in the past BW was more an application than a technology stack, and now they really have to decide how to go forward. And, SAP is opening up and customers are opening up and evaluating different scenarios. And, we talked about different tools, scenarios, and different architectural options. And, our advice is really to select the right ones for the existing requirements. The right architecture depends on the individual requirements in the company, so there is no real blueprint. You really have to care about what are the requirements, the specific scenario, and then to decide how to go forward. And, what we see at the moment is that…so, especially the enhancements next to BW are quite popular. So, that means to set up a third-party technology next to BW to enhance some features to the existing environment.

Conclusion

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- SAP customers need to be more informed about BI than in the past. There is no one, single SAP architecture.

- SAP customers are opening up and evaluating different scenarios for BI with SAP data

- The 'right' architecture depends on each company's individual requirements

- Third-party tools on top of SAP BW can improve BI

- SAP customers should set up an organizational framework for BI and DW

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Third party-tools can improve BI on top of BW, though that's a resource for several years now, and though there is nothing new, there is experience out in the market and we saw that in several (inaudible). And, just last comment on that is, don't care only about the technology. What is important, especially around SAP BW, is to set up the right organizational processes next to the introduction of a new technology. In this area, especially SAP customers often run BW in an SAP competent center and that makes, with an open approach, not too much sense, but it's very important for the success of this intelligence within the company.

So, that was my last slide. I just want to thank you, to say thank you, and I would like to hand it over to Vinay.

Vinay Nair: Thanks Steffen! And, that was a lot of good information there! And, I could tell that you've had a lot of experience advising SAP customers, because the options are very relevant to them. What I'd like to do now is…I've been getting a number of questions here in the question form, the Q&A form. Those of you on the call who want to ask some additional questions, we have about five to six minutes to address a few questions, but I'll be screening them to see that…make sure that the most relevant ones do get asked.

The first question that I have here is, "What are your initial thoughts on Business Objects Pioneer Advanced Analysis as a successor to BEx, and when do you expect it to come out?"

Steffen Vierkorn: So, at the moment, the official information is that they will come out with a version 1 product at the end of this year, so it's a bigger delay in their roadmap. What we see is that the SAP customers often make the mistake now to really wait for that product, because it's a direct successor of SAP BEx Analyzer. But, as I mentioned, BEx is used very different and we don't really understand the need for that product so much in the SAP customer base. The better way would be to lay back, to think about the requirements, and to have a look on the whole portfolio and to decide then which products they want to select and which products they should use for the specific scenario.

Vinay Nair: OK. OK. Excellent! Let's see here. I'm just trying to…there are a lot of repetitive questions here, so I'm trying to combine as many as possible. One of them is, "What's the best place to continue learning about new BI options?" This has been asked a number of times actually, in different ways.

Steffen Vierkorn: OK. Can you repeat it? I just...

Vinay Nair: "What's the best place to continue learning about new BI options for SAP customers?"

Steffen Vierkorn: So, the best way to get experience in this area is to really start with small road checks and to find out what can the technology and what not. And, that doesn't depend which third-party solutions you have selected. So, it's really important that you know how to set up a query, how to use it on top of BW, and what the third-party technology can support within the BW, because it's not the same experience you normally have with your existing BW frontend solution.

Vinay Nair: OK. Great! Great! We have one question here, which was kind of asked twice, but I'll try to summarize this. "What is your recommendation regarding dashboard development tools? Is Xcelsius the only option for SAP customers?"

Steffen Vierkorn: So, not really. I think there are a lot of dashboard tools available in the market out there. What we see is that Xcelsius is a strategic component in the SAP portfolio, but Xcelsius has a very clear focus that a developer has to develop a solution and then you can deliver it to the end user. What we see is more, at the moment, a trend to a self-service dashboard, so that the user can really select different components they want to see on their dashboard. And, there are different solutions out there on the market where you can self-support such functions, and you can use these functions on top of BW, so that's possible. Xcelsius, itself, has a strong flash engine integrated and you can do some interactive elements in the dashboard itself, but it always requires a developer, normally, in a customer situation, and the end user can't really set up an own dashboard on that.

Vinay Nair: OK, and the follow-up question to this is, "Do you expect SAP to drop products such as Xcelsius in the future?"

Steffen Vierkorn: I think it's a very strategic component and I think they will focus on that. I am not sure if they will go forward with Xcelsius in the same architecture as it is today, because it has weak integration to the overall SAP Business Objects components, and it hasn't much…too strong architecture at the moment, because you still use Xcelsius component for the meta data when you model a dashboard. So, I would expect that there is…that they try to integrate Xcelsius more in the platform, to use it in different components, especially the flash chart engine.

Vinay Nair: OK, but you don't see it being (inaudible) any time soon?

Steffen Vierkorn: No.

Vinay Nair: OK. Another question here is, "On the BW as a staging area option, that you mentioned, what is the most implemented data model approach, normalized or star schema, on the third-party data warehouse?"

Steffen Vierkorn: It depends really on the requirement. I think that there is no big difference when you have a look on the classical data warehouse market. What we see is that the customer really decides based on the requirement which data models they should choose. I think what's important, if you want to combine some reports with SAP data or non-SAP data directly with a frontend solution, that you can provide a link between both of those. But, I think there is no clear dependence next to BW which data model you should choose. It's really important that you can deliver the right solutions for your requirements in the company. So, in our experience, we don't see there a clear trend.

Vinay Nair: OK. OK. And, I think we have time for one final question, given that we're getting close to the end of the hour. But, this question is around next generation BI. So, "Would you recommend a Business Objects roadmap or a third-party BI tool to support future business intelligence requirements, such as unstructured text data analysis or predictive analytics?"

Steffen Vierkorn: So, I think all larger vendors are working on that topic in different ways, but what we can see directly in the SAP portfolio, I think, that's the interesting news on that, that SAP still has to do a lot of work to integrate their product portfolio, and they need resources for that. And, at the moment, we see that other vendors don't have to do so much integration work in their own portfolio and that they can concentrate more on innovations on that. But, all vendors are working on that and especially SAP Business Objects has a new product that's called Explorer, for explorations, so it's kind of a search product and interactive navigation product. So, they're working and they're providing some technology. But, the other vendors, for example, like IBM Cognos, with the acquisition of SPSS, they are concentrating on that area too. But, what we see is that SAP has to do a lot of integration work in the existing landscape. And, if they enhance the new tools, I think that would make it much more complex for them, but

they're still working on that, to improve functionality in the existing landscape, and to integrate that, for example that you can exchange reports between the different components.

Vinay Nair: OK. OK. Well, there are a number of more questions, but unfortunately we're getting at the end of the hour here in our allotted time, in today's webinar. I did get a number of comments from one or two of you that you had some audio or web type syncing issues, so I encourage you to download the on-demand version, which will be available after the call, and you'll be able to get uninterrupted access to that, after you download it to your machine. Also, if you have any questions that didn't get answered today, you have Steffen's contact information showing on the screen at this point in time. I'd like to just offer his correspondence if you've got any specific questions.

Well, after that, I just want to conclude. And, thank you, Steffen, for a very informative presentation! And, thank you all, to the attendees here today, for taking the time, everybody scheduled to attend! We hope this has been useful to you and stay tuned for more information on this topic in the future. Thank you all, and have a good day!