

# 2014 | CONTROLLING

Conference for SAP® Professionals

## Controlling 2014 Plenary Transcript

### **SAP Accounting powered by SAP HANA – Moving controlling and finance closer together**

Janet Salmon: Hello, today's session is SAP Accounting powered by SAP HANA; Moving Controlling and Finance closer together. Now they say, "You should never start a presentation with an apology", but I'm going to. I apologize to all of you who watched the preview that we recorded, back in March. We had a different name, we were calling it Smart Accounting then. The Powers of V; the One Voice people said, "No, no, Smart Accounting implies that it was all wrong before. We're now going to call it SAP Accounting powered by SAP HANA." It is the same thing.

The other terribly important thing here, Controlling and Finance are going closer together. CO, is it going away? This great community of, "What is Controlling? Why are we working in Controlling?" You're going to be more important than ever before. This really is where, new finance is starting to happen. What I'm going to try and do today is, walk you through, what the new technology enables us to do. How it enables us to go back and rebuild the software that we originally built, 20 years ago. I'm extremely excited today as well with a brand new book out. It's called SAP HANA for ERP Financials. I worked on it with Ulrich Schlüter and it was published by Espresso Tutorials. Actually, half the team sitting outside have helped me. Alice helped me and the Espresso Tutorials team helped me. It's a Family Edition almost, coming here and presenting it.

What I'm going to talk about today is first of all, the vision. What is SAP Accounting based powered by SAP HANA? What's behind it? Why are we doing it? Then, some of the specifics. What does it allow us to do, that we couldn't do 20 years ago? What were the compromises that we had to build, in terms of software design? What does it hopefully allow me to do? I'll talk about some of the customers that I've been working with and what they're trying to do. How they're using this, to drive their new approach to accounting?

I know I've got a lot of SAP CO-PA people out there. I'm going to talk also about what changes it will imply for CO-PA. Things that are actually in the system today, but maybe aren't being used to the best of their ability. Finally, work in process; some of those type of reports. How we're changing the period flows. Again, we're not changing how you do variance calculation, we're not changing

how you calculate working process, but we are changing the technology behind it, to make it faster. Of course, feel free to stop me at any point, with questions.

What are we doing; SAP Accounting powered by SAP HANA? As I say, it's gone through various names when we started working on it, it was Simplified Finance. Then it became Financials powered by HANA, then Smart Accounting. Then, SAP Accounting powered by SAP HANA. If you look at some of our marketing materials, this is part of the biggest solution called SAP Simple Finance. It is actually made up of SAP Accounting powered by SAP HANA, SAP Cash Management and Integrated Business Planning.

What's so exciting about it? This guy is the driver behind it. I don't know if everybody recognizes him. This guy is Professor Hasso Plattner, he was one of the original founders of SAP. He left a nice, safe job at IBM, back in 1972, to live his dream, to build a software company. He's actually now, working harder than ever before. He's absolutely adoring, what's happening because he finally feels that what we've got is, the possibility to build, what he was trying to build all those years ago.

I'll try and walk you through, why he's so excited and why he's making the rest of us so excited. Now most of you probably know, the first releases were known as R3, R2, R1, and the R stood for real time. The idea was very simple, "I'm going to transact, I'm going to capture all the things that are going on in Materials Management. All the things that are going on in Sales, all the things that are going on in Production Planning. I'm going to translate it into a financial document that records what happened. Goods moved from A to B, I had to pay an invoice to customer C, and I want to bring it all together and see the financial impact, instantly."

Back in 1972, SAP's product was the only product that did that. Of course, in the way of all engineering projects, there were compromises along the way. We were keeping track of all those transactions. Right back in the early days, ICI back in a little German town near Walldorf, one of the very early customers. They were doing that, they were getting that, what we would now call an NFI Integration. They were capturing all that information, but of course, they were struggling to read it again. The running joke of now being at SAP has always been, "It's one thing getting it into the system, it's a whole other question, getting out again."

You're laughing because you've all been there. What do we do in software terms, to try and get the wretched stuff out again? One of the things we did, to try and get the stuff out again was, we built these things called Totals Tables. Hasso said to me ... Cost Center Managers, we knew we had to give them a report, at least once a month. We built a table that said; Cost Center Account. We knew, we had

to give the Project Manager the report, once a month. We built a table; Projects, Cost Elements. We crunched everything into that data, so that we could do that on the fly. You get the same thing in the Financial Statements. You have 320 fields in the BSEG, all in manner of detail. Then you crunch it all up into about 10 fields in GLT0, and it's GLT0 you report upon. All this was working fine, but people still weren't getting the data out, fast enough.

If I passed my line about 15 years ago, I was working with some of the German car companies, and we just couldn't get the data out, fast enough. We ended up having to advise them to move into some kind of data warehouse, to be able to report fast enough. Even that sometimes, wasn't fast enough. We had people moving into what we called, Accelerated BW in those days.

What that actually meant was, we'd gone a long, long way from that really elegant simple idea that Hasso had bet his nice safe job on. If you kept track of all those material movements, sales invoices, production planning data, recorded the financial impact of that, you were actually then creating a copy of that, in the Totals Records. In COPC, you were creating another copy of that, in the aggregate tables. You were moving it into BW. You parked in a staging area, then you copied it into your cubes, and then you maybe, merged it into another cube. All this was taking you a long way, from real time.

Even SAP themselves, we do an ATAB to BW regularly, on our COPA data. That's 8 hours, when we don't know where we are. We're now trying to rip all those layers out and say, "Well, let's use that core data, basically a data that we're capturing for those transactions. Yes, let's use it to report on it." This is the slides deck that we went in, to start this report. To say, "What we want is, a single source of truth." Now, this has become a little bit tarnished by the fact that we've actually been talking about this with New LG, for about 10 years.

The idea that you had the financial and the management accounting tables, actually tied together. Actually saying, "I'm actually a document that belong with this other document." What we want to get away from is, the situation that used to drive new users absolutely crazy. I posted an MM Document, and then I show them all related documents. They see an FI document, they see a CO document, they see a profit center document, they see 3 or 4 special ledger documents. They say, "What's the difference?" The difference is, each of those documents represents an aggregate or a pop that we built within the system. It says, "This is the data, the way I look at by profit center. This is the data, the way I look at it by company code, this is the data by cost center." All of those things can get out of hand.

What we want to get to is, a situation where I have one document that says, "I'm the material movement" and another that says, "I'm the FI document. With

every dimension that you're going to report on, attach to me." I've got the company code in there, the profit center in there, the trading partner in there, the cost center in there, and so on. Everything in one simple data, straightened, that I can then start to analyze.

This idea of the highest granularity, is important. We've have the line items in there, forever. Most of the times I'd be saying to people, "What are these? Don't look at them." People would come to me all the time. "I've got the employee name in my travel cast. Oh, you have it, don't try and look at it, it'll break the system. I've got the supplier in there. Oh yeah, but don't try and look at it." What would happen in a traditional database, if you had more than about 100 records, it would go sequentially, one through the other. It would say, "Is that employee in there? Is that employee in there? Is that employee in there?" If you had more than play data, it would literally break the system, it would timeout, it wouldn't come back.

With HANA what happens is, you can handle what's called a Sparsely Filled Matrix. All those line items that don't have an employee in there, that's blank. You're literally just looking at those, that have got an employee in there. Then, you can very quickly start to select, "This is Mrs. [Sam 00:09:23] and this was the way she spent a fortune, going to San Diego. She's been to all the finest hotels." I'm dreaming of course. You can start to query that sort of data.

The user experience question starts being just a, "Is it pretty" question. It becomes really, "Is it giving you what I need? Is it giving you what I want?" HANA actually helps us there as well. The idea of a mobile device, in a world familiar with tablets, mobile devices and so on. We're all used to using them, but it gives us a massive technological problem if somebody starts saying, "Show me my cost center data." We've got to do the querying, run back to ERP, pull the data out, sort it and give it back, before the connection times out. It's not just about prettiness, it's about speed.

The other thing that I feel like I spent the last 20 years talking about is, this whole business of closing. I've spent a lot of time talking about the closing cockpit, talking about fast close. It really just means, a little bit faster than quite slow. I've been talking about, how you do it? How do you make sure, you've got the right data going in there? We're really going back now, and rewriting a lot of those transactions, rewriting the allocations, rewriting settlement, to get data faster. It's still not perfect, there's still a long way to go, but I'll try and show you what we're doing, that's different.

Another driver that a lot of people are coming to us to talk about is, the whole area of consolidation, the whole business of into company. Traditionally, we all tended to start quite small, you know? Semi-yearly implementations were

typically with one company code, in the Black Forest. "We're just buying locally and selling locally." Now I talk to all these big, global companies. What we're trying to do there is, we're trying to use that basic data, not just to give us all the information that we need, for controlling and financial reporting. Also, have all the trading partner information in there, all the stuff that we need, to do our eliminations. We can potentially use that, as a basis for consolidation. I'll also show you what we're doing, in terms of reporting and analysis.

What's changed? I really like this slide because it helps me to tell people, where they are today. 99% of the people in this room, would be on that first box. You've got any database, whichever one you like. You've got the financials coding on top of it, and you've got some kind of plan that you're using, to see your transactions, see your reports on your database. Finance is the core in there. As we move forward, going on HANA, being powered by HANA means, actually shifting the database, actually taking the database and migrating it. You'll see this little weasel word down the bottom. People start to panic here and say, "Oh, but you know, I liked the idea in the past, that I could use any database I like. SAP HANA sounds a bit proprietary and SAP, and I don't really want to lock myself into that environment."

Any other in-memory database would potentially work here. Of course, SAP HANA is the one we've been testing it on. If you look at what Business Suite in SAP HANA does, what we did was, we actually took a lot of the accelerators. If you were at Sapphire and any of the other big events 2 or 3 years ago, you'll know that for example, the COPA accelerator was one of the very first accelerators. What that allowed us to do was, to take the data that you were collecting anyway, in COPA. The information; What are my revenues? What are my cost to goods sold, by customer product, region, product group? Whatever you'd set up in your operating concern, and move that to a HANA environment.

Suddenly we could do those big selects, we could do those, "Tell me the revenues for all my customers in California." We didn't have to sequentially go, row by row, through each of those lines and say, "Are you a Californian customer?" We were in a column based store and we could much more quickly, select those customers in California, those costs for a particular plant. The benefits you get from that sort of environment ... I should take us back to what Michael was saying about, what happened at CareFusion. Those huge selects, "Give me all the product costs for a particular plant. Give me all the revenues for customers in California." Those are the ones that really benefit from going to an SAP HANA environment.

If you were actually to try and select individual document numbers, there wouldn't be a whole lot in it. It's the idea of taking those rows, and where you've got a small number ... For example plants, regions and so on, there you can really

get those big selects, much more quickly. What have we just done? The official name, if you wanted to apply for ramp up or wanted to find it now, on the software development store is; Financials Add-on for SAP Business Suite, powered by SAP HANA. Tracy's saying that, "After a couple of beers."

The idea is, the financials course has been completely rewritten. People start to panic and say, "But you know, we don't just use finance, we just MM, SD, PPPS and a lot of them." All that stays exactly the same. The deal we had, when we started to develop here was, all those transactions were to stay exactly the same or the interfaces were to stay exactly the same. Any industry solution that was trying to write into financials, and knew the logistic modules or the HR modules, but was trying to write into financials. All that would stay exactly the same, but under the hub, we could do things differently.

Once something had arrived and said, "I'm the financials document", we could store that data differently. We could potentially enrich it different, but we had to make sure that everything coming in, stayed the same. That includes things like iDocs, application link enabling scenarios. Anything, when you're bringing data in from outside. Also things like BW extraction, where you're passing stuff on to another system. We really did the code split, we really started to rewrite. The first thing we did during this rewrite was, we tried to get rid of all that redundancy.

This is the world. If you actually looked technologically at what happens when you post an invoice, and you will have see this in your system. You create an FI document, invoice against accounts receivables, against customer. You create a CO document, "These are my receivables, this is my revenue against these COPA dimensions." Then, because these documents are pretty difficult to select against, you started creating totals. All those other things that you were seeing, "These are my special ledgers, these are my profit center stuff, these are my financial statements." Those are all totals, where we were grouping things by the dimensions that we were going to need for reporting, later.

We also put in all sorts of indices. If you're doing a list of open items by supplier, by customer, you're typically reading the indices because it's pretty hard to select, from all those documents. The same in CO, we're keeping primary costs, secondary costs. We've got those extra tables. Most of the processing that we do, we actually read those tables. I have to confess, that I was absolutely terrified when we started this project. I think I personally, in my development capacity, we had 180 programs that were reading these Totals Tables. Hasso said, "You're getting rid of them all", and he didn't give me a whole lot of time to do it.

I'm relieved to say, that things are actually still working. Life's just got a whole lot simpler. All we have in SAP Accounting powered by SAP HANA is, an FI document now, and a CO document, and the 2 are tied together. All those things that we used to do was, we updated the tables, to have the information that we were going to need for reporting, is gone. We don't update any of those index tables anymore, we don't update any of those Totals Tables anymore. I can see people at Joe, panicking and thinking that I've written such reports, that reads all these things. "What do you mean, they're gone?" The trick is ... Whoops.

What we've got behind them is, actually a view. What we do is, when we're coming along and saying, "I want to settle, I want to allocate", we're using a view that actually asks for the data in the form of the original tables. The trick there means that, anything that's calling from ABAP and saying, "Give me the product cost for a particular period." It's asking the way it always did, but it's aggregating the data on the fly, out of those line item tables. It's allowing us to have our cake and eat it, to change everything, but leave everything in place. It sounds like the perfect world. It means, everything that we had, still works.

I've been through this process with SAP themselves. We actually migrated, mid-April. You could imagine, when you work for the company, during the first implementation with your own company is, a moment ... It was a long weekend, that April weekend. Everything that they had before, continued to work. What we're now doing with them is saying, "Now we've got everything in this one table. What would you like to do differently?" That's maybe, a thought process to take with you, through this conference. Everything that you had before, will continue to work. What would like really like to do differently? What are those things that you'd been saying to people for years, "Whatever you do, don't try and select by employee. It will kill the system." If the data's in there, you can now potentially select it again.

I apologize for this technical table, but I think it gives you a good idea of what we've changed. This is the FI tables and all those index tables, so BSEC, BSET, BSEM and so on, they're all gone now. All the totals tables, the KEC1, LFC1, GLT0, they're all gone. FLAGLFLEX and the new GL, they're all gone. What's standing in that place is, what's called an Equally Named View or a CDS view. We're able to select the data, in the structure of those old tables. It means suddenly, FI just got a whole lot simpler, it's now down to a header table, a line item table, and a couple of extra tables within New GL. That's it, the rest is gone. People who think that this HANA stuff is just a marketing gain, we've ripped out tons and tons of code, that we used to have to update.

What does it look like, in the system? This is a view, and it looks almost exactly like the old table structure. The difference is, and that's the trick. It means that everything that you were doing before with that GLT0 table or whichever one of

those other tables, will carry on working. You won't lose anything, but you potentially open up a whole new possibility for what you can select. Just look, how few dimensions there are in there. There's ledger record type, version, company code, fiscal year, account number, business area, currency key, debit credit and period. That's it. You're trying to do all your financial accounting on a handful of data, when in fact you've got 320 fields in the BSEG. You could easily be asking, "Give me an individual asset, give me an individual supplier, give me an individual customer." Historically, you haven't because you've been tied down by the structure of that table.

The same thing in CO. You spend a whole lot of time, worrying about what our primary costs are, worrying what our secondary costs are, worrying how we're going to structure things. That's basically the way that all our reports work, for controlling. Of course, there's a whole lot of other stuff in those tables. There's the planning, there's the target cost, there's the commitments. There's about 3 million public sector things that I still haven't got my head around, and they're all sitting there. What we're saying now is, "If I run a selection for, give me all the costs that I need to settle, give me all the costs that I need, to allocate", I'm calling the way I always did. I'm saying, "Give me the costs for March, for these cost centers."

Instead of reading these totals tables and pulling the data out of the line items. Where this is really helping us, is with those huge customers that are pumping massive amounts of data into our systems. Typically the banks, the insurance companies, the retail companies. They're trying to pump data in, as fast as they can. What they typically get into is actually, locking issues with these totals tables. Each document comes along, I pull a number and I say, "Here are some more costs for March." I lock the record for March, in that cost center. I post the data in, I do an update and I release it again. It typically gets quite slow.

That's not the only form of aggregates, we've also got these things called Summarization Reports. The sort of thing that you use in product costing or in COPA, where we build aggregates actually, within ERP. We actually do this massive selection jobs, usually as part of the period close. What we would do is, we would build a tree and we'd say, "What I'm interested in is, all my product costs in this period, in this plant, with this product group" and so on. What we used to do was, we would build up this hierarchies and we'd run a selection job, as part of the period close. It would actually write an aggregate, write a total for each of those dimensions. For each product, for each product group, for each plant. Typically, if I looked at a customer's database, about 30% of the stuff sitting in that database, would be those sort of records. We've just made that obsolete as well.



All you have to do now is, create the tree and say, "These are the things that I want you to aggregate by." Now you pull the data, straight out of the tables, on the fly. You're really ripping out layers from the system. You may be, not doing anything radically new yet, but you're making it significantly easier to do these things, to change these things because you're doing it on the fly. You're not locked into telling IT, "Could you make me a new summarization level? I've just decided, it would be really cool if I could get it by region." There's the detail, there.

The other thing of course we're trying to do is, reducing reconciliation. All that, trying to match up all these different totals, it really gets us into quite an issue, in terms of people actually working at interfaces. I was quite horrified, that one of the early customers that I'd been working with, they've got a Department of Reconciliation. Their job is to sit there and say, "What's in table A, does it match table B? What's in table B, does it match what's in table C?" Where's the value add in that? It's the problem that we, as SAP, have created for them.

The first version of SAP Accounting powered by HANA, will be working with this idea of a logical document. What the logical document does is, it leaves these 2 big line items tables, the same. I still have an FI line item and I still have a CO line item, but we're tying them together. Going forward, we'll actually take that and make it into one big physical document. As a mental picture to take with you, when we typically taught people, what's CO? We sit there and we say, "Well, if you look at your FI accounts, you've got your balance sheet accounts and you've got your profits and loss accounts. Then, those profit and loss accounts that you want to see in CO, create another record for them, it's called the Primary Cost Element. Then we'll record things like payroll by cost center, material expenses by order, revenue by COPA dimension. It's really just, more detail of what you have in the other one.

At the moment what we're doing is, we're tying those 2 line items together. Going forward, we'll make that into one record, with everything in that one record. Then of course what happens then is, all the funny business of this CO starts. All those settlements, allocations, where I need creating sender/receiver relationships, and moving costs. For example, from my team to a product group or whatever. Now, with the new GL, we already have the ability to tell FI, what had happened there, you know? "I've made an allocation, I've taken costs off my marketing cost center, and I've assigned it to my product groups. I've taken costs off my production cost center, and assigned it to a production order." Every time those cross a barrier, whether it's a profit center, a business area, a functional area or a company code, we create an FI document for it.

Going forward, we'll actually just treat secondary cost elements as a special type of account. It was a one-to-one reference. You can imagine that some of these

documents got pretty big, you know? There's a limit of 999 line items in FI. If it was a payroll and you had a pretty substantial payroll, you could end up with 4, 5, 6 FI documents with reference to CO documents. What we've done in the new scenario is, we've actually taken that link, the thing that held the 2 together, and made it available at line item level. We can really go line item per line item through the document and say, "These are the payroll costs for this cost center. These are the material costs for this order" and so on. What's changed these references procedure, object key, logical system? This is something you don't usually have to worry about. It's our problem, unless you have problems in interfacing. We've actually moved those down a layer. We've put them into the CO table, so that we can tie the 2 documents together.

The other thing we've done is, we've actually tied in the COPA table. This is the COPA Dimensions. All the things in your operating concern that say, "I'm going to report by product, by product group, by region, by product hierarchy", and so on. We basically bring the 2 together. It means, essentially when we're reporting, we're doing a hunting and gathering process that looks at the FI document and says, "Which of these are PNL items?" We're looking at the CO line item table and saying, "Which of these are primary cost elements?" We're looking at the COPA table and saying, "Which dimensions do you assign to?" When we've done that, we can do ... We've had to extend the CO table, to bring those things together. Those of you who are very familiar with this, you'll notice quite a major change.

In the past, we used to hide everything in an object number. It was KS, was the way it began for cost centers, OR for orders, PS for projects and so on. EO for COPA dimensions. You'll see that we've done something quite new and radical. What we used to do was, we took data out of the system and put it into ERP, into BW. What's the cost center, what's the project, what's the order and so on? We've actually now made that part of the table. Pre-HANA days, that would have been a nightmare, you would have never dared do that. Now it means, you can start to ask for information in the table, the way a business user would expect to ask for it. "Give me the information in a particular cost center, give me the information on a particular order, give me the information on a particular CO payment dimension."

What I've really been doing here is, walking you through the bottom of that picture. How did the FI line items tie to the CO line items? How do I include those COPA dimensions? What you've got to logically imagine is, under there are all those special CDS views that allow you to keep everything you had before, running again. I really need you to now start to think about the future. If that was the basis for all your financial reporting, what would you do with that HANA view that sits on top of all of them? You can now potentially query all those dimensions together. That's really the core of SAP Accounting powered by SAP

HANA. The idea that you've got this view, that spans the lot. You've got a little bit of BW in there, to give us a couple of query functions. You can suddenly start to use all that cool stuff. The Crystal, the Analysis Office, the Fiori Apps.

I have to confess, I'm a big Analysis Office fan. I like the idea of, just being in a spreadsheet type environment, doing my reporting off of there. This is what Analysis Office looks like. You actually don't need to worry about the state of that HANA view, that's our problem. The idea is, on the left, you have the reports that in principle, you could have done for years. It's just a list of accounts. These are my income statement accounts, giving me the operating profit for my company code or whatever I've selected by. Where it gets interesting is, on the right hand side. All those dimensions that you can suddenly start to report by. I can look at my payroll costs and I'd say, "Okay, I'd like to see those broken up by cost center." I can look at my material expenses. "I'd like to see them broken up by order or project." I can look at my revenues. "I'd like to see them broken up by product and customer, and all the things that I keep in my operating concern."

Of course, we could do that before, it's not radically new. I could do that in R2, but the point is I can do it now, in one report. I've got this huge, huge, huge document with the potential to get into any of those dimensions. The really exciting thing for me was actually, working with a large German pharmaceutical company. We'd been talking about this for a couple of months. They liked the idea, but we did this view with all their dimensions in it. They had things like ideas of responsibility centers and so on. We'd done all the derivations in COPA. We showed their management how to drag and drop, and pull these things. Their eyes just opened. This was their dream, this is what they wanted, when they'd written, "We'd like a common PNL", on their statement to us. That was the dream that they didn't really think was ever going to be a reality. We were able to show them, "It's not only reality, it's here, it's in your system. Who would like to drive it?" They were completely blown away.

Of course, all this means a change in thinking. Most of us have grown up with costing based COPA. We've known that account based COPA exists, some of us have even used it. This linking of everything by account, really puts account based COPA back into focus. Now, a lot of people have looked at account based COPA and been burned in the past, and I'm included in that group. One of the reasons that people got burned was, the number of dimensions. 15 years ago, we were saying, "Look, keep as few dimensions as you think you can get away with, in there. Don't try to include everything because the performance will be too slow."

One of the early accelerators for account based COPA, really proved that, that didn't apply anymore. We were working with a very large telecom company, you

really can slice and dice, and drill through all those COPA dimensions. It works. This is a very old slide that we used to use, to explain the differences. I seem to have spent the last 3 or 4 months talking with a lot of our early customers about, what the differences are, and what's persuaded them to go one way, against going the other way.

The real killer fundamental differences between the 2 applications, if you take away performance and general nastiness. Typically, when we would advise people to go to costing based COPA, particularly if they were a manufacturer in the past, was because you could break out your product costs. You could say, "Behind my standard costs, I've got material costs, internal activities, overheads and so on." You could have that cost component information, those fixed and variable costs." All an account based COPA would do is, it would give you the information, "You sold 10 pieces at \$100."

The other thing it did was, it aggregated all the price differences. You would have all this detail in CO, where you'd say, "These are my scrap variances, these are my quantity variances, these are my price variances, these are my resource usage variances." John's written a whole book on how to get to them. We crunched them all up into account based COPA and said, "The answer's 42." What we did there was, we've actually gone back to account based COPA and broken those things out, given them more detail. The other thing that we typically end up doing with people is, we look at the way they do their allocations. Typically, they're taking things out; research and development costs, marketing costs, administration costs, and they're assigning them into COPA. We're looking at, "Are they getting enough detail in there, with account based COPA, to get what they want to see?"

As I said, we had to make some changes, pretty early on. These are some of the changes that we had to make, as we moved into this account based COPA environment. We break out the product cost, with all the details of the cost components. We break out the variances. The other thing, I was working with a large consumer product company, although my pharmaceutical company had the same issue. They had stuff coming in, in logistics and it was coming in boxes and pallets and you name it. They wanted some kind of notion of comparable unit because when they went to the street, they didn't just say, "This is how many thousand dollars we made in revenue." They also said, "This is the ton of product that we shipped." We had to put in an extra set of fields into COPA, to do a conversion and say, "This many tablets have ... Is this, this many grams, so that you could report in an aggregate way?"

What happens is, the delivery takes place, exactly the same as it always did. In this example, one piece is delivered, it's got a standard cost behind it, and that standard cost has good various cost components. We use those cost

components to say, "These are the material costs, this is the material overhead, this is the production overhead", and we break it out again. All that detail that you used to only be able to get hold of in costing based COPA, you can now have in account based COPA.

The same with the multiple quantity fields. I have a lot of my customers, they do these extra quantities in COPA because they want to report by tons or some kind of comparable unit. They typically have 3 or 4 different quantities in there. We've got a new little bit of configuration that allows them to say, "When I say boxes, this is the logic to turn those boxes into kilograms or tons or pounds or whatever." Then the variances; they would come along with all their detail in COPC, and then scrunch it up into one posting in FI. We're giving them the opportunity to break that out again to say, "I actually want an account that shows quantity variances. I want an account that shows prices variances, an account that shows resource variances and so on."

Of course, allocations. This is getting more detailed into your posting logic. The one place you really need to make a call, if you move to account based COPA is, how you do your allocations? Whether it's costing based or account based, that'll receive those allocations. The functions here aren't actually new, you've been able to do an allocation and account based COPA for years. The way of thinking has changed slightly. You could essentially build, exactly the same allocation cycles. You can still say, "I'd like to take all my marketing costs, and spread it to all my product groups, based on revenue and product group." You build the rules in exactly the same way. The difference is, the selection is always a combination of a mountain and cost element. What you're updating is, essentially a cost element. You're no longer doing this transformation into a value field.

The thing to get your head around here is, this move from what we call a Key Figure Base Model. It's a model that's based on exactly the value fields that I sat down and defined, when I defined my COPA. 200 value fields was the limit. To transform that into accounts, it's about going back through your configuration in COPA and saying, "How do I transform it at the moment? Do I maybe, lose detail that I should have in there?"

Another great, great myth. I've been told by goodness knows, how many consultants in the last 6 months, that top-down distribution in account based COPA doesn't work. The embarrassing thing is, it even says it in SDN, it even said it in our documentation, till quite recently. It has worked since 07, but obviously, nobody had updated the documentation. The idea here is again that, you can stand there and say, "I can assign bonuses by region, by Manager or what have you." Then, break it down to the product groups underneath or the products underneath.

What else has changed? If you're in the COPC world, one of the things that I'm most excited about is, the whole business of work in process. This is another case, where we had all the detail in CO, and then we would tell FI, "Here's the settlement and it's 1 million." If anybody's ever sat there with an Auditor, trying to explain their work in process postings, complete and utter nightmare. There's a horrible little hidden field called Assignment that says, "I came from this particular production order." You almost can't evaluate it. You end up doing all sorts of mucking around in Excel, and it gets horrible. What we've done is we've said "Well, let's just put those things together." I can now evaluate that with HANA, I can get a report like this.

It goes in really simply and says, "Tell me my 10 WIP accounts." Then it goes behind those WIP accounts and says, "Show me which production order was behind it." I think that's going to be potentially ... I hate to say game changing because it sounds so radical, but I hope it's going to make a lot of people's lives, a lot easier. The people who've been there with 10 spreadsheets, trying to prove that what we calculate, really is right. They'll have one report to explain it.

The other thing, if anybody ever asked you, "What's the difference between Business Suite powered by SAP HANA, and this SAP Accounting powered by HANA?" This is the old world. Business Suite powered by SAP HANA, we didn't make any changes here. When some of our early customers started looking at things like order settlement, work in process calculation, results analysis. All those heavy lifted closed transactions in CO, they got into issues here because of what would happen. We built it, the way you would build it with a classic relational database. We did a select, which of the orders are open? We went delving down in the database, pulled this list back up, and then we'd loop sequentially, through those orders. "What's your settlement rule? Where are you trying to go? What's your status next? What's your settlement rule? Where are you trying to go? What's changed?"

This was really ... If we were lucky, it was about the same, when we moved things to HANA. Sometimes we were unlucky, and it was actually worse. We've ripped all that out, we've changed that whole selection procedure. What we do is actually, trying to do a lot more selecting on HANA, before we move into that calculation step. We select all the open orders, but we also select all the costs that are assigned to those orders, the status information. Everything that we're going to need for the calculation, in one massive SQL select. Then we go back into ABAP, and start posting. That's really taking time out, of some of these processes.

If we're extremely lucky and everything works as we want it to, we can be back to 30 faster there, on some of those. It's really quite significant. Of course, it isn't always as good, it really depends on how much aggregation you're doing? The

killer unfortunately here is, we're not handling any of the user exits, which means a lot of people are still not going to benefit from it immediately. Just to give you an idea of what's going on here. This is the way, the old results analysis used to work. Do a big select. It would loop through and say, "Which sales order items do I have to take with me?" It would then, for each order in turn say, "What's your status? Are you released? Are you technically closed? Are you finished?" It would then start to say, "How are you going to do this? Which method are you using?"

It would then go off and read the planned data, the actual data. It was doing this, order item by order item, which just wasn't the best way to do it for HANA. That whole middle block where we do all this selection, is now being moved to HANA. We do that on the database. If your cancellations are right, it really takes time out of the process. Really think of this as, not just a marketing, everything will go faster by magic. We've been rewriting some of this serious old code, to get the benefits out of it, to really change it.

For those of you who like a tick list of who's going to benefit from this? These are the transactions that we've managed to change. You'll see at the moment, they're all running in parallel. We've got CO88 and CO88H. This is quite simply because we're not totally on functional parity yet. If you had an SAP Accounting powered by SAP HANA system, at the moment, the advice would be to run them side by side. First, we'll make sure that they both did a bit of send result. That would be my first, phew! Then start to measure, "Is there a performance benefit to be had there?" In some cases, "Am I trying to do more than this new transaction's going to let me do?"

We're still working on that. This is a moving space, we will offer more. You'll see for example from results analysis, I've only got 2 methods of the 17. I'm going to feel really bad when I go to Ken's presentation on results analysis for projects tomorrow because we haven't done any of them yet. We're working on it, and we will get there.

In terms of the summary, in terms of what we've got done so far. Have a look at my blog, if you haven't already. Got to thank everybody, who actually looked at the preview of this. The view count of YouTube was fantastic, I finally have kudos with my children. Teenager children aren't interested in books, they aren't interested in status. YouTube clicks, "Mom's cool!" Thank you. The controlling with SAP; A Practical Guide. The new version coming out in October, will have all the HANA enhancements described there. If you haven't bought it, maybe wait a month, but please do go ahead and spend lots of money. The release today, brand new as I say, only in my book about SAP HANA for ERP Financials.

What we tried to do was, we tried to strip away all the marketing, all the, "This is the best thing to sliced bread." Really to say, "What does it do? What's different? What's changed, and how does it enable me to go forward, using that?" We will have to keep updating it. I'm rather scared, that every 6 months we're going to have to write a new version because we're developing so fast. The other place of course to watch is, the SAP documentation. The key idea is, we really do have a new product. It's not marketing, it really is re-architected from the ground up, an SAP accounting tool. Everything that we used to be able to do, we should still be able to do. We're hoping that this is really the lever to go into the next really big, next generation, "What can we do today?"

I'll be sitting in some of your sessions, desperately scribbling notes about, where I think we could do more than we potentially do today. I think the key takeaway; this is line item based. You've only got to look into your own line item tables, to understand the power of this. You've been recording fantastic data, some of you for the last 20 years. I bet my bottom dollar that, most of you aren't using it to the full potential that you could be doing. This is your chance to free up that data, to really use it the way you've always wanted to do, but haven't been able to do.

This idea of one profit and loss statement, it sounds like something that's always been there. When you see a customer who's finally got it with their data in it, it's absolutely mind blowing. It really shows you, what you can do with this new solution. Of course, myths always spread. I'm getting about a mail a week at the moment saying, "Is costing based COPA dead?" No, it's definitely not dead. There are still things that I would continue to do in costing based COPA. If you were doing statistical freight costs in there, do it. If you're bringing multiple different types of cost estimates in there, you're bringing the material ledger into it, do it. The 2 can coexist. Marketing would like me to say that it's much simpler, we only have one now, but that's just not true.

We're really improving the period close. There will be more coming there, but we're working on it. With that, I'd like to open the floor for question. I've actually got quite a lot of time for questions still, but I know there's going to be a lot of questions in the room. I wanted to give you the chance to ask them. Maybe one question that I'm sure, a few people are thinking but haven't asked is. "Assuming I love this, assuming this stands fantastic. How do I get from A to B?" We've actually got 2 options that my ramp-up customers are taking. One is a straight migration. SAP themselves did a straight migration. What we did was, we took our core ERP system. We're not big, compared to some of the manufacturers out there. We're tiny, compared to John Deere and some of the other guys, but we do have 65,000 people working on it. It's a reasonable sized system, and we migrated that in one weekend.



What the migration does is, it throws out all those aggregate tables, it marries the FI and CO line items, and it basically sets you up for this new reporting. Half of the customers that I'm working with, are talking about doing a classic migration like that. The other half are going [huffing 00:46:14], "What if I can't close properly?" What they're doing is, they're putting a separate box in. They're putting a HANA box in, they're putting an SAP Accounting powered by SAP HANA code on top of it. Then, they're taking feeds from their local system. What they're doing there is, they're building the system that they really want, in this central system. They're taking more or less, real time feeds into it. I'd say, about half of them are doing that.

Now, if I was a single instance, I wouldn't go that route. I can't talk about removing redundancies, and the advise you to put in a separate system. Those large customers that are sitting there going "Oh, we could do a template implementation and we could get to our ideal world." It can be a halfway house, and it's certainly an interesting possibility. That was me cheating, by asking my own question. Any other questions? Yes.

Audience Question: Is there any need that we should move to new GL or can we, even with the classic GL, still can use this?

Janet Salmon: The question was, classic GL versus new GL? You do technically, have to go to new GL. SAP themselves actually did that, during the migration. We've been looking at new GL for years, and doing probably what everybody else did. In principle it would probably work, but in practice, "Oh, do we have to?" You have to separate new GL into 2 parts. New GL, if you go to a new GL training, you exceed that sitting outside, he's written one of the new GL books.

On the one hand, you're talking to scenarios, so instead of having that very, very narrow GLT0 table, where you just have the company code and the business area in there. New GL gives you the ability to say, "Instead of having a separate ledger for cost to goods sold accounting and moving that into my GL. Instead of having a profit center accounting ledger, I'm moving that into the GL. Instead of having trading partners, I'm moving that into the GL." That would be covered by the migration, you'd have all those dimensions and their partner dimensions in the central document.

The decision that you have to make, if you're looking at this is to say, "How important are things like multiple ledgers, to me? I'm reporting, according to multiple gaps. How important is something like document splitting?" If I want to say, "I want to split my accounts receivable and my accounts payable by profit center, then at the moment, I should do a migration to new GL first, and then migrate here." Other people at SAP have said, "You know, those are often the 2 difficult ones. I have my account ledger set up. I've got my common accounts

and my special accounts, and I'm just going to live with that." Yes, technically you are using new GL rather than classic GL, but the migration generates you a subset of functions. The real decision is, "Are those other things, those multiple ledgers and those documents, pretty important to me or not?" Is that helpful?

Audience Question: Yeah. I know, but does it mean that you have to go to new GL?

Janet Salmon: The short answer is, yes. The migration program, once you push it, you'll be on new GL, but it's a subset of it. I think again, the question to ask there is, "How much extra work have you done, around your classic stuff, in terms of reporting?" Some of the stuff, you will be covered. There are conversion tools. For example, one thing that I have loved is people who're doing profit center accounting, they've built a lot of their reports. As soon as you take away the PCA table, they have to redirect. Now there are tools there, that allow you to do that sort of thing. You really need a very specific laundry list of, "What am I doing?"

Even the question of special ledgers. Some of the special ledgers become redundant. If you wanted to keep a special ledger going because you use it for some kind of multiple accounting approach, you could do. Ask me afterwards, if you want a little bit more detail. Yes?

Audience Question: I'd like to follow-up on that, to make sure I understand correctly. Let's say you're a company who doesn't use special ledgers. My only concern is about splitting. Are you saying that we can go from current classic GL, and move to Financial SAP HANA. When we make that move, we're going to be on GL, in HANA?

Janet Salmon: That's right, that's exactly right. That was the situation, SAP themselves had been in. We'd been running classic GL for years. We did our original implementation in R2. Overnight, the migration turned on the new GL, it turned on those special scenarios. It converted the documents to include those extra dimensions in it. By Monday morning, we were on new GL.