

Male Speaker: Welcome to the IBM Cognos forum session rolling forecast in turbulent times. My name is Christoph Papenfuss and I am the head of the European Cognos Innovation Center for performance management and I will guide you through today's session. Forecasting is a very important topic for many companies, and so today in this session I want to discuss three different things, 1) I want to talk about the role and relevance of forecasting in this current business environment, why are so many companies looking at improving their forecasting processes, and secondly I want to introduce you to the growing forecast philosophy which really represents improving approach that many companies are implementing right now, and then for the last point of this session I want to talk about the role of technology, what type of role does the IBM Cognos software play in implementing a solid forecasting approach within your own company.

In the last ten to fifteen years our world has changed significantly, the volatility of our business life has gone up tremendously. The world is truly flattening, we see competition popping up in different parts of the world, just take a look at the oil price for example, imagine yourself walking into your boss's office in the year 2007, you have spent a great deal of time projecting the oil price and you tell your boss that you see the oil price jumping to US \$150 per barrel, back in 2007 your boss would have probably called you crazy, but over the last year what we have seen is tremendous spikes in many different areas, we have seen the oil price, we have had the Lehman crisis and many other different things, so truly our wealth has changed and there is important for us to live with this new reality, but yet very often we find companies apologizing or blaming poor performance on unexpected events. Over the last ten years we have seen many different unexpected events for example Katrina, we have had SARS and now we have the Swine Flu, and so David Axon one of our thought leaders that we work with very closely is telling us that we should really expect the unexpected, volatility is here to stay and we need to be able to deal with this, and this is where forecasting comes into play, we live in volatile times, we live in turbulent times and we have to expect the unexpected, but yet unfortunately many companies are still relying on traditional management approaches, we are trying to run our companies on a very detailed annual budget that takes six to seven months to develop, where creating a forecast on a quarterly basis and these forecasts are always very detailed. We spend way more time arguing about the past and actually looking into the future, just ask yourself the question, is forecasting well like process within your company? In many cases that people hate the forecasting process, they hate the planning process, but yet again we spend too much time arguing about the past and so clearly something has to change, just imagine you are self driving down the highway with a 100 mile per hour, imagine that your windscreen is getting updated only ten to fifteen seconds, would you be comfortable driving down the freeway at this speed? What would happen if a little boy would run out in front of your car? So, you clearly need the visibility and, so today we need to rely on new management tools and forecasting and this is one of those critical components of a good management approach, what is a forecast? When I think of a financial forecast, the first thing that comes to mind is the weather forecast and indeed the weather forecast has a lot of similarities with the financial forecast, let's take a look. So, first of all the weather forecast is forward looking, it is not a process that describes why certain events happened in the past, why the forecast was

off, why there were certain changes, it is a forward looking process and this process is also fact based, it is objective. The weather man doesn't tell us whether he or she wants nice weather or snow in the future, it is a fact based process and the weatherman is trying to really objectively provide us with an outlook of the future, it is once again not wishful thinking, it is not a plan, it is an objective outlook into the future. Also the weather forecast is focussed on risk and opportunities, for example the weatherman might tell us that we can expect great weather over the weekend, we should may be take the family out to the lake or go out to the mountains or likewise the weatherman might tell us that there is a storm front coming in, and that we might expect a longer commuter in the morning, so it is focussed on risk and opportunities, also the weather forecast is very flexible, it is getting updated almost every minute and especially the weather forecast is being updated as new information comes in, so overall the weather forecast is truly a great model for financial forecast, there are many elements in there that we should also look for in our financial forecast, that also brings up another point, in many companies the terms forecast plans, budgets are being used interchangeably, but in these turbulent times we believe it is very important for us to distinguish between these different processes. Plans and budgets detail how we think the future should look like, whereas a forecast describes what the future will most likely look like again thinking about the weather forecast, the weather forecast is a true forecast it represents what the facts tell us, the future will most likely look like is not a description of what we want the future to look like, and so today to deal with turbulent times to really truly identify risks and opportunities it is important that we really implement a true forecasting process that objectively describes what the future might bring for us.

Then what is the purpose of a forecast, the author of the book "The Art of the Long View" Peter Schwartz captures this very nicely. Peter Schwartz says "The end result is not an accurate picture of tomorrow, but better decisions about the future" and this is truly what the good forecasting process should be about, it should be about enabling us to make better decisions about the future, forecasting should be about identifying risks and opportunities as they come along. We should not think of the forecast as being a highly precise prognosis, but rather we should think of forecasting as a process that enables us to make better decisions about the future.

Good forecasting practices indeed create a lot of opportunities and value for a company, for one thing there is the reputation of a company. Think about a company that has produced accurate forecasts over a long period of time, the reputation of this company will truly go up, investors think that this company is worth investing in, so there is a big trust and reputation component of forecasting, with good forecasting practices comes good performance, we are able to identify risks and opportunities as they come along and with that we can truly increase the performance of our company, we are prepared for the future we are able to act, and then from a personal perspective it is also important to keep in mind that for finance professionals good forecasting processes can also help us with our career aspirations, think about the opposite case of a finance professional creating forecast that are not accurate, that are not providing value to the company, this is what truly leads to poor career performance, so all in all good forecasting practices really create a lot of value for companies and you should also look at implementing a good solid

forecasting process in these turbulent times. How do companies approach the forecasting process? Very often companies still rely on what we call a traditional approach or the static approach, as you can see in this chart this is a very typical case, there are couple of characteristics let me walk you through this. So, for one thing there is an artificial barrier at your end, where only forecasting until December 31st in this case here, that is all fiscal year end, there is this barrier of fiscal year end, we are not looking out beyond this date, also we are only forecasting three times a year, and then also if we want to utilize the forecast data that we are creating here for critical business decisions, we are looking at a case where we are actually not having a consistent data set, imagine yourself making a critical business decision in March, you now have nine months worth of forecast data to make your decision on. Now, imagine you are in September and you also want to make a similar business decision you only have three months worth of forecast data to base your decision on, so all in all the static forecasting approach has a lot of limitations, the first thing is really the physical year end focus and you should really ask your self the question if you want to continue with your business beyond fiscal year end, and also we have the limitation of infrequent updates, and we have the limitation of an inconsistent data set, it makes it really hard to make a critical business decision sometime in September, and unfortunately we can see the result of poor business practices in many cases if you look at the newspapers very often you can see reports of miss forecast and this typically leads to poor performance of the companies stock or likewise from a career perspective as well, so also you should think about improving your forecasting processes. So, what can you do about this, what is a good approach, rolling forecast have really proven to be an effective approach that you should also consider, lets take a look.

We have seen this picture before this is the traditional static forecasting approach, in this case we have three forecasts a year it is a quarterly static forecast. A rolling forecast on the other hand has a rolling time horizon, and that is really the basic definition of a rolling forecast, it is the rolling time horizon, as you can see in this case here, we have a rolling four quarter forecast, and this forecast has been updated once a quarter, so what is so attractive about this model and what else do we have to think about when we think of rolling forecasts, there are many different aspects let me just highlight a few, one of the great advantages of the rolling forecast is that we have a consistent time horizon, what we saw earlier with the static forecasting process we have an inconsistent data set, in September we only have one quarter worth of data of forward looking data, with the rolling forecast we have a consistent data set that provides us with a consistent time horizon, and at any given point in time during the year we have the ability to make a business decision and we can utilize the same set of data, further up to rolling forecasting process provides you with a consistent and repeatable process. We don't have to create different templates for each forecasting cycle, just think about the time horizon we have to always cut it down from nine months to six months to three months, also the rolling forecasting process provides you with increased visibility into the future, just imagine yourself sometime in September, you now have the ability to look out until September of next year, with a static forecast we are only looking out until the end of the fiscal year. Also another great advantage of the rolling forecasting approach is that we have the basis for decision making, many companies utilize the annual budget as the main tool to run that company, but unfortunately budgets in these turbulent times are typically outdated

within the first quarter of the year and at that point in time it is critical to really have a good solid forecast that you can utilize to run your business and last, but not least the rolling forecast approach provides you with a great starting point for your annual budget, just imagine yourself sometime in August, September that is typically the time frame when many companies start with the annual budget, and you have a starting point, take a look at the example that we have in this picture here, you already have a starting point at that time and you don't have to start from the scratch, and such companies are able to create their annual budgets in a more meaningful way and most importantly in a much faster way, so there are many different reasons why rolling forecast are attractive and these are just some of the reasons, lets take you to further look at if this is really effective.

The Hackett group conducted a survey in 2008 and they came up with some great data, so lets take a look at some statistics here, the first thing to note is as you can see in this chart is that rolling forecast considerably speed up the budgeting process. The Hackett group found that the average company needs about a 121 calendar days to create the annual budget, how ever companies that utilize a rolling forecast approach only require 91 days that is a substantial reduction in cycle time, so rolling forecast can truly speed up some of your management processes. The Hackett group also looked at the overall satisfaction of the management processes and as you can see in this chart here the companies that utilized the rolling forecast approach are typically much more satisfied with their management processes, and this is once again a function of the ability to have a consistent data set is the function of having a increased visibility into the future and it is also function of not having to rely on the annual budget which is typically out dated within a very short period of time especially in this turbulent times, so truly rolling forecast must provide value to companies and what we are seeing right now is that about 37% of all companies have implemented a rolling forecast approach or are in the process of moving towards one, so you should also consider looking at the rolling forecast approach.

What are some of the design elements that you should think about when it comes to a rolling forecast, let me give you some insight here and some of these also apply to a generic let's a static forecasting process. Today I want to focus on just three important ones, there are many more and we are actually executing a number of different workshops in 2009 across the world and we are happy to invite you to one of our detailed workshops where we talk about several other success factors. The three factors that we want to focus on today are the time horizon and the update frequency, the type of models that you need to implement and then also the use of scenarios in your forecast let's take a look, lets start with a time horizon and the update frequency.

When you take a look at books if you take a look at different white papers that are circulating right now, very often authors postulate that rolling forecast is a twelve month quarterly process, is this really true? Is the rolling forecast a twelve month quarterly process, should it be a 12 month quarterly process? Our customers tell us "No" they tell us "That it really depends on your business, it depends on the environment that you are operating on" don't just assume that a rolling forecast needs to be a 12 month quarterly process, make sure that you truly understand what business you are in and what type of

volatility you are dealing with, you have to make sure that you really match the time horizon to the rhythm of your business, so take a look at an example, imagine yourself being in charge of creating a forecast for an investment bank in 2009, would you feel comfortable creating a 12 month outlook, probably not you would probably feel comfortable creating a forecast for the next one or two months. As a matter of fact few weeks ago we met with a leading hotel chain and this hotel chain decided to move towards a one month forecast in these turbulent times, especially with the Swine Flu around, on the other hand after the spectrum we also see a lot of companies utilizing a longer time horizon like 24 or 36 months, life science is one of those examples, people are still getting sick in these turbulent times and so pharmaceutical companies feel that they have a much better grasp of the future. Also take a look at the different functional processes that you utilize for example a hotel chain might forecast the revenue on a monthly or let's say quarterly basis, but maintenance and repair and those type of things could be forecast with a much longer time horizon as these are more predictable things, so make sure that you select the right time horizon that really matches your business environment and that matches the volatility within your particular industry, and we understand that this is not very easy, because very often companies just simply assume by fault that it needs to be a 12 month time horizon. What about the update frequency, just take a look at the Swine Flu that we heard about just a few weeks ago, let's say you are in the hotel industry to stick with the same example. The day that we really truly found out about the Swine Flu would you be comfortable waiting until the end of the quarter to see what this could potentially do to your business. The answer is no and so best practice companies are really moving towards an event driven update approach, they implement more frequent forecast and they move away from the calendar driven approach, they update their forecast on an as needed basis, and this truly requires you to have a set of models that can be updated on very short notice, models that are ready to be updated and this brings us to our next point.

What type of models do you need? Can you utilize the same models that you utilized for your annual budget or do you need to implement slimmer models that can be updated very...very quickly. Here is an example of a model that we found with one of our clients, it is a very...very detailed forecast as a matter of fact this template matches the template of the annual budget, what you can see here is number one we have a monthly time scale here that goes out until fiscal year end and then on the left hand side we have our typical chart of accounts approach, the dots in the middle of this chart here really indicate that we deleted number of lines, this template here all together contained about 260 different line items, so it is a very...very detailed forecast and, but you can also see on the right hand side there are lot of different variances that we could analyze, but ask yourself the question, look at this template, are you really truly confident to make critical business decisions, does this type of template really provides you with critical information about risks than opportunities about your customers, are you losing customers? Are you winning the right customers? Once again the answer is probably no, this template does not provide you with critical business insight and it also takes a very long time to get updated, people get lost in the detail, so what our customers are telling us is that the language of the forecast needs to change, we need to move away from this chart of account driven approach and move towards drivers, business drivers that speak

the language of business. As a sales manager I don't think angel accounts, I don't think about 634172, I don't worry about this account, what I think about are the number of opportunities that my sales team is able to generate, I think about the pipeline of my team, I think about the number of my sales staff, I think about customer satisfaction, all these are business drivers that I truly care about and that I truly understand, I don't care about 634172, but yet we send out templates that only reflect the chart of accounts which is very difficult for the business people and as a result of that we get forecast that are not accurate, we get forecast that do not provide the critical business insight and also people spend too much time on updating the forecast, let's take a look at an example, few years back we worked with a company that has a very unique business model, they have a call center that calls into various different large companies and they try to identify opportunity, once an opportunity has been identified the call center hands this opportunity over to a field sales staff, and the field sales person will then go out to meet with the company to potentially close a deal. The manager of this call center was asked to forecast revenue on a monthly basis, this was a very difficult process for the call center manager, he really truly cared about making sure that he had the right staff on hand that the staff was trained properly that they knew how to identify opportunities and that they will stay current with the product offering, but yet here he was spending a lot of time trying to forecast revenue, and also the revenue was not clearly in his hands, there was also the in depth play with the sales force, and so we started working with this company and we developed a driver base forecast approach, a forecast approach that truly speaks the language of business. In the new approach, *[Inaudible]* and the manager is now in charge of forecasting the number of opportunities that his team will generate using a historical rate, the number of opportunities can then be translated into pipeline using the pipeline once again a *historical or plan rate* *[Phonetic]* can then be utilized to translate this into revenue. Here is a numerical example for example the call center manager of forecast 50 opportunities for the next month and then looking at this historical data we see that the average of every opportunity is typically about 20,000 large and which then translates into a one million Euro pipeline, historically about 20% of these opportunities have been converted into an actual deal resulting in about 200,000 in revenue, so utilizing this driver based approach the call center manager is now able to generate a forecast very quickly and also from the finance perspective, finance is now able to really truly conduct some in depth analysis, we can for example find out that the average opportunity size was lower than in the past which could lead us to implementing a new call script training our call center staff better or may be there is challenges for the field sales staff, the conversion rate has dropped down to 10%, so now we have much better insights the forecast is generated in a shorter period of time and everybody is happier, this is a driver based approach that truly speaks the language of the business.

The other components just thinking about is the simplicity of your models, not only should we strive to utilize business drivers, we should also focus on what is important, is important to simplify the models that we utilize. The example that we saw before we had about 260 line items, it takes a long time and people put a lot of effort into updating the forecast, but yet we have to ask our self the question, are most of these items really relevant, many companies are now taking a look at the forecasting process and try to figure out which items they should really focus on, one great way of thinking about this is

to utilize this metrics, ask yourself the question if the items that you are forecasting are volatile and material. We recommend that you really focus your efforts on those items that are volatile immaterial, let's take a look at an example, imagine you are in charge of managing the forecast process for large multinational company, in the past you have had to wait for the forecast from a different part of the earth and, so the forecast process was very slow, but a detailed analysis shows that indeed, this business unit that is very slow to produce its forecast is very immaterial, it only contributes about less than 1% of the overall profits. Further, the results of this business units happened fairly stable in the past, so in this case you can probably resort to simply monitoring the results and spending the time on analyzing rather than actually forecasting, and then also focus your effort really on those items that are immaterial and volatile, don't focus your time and effort on forecasting renting office supplies, but focus your time on those items that are really relevant, so utilize this metrics try to simplify your models and try to implement drivers that will make it easier for your business to really understand what is happening in your business.

What about the usage of scenarios, should we utilize scenarios in these turbulent times, in many companies we only produce a base line forecast, lets say that is zero growth, this is our one forecast that we produce, but honestly ask yourself the question, would you want to place a bet on where the economy is heading right now. The answer is probably no, I certainly wouldn't feel comfortable at betting on any particular scenario here, and so what we are seeing is that companies are really are now really utilizing scenarios in the forecast, there is not a simple base case that we should have, scenarios really provide you with great insight into what the future could hold, it can help you identify risks and opportunities in a much safer and faster fashion, many people say that the process of developing a scenario is actually much more valuable than the output, it forces you to think about different business outcomes, it forces you to think about these different scenarios, I mean such you are able to identify the risks and opportunities, but unfortunately developing a scenario can be very tedious, just take a look at your current forecast process, many companies have promised with their forecasting processes, people don't like that process it is very bloated, it takes a long time and then the thought of adding one or two different other scenarios to it really brings the whole process to breaking point, another problem with scenarios is that you should really document your assumptions very carefully, what is the definition of modest recovery? What is the definition of zero growth? What type of things should you think about, so developing a truly detailed scenario can be very tedious and so there should be a different approach. One thing that we are seeing with our customer base right now is a very slick and slim scenario approach. These companies still utilize the typical base case scenario, this is the one forecast that you could use in your business, you can see this in the chart indicated as the blue line, on top of that companies are then asking their business managers to also provide insight into specific up and down side risks, for example a sales manager might see a potential upside opportunity at a particular customer or likewise a potential risk at a different other customer, and so we are basically asking our business to provide a baseline forecast and along with that to provide an overview of particular upside and downside risks, later in this presentation I will show you exactly how this looks like. The advantage of this approach is it is very slim, people can typically complete the step of

scenario thinking in a very short period of time, and you still maintain the benefits of the scenario based approach. Once again many people believe that is the process of developing a different scenario is much more valuable than the actual output, it really forces you to think about the future from a different perspective, so try to think about this approach, identify risks and opportunities along with your base case scenario. So, these are just a few best practices a couple of design elements that you should think about, we talked about the time horizon, the update frequency, we talked about the need for agile models and we also talked about the need for scenarios. There are many different other success factors that you should think about, but for today lets leave it at that

Let's move towards the last part of our presentation, what is the role of technology? What is the role of software like IBM Cognos version 8? Forecasting truly requires a very strict process, you need to be able to update your forecasts as critically events occur, you need to be able to create the forecast within a very short period of time to really prepare yourself for the future, and so you need to type process that is repeatable, you need to process that is very disciplined and you need to process that can be updated fairly quickly and most importantly also you need to link this process to decision making and for that you truly need to go to technology, lets take a look at an example, what are some of the process steps that you need to consider when you implement a rolling forecast. The first thing that typically happens is, when you work in a rolling forecast environment at the start of your forecasting cycle you need to create a new version, you take the old version you archive it, so that you have the ability to do analysis, technology can help you here to quickly copy data sets between different versions and to create a new data entry form. Once you have done that very often companies make some tweaks to them always, for example they want to add a cost center, they want to add a profit center, they want to may be change your formulae and technology really provides you with the ability here to make the change in one spot, and you can automatically copy it down into several other cost centers, business units and so forth, so this is a very convenient environment where you have centralized model maintenance, once you have updated your models, you typically load your actuals in there, utilizing modern technology like IBM Cognos 8 you can have a standardized interface that allows you to load your actuals from your ERP systems and other external systems at the push of a button, this is a repeatable process there is no copy and paste. Once you have done that you can then distribute the models out of the business, instead of sending out spreadsheet templates via E-mail you can utilize a typical work flow functionality that you find in our products, people then collect the data, they can do the data entry and you can monitor other process, this is especially very important for finance professionals that are typically chasing spreadsheets, the work flow functionality provides you with real time insights into who has started the process and who is lagging behind, and as a result you are able to complete the process much faster. Once you have collected the data you can aggregate the data in real time also throughout the data collection process you don't have to wait for all the spreadsheets to come in, you can simply aggregate them in real time and look at them, you can then run standardized reports, you can perform some analysis and then most importantly once you have done your analysis you can ask some what if questions, you can optimize your forecast, you can assimilate different options and the results of this then can be brought into management meetings, after all the forecast is about making better decisions about

the future, and now you can utilize the data from the process to make good business decisions, so all in all this is a fairly complex process, but technology is really critical here to automate the process and to create a repeatable process that can be updated on a frequent basis. We at IBM Cognos say that spreadsheets are like bunny rabbits, everybody loves them, they multiply uncontrollably and they are extremely hard to catch, so in order to really implement a good solid rolling forecast you should move out of the spreadsheet environment leave the bunny rabbits behind and move towards a goods technology platform like IBM Cognos 8. Lets stop talking and look at this in real life, lets take a look at the example of a sales manager that is reviewing the progress of his team, has the team started to forecast, where are they when can we expect the forecast to be done, lets review our results and then also create a new forecast and then perform some sensitivity analysis. I am now logged into my IBM Cognos environment, what you see here is a quick dashboard, on the left hand side I can see where my team is, with the forecast I can see that one person has submitted the forecast, but I also see here is my organizational hierarchy. This is the organization that I am in charge of, I am in charge of the fresh food company for the area of sales and marketing in Europe, what I now want to do is I want to forecast the German distributor. I open up my planning grid and I can now create my new sales forecast, what you see here is this is a very simple template. The only two items that I have to forecast are the sales quantity and the unit discounts. These are things that I as a sales manager care about and these are things that I have influence over, what we do here now is we have the ability to provide actually a baseline forecast, I don't have to create a forecast from scratch, but I can rather rely on existing data sets, in this case for the sales quantity I have the ability to utilize my previous forecast as the base and for my unit discounts I will utilize my budget, my current budget as the basis and now I can just simply adjust my prior forecast or the budget, in this case here for example I see a 5% increase of my sales quantity over the last forecast and in this case here I think that my unit discounts will probably go down a little bit, you can see the numbers in red indicate the different changes that we had here, I can fix my windows and take a look at the further months you can also see that we have a 14 month process here, this is a 14 month rolling time horizon, so very quickly I can generate my forecast utilizing a certain basis and I can just make some adjustments in my prior forecast budget. Now, let's take a look at the results of this, so I forecast two things and what I have here my model is I have a quick overview of my overall results. There are many different items here that are being calculated automatically for me for example I can see my net sales, I can see my contribution margin and other different things here, so just by entering two numbers I am able to actually get a very good picture of my business and it is a very fast process. Then we save the data and then what I want to do is I want to do some analysis. Let me rearrange my window here, what I can see now is that I have different versions all lined up here for example I can compare my current forecast with my budget with my previous forecast, let me go through particular months, let's see the current months plus four and now what I want to do is I want to identify specific risks and opportunities, this is the scenario approach that I described earlier, so in this case here for example I have created my base forecast and I can now identify specific upsides that I see, for example in this case here, I believe that I have some additional sales opportunities with the customer that is potentially introducing a new product, so I can now enter the exceptions that I see here or the particular upsides, and once I hit enter you

will see the results reflected down in the other window. Now, like wise I can also enter some specific downsides, so in this case here for example I see that there might be a potential risk of a price reduction, one of my customers once through E-negotiate a contract and this will be true for the remaining of the year, and you can immediately see the results reflected down in the other window. I can also take a look at this now in my group currency, this is a multi national company and there we go, so now I have created my forecast this was a very quick process I have focussed on just a few items, items that really speak my language and I was able to utilize a good starting point. Now, what I want to do is I want to take a look at the report, I am pulling up my upside downside report in the Cognos 8 environment, and in real time I can review this here, and now what you see here is the yellow bars really indicate my base case forecast, this is the forecast that we created and then the green and the red lines indicate the particular upside and downside scenarios that we just entered. Now, what I want to do is I want to switch towards a what if analysis, now I want to take a look at specific variances, what you saw here is a driver based forecast and a driver based forecast provides me with the ability to do in-depth variance analysis meaningful analysis, for example I can find out what the volume variances, what the price variances etc. So, in this case here I have the ability to compare different data sets and I can see them graphically represented here on the right hand side, so now what I want to do is I want to compare my current forecast with a prior forecast and I can quickly refresh the data here and then I can take a look at my variances, what I can also do is I can run particular scenarios for example in this case here I have the ability to take a look at my exchange rate, I can change it 2.9, I can refresh the data very quickly and I can see what type of impact this will have on my overall broadcast, so I have the ability to analyze large data sets very quickly, I can test certain scenarios and I can specify specific business opportunities here, so this is just a very quick example of a good rolling forecasting process, this might provide with you some ideas for your own implementation, so our rolling forecast are really a silver bullet, unfortunately the answer is no, as with anything in life there is no one size fits all approach, you truly have to take elements of the rolling forecast and customize them through your particular business, one of the examples is the time horizon decision for example, you truly have to look at your business, you have to understand the environment that you are operating in and then customize that approach to your business, also you need a forecasting culture, simply by implementing a rolling time horizon you wont get better business results you also need to encourage management and your employees to really look at forecasting as a critical process and you also have to make sure that people provide you with an objective outlook, this might require in some cases for example that you have changed the overall compensation approach, also you need to implement agile models we just saw this here in the examples you need to have the ability to update your forecast more frequently and this needs to be a very fast process, so you need to change your models, also you need to have the right technology in place, operating in a spreadsheet environment can be very hard, it is a very complex environment, technology helps you implement a repeatable process, a process that can be executed on very short notice, a process that doesn't require a lot of manual labor, so all in all rolling forecast are very proven approach , but we have to make sure that you really implemented in the right way, with that I would like to come to a conclusion, if you like what you saw today come and take a look at the IBM Cognos innovation center, on our website you can find a

number of different white papers about the topic, also if you are interested come and join one of our half day rolling forecast workshops, during the workshops we discussed several customer examples and we go on to a lot more detail and discuss several other success factors, also if you want to follow us on Twitter, we have different Twitter boxes for the US and also for Europe where you will obtain event updates and other useful things, so quick summary in this presentation today we talked about the role of forecasting, forecasting truly is a critical management process that you should consider for your company, the traditional detailed budget no longer works, you need to have the ability to create objective outlooks on very short notice and forecasting really provides you with a means for that, rolling forecast are really a proven approach for getting better business insight, many companies have implemented the rolling forecast and they have seen great results, we talked about some of the critical success factors as well, and also with the IBM Cognos software provides you with the ability to implement a good solid approach and IBM Cognos innovation center provides you with best practices along the way, with that I would like to thank you very much for listening into the session today, if you have further questions please get in touch with our team at the Cognos innovation center thank you very much and bye-bye.