Male Speaker: Welcome back. We began this morning hearing about the key challenges and best practices that we need to be aware of in order to drive effective performance management. We also heard a little bit about how Cognos can help organizations put those practices into action. Now, we would like to give you the chance to hear firsthand from a company that's actually living out this vision within that organization. So, for this presentation, we welcome Robert Loreto of Qualcomm. He is Director Business Process. Robert has 13 plus years experience managing information systems projects involving all phases of the systems development life cycle and twice he and his team have won the innovation and best practices award from Cognos out of a field of 23000 customers who entered the competition. So, it's now my pleasure to introduce to you Robert Loreto.

Robert Loreto: Thank you *Mark[Phonetic]*. I am Robert Loreto with Qualcomm and I am going to be speaking today about our journey with Cognos in the past four-and-a-half years as well as our most recent journey in TM1. Today, we are going to talk a little bit about QCT, Qualcomm CDMA Technology is the group that I work for with *Ben[Phonetic* Qualcomm, why we chose Cognos, the teams that we work with and delivering performance management, the phases of our rollout, the strategic procurement forecast, which is one of our most detailed forecast, I would like to drill down a little bit and explain that to everybody, and then the Cognos benefits that we received, and then the lessons learned to best perform a project like this within your own organization. Qualcomm CDMA Technology is one of the major business units within Qualcomm. We are basically the chip inside your cellphone. We produce many different chips in order to make your cellphone work. We also do the software and other solutions around the cellphone technology. We are located all over the world. We are a major R&D shop with 4:1 ratio between engineers and support staff. So, four-and-a-half years ago, my management came to me and wanted to develop a more efficient planning process. We always felt we knew how to plan, but we thought that we needed a better way to plan by being more collaborative and more integrated with the other departments within our organization. So, we talked about fine tuning, that's what we wanted to do. We knew that we knew how to plan, but how do we tune that in order to make it more efficient and the data more reliable within the organization? So, the teams that we grabbed in our first approach of Cognos planning, we went after marketing, which does… to long term forecast strategy, procurement because we are a fabulous manufacturer, we have a big partnership of manufacturing across the world in order to develop our products, we went to our engineering department in order to help us understand yields and test time of all of our products and then finance to understand the P&L impact of all of these groups and the total P&L output. So, after four years, I am proud to say this is our roadmap today. We have a lot of enterprise planning models which are in blue and green. The green are more collaboration and consolidation of those models. We also have an orange, which is our TM1 enterprise. We recently started TM1 about 7-8 months ago and we are very proud of that and also I will drill down on that later, show you the benefits of TM1 within this environment. You can see we pull data from our ERPs. We pull data from over a 150 people within our organization in order to understand a full forecast and our full actuals against that forecast, delivering performance management to our executives so we can understand where to best apply resources as well as *cost savings[Phonetic]*. So, let's drill down on some of these applications and explain to you what we have done. So,

procurement - one of the reasons I put up the slide is because all of these models go through multiple phases. So, phase one of procurement was January '05. We went very quickly in a very small footprint. So, we have both turnkey parts as well as parts that we manufacture through multiple phases. So, before we took the parts that we manufactured in multiple phases, we decided to take our turnkey parts, a much smaller subset of our forecast and with that, we were able to calculate *[Inaudible]* for cost because that's not in our ERP. We were able to project total cost forecast for three years by quarter for the whole company by product. So, very quickly, within 30 to 40 days, the users have seen this application and we are able to use it and decide whether or not this was the right application to move forward with *further traditional[Phonetic]* forecasting needs. So, by September '05, we went out and we were able to build another model for them that we added on, so not just turnkey, but now we incorporate a contributor and we had a web user input and we had the execution window that's taking our current forecast in our ERP, the 12-month strategy or the 6-month strategy, bringing that in so that we can calculate *[Inaudible]* for cost and then we put *capacity[Phonetic]* model. What's our total capacity in these areas? And then other things in order to again integrate more within the total cost projection and that went very well and then in February '06 we added even more and some of the things we added was scenario planning capabilities within Cognos *enterprise[Phonetic]* planning. We also had a *little[Phonetic]* data warehouse for the first time and the reason I point that out is because people think you need a data warehouse day #1. No. If you have one, it's great; if you don't have one, there are other ways to get around that and get to that later. We had a web reporting. We used more of BI within Cognos to deliver some of the reports and we also added a very *important[Phonetic]* thing, that is called *row level security[Phonetic]*. So, within every product, users are assigned to which products they can see, that kept the integrity of the system, and then with that integrity, we were allowed to roll it up to more individuals within our organization and then finally, just recently, in November '07, we did more. We did set allocations. We introduced our back end assembly to this model for the first time. So, most of our chips have a back end assembly that there is a lot of cost driven in there. So, now we are able to put these costs in there, forecast this cost as well as put performance measurements around them. So, these four phases have allowed us to really understand our total procurement strategy and understand how to save as well as maintain as well as enhance our current processes. So, our Cognos evolution at a very high level for all of our models when we first started with phase one was just Excel and Cognos enterprise analyst. I mean that is all we had for reporting, but we had the Cognos enterprise models with Excel add in. Phase two, we went to PowerPlay. We started dumping the data out of enterprise planning, we started using PowerPlay to get people multidimensional reporting capability. Phase three, we introduced data warehouse and *ePOs[Phonetic]*. We were able to put more BI reporting onto the current environment. Phase four, we used hierarchy management in order to do *row level security[Phonetic]*. We moved a lot of the administration of the applications back to the superusers of those organizations and then we put reporting and analysis capabilities in Excel. So, now they have multiple ways to bring stuff into Excel, which everybody loves and lives with, you know, so we have Analysis Studio, PowerPlay, BI. We have a lot of ways to communicate to the users. So, phase one, just to give you a… when we first started four-and-a-half years ago, we only had four contributor models, twenty users really using

those contributor models, one PowerPlay cube and 40 report users using Analyst Excel for enterprise planning. Today, we have over 18 contributor models, 150 plus input users you know in order to *[Inaudible]*, but it is basically a huge environment allowing us to able to collaborate across the organization in order to achieve effectiveness in our finance processes. So, just to give you, you know, a little bit of a roadmap so it doesn't scare you, you can see it took us a long time to implement these models and enhance these models and every single model that we have has gone through multiple phases. I am a strong believer of producing something quickly, letting it show to the users, and having those users come back to you with additional things that they would like as well as additional changes they would like that they didn't anticipate prior to seeing the model. So, we are very quick about putting a model up, 30 to 45 days, letting the users use it, letting the users experience it, and then coming back with the next multiple phases that we could have in that approach. So, you can see all of our models took multiple years in order to achieve what we have today. So, another reason I wanted to speak to you today is because of driving deeper. That's what we are calling TM1. We went out and purchased TM1 to add to our current footprint and I will explain to you where we are using TM1, where we think TM1 is fitting in our environment and why we think it is really beneficial to what we are doing today. So, the first thing we wanted to do is take the current enterprise planning data, we have over a 150 people contributing multiple sets of data throughout the company, but we want to take that data and put it into more flexible, more scenario planning models, so we have multiple superusers within the organization that always are doing scenarios on top of the multiuser input data. That data was being done in Excel, but what if we call it, control what if we call it because it doesn't change our overall annual plans that we do, but it changes the what if during the month or during the two months when managers and management is deciding where they are going to focus their resources or where they are going to focus cost savings and able to see that input come back and see if that's the right place to put the people. So, we want to call it as expanding our data in order to enhance it, that's what we call it. So, phase one, believe it or not, is a software forecast and it is a very small part of our business software revenue, but it is a very important part of our business, because it is most complicated part of our business. So, we thought if TM1 could address that, we knew that we had the right tool in order to do the scenario planning across all the other models that we want to do in the future and we are very successful. Within 90 days, we were able to put an application in front of the users that basically took their software forecast in Excel into TM1 and now they have a process, they no longer have lookups and what ifs and if statements throughout this Excel spreadsheet. They have a process that they run through TM1 in order to calculate forecast for the software revenue. These two, actually we have Cognos Finance, for a long time, we have been a Cognos Finance user for over five years. We wanted to get our customer P&L forecast, which was in Cognos Finance and *[Inaudible]* into our TM1 environment. We felt TM1 had a lot more scalability from a forecasting standpoint and we wanted to take it there. So, just recently, January, we were able to go live with that and we have seen a lot of success with that as well as customer P&L *feeds[Phonetic]* software forecast and now as the customer forecasts *where the[Phonetic]* chips are being put in, we can automatically with *[Inaudible]* forecast our software revenue. Before there was an Excel upload into the Excel spreadsheet so the software forecast now is an integrated process within TM1. We

have over 12 cubes 0:10:51.1 handling these two phases and these 12 cubes collaborate and work together in order to achieve both a customer forecast on our products as well as a customer forecast on our software revenue. Phase three is finance scenario model *[Inaudible]* in doing that right now, our goal is to go live within July. Basically, we are taking calculated *AUC[Phonetic]* that is out there, the calculated *ASP[Phonetic]* that is out there, the calculated volume that is out there with enterprise planning models and bringing that together and giving the financial community a place where they can challenge and make high level changes and see what impact those will have to our P&L. Phase four is engineering scenario yields and phase five is procurement *scenario yields[Phonetic]*. I have deeper slides that drill on those and I will get to those and give you a little bit more information. So, TM1 finance application was first like I said the software sales forecast. We started about 90 days, within August '08, we were able to deliver software revenue actuals and forecast, customer P&L *level[Phonetic]* for software revenue, and the coolest thing about this model and this is why TM1 is really strong, it has got looping capabilities. So, we do volume break pricing. So, we are able to do that loop. So, when you break a counter, come back, and get that counter back and then customer sales forecasting. We have product and software revenue by customer. You know, we have this in Cognos finance and we were successfully able to take it out of finance and put it into TM1, enhance the customer forecast capabilities, as well as have that now talk to our forecast for software revenue. So, integrating TM1 in the finance or other projects that we would like to do is basically bring in more, so we are going to take the total volume that's within our enterprise planning and give our financial analyst ability to mix with that, do product mix, do tier mix, do different things, *not[Phonetic]* ASP do the same stuff which is average selling price, *not[Phonetic]* AUC, average unit cost, and then total R&D because total R&D is an important part of our total cost. When we create a chip, it's mostly hours of engineering and development time that creates this chip. So, are we making sure that we are producing the right chips at the right time in order to achieve best performing P&L or best performing market share? So, this database allows finance to tweak a lot of things within a lot of different areas, but then come back with results, then next time we do a planning process *[Inaudible]* times your planning process, we can take this data and give opportunities to people and challenges that we think that they should look at while they are going through that. Procurement *path[Phonetic]*. So, procurement has these models that we talked about the cost, capacity, *SAP[Phonetic]* and engineering yields model in Cognos Planning, but now we want to take that data again and be able to develop it into TM1 by giving them cost drivers. What would they make at a high level for cost drivers and what if scenarios and quickly do those changes, quickly see that and give that feedback back to management as well as the back end assembly, *what will[Phonetic]* we do there to make changes and then capacity, do we have too much capacity, not enough capacity, what do we do if we change our capacity strategy, what effect does that have on our P&L? So, all of these are basically the same. One is for finance, one is for procurement, but what we are doing is exposing that data and allowing users to use that in an OLAP cube make changes quickly, create a scenario on the fly whenever they want to and as well as analyze those scenarios against each other. Another thing we are basically doing now that we have our data warehouse and our BI implemented, we are extended that and we are trying to teach people to use that in order to do their decision making. So, on the left here, I have a

*portal[Phonetic]*, we are very big on this. We believe graphically you want to display data that attracts the user to a specific need or specific thing that they are interested in. When they click on that, then they go to the right, they go to drill down reports and then we have what we believe in PowerPlay and Analysis Studio down below the cube analysis. OLAP technology has been really great in our company. We have been using PowerPlay for over 10 years and now with Alert Manager, we are able to send out alerts based on certain conditions or schedule certain reports that have certain conditions, so people can see the data and then go to the portal, analyze that data, as well as drill down on the *[Inaudible]*. So, we are introducing BI now with all of our planning models, but before we just start off with the planning models, we used Excel data and then used PowerPlay, but now we are going… when you do *learn[Phonetic]* a model whether it is TM1 or enterprise planning, we are able to give the BI experience. So, benefits of Cognos and these benefits are actually from our users, these little bullet points are from the users as well as the quote below. Today, they basically feel that the data is more accurate, you know, it's more consolidated. They feel they can trust the data and use it in their data analysis and data ownership. Now, we only have one owner for certain key parts of the data, that's why we distribute that data and there is over a 150 users. So, basically, we are spending more time analyzing key benefit business metrics you know and this is a quote from one of our guys *[Inaudible]*, but today we are able to get information quickly and accuracy, that's our main goal. So, quickly and we were able to provide this to our business through multiple phases and building that trust through those phases I think is really what has driven this success for us. So, best practices and lessons learned from my perspective - defining global dimensions and rules. This is a very important step. For us, it took us a while just to understand what are the global dimensions that we share across, what are the individual dimensions that we share within a business area like procurement allowing one ownership of source. That was very important to us and I will explain to you another benefit down later that proves that's a key place that you need to do in order for people to trust the data. Common libraries and dimensions, that's more technical, but within Cognos you will have libraries and dimensions that you will have to use, the more you standardize that, the more you leverage that, the easier it is to roll out additional models off that data. Then creating buffer accounts; people always ask me what are these buffer accounts? Well, within this process of marketing, procurement, and finance, the numbers do change because everybody believes they have their own assumptions and I am fine with that. So, what we do is, marketing puts in the numbers, but procurement and finance have their own accounts they call buffer accounts, that they could either tweak the number up or tweak the number down. So, this is our version of how we get to you know the version of the truth, one truth, right? We do have multiple volumes where we know why those volumes have changed and what the assumptions of those volume changes. This gave us flexibility in order to answer every business need as well as every department's need. Data warehousing - you know we didn't have one day #1, but we knew the benefit was there. So, in our roadmap, our long term strategy, there was data warehousing in the roadmap and it was really beneficial for us. We a star schema data warehouse or strong BI supportive and strong BI you know go getters. So, we really knew we needed that and we have that today. So, if you have a data warehouse today, that's great. If you don't, just make sure it is on your roadmap and drive there and your reporting will be so much

easier. Lessons learned - you know quickly we separated planning from analysis. We learned that you don't want to give people too much information. If they only need five things to give you, that's all you want to produce is a model with five things that they can put in and send back to you and then you consolidate. A lot of models are built where people go in and… or you just do these three rows or you just do these five rows, I don't think that works. My philosophy is you just give them what you need from them, they answer those questions, and then you bring it into your planning environment, just consolidate it, and then you report it out using BI. An enterprise wide reporting and BI strategy allows us to do that, right? So, we are able to give this data, bring it into our BI strategy, and then share it and then process automation and notifications are key. We have notifications when systems don't run or stuff like that, but we also have notifications of alert and conditions that users should look at based on what they told us. So, we program those so they can be focused on doing their business, day-to-day business as well as also knowing what to go look for. Then empower the user. Our users have a lot of abilities within our systems, it's flexible and data is available *on their terms[Phonetic]*. So, they are able to push the data anytime they would like. We do run the data once a night, but we also let them run it whenever they feel during the day. You know, we don't believe in scheduling every two hours because someone is always going to miss that you know by 10 minutes. So, we empower them by letting them run throughout the day based on the schedules that they set for that day in order that they need some data back. I just want to thank you all. That is my presentation. Thank you very much.