

Andrew Popp: Okay. Welcome to today's session, managing the report life cycle. My name is Andrew Popp, part of the product marketing team and I am going to be joined later in this task by Stephen Gibson. The slide you see now is who are we. I have been part of the product marketing team for the last two years primarily focused on reporting and dashboarding. Stephen Gibson has been an engineer at IBM for the last 14 years primarily focused on reporting and charting. This is the abstract for today's session. Some techniques and tips for managing a report life cycle, discover how to design and build effective reports and express authoring mode using IBM Cognos 8 BI report studio. The session will also show you how to promote these reports to IBM Cognos 8 BI report studio professional and then have them consumed in IBM 8 Go Mobile and the new IBM Cognos 8 Go Dashboard. Today's agenda, I wanted to talk a little bit about the challenge that businesses are facing today, talk to you a little bit about the latest release of IBM Cognos 8 BI v4 that we released last October, introduce the concept of the life cycle and the reporting life cycle, and then we want to dive right into a number of demos, followed up by a wrap up and then do some questions. The business intelligence objective - so this is an objective that most organizations have today and it's really around trying to get everyone within an organization making decisions based on the same set of data. So, we have all been part of meetings where we walk into a meeting talking about revenue numbers. Well, in this case, let's just say that revenue numbers are declining. So, we are all sitting around the table and sure enough somebody walks in with a conflicting revenue report number. Based on their numbers, they say that the revenue numbers are actually increasing. From then on that meeting is basically trying to figure out where the numbers are coming from, whose numbers are actually right. You end up leaving that meeting with having made no decisions around the bigger issue why is revenue declining and basically, what ends up happening is you have a number of people within an organization who are making decisions based on either *rogue[Phonetic]* data or different data and it really acts as a deterrent with respect to trying to make better decisions. So, the objective of trying to get everyone on to the same dance card or making decisions based on the same data is all around the business intelligence objective. So, in October we released the... a brand new version of IBM Cognos 8 v4 and it was really around trying to get more people making decisions from the same set of data. If you take a look at the typical deployment that most BI vendors have today, there is only probably in the best case scenario between 20% and 30% of an organization that's actually leveraging BI today. If you look at the job descriptions of those people, they are typically found in the IT organization, professional report authors, data modelers or what have you. Those people are on board with respect to BI, but their constituents, i.e., business users, are typically not on board and in some organizations that can represent upwards of 60% to 70% of the people. So, if you go back to the business intelligence objective, you have potentially 60% to 70% of the people making decisions not necessarily based on the same set of data, which you know back to the previous example causes a lot of disruption. So, in October we really focused our release around getting these business users informed, engaged, and aligned. So, there is a number of features that we released as part of that release that really *ladder up[Phonetic]* and talk to why we are informing, engaging, and aligning users. Informing them is really giving them more color, more visibility in terms of the data. So, a classic example of some of the features that we released that *ladder up[Phonetic]* into that are annotations, better charting technology. These are all

capabilities and features that give you more color so that you can actually figure out exactly what's going on and it really is a method for engaging these business users. The second *tenet[Phonetic]* is all around engaging business users and probably the key feature in this bucket is around Go Dashboard. So, we are going to get into a little bit detail on that and you are also going to see a demo, but that's really a brand new capability, which is really targeted at giving or enabling end users, in this case business users, the ability to create and customize their own dashboards rather than going into IT, asking them to create a dashboard and then you kind of have that typical conflict IT versus the business user and then finally, it is around aligning business users. So, one of the cornerstone features that we released around that was business viewpoint which is the ability to manage dimensions within an organization. So, we now kind of want to shift focus here a little bit and get into a series of demos that both myself and Steve have setup and I want to use this chart as a guidepost to sort of setup what we are planning on talking about. So, I introduced myself as a product marketing person when we started today's presentation. I want to now switch personas. I am going to now be a business analyst, Steve is going to now play the role of the BI professional. What we want to try to characterize here is a typical flow that we see in our customers with respect to how a report starts, how it is then passed on to a professional author and then how a professional author can basically make modifications and then we can leverage our other capabilities, namely Go Mobile and also Go Dashboard to then see that output. So, for the first part of the demo, I am going to start and express authoring and I am going to play the part of a business analyst and I want to quickly put together a statement style report. Okay. So, the first thing you are going to see is I am in report studio express authoring mode. So, express authoring mode was a mode that we released back in 8 v3 and it's really a specified sort of slimmed down interface that builds itself as a user interface for business analysts to quickly create statement style reports. So, you have a data tree on the left hand side and then you sort of drag and drop items onto the canvas. What you are going to see and I will maybe just start here, is as I begin to drop things on there, you are going to see that there is one critical difference and that's really around the ability to see live data. In report studio professional, you see everything in a wire hanger frame mode here. You are actually seeing live data. So, what I have done here is I have... you know with some really quick mouse clicks, I have created you know what's starting to look like a statement style report. So, I can quickly now see, okay, based on my revenue across a number of product lines, in this case five of them, how am I doing versus 2005-2006. So, I want to do some simple formatting, again, because I am a business analyst just to make sure that you know not necessarily the report is pretty, but the report is functional. So, what I am doing is I am... you will see that I am actually changing the layout of the report on the fly here. I am going to now go into the toolbox and again, this is sort of very similar to the paradigm in report studio professional in the sense that I have got this toolbox with a bunch of precanned objects. So, I am going to just do some naming here so I can sort of navigate this a little bit better. This, you know, *since having two products, I am now[Phonetic]* this is likely the total products. All right. So, let's see. Let's go back to the source here. I mean having it based on product line is interesting. I want to add in retailers. Just expand that. So, here is my various retailers across the geo regions and again, I just... I kind of want to set up the same sort of format I had set up earlier in the sense that I have a total, so I just want to drop that down. Let me go back to

my toolbox objects, grab the cross tab space, set that in, I am going to call this retailers again. Okay and again just overwrite this because it doesn't make sense to have two things called retailers. So, I am going to now call this total retailers. Okay. So, I am starting to see something that's you know giving me some pretty useful information. The other thing that I want to see, I want to be able to see what is the actual difference in percentage between 2005-2006. So, in express authoring mode, there is a bunch of precanned or prebaked calculations and they are calculations that are basically set around you know the business analyst persona. He or she is trying to create these statement style reports. So, they are going to be looking for variances, they are going to be looking for some differences and stuff like that. So, I want to quickly do that as well. So, what it does is it has now provided me with a variance difference between the two, showing me the percentage difference between 2006 versus 2005. So, you can see where sales are up and where sales are down. So, I think the last thing I kind of want to do here is two things. I just want to play around with the formatting here a little bit. So, this is something else that we introduced in 8.3 and we have now carried it over into 8.4; it's this whole eyedropper feature where I can pick up a you know set a style, pick it up, and then basically drop it on so that I can carry that style without trying to reinput you know the font size and whatever. I want to just add some *underlines[Phonetic]* here, pick that up, *this will do here too[Phonetic]*, and just drop it down. So, this is starting to look like a statement style report. I guess the only other thing that I wanted to do is maybe do something around conditional formatting. Just to give a bit of a visual indication in terms of what parts of the business are doing well and what aren't and... it's always nice to do it you know color coded using colors. So, I am just going to add one. New conditional style, we will do it based on revenue. So, very much like query studio. Kind of drops in and you know you got the opportunity to sort of define a high-low value. I am going to just you know for simplicity sake just hit 75% here. Okay. So, we will just say anything above that is excellent, anything below that, we will just say is average. I am going to just change the color because in my old age I can't necessarily see font color changes. I want to be able to actually see you know the whole cell change. So, let me just do that. You will notice this *UI[Phonetic]* is a little bit different. We did a lot with respect to the graphing technology in 8v4 so there is a lot more power in here. All right. So, there we go. Now, I guess the last thing is, we might just throw a title on this. All right. I think we have got it. So, now... and if you go back to our demo script here, me being a business analyst, I am going to now send this over to a professional report writer and that's Steve and the reason why I would do that is you know this report is good, but I think that he can add some spice to it and maybe you know get it ready to send it out to prime time to more people or whatever, but I am going to now pass it over to Steve, who would be... who is going to do some professional authoring to it.

Stephen Gibson: So, here I have opened the report that Andrew created and reports *through[Phonetic]* Express. As you can see, it's a report just like any other report. There is nothing special about it that it was created in Express. It's all the same thing and I am in Report *[Inaudible]* Professional. So, I am going to add a few things to it. So, what I think I am going to do is I am going to put two charts next to the cross tab to give Andrew some extra context to these numbers. I think that will be a useful thing for him to do. So, first thing is I am just going to put the cross tab in a table. So, I select the

cross tab and I am going to create a table with two columns, that's the easiest way to put things side by side and I am going to have two charts stacked on top of each other. The easiest way to do that is to put them each on a block. So, I will just drop in two blocks here and now I am going to put in the chart. *A chart here[Phonetic]* and based on the orientation, I think it is going to be nice to have a bar chart like this and I will drop in another bar chart down here the same thing, like that. Okay. Now, I am going to select the block here and I am just going to add a little bit of padding. So, we get some separation between the two charts, probably a nice thing to do. We don't want them butting up against each other. I will just put five pixels, should be good and I will put the same thing on this other block here, five pixels, five pixels. There we go. Okay. So, when I am building reports, the first thing I like to do is get the structure right or the data right and then I work on aesthetics. So, let's get the data right here first. I think what's going to be useful is for Andrew to see revenue per employee for different years because I can see here we are looking at revenue for different products and regions. By getting an idea of the average revenue for employee might help add some context to this report. I go over here and I choose *the level for[Phonetic]* years, and I will drop that as my category and I am going to choose the measure, revenue for employee. So, I am going to drop that in this my default measure. Now, the next one related to that is probably the number of sales reps I have. So, it's good to see the average, but it's also good to see how many sales reps we have. So, we could see if that's changed over time. So, I drop in the measure and go up here, drop in category. All right. So, I think the data is good. Let's run this and see how this looks. Oh okay. Data looks interesting, but things are really kind of hard to consume. I mean if I show this to Andrew, he is going to flip because it is going to be hard to see and hard to consume. So, let's apply some principles of good visualization here. The first thing is let's get rid of useless stuff. So, having the legend here is not useful because it's obvious what the measure is. There is only one series and this year on the side here is not very useful because we can easily see it's years and I don't like these guys down here at the bottom. They kind of take up a lot of space or bit of space and don't really fit well. So, I am going to add a title to each chart to show that information. So, let's make those changes and see how it looks. Getting rid of the legend is easy. I can just press delete. Press delete, getting rid of the axis titles is easy. I can just select them and press delete *and I am here[Phonetic]*. Right? Now, I can add my title. So, let's go over here and turn on a chart title. Go over here. Show and I am going to call this one revenue per employee and I am going to call this one sales reps. Okay. Now, the other thing I noticed is... let's see... go back to the view over here. It's kind of high. It's very large. So, let's shrink the size down so it kind of aligns up here. So, it doesn't... so I don't have to scroll and it doesn't take up too much space. So, let's get an idea of how that's going to look. I can click here. *Size it overflow[Phonetic]*. I am just going to take a guess here that probably a 150 pixels high and 300 pixels wide is good. Now, when I put an explicit size on it, I get this little plus minus control here. If I hit minus, it shrinks it down to the actual size of the chart when it is *run[Phonetic]*, so I can get an idea of what it is going to look like. So, I can see this is the actual size. When you expand it, we give you... we use much more space because we give you a lot of *drop sounds[Phonetic]* to interact with the chart and do what you need to do. So, let's set the same size on here and see how she looks. 150 high, 300 wide. Shrink it down. Not bad. Not bad. That looks good. Yeah. Okay. So, now, let's run this and see how it looks.

Okay. That's not too bad. Things line up nicely and this presents it in a much cleaner fashion, but there is still some more we need to do here I think. First of all we need to fix this axis. That's just too many zeros. It's hard for me to understand and it's also currency. So, we are going to format it as currency and I am going to scale it by millions, so it will be easier to read and after that, I am going to make this look a little bit more visually attractive. We will talk about that in a second. So, let's fix that axis first. So, now I expand this guy out again so I can edit him. Click on it and I bring up the data format. I say it's currency and I say scale it by minus six; 10 the six is millions and I am going to edit my title here just so that's clear. So, people know what we are talking about. Perfect. Much better. Much easier to read. Much clearer. All right. So, now let's do the aesthetics. So, although the information is currently presented correctly and is useful, it's not very visually appealing. Many people need to have something engaging and looking pretty to draw them in and get their attention. We don't want to overdo it. We don't want to make it distracting. We just want to make it appealing and comfortable. So, we are going to add some subtle changes to this to make it look nice. The first thing is I am going to change the *palette[Phonetic]*. Go here, choose adjust *palette[Phonetic]*, but since we only have one bar, it's only going to use the first one and I would prefer to have this one. So, let's just press up, so that's going to be the first one used and I am going to copy this *palette[Phonetic]* to the clipboard, click on this chart and do paste there. So, that was a quick shortcut for copying *palette[Phonetic]* from one chart to the other. So, let's run that, see how that looks. It's starting to look better, not bad. A little more attractive and fits more with the other colors here. So, let's go now and let's add this generated background. We are going to make the background of this chart look very nice. We are going to add a border. It's going to make it gray and we will make it *three points let's say and make it proofed[Phonetic]*. We have different styles for borders and I can make it a corner, *radiates here five points[Phonetic]*. So, I can make rounded corners. So, let's do that and I can also put a fill on this. So, we have different fill types here, linear, radial, gradient, what not. I like this *radial line gradient[Phonetic]*. What I can do with this and you can try this out yourself to see the different effects you can get, but I like to create like a spotlight, look like a... almost like you are shining a flashlight on the upper right corner of your chart. It just has a nice shading to it. So, let's do that and I have tried this out before, so I know what colors to pick. I mean you can try this yourself later and just come up with different effects. Let's go here and I am going to choose, so I want a gradient from white to gray. I want the inner size of... so, the white color... oops... to be 20 and the outer size to be 200 and the position now, where do I want my focus? Where do I want the white to emanate from? So, that's going to be 75 I think. Hopefully, I won't get this backwards. 75 on the x, 25 on the y. So, let's run that, see how that looks. Aah, I guess I didn't get it backwards. Now, that looks pretty good. So, you could see I got my white here and it makes like a spotlight. The gradient effect goes out to darker gray and I got my nice border around here with rounded rectangles. It looks softer and more inviting. So, let's go back and add that same style to this chart. Now, fortunately, I don't have to recreate the entire thing. I can use the eyedropper to pick up that style and just drop it down on the next chart and run that. There you go. That was pretty quick and always easy to do. The last thing I want to show you is that I can add borders and generate a background to these titles. In fact, you can add it to many places in the report. You can add it to cross tabs, to

blocks, you can add it pretty much everywhere, not just charting. People seem to like it the best in charting, but you can pretty much put it anywhere that you can put a background. So, let's edit this. Yeah, let's just put a nice rounded border on it, make it solid, make it a three pixel corner and I am going to make it black and I am going to open up this guy here, copy that style or pick it up with my eyedropper, and paste it down there and press run. There you go. Now, that looks pretty good. So, you can see that I have taken the report that Andrew created in Express and without making any special conversions to it, open it in report *[Inaudible]* professional and I have added some professional content to it, some very visually appealing charts that add extra content to this... or add extra context to the stuff he created in Express. Now, I can save this and Andrew can use it in Express without any changes because really it is the same report. So, there you go. I hope you found this useful.

Andrew Popp: All right. Thanks Steve. So, those charts that you added, they look really good. Now, I want to now play, so, again, just a recap. I was the business analyst, I sent some stuff to Steve, Steve added a bunch of neat features to it. I now want to show you and this is really the Cognos secret sauce is just this concept of author once and consume anywhere. So, at no point did Steve do any special authoring or any editing for consumption in a mobile... I beg your pardon... in a mobile device for example and I want to just show you how you can leverage Go Mobile technology and take a look at that exact report and you will see that it looks exactly the same as what Steve had in his professional authoring environment. So, this is you know in this case here I have chosen the Blackberry device. I mean we support a number of devices. So, I am going to go down and there is some stuff that happened in the background in the sense that I had to sort of browse my inbox, I then went to my folders and product and revenue with *spelling error[Phonetic]* is there. So, I am going to actually open that up and just for effects perspective, I am just going to focus in on that. So, it's now bringing that report up. So, the first thing you are going to see is it brings up the report and you can see that that's the exact same report that A), I started with and B), that Steve has now modified. The beauty of the Blackberry and any PDA devices that we have kind of built the user... we have built the application to fit the user interface. It doesn't make sense to necessarily look at all of this because it quickly becomes an iChart. So, what I want to do is focus in on a table. So, I can focus in on a table and I can scroll through any of the values in that table. I can lock a row and say I want to have this as the column focus and then when I do that, it will then show me all of the relevant stuff. So, you can imagine as a business user I am about to go into a sales call, I can quickly then get an update on the information that I need just before I walk into either an account or with my boss or whatever. So, this is a really great way to consume BI information. The other thing that you can do is, it's not only for cross tabs or lists, I can also go into that chart that Steve spent a lot of time on and now get the chart focus. So, you will see once I brought it up, you know, it actually looks quite good in the Blackberry, but the other thing is as I scroll down using my *wheel[Phonetic]*, I can actually see the *cull outs[Phonetic]* for the value. So, I know for example 2005, we had revenue per employee of about seven million dollars. So, the user interface is really designed around the device and you know I can't stress this enough, but there is at no point did Steve or even me as the business analyst did we do any sort of special templates or anything for consumption in a Blackberry. Now, this is kind of the

last stop on our round trip and I want to now show you how you can bring this into Go Dashboard. So, Go Dashboard is our... is a brand new capability that we released in 8v4 and it's really around enabling the business user to be able to create their own personalized dashboards and Go Dashboard really has two parts. There is an assembly part, which is as defined I basically create my own dashboard and then there is a consumption part. I am kind of going to do the demo a little bit backwards. I want to show you the end product and then I want to show you how I built it. So, the first thing you are going to see is here is my dashboard. So, on the top, there is a number of portlets, there is a slider, you know this is something that you know thanks to our friends at Google, we associate with the dashboard, but more importantly you will see in the bottom left hand corner that's the chart that Steve spent all the time on. So, in my dashboard which I have made up of a number of other artefacts, I have grabbed a part of his report and that's what's really game changing here because before this technology, the single common denominator in Cognos technology was very much a report, a report had to exist. In this case here, this is made up of a number of parts of report. So, we have really broken that down and the common denominator now is part or report parts. So, you will see you know there is a number of interactions I can do here. As I bring the stuff, as it's brought into Go Dashboard, I mean I can drill down into the various layers. So, there is no... there is no technology or any sort of suppression from that perspective. I can drill up, drill down, do all that kind of stuff inherent in the original report part. The other thing you will see is as I move to the right here, there is also conditional formatting. I have also focused on a pie chart here and you will see thanks to the technology of Flash, well, Flash is a big part of Go Dashboard and really what Flash delivers is client side *caching[Phonetic]* and that really allows me to go through this pie chart and pick the various measures and as I pick the measures, the pie chart redraws itself almost instantaneously and really what's happening there is because the techno... or the data is now client side, we can make changes to the graphics and it's rendered in almost immediate time and then again, *mouse overs[Phonetic]* are preserved, all that good stuff. I can also tie specific sliders to specific chart types. On this case, anything between 40 to 50 million in pay, it's only one region, but basically the chart will then redraw itself to show me the latest... the latest data based on my filter. Now, finally, one of the nice things that you can do in Go Dashboard is it's all built around personalization, so Steve originally built this chart as a horizontal bar chart. I can go in and change it even though it was originally authored with these colors or whatever, I can go ahead and change that. So, in this case I want to change it so that, let's say for example I want to use *Excel[Phonetic]* color. So, boom, it basically redraws it using *Excel[Phonetic]* colors. So, you can really see there is a lot of personalization that is enabled through Go Dashboard and again at no time did Steve sort of prebake any of those personalization qualities. I basically use Go Dashboard and it enables me to do that. For the last part of this demo, I just want to quickly show you how I created that dashboard. So, I am now in the assembly mode and again, it follows the same sort of look and feel; on the left hand side, I have data, I am just going to sort of arrange the template. You know, there is a number of look and feel things you can do to sort of do the set up for the dashboard. As I go to the left here, you will see, I am actually expanding the content store. So, these are all the reports that exist in my content store. Obviously, there is a security concern here. I can only see the reports that I have security privileges to. So, you know, there is no

concern about me falling into some HR file that I am not allowed to see, so, here is a number of reports. So, the first thing that I did is I grabbed a whole report. So, I have grabbed the whole report and dropped it on to the Go Dashboard canvas. Boom. It basically renders it. I can then also go in and grab a part of a report. So, what I have done here is it's basically expanded the report expenses by country and it tells me, I mean it is not the best example, but it tells me that there is one object in there called the progressive chart. So, what I am going to do is I am going to grab that and basically drop it. As I am dropping a report part, it is basically rendering it in Flash. So, this is where you see Flash versus dropping a whole report which you saw on top. That doesn't do any sort of Flash. It's just the one dealing with parts. I now want to... again, I have switched tabs here and I want to sort of deal with some of the you know the prebaked goodies that we have and one of the more popular ones is the slider. So, as I drop a slider on there, it basically says "Okay, Andrew, here is a number of the measures that we found on all of the elements you have dropped thus far. What would you like to slide aka filter on?" So, in this case I want to do it on expense total. I can do it... you know this is probably good enough from the highest to the lowest. So, basically now the slider drives the pie chart on the right. Now, I want to get to the stuff that Steve has invested a lot of time in. So, I go into my folder, I go into product revenue report SG and you will see here, there is three elements in that report. There is the original cross tab that I started off creating in Express Authoring, then there are the two combination charts that Steve spent a lot of time creating. For whatever reason, I don't want all of that information. I just want one of the combination charts. So, I can just simply grab one of them, drop it down onto the canvas, and it immediately renders it as it was in... as the full report and it's worth mentioning here that I have now... I have now grabbed three distinct pieces of reports. There is no one report that contains all of the information you see on the screen. It's actually coming from three discrete reports and I have simply grabbed parts of it. So, that's really where the paradigm shifting event happens. It's now... we are now dealing with report parts as opposed to reports and then you know just from a completeness perspective, I can draw up you know any sort of... any of the portlets that we have supported all along, so in this case, I am going to draw up a Go Search portlet. So, that's the demo for my Go Dashboard perspective. So, we started off with the consumption in terms of what is the end product look like and then we have gone into the assembly experience like how easy was it to build and we truly believe that business users can actually build that themselves. Like I just used simple drag and drop gestures. I didn't do any sort of special coding or anything and as I dragged... as I dropped it on, I basically saw the end product. I just want to sort of finish off here by just hammering home another point and it really ties in what you saw from both myself and Steve and this is the author once, consume anywhere story. So, you will see that I started off in Express Authoring and then Steve as the professional author did some modifications. At that point there we had a single report specification. So, that report specification was built on trusted data, so that's data that has been modeled, single version of the truth and all that good stuff. So, if you kind of look at it from a balance perspective, IT is very happy with that story because then they know there is one version of the truth. They are not going to get a phone call in the middle of the night saying that revenue numbers don't match up, but on the right hand side of this chart, we allow our report specification to be consumed in a number of different capabilities and that gives business freedom. So, we showed you



two of them today. I took a report and consumed it in the mobile device so I could take it on the road or I took a part of the report that Steve built and I consumed it in our Flash dashboard capabilities. So, at no time did Steve was he ever aware that we were going to do that and the technology didn't inhibit both him from designing a report or for me consuming the report. At this point, I would like to open it up to questions. Thank you. Good. Stop it or *[Inaudible]*. How was that? So, what do I do? Hit pause here? Stop, you want me to stop?