

## Event 130514

### **Survive and Thrive: Why BI needs to be in your budget.**

Mary IBM Representative: Good morning, good afternoon or good evening, depending on where you are in the world, and welcome to our webcast brought to you by IBM. The topic of today's webcast is "Survive and Thrive: Why BI needs to be in your budget." We have just a few quick items to go over before we begin. We will hear from today's presenters and then we will open the floor to your questions. To participate in the Q and A portion of our webcast type your question into the Ask a Question Text area in the left corner of your console and then click the submit button. You can submit questions at any time during the webcast. We will address as many questions as time permits after our presenter's prepared remarks.

This webcast contains audience polling. When the polling questions appear, please select your answer by clicking directly on the radio button or check the box and then click the Submit Answer button to complete your response.

If you experience any technical problems, please visit our webcast help guide by clicking on the Help link on the lower left corner of your console. Now let's get started. I would like to introduce our moderator for today's presentation, Caroline Seymour.

Caroline Seymour: Good morning, afternoon, evening and welcome everybody to today's webinar. And my name is Caroline Seymour and I am from IBM and I'm going to really be your host today. Now I know you will have heard this before, but through these challenging economic times, being diligent on what you spend and include in your budget is critical to ensure that your company not only survives and weathers the storm that is ahead, but also to come out ahead of it.

And that is exactly what Business Intelligence can help a company with. It allows business users to have access to the right information so they can make faster and more confident decisions. So you can make the best cost-saving decisions, the best revenue generating decisions, the best decisions around your assets, so making decisions that really have an impact to the business.

So today we are going to focus on showing you why BI should be on your budget and a priority for your organization. And we are going to do that by first hearing from Jim Mullholland from Creativity. And Jim is the Vice President of Information Technology and he is going to walk through what they have

done with Business Intelligence and how they have actually done it as well as also the benefit that Business Intelligence has provided to Creativity.

And then we will pass over to Michael Lock who is a research analyst from the Aberdeen Group who will walk through the key highlights of a recent survey that they did to small and mid-sized businesses. And actually on the right hand side you see that there is a little quick fast fact and findings from their survey. And it shows here how the Best in Class SMB companies have gained significant ROI through the BI projects. And Michael will actually go into this in more detail in the section of his webinar.

So first of all I would like to welcome Jim and Michael today. Hi Jim, Michael. And after the speaker's moment we will have a Q and A so you can write questions throughout the webinar that we will address at the end. But before handing over to Jim and to Mike I would like to just take a couple of quick poll questions. And the reason for this is really just to understand a little bit about who our audience is, so understand you a little bit better.

Just two quick questions – and the first is really just your company size from an employee perspective. So as you can see here, just really approximate the number of employees within your organization or subsidiary. So if you can actually select, and you only need to choose one on this particular poll. And I can see people are already entering; I will just give a couple more seconds on that. But I think that that is complete. So I'm just going to refresh and then push these results, push the latest results.

And as you can see we have a mixture of an audience; interesting that we have got a lot of employees with 5000+ which could be the fact that there are subsidiaries of larger organizations on this call, too, this webinar. I appreciate that.

The second question is really what BI capabilities are you interested in. And you can actually check each of these capabilities. That applies it to what you are interested in in your organization. I realize there could be more, but what we typically see is reporting, analysis and dashboarding is a top, key capability that companies are looking for to implement within their organizations so we just wanted to really take a look at this audience and what you are looking at here. And it is interesting, it is [close]. So I will just give one more minute. And again, it is not one or the other, if you are looking at all three then do select all three and submit your answer – if you are just reporting, just select reporting.

So actually what I will do is I will close the poll and refresh and we will push and share these results with you. And as you can see, it is absolutely really almost a tie with reporting, analysis and dashboards. And that is pretty consistent with what we see. So that just helps confirm where we are at.

And so without further adieu what I would like to do now is to hand over to Jim Mullholland of Creativity. Jim?

Jim Mullholland: Thank you, Caroline, I appreciate it. Good morning and good afternoon everybody. Again, welcome to "Survive and Thrive." I hope this morning or this afternoon to give you guys a little bit of insight into some of my experiences deploying BI to both small and large enterprises and in particular focus on my work at Creativity, Inc.

All right, so just a quick background on myself. I am Vice President of IT for Creativity, Inc. since 2004. I have 15 or so years of experience in building data warehousing and BI solutions for mostly pharmaceutical and consumer good companies, but also banking as well. The first data warehouse I deployed was in 1994, way back when, and this is actually still in use today at a Fortune 50 company, of course has gone through many iterations and upgrades since then, but the base model still up and running. And just to the point of face, the largest solution I have ever worked on was over 10TB of storage, non-aggregated storage and over 200 million unique patient records, so a very large dimension you can say on that one. So I have some pretty broad experience and some good insights I think to hopefully help you guys figure out your way through BI.

Okay, so who is Creativity, Inc? We are a leading craft supplier. We have 5 major brands as noted there on the slide. And we design and market and distribute basic crafting supplies, beads, organizational paper crafting, things like that. We sell mostly to mass merchandisers and national craft chains and we also do a lot of independent work as well, craft retailers. And our brands are, they are mentioned there, and we have over 300 employees currently at the company right now. And we are one of the top 5 suppliers to the crafting space.

All right, so on to the project that we faced. So coming into the company in 2004 we had some challenges we were facing and one of the big things is that we had separate accounting systems that made consolidated reporting very difficult and certainly not timely, bringing the data together from all of these systems was a daunting task, on a quarterly basis making board reports, things like that. And the information was just basically hard to find often. IT had to get involved; the end users or finance could not do this themselves; metrics had different definitions, things like that. So we had a major task

as far as consolidating the separate systems that the individual brands brought to the table as far as that was concerned.

Traditional paper-based reporting wasn't sufficient to run the business; electronic means to support value added analysis and Excel files, things like that, basically [Green Borrower] is not going to work for us anymore as far as a way to report so we needed to kind of get beyond that and get to more of more modern approach, a more flexible approach.

A big issue for us was managing key customer metrics, fill rate for us is a big customer metric as far as how well we provide the customer with the product they ordered and what rate. We are measured by that by our key customers and we are graded and our customer satisfactions surveys are definitely based upon how well we do that. And we were not hitting our fill rates at the levels we needed to, and there were many, many reasons for this and one of the things we had hoped for the system was to be able to get the insight into why this was happening in our supply chain, starting at the factory level – we have factories overseas in China and the Czech Republic and some in the US as well – and then just making sure that we were watching that flow. And with the current systems we had it was very, very hard to do that. So we were looking at sort of finding a way to measure these key metrics and keep an eye on them and actually get ahead of them so we can serve our customers better.

And last but not least was certainly the, I'm sure the phrase you have heard before, but the single source for accurate, timely and explainable information. So basically one version of the truth; we wanted to basically have a place to go where anybody in the company can actually find the numbers they needed and know that when they were talking about it in a meeting or with a customer they could feel confident that that was the metric we were supporting, that was based on facts, and it also was explainable. So we had definitions for everything. It seemed like an impossible dream to start off with; folks kind of, some people were very skeptical about it, but in the end having done this before in other companies, I knew that we could actually get there. So these were kind of 5 of our top goals for the projects at the start.

Okay, so you may ask why IBM Cognos? Well, here at Creativity we actually did a proof of concept process that involved several leading vendors in the BI space, all of which I had worked with in the past except for one, and had used all of them in different places. But I wanted to kind of give everybody a fresh start and given that Creativity is a small-medium business, kind of a different perspective than where I come from which was a much larger business. So I wanted to see what the vendors had done recently and can really address our needs specifically. So we established criteria with these vendors. We actually provided data; you can randomize the data, you can [itemize] the data, however you want

to do it. We actually provided real metrics and real dimensions that we were looking at that wouldn't be some sort of canned package, but actually speak to our situation. And we asked the sales teams to come back and actually demonstrate to us how their solution would actually solve our issues in 90 minutes or less. So we actually gave them the time to put together a clearly well-thought out strategy. We were very clear that the solution had to be broad in terms of solution set, in other words, we needed everything from modeling capabilities to ETL – Extract, Transform, Load – to the front end GUI, to reporting and analysis and dashboarding. And we also needed a solution that was deep in terms of feature sets and capabilities and advanced metrics and rankings and things like that. So we wanted to be fairly deep in the capabilities.

In the end for us, IBM Cognos clearly understood our need the best. They had a deep product line which I thought at the time and still today is really second to none. I point out Data Manager as being a key differentiator for us because it is a very capable ETL tool that has most of the features you need to build your data warehouse and your data marts. There are best of breed tools out there that cost a factor or magnitude more than Data Manager and they have endless capabilities, and they are great. But for us, we didn't have the budget or the time to learn something like that. Data Manager snapped right into the IBM Cognos framework and really fit in well. So for us that was kind of a key differentiator – is having a tool like Data Manager available to us.

Our architecture – two points about that. We have a three-tiered architecture, kind of standard. When IBM Cognos Version 8.3, using IIS, and with Microsoft SQL Server 2005 to house the data warehouse and data marts and DB2 UDB which is the source for our ERP applications actually forms the main source of our ETL every night. So we pull from a couple of different platforms and source it into Microsoft SQL Server. Data Manager runs on a nightly basis, summarizes the data for several operational systems including ERP and some other warehouse-based systems as well. So we summarize on a nightly basis and present it to our users every day. With data marts that are built to serve key operational areas. That is kind of how we decided to break this project down into operational areas so we have a finance data mart and a supply chain data mart and warehouse operations and sales and purchasing, things like that. So we broke it down that way and kind of made things pretty specific toward those departments to help them with their issues everyday.

We have dozens of production reports. I don't know the exact number but there is a lot running on a daily, weekly, monthly basis. We have 10 cubes that are refreshed mostly daily, some are actually done weekly and monthly. And these reports go out to about 100 managers and executives on a daily basis. So we push reports out and we also have folks of course going in to the front end and doing their own reporting as well. So that is kind of the overall architecture of the system that we have running.

Kind of a pictorial view of it. We have a production environment that has those three tiers, as you see there. The data server is on the left. We have an iSeries running our ERP package. And we have a system called Cubiscan which was in our warehouse and does the cubing and sizing and measuring of all the boxes that we get both inbound and outbound; we use that data as well to kind of measure palletization and things like that and actually making sure we are following standards for our customer's requirements.

We are using a SAN Storage Area Network, so I think a nice critical infrastructure thing to do is have a SAN running so that you can not only leverage the benefits of a centralized repository but also do things like virtualization as well. It helps and in this whole project we are using virtualization as well.

We have our web server and of course the Cognos 8 BI Server. And our test environment is not necessarily three tier specifically, it actually is two tier but we do have a separate and [DEV] and [UAT] user acceptance testing environment, which is a virtual environment for us, as well. So we do things in Dev from a development side, make sure it kind of works from a high level perspective, do some checking. And then we roll it out to our end users to check it out in the UAT area as far as business, soundness and final adjustments. And then once that is done we move it out to production. So we kind of keep the cycle going and keep the system moving along in that way.

All right, so getting started. While you are deciding how to embark or if you have already embarked on your BI journey, there are some questions you should be asking and some things you should understand. And again this comes from my perspective of doing it for over 15 years, so you may have some other things to add as well, but from my understanding I think you need to understand that BI is basically implementation and not really an end point. They are a journey. So there is no destination, there is no end point, there are really no quick fixes. The company's goals are ever evolving; the economy as you know is ever evolving. Our customer's needs are ever evolving. So the BI tool needs to reflect that on an ongoing basis. So, really it is a journey and it is a path that must be taken with constant feedback from the user community to make sure that the system is alive and well and really focusing on what is important today.

The project must have support from executive team – that is a critical thing. For us it was originally, besides myself of course being a sponsor, it was the CFO being a sponsor of it – getting him on-board, being part of the actual initial design teams to show the importance of this and being that it is critical to the growth and success of our company was important for it to be an active project. Now folks are very busy with their day-to-day jobs, the BI tool is going to add some stuff to their plate, but in the end once

they realize what the tool can provide to them as far as information quickly, easily accurate, they will really like the system a lot. That has been our case here as well.

Avoid the big bang approach. Divide the project up into smaller chunks, focusing on the areas that are critical to your company. For us that was more on a departmental basis; things like supply chain were very important to us. We were hurting there. We needed to kind of get a better visibility into that part of the business. So we decided to make data marts based on those areas and roll them out one by one. If you decide to say, well let's look through all the specs and then we will see in six months or a year and come back with this great system, it loses momentum and things change in a year as well. so by doing it in smaller chunks and focusing on different areas you can actually roll things out on a much more consistent basis and actually stay relevant to the business flow.

I have alluded to this as well in my conversation to you guys, but enlist key members from the operational teams to ensure your goals are measured and clear and impactful. IT is great at bringing technology in that will solve the problem but we are not really good at actually finding out what the problem is, the business folks that are closest to the customer really know what is really needed and so bring them into the project, make them key members of the project. They have to drive where their solution is going to go. So they will provide the actual measurable and clear goals that IT can help meet. But without their help on an ongoing basis you are really going to have a system that is going to be less impactful to the organization.

And finally leverage a business partner if you don't have the internal folks to do it all. We certainly do not have the internal folks to actually do it, and it actually worked out well for us. Having a partner to work with can really accelerate the development. For us there is a company that is based out of Toronto called Acumetrics. They are really good in the BI space and they also happen to know really well our ERP applications, so it kind of worked well. They actually knew the sourcing system and they knew the Cognos application as well. So we really were able to accelerate our development very, very quickly. And within a couple of months built the base warehouse and then a month or two after that start releasing data marts to the community. So it worked out super for us and I would recommend to anybody who has the opportunity to do that to find a good partner.

Okay, so some of the benefits that we realized from all of this and kind of referring back to my initial slide of some of the key pain points – improve customer service. That is what we are all trying to do, I think, in the end is improve the customer experience and our service levels. And I mention that fill rate again – we have better control of that metric by using Cognos 8 BI. We ensure customer expectations were exceeded. Our ROI on that is conservatively measured at about 25% of reduction in these charge

backs that we get from not meeting the fill rate. Fill rate issues still go on because some of it is just human error, unfortunately. Some of it is actually things that we are still working on to get deeper into and finding better ways to manage it. But we have conservatively estimated an ROI of about 25% reduction and for us that is a pretty large number. We paid for the tool pretty quickly with that one bullet point right there.

But we have others as well. We increased our agility; the finance team can close the books on a monthly basis in about half the time they did before. Now it is kind of a mundane thing, folks close the books every month – it is not a really strategic kind of thing – but it has to be done of course for compliance and the board and everything else, so why not make it less painful and faster and get the folks back to doing things that are more strategic in nature. So by providing data to them that was in a more consumable form, Excel, PDF, raw CSV sometimes when the data is very large, so CSV files. The finance team can really do things much faster.

And we actually run some mid-day updates as well. The [e-sellers] run it at mid-day sometimes just for their particular data mart to give them even an up to the minute view of what the operational system looks like so they can actually do things better. So that was kind of an [unintended] benefit, that whole decrease in time to close the books, but it really has been a nice game changer for the finance team and allows them to move onto bigger and better things.

So this sounds pretty good. We elevated our company IQ, basically the standard measurements of the business, for example, what is a margin and what does that mean? What is product margin? What is standard cost? These things are readily available; they are understood and they are applied to make better business decisions. In other words, everyone speaks in the same sheet of music. When someone throws the word margin out there we know what they mean; it comes from one system. It is defined out there. And folks who really didn't know beforehand what this meant, what these numbers meant, now do know and it really makes them a more intelligent employee and person within our business. We can all speak about these things and really reach the goals that we are trying to reach. So in the end the company IQ has been elevated by a system like this. And that is a really nice thing to have.

And last but not least is an empowered organization. Through the use of both production and adhoc reporting, everyone has access to the information they need, when they need it. There is no more making an appointment with IT to get a report out, I need to do this. They still have questions of course; we show them how to do things, but everybody has the tools to get the answers themselves when they need them. They design their own reports at times and do on-off analysis, all coming from one set of meta data, one set of rules so that we know that the rules are being applied properly and really in the



end empowers them to make their decisions and move forward with their business in their time space versus what IT has time for. So it has been quite powerful in that area.

Okay, so some key takeaways from all of this. Build the data warehouse. In other words, there will be the temptation and it does succeed for a lot of folks to actually build your data marts right from your source systems and avoid building a kind of structured centralized data warehouse. But I have found that for us taking the time to build the warehouse paid dividends in the years to come. We were able to adapt to the business and make changes much more quickly. You actually benefit from parts of the systems that even across operational areas are all the same. Your customer [masters], your customer master or your product master is a product master, date structures, things like that are all codified and made standard within the data warehouse. So while you can succeed without doing it, I believe that it provides a foundation that is much more sustainable and buildable as well in the future. So I would say always take the time to build a data warehouse.

Start small and focus, but then grow. For us, most deliverables would have been in the 30 to 60 days or less timeframe. So for me again, going back to the big bang approach, we like to keep releasing new (inaudible) functionality on these smaller time cycles to keep things fresh and relevant to the business. And it keeps the excitement up and as well. The system is one of those systems where it is not just email where it is going to be there, it is part of the infrastructure. So it is kind of an area where a system that can actually provide much more value add and every day people find things they didn't know they could do before. So we want to keep that excitement going and the system growing. So having these quick focused deliverables is really critical for us.

BI is not an IT "skunk works" project. Make sure you obtain executive buy-in and operational participation for this stuff. Without the top level support these systems tend to go by the wayside and die in the line. So get that high level support for the project.

Utilize partners again to actually accelerate the project and build internal competency and that is what we have done here successfully.

And certainly last but not least is establish internal BICC, a BI Competency Center, to keep the project vital and relevant. And make sure that there are members of the operational teams on that BICC. We have one here; even at a medium size company we are able to keep folks focused and dedicated to this project and the BICC keeps things relevant. We meet on a regular basis and keep things moving and honest to the business. So it is important to have that to really have a vital application.

So what is next for us here? We are going to expand the use of dashboards. We have gone to that in the last year. We have product teams based dashboards that deliver focused and actual information and dashboards are really nice to allow folks to give the system and really quickly see a pulse of what is going on with their business. And so we are going to expand that out to other areas this year.

We are going to explore more potential uses for the mobile web on PDAs and smart phone. We have in limited use right now on certain executive phones and certain other folks, but things we are kind of grappling with and likely to go in this area. Some security issues, just making sure we have that nailed down. What content makes sense for PDA and works in a PDA. And also the cost factor as well. If you are overseas and pushing content across the cellular network, it can get a little bit costly on some of the data charges and roaming things, things like that. So we have to kind of get handle on that. But we are going to explore more uses for that.

And lastly we are going to start merging the planning data into our model in a more automated fashion. Right now the planning is kind of semi-automated. So we want to complete that 360 degree view of the business and we want to look at the Cognos planning and TM-1 applications as well for that to kind of make planning an enclosed loop for us, a completed view of our business.

With that, I would like to turn the mic over to Michael Lock and he is going to give you his perspective on the whole project.

Michael Lock: Thanks Jim, I appreciate that. It is great to have the opportunity to speak with all of you today and share some of our research on BI for SMBs. The way that I have set up this presentation is really to delineate what I think are three logical steps to Best in Class BI based off of some of our fact-based research. I think that you will find that a lot of the data that I am going to talk about lines up pretty well with some of the ideas and experiences that Jim just discussed. My data really shows that Best in Class SMBs are really seeing major improvements when it comes to deployment time of BI projects and also ROI quite frankly. At the end of this presentation I really hope to show that when deployed properly BI can generate substantial returns. And this is really what my data is showing.

So why don't I start off with just a general definition of BI or sort of the way that Aberdeen views the world. BI is really a combination of technologies, capabilities and practices that enable better decisions and really help improve business performance. So, essentially what we are really talking about are the

methods and tools used to really collect assemble and deliver the right information to the right people at the right time. So that is really how we see the world in terms of BI at Aberdeen.

In terms of Aberdeen's methodology, I want to just sort of level set where I am coming from here. Aberdeen is essentially an analyst firm and we are analysts of end user behavior for the purpose of educating the end user marketplace on best practices for technology implementation. So what we see up here is our PACE methodology. This is essentially the first half of our methodology. We all have to have acronyms right? And PACE is ours. So Pressures, Actions, Capabilities, and Enablers. The Pressures is really the top drivers that are compelling companies to invest in things like BI. We look at the Actions, the strategic actions that they are taking to address those pressures. We also look at the Capabilities of these companies, from an organizational maturity standpoint – how are they structuring their company around process, around organization, around knowledge management, around performance measurement.

And then the Enablers is really where the technologies and tools come into play. What are the strategies around technology that they are using to address those pressures? So that is essentially the first half of our methodology. And all of our research and our fact-based, survey-based research we ask questions about these areas. And we also ask questions about performance which is really what drives our maturing class framework that we see here on the next slide.

So, Aberdeen's Maturity Class – you will hear me talk a lot about Best in Class companies, and this is really essentially how we determine that. We ask questions, and in addition to the PACE questions we ask questions about performance. So you see there on the left our selected performance criteria which I will discuss in a few minutes but, time-to-information, BU utilization, employee productivity, cost-per-user of BI Applications – these are all the metrics that we use to determine Best in Class. And the way that we do that is that we take our total respondent pool, which in this case was 647 SMB organizations and we basically assigned a score to each company based on the response to these questions. So those companies that scored in the top 20% are what we are calling the "Best in Class." Those who scored in the middle 50% are the industry average and the bottom 30% are what we call the Laggards.

And so once we have determined who our Best in Class companies are, what we like to do is we go back to the data to find out some of the characteristics that makes a Best in Class company. So why are these companies performing at a higher level, what are the characteristics that these companies have that makes them achieve at a higher level than their peers.

So let's take a look at some of the facts from the study. Back in October we published a report on BI for SMBs. And the majority of this data is based on that study. So we did have, as I mentioned, 647 SMB organizations that responded to our surveys and that we gathered data from. You might ask what our definition of SMBs are. In this case we are talking about companies under \$500 million in annual revenue. A couple of different reasons for why we did that. The data really provided a better dispersion around that threshold for analysis, but more importantly some of the conversations that we have had with end users have really shown that above \$500 million, those types of companies are really making enterprise-wide, enterprise BI type investments. And we wanted to really look at some of the smaller and mid-market companies.

The sources for the research for this particular report were three fold, and these actually fall in line with our three steps, the Best in Class BI. So the first report, not necessarily in chronological order, but data management for BI for March – this report really focused on infrastructure. So how are companies managing their various disparate data sources? How are they managing the growth of their enterprise information?

Next, we looked at the BI Deployment Strategies report from April. This report really looked at how are companies optimizing their BI deployment strategy to fit their company and how are they using that to really spread BI capability and functionality throughout the organization.

And then finally the TCO report from February was really about cost reduction. How are companies managing the cost of BI, not just the upfront sort of licensing costs, but also the ongoing support and maintenance costs in order to generate the most value and the most return from their BI investment.

Some quick facts from the research in terms of demographics. We are typically, at Aberdeen, we typically write for the business decision maker, and this is pretty much reflected in the user's or the survey respondents that we saw, as you can see the pie chart on the top left over  $\frac{3}{4}$  of our respondents really came from the manager level and over half came from the VP/Director and C-Level. So really decision makers who are taking our surveys. And clearly what this says to me is that BI is not just an IT initiative, although often times it starts there, it really has moved on to the business decision makers.

In terms of head count, we had a pretty even dispersion around the various categories we have. About half from under 250 employees and another half from over 250 roughly. In terms of geography it is fairly typical for an Aberdeen survey we will see about 60% from the Americas, about a quarter from EMEA and about 15% or so from Asia-Pac and that is basically what we are seeing here.

The top industries represented – our surveys are horizontal so we look at all industries. Some of the top industries represented, high tech software education, financial services, retail and healthcare showed up with the most respondents.

So I talked before about how we determine our Best in Class. This next slide here shows what that actual performance was. So if you see the three areas of this chart, Best in Class, Average and Laggard, I'm not necessarily going to read all of these off but you see here the stark differences between the Best in Class and the industry average and the laggards. So at the top line there, 58% of our Best in Class companies provide access to key information in real time or in near real time. I will talk a little bit more about that in a couple of slides. But you compare that to only 5% for the laggards.

100% of our Best in Class companies deliver self-service BI capability to non-technical users. As you can imagine, this is a major notion in the SMB world. Having that ability to deliver self-service capability – compare that to only 18% for the laggards.

And then one that I thought was particularly interesting, in terms of employee productivity, be Best in Class on 11% mean average improvement there versus actually an 8% decline for the laggards. So some very, very stark differences there between the Best in Class and the rest of our survey respondents.

So the first step in our path to Best in Class SMBs, the way I laid it out here, Step One is all about data management and Jim talked about the importance of setting up the data warehouse. In this section we are really talking about how companies are aggregating data from their various disparate sources, how they are transforming and cleansing that data in order to deliver it to the right people in the organization at the right time.

So the next slide here, this is the performance, these are the performance criteria that we drew out of the data management report. And the way to read this is that the numbers that I am showing here are a weighted average year-over-year change in these three metrics. So if you go left to right here you can see the difference, again, between the Best in Class and the rest. The number of users with access to BI applications, the Best in Class saw a 9% annual increase versus only 3% for the laggards. So this is also key in the SMB realm in order to deliver that analytical capability to more end users and really achieve that ROI on the BI investment. It is important to spread that capability throughout the organization as the company sees fit.

In terms of employee productivity, here we are really measuring productivity in terms of time spent searching for information, so again 11% increase for the Best in Class and 8% decline for the laggards. And another interesting one was around data management infrastructure costs. Now a number of conversations that I have had with folks like Jim and other companies that are experiencing, that are sort of delving into BI right now, they talk about the very significant costs associated with data management and infrastructure and the Best in Class 5% reduction over the past year versus a 2% actual increase for the laggards. So that is our Best in Class performance for data management.

So in terms of why companies focus on data management, this next slide shows some of the top pressures. So this is really the P in PACE. We asked all of our survey respondents, we offered them a list of 7 or 8 pressures to choose from and asked them to really tell us what your top two or three pressures are that are forcing you to look into data management. And the top two are actually a couple of themes that I am going to be hitting on a number of times in this presentation, but reducing time-to-information is the number one pressure driving a focus on data management. This is really all about delivering relevant information to the appropriate people really in a timely manner.

And again I hope I don't sound like a broken record by the end of this presentation but delivering BI capability to more end users – this is a major theme for SMBs. In order to really increase that ROI and have that capability in as many areas of the business that can actually drive value from it is very important for these companies.

So some of the characteristics of a Best in Class company, the next slide here we are looking at some of the tactical capabilities for data management, so organizational maturity. So the one on the left here, incremental growth of existing database and data warehouse assets, this is really something that has come up through some of the conversations that I have had, has to do with the growth, as companies experience significant growth in data volume, they really want to have, they really have numerous areas of the business, whether it is finance or supply chain or procurement or what have you, really more areas of the business that are (a) experiencing growth in data and also that they want to be able to apply BI capabilities to that data.

So the Best in Class companies had that capability as the data was growing to apply more and more analytical technology to that data.

Secondly, data cleansing capability. You heard Jim talk about data consumability or usability or explainability; this capability really helps make sure that the data is clean and relevant. And really what we can see here is the Best in Class companies across all three of these are really much more likely to have these capabilities than all others. And also in terms of optimizing queries, I'm sure some of you may know that a poorly designed query can at times take hours, if not days. And so the ability to have those skill sets in house to generate those high performance queries is really crucial to reducing that time-to-information.

So a couple of quick recommendations and takeaways from data management. First off, make efforts to establish an information culture that values collection of management and delivery of corporate data. This is another theme of the research. It is a little bit fuzzy of a notion but the fact is that most of our Best in Class companies, or a larger percentage of Best in Class companies reported having this culture, one that sort of values and appreciates how data is used and how it is disseminated within the organization. These are the same companies that saw really an increase in BI adoption.

So secondly, look into investing in data integration and cleansing technologies. These types of tools will really help manage with some of the data complexity that a lot of these companies are dealing with and at the end of the day hopefully help reduce some of the significant costs of data integration. As you can see the charts on the right show that the Best in Class companies are twice as likely to be using these types of tools.

So the next step is really about optimizing the BI deployment strategy. And here we are really looking at how companies are delivering BI beyond just the power users. How they are delivering that information faster and how they are delivering it in a way that is easy to use. So let's take a look at how that shakes out in terms of performance. If we look at these three performance criteria for BI deployment, we see again the self-service capability metric here. 100% of our Best in Class companies have the ability to deliver self-service capability to non-technical users. So a lot of SMBs don't necessarily have the type of resources to manage that type of a roll-out and provide the type of support that is necessary. Having that type of self-service capability is huge.

Information being available in real time or near real time – obviously there are varying definitions of real-time. It could be sub second for some companies, it could be by the end of the day for others. The data shows that Best in Class companies by a large margin have the ability to deliver that information in real-time or in near real time.

I'm going to skip ahead to the next slide on strategic actions around BI deployment. The one that I wanted to point out on this slide is the top strategic action, creating a corporate culture on BI. So we talked again about that information culture and the importance of having that type of a culture in spreading BI functionality throughout the organization. This turned out to be a best in class strategic action.

Some, just a quick view here at some of the various deployment approaches that Best in Class and all other companies are taking. On premise is still the number one type of deployment for all companies really, but particularly the Best in Class. A lot of companies are looking for BI capability to be baked into their enterprise applications such as ERP or CRM. Some companies that are very data heavy are looking into BI appliances, sort of a combination of hardware and software.

And then of course we are hearing a lot about the emergence of SaaS. The uptake – it is happening, the fact is the Best in Class companies are using a SaaS approach, or are more likely to use a SaaS approach than all others.

So just some key takeaways from BI deployment. First and foremost investigate automation of report generation and delivery. This is another theme of the research. Companies with fewer resources don't necessarily have the time to generate all the reports that are needed and deliver them to the right people at the right time. So this type of automation can really help.

Also, improve the ability to monitor the usage levels of the BI system. I think we have all heard the adage, can't manage what you don't measure. Having this type of visibility will really help increase the utilization of the BI investment and hopefully at the end of the day lead to that ROI that we are talking about here.

And as you can see on the charts on the right it shows the Best in Class companies have these types of capabilities and are using these technologies at a rate that outstrips all others. So lastly, step three we are talking about managing the TCO of BI. So not just the upfront costs but the integration and ongoing maintenance costs, costs relative to budget and then also we are also looking at time-to-completion and ROI. So on the next slide we are looking at some of the performance metrics from the TCO report. The two that I really wanted to highlight on this slide are the second and third one, time-to-completion and ROI as you can see here. Time is money and the Best in Class are deploying their BI solutions or completing their projects 63% shorter, or excuse me, the laggards are taking 63% longer to deploy their BI solutions. That is a month. It is a lot of time and it is a lot of money and resources that are being



spent on the BI implementation on the part of the laggards. And then of course sort of the gem of the research is the ROI of the implementation. Best in Class companies saw weighted average year-over-year 56% ROI on their BI implementation, twice that of laggards.

So some quick pressures here for cost management. A few of these we have seen before, delivering BI to more end users is the second pressure. But the top pressure, improving integration of data for multiple business applications. Again, we talked about some of the significant costs associated with infrastructure and data management; this is indeed a top pressure forcing companies to really take a hard look at how they are managing their costs.

Some quick Best in Class characteristics around cost management here. Data integration and cleansing capability, again, that costs associated with integration, they are using these tools to help with that process and reduce the costs associated there. Automation of report creation, this type of capability really reduces the BI technical burden on the staff. If the skill sets and the expertise isn't necessarily as strong as it needs to be, this type of automation can help with that. And then in terms of formalized training, this is something that again helps increase adoption and really spreading that BI functionality throughout the organization.

So some key recommendations for TCO. First off, actively measure and track BI project costs versus the established budget. This is the kind of capability that really shows the value of measurement as we see the Best in Class are much more likely to do this. It seems simple enough to just measure how the costs are progressing relative to the budget, but the fact is not enough companies are doing it. This kind of measurement really helps stay on budget and will really help deploy the solution in a much more timely fashion.

And then secondly, examine BI dashboard technology. So a lot of the research we have conducted looks at dashboards and a lot of the conversations that I have had focus on the value of having visibility into those key business processes. So it really speaks to, the chart of the right here we see how the Best in Class are almost twice as likely to be using this. They really understand the value of having that visibility and it really helps them enable, really enables them to define and really measure the KPIs, the performance indicators that drive their business so that they can really measure, monitor, adjust and improve them.

So just to wrap things up here, a couple of key takeaways just a summary of recommendations. First off, again, I talked about the information culture. It is a bit of a fuzzy term; it is very tough to quantify, but at

the end of the day it matters. This is something that the Best in Class companies report having and it really helps spread that BI functionality throughout the company. Investigate automation of report generation. Again, this is something that will help reduce the burden of some of the manual report generation and delivery that companies face.

Improve the ability to monitor usage levels of the BI systems. So measure it and manage it, all hopefully leading to a better utilization of BI assets.

And then finally actively measure and track BI project costs versus the established budget. So we are all very aware of the economic climate. Yes, budgets are tighter these days, but the fact is that managing the cost progression as the BI project is unfolding relative to the budget is something that will really at the end of the day hopefully help produce that better ROI and really prove out the value that BI can deliver.

So with that, brings me to the end of my portion. I want to thank everyone for joining the call today and I will go ahead and hand it back to Caroline.

Caroline Seymour: Sorry I was on mute there. thank you; thank you, Michael. And before we open up to Q and A and we have a lot of questions actually come in through the Q and A and we may not actually be able to answer all of them, but we will get back to you and help you with answers to all of these questions after the event.

But first, before I open it up I just want to thank our speakers today, Jim Mullholland from Creativity, thank you Jim. And also Michael from Aberdeen. And also to thank you for attending. And hope that you have got value out of the information that we shared with you today in this webinar and that you can actually see that BI does make a difference and that it is strategic and it should be an imperative initiative within your organization to ensure the success of your company.

So without much further adieu, let's just tackle some of these questions. We have about six minutes. And maybe what we will do is we will start from the beginning here. And I guess this one really is for you, Jim. Should the building of the data warehouse be parallel or part of the enterprise information architecture efforts?

Jim Mullholland: Well I think in a purist form the data warehouse would precede I think any deliverables that would come out of it. I think that for us that is kind of how we addressed it. But I think everybody has got to kind of look at their own individual needs and I would say that as you are building the data warehouse you are going to have the framework kind of in mind and it may take awhile to build it and populate it. But you can start certainly gathering the requirements for the subsequent data marts and deliverables from that, knowing what your model is going to be and you always have adjustments going forward. But I think that certainly you want to have the warehouse in place to support all of the downstream models and things like that.

Caroline Seymour: Thank you Jim. By the way, Jim and Michael, if there is a question and I point one question at one person and if you have got something else to add to somebody, Michael or Jim just jump in.

Michael Lock: Yes, Caroline, if you could help me out by just giving me the question number as you are reading it, what question you are on.

Caroline Seymour: Oh, yes, of course.

Michael Lock: That would be great.

Caroline Seymour: And actually there were a couple of questions that came in with regards to getting a copy of this presentation and also the recording, and I just wanted to mention to everybody on the webinar that you will be receiving an email with the link to the archive of this webinar because it is recorded and you can actually download the PDF so you will actually see the slides of this webinar itself.

So if we go to another question, question 23 here. They come in different orders, it is interesting. Perhaps Jim, what resources made up your Business Intelligence Competency Center?

Jim Mullholland: Sure. Well for us there was a base of a couple IT folks and then we had folks from finance, someone from supply chain, we had someone from operations, a couple people from sales. So in the end we had about 7 people or 8 people on that BICC and initially it was chaired by the CFO and then once the project was underway for over a year and well underway we kind of transitioned over to myself being the chair of the BICC.

Michael Lock: Yes, and this is Mike just to add to that, some of the data that we have collected. We look at this type of thing and we talk to our users about whether or not they have a competency center. Sometimes we call it a BI center of excellence or simply just having cross functional teams in place to test the solution and help implement it. The data really shows, from our end at least, that these are the kind of things that Best in Class companies are doing and utilizing.

Caroline Seymour: And then there is a question 22 here. How much was involved in training you end users? So I guess, Jim, your end users to generate their own adhoc reports. And I know Michael you also mentioned in your survey about adhoc and self-service. But Jim, the [involved] in training your end users to generate their own adhoc report?

Jim Mullholland: Sure. Well the first thing was to educate the folks on the model itself. A lot of them participating in building the models but others were just in a department or operational group that didn't understand or know, so we had to train them on just the model and what the metrics meant. That is the first thing, is knowing what you are dragging or building the report from. Then from there, the interface. We actually did some formalized training with some IT folks and then we used the Train the Trainer kind of philosophy where we did our own internal training to our own people and to basically do their own reports. It was about an hour session to be honest. And it wasn't every last thing that they could possibly do, but it certainly made them capable enough to do their own reporting and then deliver output into Excel or other formats they need. And then we have some follow on training, either one on one or organize more advanced training if required and as requested. But it really wasn't that hard. The biggest thing is to make sure they are understanding the model and the data they are working with.

Caroline Seymour: And then there are a few questions that are similar, and I guess it is really, just looking at the time, but maybe both to Jim and to Mike to answer. This one here is, I will just phrase one of the questions they way it is put. Is the best way to get business to invest in the business intelligence? And this question comes up a lot – it is the business justification – how do you get the business engaged? So best ways to get business to invest in business intelligence as a high priority other than "build it and they will come?" So maybe both of you could take from your perspective on that.

Jim Mullholland: Sure, Michael, you want to go first.

Michael Lock: Sure. I think it all boils down to sort of the makeup of the company and the culture there. Obviously I talked a lot about the notion of information culture and how the company values the collection and delivery of information. But one of the things that came out through an interview that I did with a mid-size lumber distributor actually wrote this up as a case study in the benchmark report, was really all about sort of displaying the capability of BI when it is deployed properly. And I spoke to a gentleman who was a financial analyst and he talked about how he deployed it originally as sort of a point solution but then it sort of spread throughout the organization and management levels were coming to him and saying things like, "You are telling me with this solution I can optimize my truck delivery routes? I can maybe shave off a delivery per week? I can save on gas? I can optimize my payload capacity, things like that?" They see the power of the solution and the visibility that it can provide and then it sort of pervades the organizations from there.

That sort of falls somewhere in between the "if you build it they will come" type of a philosophy and the "just show me before I deploy it" type of a philosophy. But I think a lot of it depends on sort of the mentality of the organization. But I think it is a lot about sort of proving out what capabilities the technology can provide and really how it is going to deliver the business value to the areas of the business that they really care about.

Jim Mullholland: Yes, I will just add real quickly that for us at Creativity we kind of knew what our problems were and that we needed to – we were a medium business, small/medium business working with the largest companies and retailers that are out there. And we had some high level service level, high level demands we have to meet. So for us it was survive and do this or perish basically. And so we needed to kind of go with the philosophy that we need to get smarter and more intelligent with our numbers and our metrics. And really it wasn't that hard of a sell in the end for us. They knew my background as far as business intelligence. I had a CFO who is kind of savvy in this area and we really put the plan together and put up some early ROI metrics. We were hoping to get some certain bang for our buck on the fill rate stuff and some other areas, supply chain related and it came through for us. But in the end the writing was on the wall as far as being able to support our customers properly.

Caroline Seymour: Actually I was going to ask you to answer a second question down there but unfortunately we have run out of time. In fact we have just run over slightly. But again, I really appreciate your time today Jim and Michael, thank you for joining us. And thank you everybody for attending. And we will answer the rest of these questions and get back to the audience here and I would like to just pass back to Mary to close.

Mary IBM Representative: And we would like to thank our audience for joining us today. Once again, this has been an IBM webcast.