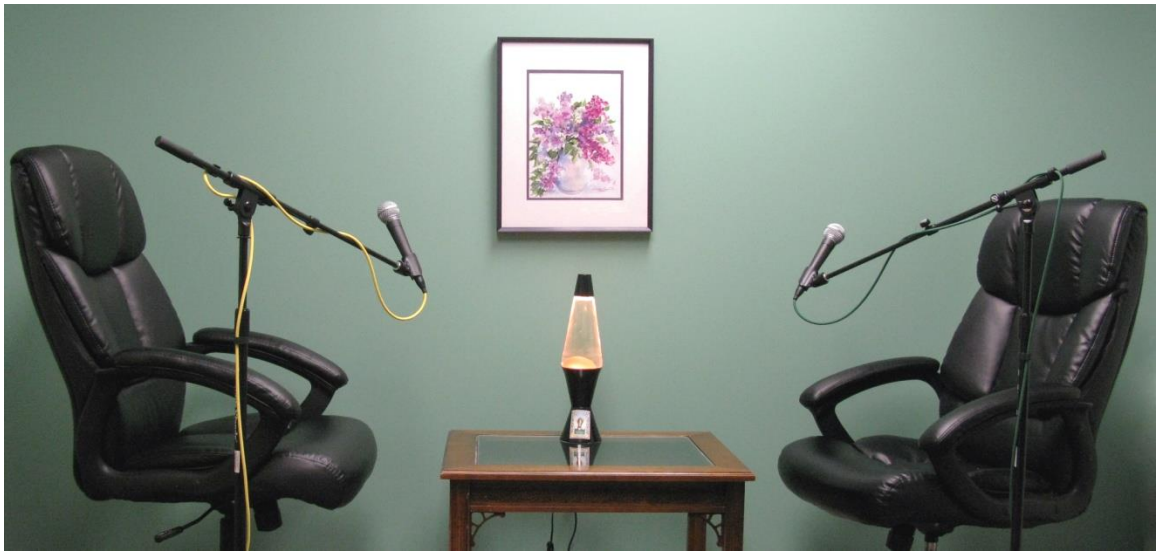
BBBT Podcast Transcript



About the BBBT

The Boulder Business Intelligence Brain Trust, or BBBT, was founded in 2006 by Claudia Imhoff. Its mission is to leverage business intelligence for industry vendors, for its members, who are independent analysts and experts, and for its subscribers, who are practitioners. To accomplish this mission, the BBBT provides a variety of services, centered around vendor presentations.

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Vendor:	**VisualCue**
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Host:	**Claudia Imhoff**, President, BBBT
Guest(s):	**Kerry Gilger**, Founder
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Claudia Imhoff: Hello, and welcome to this edition of the Boulder BI Brain Trust, or the BBBT. We're a gathering of international consultants, analysts, and experts in business intelligence, who meet with interesting and innovative BI companies here in beautiful Boulder, Colorado. We not only get briefed on the latest news and releases, but we share our ideas with the vendor on where the BI industry is going, and help them with their technological directions and marketing messages. I'm Claudia Imhoff and the BBBT podcasts are produced by my company, Intelligent Solutions.

I'm pleased to introduce my guest, today. He is Kerry Gilger. Kerry is the CEO for VisualCue, a very interesting visualization company, I have to say. Welcome, Kerry.

Kerry Gilger: Thank you, Claudia. Glad to be here.

CI: Let's get started with some findings from Bain Capital. You actually shared with us some very interesting findings about companies that use analytics. Why don't you talk about those a little bit?

KG: One of the things that drives me, is I like to see people that put lots of time in on their studies, and understand what the output of those studies are. Especially when it relates to information, or certainly analytics, or big data. Things that companies seem to have a lot of challenges with.

Bain Capital--this is nothing new to them.

They've showed us some information that I thought was really interesting. They talked about companies that use analytics and the value that they have received from them.

They're saying, for instance, companies that use analytics best are two times more likely to have top quarterly financial performance. 5x more likely to make decisions much faster than competition. 3x more likely to execute decisions as intended, and 2x more likely to use data very frequently, when making decisions.

I think as I read through this, it makes a compelling reason why you want to turn around, and use data analytics in just about anything you're doing from a corporation standpoint.

CI: It does. It seems like it's a no-brainer, given that research that said, "Look, if you just use analytics, you're going to be smarter. You're going to make decisions faster. You're going to be a better company."

And yet, companies are still struggling with analytics. You also mentioned some of the challenges that just restrict companies from going full bore into analytics.

Again, I'm going to ask you to go over those challenges. Why aren't companies just falling all over themselves with analytics?

KG: I think the number one reason is, again, the data still sits in silos. Our information stacks are very siloed in nature. Consequently, when you want that data to tell you a story, you need to be pulling from a variety of different sources to tell you that story.

Data silos, I think is a big one. Universal understanding would be a second problem that I see going on. That is, how we do we get everybody in the organization to understand what's going on with that data?

CI: By that, do you mean they're not using the same terminology? They're not looking at the same information? What is universal understanding?

KG: I think it's all that, but I also think that when you're trying to convey what's going on from a data standpoint, you need to get that data all the way down to the lower ends of your corporation.

Everybody within that organization needs to see a common way of looking at that data. Consequently, they can make an informed decision. You can make huge impacts by making a bad decision.

They need to understand the impact that they might have, by making that bad decision. I think that the problem we've got with a lot of technologies today, they're complex in nature, and they're—in fact, it was shared with us that a lot of these BI systems are actually on the shelf. We've seen it ourselves.

A number of companies that we visited, actually parked the BI, because it was too complex--not only to use internally, but to express to others within the organization how to take advantage of the use of those analytics.

CI: I think the other piece of that, that universal understanding, even if they use a BI tool, and they see the results of an analysis, the results themselves are displayed in fashions that are unusable, in many cases.

It's very difficult to use a spreadsheet, for example, and be able to figure out what particular cell in this enormous spreadsheet is the one that I need to pay attention to, or the one that's having problems.

Even if we do use the BI tool, sometimes the way the data is displayed isn't usable either, right? It isn't understandable.

KG: Yes, good point. Good point. It's interesting how many companies actually still run with Excel as its backend. I guess this is where VisualCue kind of stands in. I think that's one of the things that we turn around and try to tackle.

We wanted to create a universal understanding of data. That goes both internally and externally.

In the design of this product, there is a kind of bottom line that we constantly worked against, and that was simplicity.

Everything we did, we constantly exercised the word simplicity against it. So, what? Is there another way? Another technique? We actually got to the point where we actually used cameras and watched how the eye would monitor a piece of data, because we wanted to look at our UI.

There are ways that we can put the UI to make things easier, or more understandable. We wanted to take the natural way that a human thinks and capitalize on it. You'll see how we tackle these particular challenges, with universal understanding as a forefront, and come up with new techniques to be able to show you that data.

CI: And then, there's a third challenge, as well.

KG: That's what we call talent challenges. As you probably know, there's going to be a shortage of analysts, and we're not only seeing a shortage of analysts, but we're also seeing a huge challenge within corporations themselves, on having talent that can understand how to use the BI tools. These would be non-analysts.

Consequently, we need to unify the way that we want to be able to express this information. Again, that's another area that we wanted to take on as a tackle.

CI: Yes. What's interesting are how many universities are now gearing up, or have already geared up, to spin out data scientists, for example.

I'm not sure that that's the audience, really, that a company—I mean, a company certainly needs data science and data scientists, but the vast majority of users are not data scientists.

I kind of want to lead to my next question, which is, how does VisualCue, first of all, overcome these three pretty major challenges? And secondly, in your drive to get simple, or to bring in simplicity, how do you do that? What is your technique that you do that by?

KG: First and foremost, we're not trying to get rid of data analysts. There is a play within every corporation to have these individuals in place.

The key though, is how do we convey this information to others within the organization? How do we look at our processes? How do we look at ways to turn around, and kind of make better informed decisions?

Consequently, when we designed our particular product, we kept that in mind.

The way we go about that, is by creating natural instincts in the way people look at data. We actually convert data into art. We allow that art to express what's going on, and what's happening.

It's a natural thing. In fact, they say as an infant, the very first thing we begin to recognize when we're babies is facial expressions. It's the very first that a child picks up on, is patterns.

Obviously, we need to capitalize on that concept. We turned around and came up with our solution. We talk about data silos. When we come up with a solution for a data silo, we've got to understand that we've got to be able to pull from multiple data sources.

It's all about storytelling. I need a dataset to articulate what we can do to improve on a particular part of my organization—a particular part of my operation. You talk about universal understanding.

We need a way to move away, possibly, from numbers, and possibly move into art as a way to express what's going on with a particular data.

Last, but not least, when we talk about data challenges, it's not so much the analyst. It's the analysts be able to convey what their findings are to everybody else within the organization. It's a way to be able to make sure that everybody in the organization understands the impact of their decision making, and the impact it will have on the company itself.

CI: Yes. You have something called the Tile.

KG: Yes.

CI: That is the core of your technology. It is a remarkable visualization technique. Unfortunately, we're talking about it, so it's kind of hard to talk about what the Tile is, without actually seeing it, but I figure I'm going to let you try.

KG: A Tile is the basis of our product. Basically, what a Tile is made up of, is several—what we call—cues. Think of a Tile as an icon for a moment, here. You have an icon that might be representative of the subject matter that you're talking about.

Let's take on a call center for a moment, here. We might turn around, and allow that centerpiece to be an agent.

It might have a look of an agent inside there. Then, what we do is we have cues, or surrounding pieces of information to describe why the agent might be having challenges, or problems within its data. It could be as little as four or five cues. In some cases, we go as high as 67 cues.

CI: Wow.

KG: It's all about what we need to do to express what's going on. All of these cues are actually designed on layers. If anybody's been exposed to Photoshop, or Illustrator, you'll recognize every object that you start drawing on there, becomes a new layer on to Illustrator.

What we're doing is we're moving these layers up and down the stack, in order to make an understanding of what that underlying data is telling you. The way it moves up and down the stack is through a set of thresholds. If I took that agent, created an agent that was green, so it was alerting me that everything is fine.

I might also make an agent that is yellow, and another one that might be red. The way I move it up the stack, is if that value coincides with what we what to be alerted to. Then I'm going to bring that layer up in the stack on that Tile.

Therefore, it's expressing to you the type of challenge that's going on. Again, the idea by using the cues has expressed to you what's going on with this agent that's caused him to go yellow? What's caused him to go red?

In some cases, we might want to see his over performance. Maybe he's doing much better than we anticipated, but why?

We want to see if there are ways that we can capitalize on that. Again, it's another way to be able to get that Tile to express to us what's happening. The Tile goes much deeper than that. There's all sort of techniques that we use to express more about the data. We can start telling you such things as data history.

When was the last time it was refreshed? What happened the last period of time that we looked at this data, compared to this period of time that we're looking at the data? We can show you things such as alerts, or multi-state, as we call it.

We also have the ability to turn around and do an expectation based. It's a brand new concept, but instead of using red, yellow and green. You could turn around and use green as saying, "This met my expectations."

And then, you can use other colors to let you know, "It's above my expectations," or, "It's below my expectations." Consequently, it expresses the new level of data than the standard red, yellow, or what we call a stoplight concept.

There's just a lot you can do with color, and you have to almost sit through it once to begin to understand the value of using these elements.

CI: I certainly encourage anyone who isn't familiar with VisualCue to go to your website, visualcue.com and see these Tiles, because they are stunning in their simplicity and in the incredible amount of information that they generate. Visually it really is just remarkable.

KG: To capitalize on what you just stated, you almost have to see a video. We turn around and put a video online, so people can get an idea, and if they want to go further they can contact us. We have a series of videos in a variety of different marketplaces.

They can understand how this type of technology can be applied, for instance, to fleet management, or to business process management, or how can I apply it to logistics, or CRM? You'll see all sorts of techniques that we use, in order to express what's going on with the underlying data.

CI: And every industry. I can't imagine—and governments—I can't imagine anyone not being able to use this technology.

KG: This technology actually started with the Pentagon. The Pentagon was up against a challenge. They wanted to be able to understand "situational awareness", they called it. We were up against a lot of other competitors that were after this opportunity to go in these command and control centers.

What set us apart was the fact that they were able to look at our technology, and understood what was going on with no training. Not only that, we took them through the processes. Again, with no training. We let

them know what the status was. Again, with no training. It was such a huge lift for them, that it was a closed deal.

We had to go through a whole bunch of other competitiveness, and it was challenged. We went through all of those challenges, but lo and behold, we did get into the Pentagon in the control and command centers, but it expanded there.

We actually moved into USPS, the United States Post Office. In that particular location, we're looking at multiple pieces of information.

From all the way down to the individual post offices--there's 37,000 of them. They needed ways to be able to roll that data up, so they can get an understanding of what's going on at the post office level. You can see, we were thrown a whole bunch of data to be able to get through, to get to understand, and be able to make informed-type decisions at the upper level.

We were able to show a variety of different things, such as fraudulent-type activities that were going on at these levels. We actually got all of the way down to the register level, so everybody that runs a register in the post office, we can show within seconds that transaction all the way up at headquarters. It was a huge undertaking to make all of this possible.

CI: I think that's an important point. You don't just deal with historical information. In fact, much of the case studies that we saw were very low latency, almost real-time situations. For example, talk about the fleet services. That's as real-time as it gets.

KG: Yes. What separates us from a lot of fleet management systems—and we're not just a dot on the map. We actually apply this Tile on the map.

Let's just say we want to look at the status of a vehicle. We can actually tell you if they slammed their brakes, if they accelerated, if they went off-route. We use little cues to let you know that happened.

For instance, a steering wheel will light up if in fact, he went off-route. If he has too much idle time you'll see an hourglass come up. If you see that he's speeding, you'll see the speedometer shown on there.

We use these little cues as a way to let you know what's going on, and at the end of the day, as you're looking at the Tile, it will give you the understand of what happened throughout that day of this driver.

But, that's looking at it from a driver standpoint. By double tapping on it, for instance, we can get into inventories.

We can begin to understand the inventory levels on a particular vehicle, or up sales. That might be another thing we want to look at about this vehicle.

CI: Or, the truck itself, right?

KG: Or, the truck itself. The status of the truck, and the condition of that truck. Those are a variety of pieces of information, but the key is, is that we're not limited to one or two or three dimensions of data on a geospatial environment.

We have the ability to put another 50, 60, 70 elements on that map that tells you about the status of that, without having to go to traditional reporting, or go to a dashboard, and let me know what happened on one specific area on an inventory level.

In this case, we actually take you, and real, live feedback as to what's going on in the vehicle.

I need to bring up to you that it's not necessarily important to get real-time. In some cases there are, but even having history data, and having that history data give me a story, it's huge, in and of itself.

A lot of franchises—we're only getting a lot of franchises daily updates, but that daily update was huge for them, because it's faster than they get the data today.

Today, when they get the reports they have to go through a series of reports, and usually they want to do some comparisons.

You'll find that they're only looking at one or two, maybe three KPIs, because of the amount of effort it is to get to those one, or two, or three KPIs. Heaven forbid, if I have to compare it now, to another franchisee, or a series of franchisees.

It becomes hugely complex in nature. We wanted to make it simplistic, by the approach of using these images as a way to express what's going on.

CI: I think the key, again, to your success, is that ability to tell a story. In fact, that's where you start. What's the story you want to tell with this Tile, and let's build the Tile first and then let's figure out what data we have to stuff underneath it.

KG: Exactly.

CI: In order to make it work. It is absolutely remarkable. Unfortunately, we're almost out of time, but I do want to quickly touch on the future of VisualCue. Where do you see the company going?

KG: We're just getting started as a company. We actually got a best practices group within our organization, looking for better techniques, better ways of understanding data.

We have new sets of concepts that are coming out. It's still advancing on this visualization. We're starting to see patterns that you can't typically see through standard visual analytics.

We want to capitalize on that. We're starting to understand more and more about the eye, and how the eye is processed, and we're starting to begin to understand how, and what type of images work best with your eye, what colors work best.

We're understanding the makeup of a Tile. You'll find some Tiles don't work well, versus others. Why?

We started putting a huge effort on that particular piece. There's areas there, but then there's areas in the area of virtualization, or I want to also go to augmented reality. There's huge areas in augmented reality that this technology could be utilized on.

We see a series of outputs that could be accomplished by the use of the basis of this technology into new areas that we're just beginning to touch.

CI: That's wonderful. I hold great hopes for your company.

KG: Well, thank you, Claudia.

CI: I think you have something very unique.

Unfortunately, that is it for this edition of BBBT podcast. Again, I'm Claudia Imhoff, and it's been such a pleasure to speak with Kerry Gilger, of VisualCue. Thank you, again, Kerry.

KG: Thank you, Claudia.

CI: I hope you enjoyed today's podcast. You'll find more podcasts from other vendors at our web site, www.bbbt.us. If you want to read more about today's session, please search for our hash tag on Twitter. That's #BBBT. And please join me again for another interview. Good bye and good business!