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Analytic Techniques for Improving Loyalty and Reducing Churn:
A Q&A with Ryan Garrett of Teradata Aster

By Ron Powell
Originally published September 16, 2015

This BeyeNETWORK article features Ron Powell's interview with Ryan Garrett, senior business development manager of field applications for Teradata Aster.

Now that omni-channel customer interactions are becoming the norm, it seems as if bad news travels at warp speed. Unfortunately, if the bad news is about your customers' negative experiences, the impact can be enormous. Thus, it is increasingly critical to more effectively communicate with your customers and increase their overall satisfaction with your company. With advanced analytics including sentiment analysis, behavioral analytics and customer interaction management, a company can look at all customer touches through all channels to understand and react to the entire customer experience in real time. I chose to interview Ryan Garrett on this important topic because of the success of their user-friendly Teradata Aster Customer Satisfaction Index (CSI) Solution that includes built-in advanced analytics. Using an advanced analytics application to support your customer satisfaction initiatives, you are able to monitor customer interactions more quickly without an army of statisticians and customer service reps. As the complexity of engaging with customers continues to increase, companies need the ability to utilize advanced technology and big data from internal and external sources to increase the effectiveness of customer interactions.

Ryan, customers interact with a company on multiple levels – website, call center, service, sales, product complaints/compliments and so on. What is the downside if a company doesn't know what their customers are doing or thinking at all levels of their interactions? It seems to me that companies need a more comprehensive way to measure their customer satisfaction. Can you talk about the Teradata Aster customer satisfaction index or CSI solution?

Ryan Garrett: The Teradata Aster CSI Solution is something that we've built on top of the Teradata Aster AppCenter. It lets you calculate customer satisfaction scores across all touch points over the life of the customer journey. Typically, companies use this to reduce churn, reduce customer effort, or improve loyalty. We incorporate several of the analytic techniques that are embedded into Aster, but we're providing the power of these analytics through a very intuitive, guided development interface so analysts and line of business users can take advantage of this power.

With the CSI solution, we make it easy to operationalize the insights that are generated by exposing visualizations that are very simple to understand in the AppCenter and by integrating with business intelligence tools. Also, we have JDBC connectivity to systems such as marketing automation and CRM solutions. Anyone in an organization who is concerned about what is happening with customers at any given point in time, as well as what has happened with them historically, has access to the insights via the system of their choice.

You mentioned the guided development interface. How can such a comprehensive solution built on an

analytics accelerator be user friendly?

Ryan Garrett: The guided development interface is actually one of the coolest things we've built as part of this solution. This interface lets you build really complex, powerful rules without writing any code. You're not writing any SQL or MapReduce. You don't need to know anything about parallel programming with advanced statistics. We've exposed a lot of the things that power users are typically concerned about via the guided development interface. Thus, any analyst with a basic knowledge of the dataset with which they are working – when I say "basic," I simply mean the analyst can read a column name, know what it's referring to, and understand the values in those columns – can build these rules without any heavy lifting. Honestly, the vast majority of business users to whom we show this are very quickly comfortable with it. We're taking advantage of very powerful analytic techniques, but it's almost as simple as point and click to create these rules.

How about operationalizing these insights? How easy is it?

Ryan Garrett: It's great to be able to build these powerful rules and to understand how satisfied customers are at any point in the journey, but it's relatively useless if you can't then do something with those insights. What we've done is exposed the rules via the Teradata Aster AppCenter. Any business user can come in, adjust a few parameters, click "run" and see the latest and greatest customer satisfaction scores. But we also integrate with business intelligence tools. In our demo instance, we're pushing result sets to Tableau server. Everyone in an organization that has access to Tableau can see the CSI results the same way they would look at any other workbook in Tableau. And, as I mentioned, we can integrate with other third-party solutions such as marketing automation and CRM, where the users of those systems may also want to act on these results.

You mentioned that the CSI solution lets customers take advantage of multiple advanced analytics. What do you mean by that?

Ryan Garrett: One of Aster's strengths, and keep in mind that this solution is built on top of Aster, is that we have advanced analytic libraries that are part of the core system. Typically, a pretty knowledgeable person is required to take advantage of these advanced analytics, so we've simplified access to these analytics via the guided development interface.

Let's talk about nPath, for example, because that's one of the most popular functions that is part of Aster. When using the CSI solution, users will never know that they're interacting with an nPath function. With the CSI solution, they're able to put events together and find more intelligent patterns. Did someone simply put in a call to support and get a problem resolved? Did they simply check in at a retail location? Or did they call support three times in one week and visit a retail location before their issue was resolved? Or did they step through multiple CSRs at your support center before an issue was resolved? You probably want to treat those four scenarios quite differently even though they all involve either a support call or retail visit. Your users point and click to create rules. They're leveraging nPath, but to them it's all point and click to determine what events occurred, in what order and over what span of time.

Sentiment analysis is another popular tool that is very simple to leverage via the guided development interface. There is a wealth of information in text. Your customer support team takes notes when they speak with a customer, their chat sessions are saved, and your customers share their feelings quite openly on social media. The Teradata Aster CSI solution leverages several techniques to parse that text and determine its sentiment. So you can create rules based on that sentiment, without having to understand the nitty gritty of the text functions running in the background. If you think about trying to write complex text parsing functions and then determine sentiment on those, with the guided development interface, we're able, for example, to look at call center notes. We can look at the notes from the customer support center and determine if they're positive or negative. That's all you see. You don't see that you're actually running a complex sentiment analysis function underneath.

For behavioral analytics, if you want to look at your customers and how tightly connected they are to try to

determine influence, it's just a very simple visualization as opposed to trying to embed a function into an SQL statement, for example.

As I said, this is all built on Aster, so your team can also take advantage of things like paths-to-churn, advanced segmentation techniques, and deeper path and pattern analysis beyond what we already discussed.

How does the CSI solution compare to something like a Net Promoter Score?

Ryan Garrett: We get a lot of questions about Net Promoter Score (NPS). A lot of our customers use it, but it really has so many drawbacks that it's not something that I would depend on to determine if I was doing a good job of keeping my customers satisfied.

For anyone who is not familiar with Net Promoter Score, you typically ask one question such as, "Would you recommend us to a friend?" You get a snapshot of what a person feels like at that point in time. Don't get me wrong – that's better than no insight, but that doesn't provide any sort of context about whether the person is commenting after a negative event. Is the customer upset because they just had a bad experience with a customer support representative after they also had two issues with a new product that they purchased? Or is the person extremely happy because they just had a customer support representative call them out of the blue to offer them a credit to resolve an issue that they had called about two months ago. With Net Promoter Score, you don't have the context, and it's static. With the Teradata Aster CSI solution, we're looking at all of the events and the interactions with customers across multiple channels.

With the Teradata Aster CSI solution, you can get the results and see exactly what your customers are feeling now. You can compare that to a previous period – a month ago or two months ago, for example. And then we've also built in some cool techniques that let you factor in things such as how emotions increase and decrease over time. I'll use myself as an example. I have an iPhone that is probably two or three years old. If I had an issue with the iPhone within the first month of purchasing it, that would probably matter a lot more to me than if I had a problem now after I've had the phone for a few years. If I called in the problem with my three-year-old phone and someone was to run my score, they don't want to see the same impact from that problem as they would have seen in month one. There are lots of unique features that we've built in that provide a lot of context and make CSI very dynamic.

From a user perspective, at any point in time, I can determine exactly how my customer feels because it's dynamic. It's not at a point in time that is way in the past. So let's say I'm going to have a conversation with that customer tomorrow, I would be able to access today exactly how satisfied that customer is. Is that right?

Ryan Garrett: Yes. Because this is all outputted as a table, you could get all the context that you need, not only the score that gives you an indication of why they feel that way, but also all the events that have occurred – whether that was in store, product usage, customer support calls, and any other events that have occurred up to that point – to provide some context of why they feel that way. You could also see how their satisfaction has trended over time.

Obviously, there are a lot of different types of companies and industries. Which ones do you feel benefit the most from using the Teradata Aster CSI solution?

Ryan Garrett: Since we just recently launched this solution, I've been lucky enough to speak with several customers who are either using the solution or getting ready to implement. And, I've really seen a lot of traction in communications, consumer financial services, travel and hospitality, and automotive manufacturing. The solution benefits any company that interacts with their customers many times over multiple channels and wants to better understand how those interactions and events impact customer satisfaction – typically to reduce churn and improve loyalty. We all know it's much more cost-effective to retain current customers than attract new customers. Any company like that stands to benefit from this

solution, but those are the verticals where we've seen the most success. Other ones that are showing more interest include insurance and healthcare. This is a solution where we continue to learn and see companies from other industries come to us. I expect that to develop over time.

It all sounds very interesting. What's next?

Ryan Garrett: The good thing is if you're already an Aster customer, you can just contact your account executive. Actually, if you're already using the Aster AppCenter, then this is something that we can spin up for you in just a couple weeks with a quick services engagement. It's very painless to get this type of insight if you're already using AppCenter.

If you're not a Teradata customer, you can contact me. My email is ryan.garrett@teradata.com, and I'll share resources with you and we can figure out whether this is a good fit and help you get started.

Ryan this sounds great. I look forward to hearing more about the Teradata Aster CSI solution in the future.

About the Author

Ron Powell, an independent analyst and consultant, has an extensive technology background in business intelligence, analytics and data warehousing. In 2005, Ron founded the BeyeNETWORK, which was acquired by Tech Target in 2010. Prior to the founding of the BeyeNETWORK, Ron was cofounder, publisher and editorial director of DM Review (now Information Management). Ron also has a wealth of consulting expertise in business intelligence, business management and marketing. He may be contacted by email at rpowell@wi.rr.com.