



Get the best use out of your data!

Arantech defines customer experience management (CEM) as “the ability to proactively monitor and manage, in real-time, the lifecycle experience of every customer that comes into contact with ... a communications provider”. Founded in 1999 and acquired by Tektronix Communications in 2008, Arantech is a leading provider of CEM systems to communications service providers worldwide. VanillaPlus recently caught up with Brian Carroll, CEO, and James Doyle, VP Product Management & Marketing, to hear the company's latest initiative to enhance user experiences for CSP customers.

VanillaPlus: What is Arantech's OpenPlatform™ strategy and what are its components?

James Doyle: The idea of OpenPlatform™ is to drive the unique CEM data source out into business stake-holders. The original driver of touchpoint™ as an application was very OSS-focused.

Our stake-holders were network optimisation, and quality of service management. Although we have developed a number of use cases with others in the business, the problem we've been finding is that our data structure and our application were focused on voice technology.

OpenPlatform is about two things: Accepting the fact that we are not going to be able to address all of the needs of CEM across all stake-holders, but also making sure our data is structured to ensure that we can answer questions coming from the business. OpenPlatform is a set of components acting on our data in slightly different ways, depending on needs.

The first component that we have already delivered on OpenPlatform is an element called ProAction™. That is a capability to take extreme real-time data from our heavy-lift aggregation engine, which is the bottom part of touchpoint™, and allow the right business rules on top of it for the customer to write business rules and implement what we call the 'find and fix', event-triggered use cases.

It had a strong business case and drove good RoI use cases, but no-one could interact with it from a business perspective, they had to write a use case on top of it and write the rules.

Driven by this, the next component we will release within OpenPlatform, ProData, is much more business-focused. ProData allows raw data to be extracted from touchpoint, and to be conditioned in different ways to meet the needs of multiple different BSS stake-holders. For example, for a business analyst within the operator with specific reporting needs, ProData

supports open business intelligence tools like IBM Cognos or SAP Business Objects. The data will be structured so that a business analyst can interact with it themselves and write reports.

So the first business-focused part of OpenPlatform is a data mart; we call it ProData™. There's touchpoint ProData and there are a set of letters after ProData to define the different sorts of conditioning we do. ProData M is a data mart. We're taking the raw data set out of touchpoint and conditioning it so that the tools we allow on top of it will be open business intelligence tools like IBM Cognos or SAP Business Objects. The data will be structured so that a business analyst can interact with it themselves and write reports.

VP: What were the drivers behind this?

JD: The issues we were getting from our customers were that they could extract value using our existing tool from a reporting perspective, but the data was structured so that it was technologically based which made it complex.

ProData allows data to be structured to meet very specific reporting requirements - it might be a set of data to support handset use cases, or it might be a set to support VIP users.

So we've created these individual data marts which will address certain areas for our customers; it might be a set of data to support handset use cases, or it might be a set to support VIP users. We're going to develop this in an incremental, agile way to drop out data marts, and we hope that by the end of 2011 we will have re-conditioned our data to be business-consumable.

ProData is currently targeted at users who know the questions they want to ask of the data, so when they do the ETL (extract, transform and load) of the data marts they can answer a set of questions like 'Give me my top worst performing handsets'. These are the questions that business analysts want to ask, and yet leave the data in such a way that they can ask more questions. ►



Brian Carroll: Looking at data warehouse providers as partners



James Doyle: A structure of the data laid out in a logical way



"What it allows us to do is segment the CEM value proposition."

- James Doyle, Arantech

There are other use cases that CEM needs to address, where the users themselves don't really know the question they want to ask. They are looking at the data in such a way that they can find problems. The technology that's best suited for that is OLAP cubing of the data. One of the challenges of our data set is that it represents the customer experience of all the network's subscribers, so it's a huge amount of data. You clearly can't put all of that into a cube and if you did you wouldn't put it in the way a customer wants it.

ProData will support this type of use-case in the future – data will be extracted and transformed on a case-by-case basis so that the customer will choose the dimensions of the data they want to put into the cube.

ProData O, the third component including ProAction, is the way of extracting the data and transforming it on a case-by-case basis so that the customer will choose the dimensions of the data they want to put into the cube. They can then analyse that data to get some answers that they didn't know. You might put in a set of dimensions and look at it and say how are my iPhone users consuming voice or data, or what network are they browsing onto. You might come up with a picture that they were trespassing from 3G to 2G. If you didn't know you were trying to ask that question of the data, you might be putting a set of data in about iPhones and network type and say, I've got a problem.

You're providing a data set to allow business-oriented users to ask questions of the data that they didn't know they had by putting stuff into a cube. We're not fixing that, with DataMart you're fixing it around a set of known questions. With OLAP cubing we have to make sure the selection of dimensions that you put into the cube are straightforward for business users to select.

There is one other use case that requires slightly different data conditioning, which is a Google-like query where you've got raw data and you want to ask it a bunch of questions. We don't believe again that you can develop the CEM proposition with all raw data; it will have a set of queries because the data's too much. But there may be chunks of data that you can put in in a raw state, like error events. Then you can ask very specific questions of it.

The idea of the raw piece which is ProData R – so you've got M, O and R as different structures – is that it is a pure export utility, that is OpenPlatform. OpenPlatform can offer this type of pure export utility by us conditioning the data that we have already lifted into our database from this heavy-lift aggregation engine and, instead of putting it into the format





“With OpenPlatform we can open up a new area of usage.”

- **Brian Carroll, Arantech**

that it is today with our touchpoint application on top, we’re going to extract, transform and load it directly from the collection engine into different data stores. The goal is to make that data consumable by a new audience, and have it conditioned in such a way that the interaction with it is straightforward to get to value quicker.

Today, we sell consultancy services to our customers when we sell CEM, and that helps our customers extract value from the data and use it. What we’re doing in some of these cases is enabling our customers to do it themselves.

VP: So is that going to cut your consultancy revenue?

Brian Carroll: We think it’s going to do the opposite. We haven’t delivered our consultancy business into the BSS space yet; we’ve been helping existing customers to extract value from the deployment and uses they’ve got. With OpenPlatform we can open up a new area of usage. It’s placing the experience data set where it might not have been placed before, and we think that’s going to drive our consultancy revenue.

VP: So it might stimulate further CEM system sales rather than cannibalising them?

BC: Yes, we’ve always talked about CEM being a business tool and I suppose this is a recognition and an access method to make the data consumable by that set of stake-holders. We had two choices; either build an application for business users and put it on their desk top, or find a way for our data to be more consumable. We decided on the latter.

The data mart, ProData M, is something that business analysts will understand. That will be self-help. In terms of the OLAP piece, which is the structuring of data into a cube and profiling it, it is more of a challenge because we have to look for an application function to condition the data and make it useable.

VP: What obstacles to existing business processes will you and your customers have to overcome?

JD: The challenge with this is that it’s a new data set and it comes from the OSS space. I think there’s got to be trust built between the stakeholders in an Op Co to allow that to happen. The questions need to be answered and the experience set that CEM provides is one data set that can help. It will require operators working together in a cross-functional way.

If you look at data transition from the OSS to BSS siloes, this is going to take time and be driven from C-level down. There are many problems; I mean common KPIs if you are reporting across multiple Op Cos, and then validity of data, and making sure it’s representational. ►



It'll be looking for things like 'bill shock', maybe adding value to churn propensity models. It will be taking the usage data, the negative experience of what your customers are doing, rather than just the positive stuff that's extracted out of CDRs at the moment. It will add depth to existing stakeholders like marketing, sales, key corporate account management and the insights guys.

VP: That sounds like a quick route at last to significant improvement in the customer experience and reduced churn.

JD: Well, that's the holy grail. If you are driving a marketing campaign by doing two or three months of data mining using the existing data set, that might convert to some more micro-campaigning that's more targeted, or it might provide data about subscribers who dial in to allow (operators) to route the call quicker so call holding times go down.

VP: Is this in trial anywhere yet, if so where?

JD: The first component of OpenPlatform is ProAction, and we've got that in three customers at the moment. So that's commercially available this year.

We are going to be trialling ProData with a customer in November. For this customer, we are delivering different subsets of our data to meet their very specific reporting needs in a highly efficient manner. The data will be formatted to support open business intelligence tools, and our customer will use these tools to rapidly and easily extract value.

We are going to be trialling Data Mart with a customer we hope in October. If you imagine a data warehouse as a total data set, then individual data marts are really sub-sections of a data warehouse. We will trial our first set of data marts this year, with data formatted so that you can deliver a business intelligence access method on top of that data set, and give it to our customers to extract value.

We haven't done a lot of statistical analysis on our data. There's a lot of value locked up in it. ProData could offer, for example, a regional view of data that's consumed by a small part of the business; it's a way of ring-fencing a large data set to address a specific set of needs.

VP: Can ProData deliver flexible business reporting?

BC: Yes. With open, standard industry tools, like Business Objects or Cognos, ProData can offer a structure of the data laid out in a way that it makes logical sense. It's presenting the data in terms that you as a business analyst understand. You understand handsets, you don't understand PDP context activation or detailed KPIs, so it will present the data in a sort of logical way. So, when you are building a report it's straightforward to pick and mix. I want to see a report with all my iPhone users that are in this location and using 3G.

VP: Does this all raise the importance of data warehousing and mining within telcos?

BC: There's a lot of data warehousing and data mining going on with the CRM data set; inventory, handset, tariff planning, future sets bought, and it's over-lapping those two things. We will be looking at existing data warehouse providers as partners, for instance, for our data.

VP: What has their response been so far?

BC: Very positive. They are driven by the customer so the customer sees that this data set can provide insight into things they are looking for already, so having that data set now in their existing data marts or data warehouses allows them to do more.

VP: And will this service be available on a license basis or in the cloud?

JD: The way we are approaching it is as an optional extension of touchpoint. It's using the existing collection engine, and licensing the OpenPlatform components so that our customers can add on licence capabilities to condition and export the data in these various ways. You could theoretically put the whole of touchpoint into the cloud, but you're exporting a lot of valuable and secure data, and I don't think our customers would want to do that.

VP: Clearly, you are working from an existing customer base, but does it provide additional advantages by following the licence model?

JD: It does. What it allows us to do is to segment the CEM value proposition. CEM is a very misunderstood term in the industry; it means a lot of things to a lot of people. Whereas our existing proposition, touchpoint, was a very specific heavy-lift aggregation engine providing insight into customer uses with a set of tools on top of it, and provided a very broad access to the data – what we are doing with OpenPlatform is almost narrowing the usage of that data.

We foresee being able to almost package those use cases and deliver them as a one-off play, so not necessarily as an optional add-on to an existing touchpoint customer, but actually just providing a data mart and component into a new customer as a stand-alone value proposition to deliver a set of specific use cases. As CEM becomes more segmented and understood these will act as value propositions in each of those segments.

VP: And what does this make of your relationship with the likes of Cognos and Business Objects?

BC: It should make it clearer, in that those sorts of tools were always bolt-on. There were bolt-on ways of competing with our own native reporting capability and our own dash-boarding capability. What we are saying is let's format our data and allow those guys to sit on top and deliver what they do best. It should make the relationship clearer, certainly from the customer's perspective, making it easier for them to gain access and value using those tools. 🤖

**VanillaPlus
Jargon Buster**

BO: Business Optimisation

BSS: Business Support System

CEM: Customer Experience Management

Op Co: Operating Company

Rol: Return on Investment

SAN: Storage Area Network