VAI EXPERIMENTS WITH WATSON

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It's hard not to hear about Watson these days, especially since IBM changed the name of its Power Systems division to Cognitive Systems. But what can the cognitive service bring to pragmatic IBM i shops who are wary of change? The ERP software company VAI is at the forefront of experimentation.

According to VAI CIO Kevin Beasley, VAI started working with Watson in 2016. A lot of the early work that year involved manually uploading a bunch of ERP data into Watson, mixing it with data supplied by IBM, and then seeing what Watson came up with.

One of Watson's tricks is automatically applying machine learning algorithms to mixed data sets to see if any correlations pop up. Beasley says this can be a fruitful exercise, particularly with some of the weather-related data that IBM has access to since it acquired The Weather Company two years ago.

"Every time we drop data in there," he says, "it always sees patterns that somebody wouldn't have necessarily seen without drilling for a very long time into the data."

The data management side of the story got a little more serious for VAI earlier this year when IBM shipped the Watson connector for Db2 for i. IBM delivered this product, which is formally called the DB2 for IBM i Connect tile, on its Bluemix cloud-based application development offering in June. The Connect tile serves as an extract, transform, and load (ETL) tool for scraping relational data out of a database and loading it into Watson, which runs on IBM's Bluemix cloud.

The Connect tile made it easier to upload structured business data generated by VAI's S2K Enterprise software into the analytics service. This upped the ante for VAI, but the data management story got even better when IBM started shipping a Secure Gateway, which is a hardened server that provides an encrypted "tunnel" between the customer's on-premise data and Watson sitting on the cloud.

"It does actually make it fairly easy, much easier than what most people realize, to connect Watson to our databases and data sources," Beasley tells IT Jungle. "Once you've made that connection with the secure gateway, it can take all the data that was already extracted, pull that into Watson, and now we can start doing our initial analyses."

In addition to supporting S2K business data stored in Db2 for i, Watson can work with reports and views created with VAI's business intelligence product, S2K Analytics, which is powered by IBM Cognos. This allows customers to piggyback a bit on the analytical work they may have already done within the Cognos environment.

And because Watson can extract any metadata defined within

Cognos and Db2 Web Query BI tools, it provides a familiar environment for business analysts to work with labeled data sets, as opposed to working with the cryptic field names used in the database itself.

This is a big benefit for advanced customers who have already started down the analytics road, Beasley says. "So you don't need to be a technical person to be using Watson," he says. "You're not going to deal with people's rows or columns. You're just dealing with the business terms of what you need, such as work orders, invoices, statements. All the logic is built into the metadata to get the data from the appropriate spot. You simply go to town writing your own Watson reports and so on."

However, customers that do not have an existing BI tool and well-defined metadata will have to start from square one within Watson, and will need to work directly against the raw database fields. This is something to keep in mind for those customers that have not started making analytical investments.

With those three usage patterns — manual data upload, the Db2 for i Connect ETL tile, and the real-time Secure Gateway — firmly in place, VAI felt comfortable demonstrating how its ERP system works with Watson during its VAI Leadership Summit last month in New York City. For the on-stage demo, VAI set up Watson for some natural language question and answering using Watson's API for voice.

It's still early for Watson and other cognitive and advanced analytic systems, and so VAI is taking it slow. Currently there are about a half-a-dozen people in the Ronkonkoma, New York, company who are working with Watson and brainstorming how they can incorporate the service into their own ERP offerings.

Today, VAI is concentrating mostly on Watson's basic reporting capability as an add-on to its own S2K Analytics. The company has a picture of a Watson dashboard on a smartphone on its homepage, which shows you where things may be headed.

Looking further down the road, Beasley foresees VAI customers using Watson to accomplish more real-time tasks, such as on-the-fly routing of delivery vehicles based on traffic data, automatic translation of business reports, or image recognition applications. The vendor could pave the way for healthcare companies to work with medical data made available via Watson APIs, or manufacturers to work with social media data.

Much of the potential of cognitive computing comes back to what data is available, and how can you get it. ERP systems were developed to generate and utilize structured data that's stored in relational databases. But many of the new data sources don't fit naturally in relational databases, so it makes sense to connect to the systems that do. Watson is one of those data sources.

"Watson is probably in the early stages from the standpoint of people figuring out what they can do with it," Beasley says. "If you're a scientist working in health and various other industries, they know what to do with it day one. But the average business person, from a SMB company, it's going to take a little bit of learning and understanding how it really factors into their business."

The world of big data analytics and the world of IBM i computing don't intersect in a clean manner. But it's hard for VAI to ignore the massive changes that have occurred in big data storage and advanced data processing capabilities over the past several years, and the

ongoing changes that promise to make storage and compute capabilities faster and cheaper in the years to come.

“It’s a great equalizer for our customers to have access to what a few years back only a $10-billion company could have access to,” Beasley says. “Now the capabilities that are delivered by many of these dedicated AI systems can be easily added to many different products, and over time it’s going to get easier.”

While VAI has a functioning Watson add-on available now, it hasn’t launched it, let alone announced a beta. With the Christmas holidays approaching, the start of a beta will likely be pushed out into the beginning of 2018.

It seems that it’s not a matter of “if” cognitive and machine learning capabilities will be coming to VAI’s product set, but more a question of “when.” VAI needs to consult with customers and decide their tolerance and desire for incorporating machine-generated recommendations or decisions into their business processes.

“We have to go back and see what makes sense,” Beasley says. “Part of what we do is educate our customers on what’s coming down the road, what’s available, what can be done, what’s new. It has to be something that puts the business first. All the other things that fit other industries are nice, but we have to concentrate on customers first.”