



THE STRATEGY BEHIND THE SCIENCE:

AN INTERVIEW
WITH IIS' CHIEF
DATA SCIENTIST
DON VILLEN





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BIG DATA INSIGHTS

DON VILEN - FORMER CHIEF DATA SCIENTIST AT BUYSIGHT (ACQUIRED BY AOL) AND PROGRAM MANAGER AT MICROSOFT SQL LAB - SEES ENTERPRISES FACING RADICAL ORGANIZATIONAL CHANGE OVER THE NEXT FIVE YEARS AS NEWSQL TECHNOLOGIES BECOME STANDARD FOR BIG DATA WITHIN CUTTING-EDGE COMPANIES. READ ON FOR MORE INSIGHTS FROM IIS' SEASONED HADOOP EXPERT AND CHIEF DATA SCIENTIST.

IIS has deepened its Big Data practice with the addition of Chief Data Scientist Don Vilen to its team of thought leaders. Formerly a computer science professor at California State University-Chico, Vilen brings over 35 years of experience to IIS as a technology veteran who has worked on some of the most groundbreaking database products to date. His keen insights and experience in developing solutions to accommodate Big Data and analytics gives IIS a go-to expert when providing end-to-end solutions and ongoing services to enterprises.



ABOUT DON VILEN

Vilen's 30 years of experience give him a unique perspective on the data management and analytics challenges facing enterprises today. "We have a lot of customers who have been collecting data for a long time, but never had the opportunity to combine enterprise data," notes Vilen. "Now, it is possible to store and look at data in ways like never before."

Vilen has worked on cutting-edge enterprise technology for quite some time, well before the Big Data era became a mainstream topic - and an enormous challenge for enterprises in the 21st century. Before joining a number of start-ups in California, he gained recognition as an accomplished professor of computer science at California State University-Chico.

- ♣ A thought leader in Big Data
- **+** Over 35 years of experience
- Hadoop, HP Vertica, SQL and NewSQL-based technologies expert
- Former Chief Data
 Scientist at Buysight
- Program Manager at Microsoft SQL lab
- Formerly a computer science professor at California State University-Chico

After a 15-year tenure in academia, Vilen took his talents to Microsoft in the mid-1990s and helped develop Microsoft SQL Server, one of the most widely deployed database technologies in the world for over a decade. In fact, he worked as one of the program managers for Microsoft SQL Server in its early days, placing himself firmly on the cutting edge of database technologies not only in academia, but in the private sector as well.

Serving multiple roles within the Microsoft SQL Server development team, Vilen is well seasoned in SQL and NewSQL-based technologies. Over the course of his career, he has seen the development of Big Data solutions from the perspective of an academic, vendor, client and independent third party. As part of IIS' Big Data practice, Vilen has recently added HP Vertica Certified Solutions Expert to his repertoire in addition to his deep knowledge of enterprise Hadoop, positioning himself as a thought leader in Big Data for many years to come.



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DON VILEN'S VISION AS IIS' CHIEF DATA SCIENTIST

"Enterprises face radical organizational change over the next five years," Vilen comments, referring to the challenges of Big Data. The shift, according to Vilen, has a lot to do with the requirements of lines of business use cases versus the capabilities of IT. Today, enterprises must move past the technologies and tools of yesteryear and focus on solving the unique business problems facing lines of business and CTOs. The key is to identify emerging trends quickly, particularly with respect to Big Data solutions, and lay the groundwork of standards for lines of business executives and CTOs to follow.

LIKEWISE, VILEN NOTES THAT THE VENDOR LANDSCAPE WILL NEED TO ADAPT TO THESE CHANGES AS WELL.

Vendors today must move beyond selling hardware and software, focusing instead on solving real-world business problems rather than simply throwing more computing capacity at the problem. When speaking to lines of business decision-makers, vendors must learn to speak their language and present solutions, not just products or services.

The challenge facing lines of business executives, CTOs and CIOs is how to ramp up their organizations quickly for the era of Big Data and analytics while minimizing corporate risk and avoiding starting with aspirations that are too grand. Vilen's recommendation is to start with small greenfield projects and stay narrowly focused to guard against "project creep". Adopting a parallel strategy (i.e., when one project continues a legacy approach while another brings in a new solution) is one way companies can test for performance without impacting service levels to business units. Often, the outcome of a short two-to-three month project can yield surprising insights, loading the bases for larger Big Data projects.





DON VILEN'S EXPERTISE ON HADOOP, NEWSQL, HP VERTICA AND JOINING IIS

Since Hadoop and NewSQL-based systems are a hot topic in the Big Data space, Vilen's insights into how these emerging technologies will revolutionize enterprises are critical. "One area of concern is that data is owned by vertical aspects within the same company, so it is hard to know which data exist," Vilen says when commenting on the biggest challenges faced by IIS' customers.

HADOOP, HP VERTICA AND NEWSQL TECHNOLOGIES PROVIDE ENTERPRISES WITH A GREAT WAY TO STORE AND PREPARE LARGE QUANTITIES OF DATA.

Superior to SQL Server and other relational database technologies when analyzing very large amounts of data, Hadoop, HP Vertica and other NewSQL technologies provide enterprises with a great way to store and prepare large quantities of data from multiple repositories within lines of business. HP Vertica, in particular, continues to show much promise when assimilating, accessing, processing and analyzing data by enabling machine learning and real-time data analytics.

In no small part due to IIS' strong relationship with HP as an HP Platinum Partner, Vilen chose to join IIS to work alongside the best in the Big Data industry and stay on the cutting-edge to which he has contributed for decades. "IIS speaks the language of its clients, which is a different conversation than it was five to 10 years ago, or even two to three years ago," Vilen says. "IIS has invested in the right leadership to have these kinds of conversations that set us apart," he adds.

IIS has nourished a robust, deep Big Data practice, which includes strategic partnerships with VoltDB and Hortonworks in addition to HP Vertica. The investments IIS has made in personnel and partnerships now position IIS to offer end-to-end solutions to enterprises, not just new hardware and software, which Vilen believes matches his vision for the future of theindustry.

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The hot
topics in
BIG DATA are
HADOOP and
NewSQLbased
systems

For more information on how IIS can help enterprises take a solutions-oriented approach to Big Data, visit *www.iisl.com* to contact a representative.

WITH THOUGHT LEADERS LIKE DON
VILEN NOW ON ITS SIDE, IIS STANDS
POISED TO PROVIDE INNOVATIVE,
PROACTIVE SOLUTIONS TO THE BIG-DATA
CHALLENGES ENTERPRISES FACE.

