100 Most Promising Big Data Solution Providers 2016

'Big Data' is no more a buzzword. Now that organizations have already put their wide arms around Big Data, the next impediment lies in refining the data to bring out insightful and meaningful results. With every bit of '0' and '1' being harnessed as meaningful "collections," enterprises are sure to achieve complete utilization of their concrete information, and attain significant outcomes. Another trend that has gained notable traction is capitalization of cloud for storing invaluable sets of data. While majority of enterprises consider it as a risky venture owing to the concerns of security, others embark upon it for the sake of business agility. With myriad of such transformations, enterprises are confident to embrace innovative ways to hold together the regulations of corporate world, and ensure their participation

in the realm of Big Data. In order to uphold a fine balance, it has become critical for the CIOs to choose proper technology and select best vendors that are at the forefront of effectively tacking the impediments across the Big Data realm. To help them accomplish their objective, CIO Review presents "100 Most Promising Big Data Solution Providers 2016." A distinguished panel comprising of CEOs, CIOs, VCs, and analysts including CIO Review's editorial board has decided the top Big Data Solution Providers from over thousand companies. The companies featured in this list provide a look into how their products work in the real world, so that you can gain a comprehensive understanding of the solutions available and how they stand against competition. We present to you CIO Review's 100 Most Promising Big Data Solution Providers 2016.

Company:
BEZNext
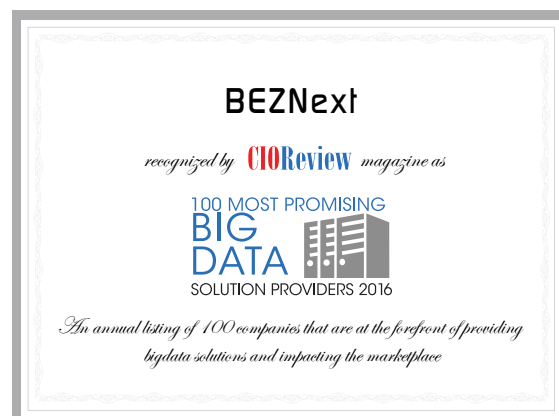
Key Person:
Boris Zibitsker, PhD
CEO

Description:
Offers Performance Assurance solutions for optimizing business and IT decisions during the entire application life cycle

Website:
beznext.com

BEZNext
Performance Assurance for a Big Data World

The new technology releases of Big Data open source projects incorporating new features and algorithms have become a vital part of industries such as financial services, health care, telecommunications and retail. The availability of low-priced hardware, free software and unstructured data support attracted many companies to leverage big data opportunities to a great extent. As a result, the customers face increasing number of options of tuning OS and big data subsystems like Spark, Storm, Kafka, Cassandra, HDFS, HBase, and YARN, including change of priorities, concurrency and resource allocation. However, the real challenge is how to adopt these big data subsystems, satisfy service level goals and reduce the risk of performance surprises at the same time. "Our Predictive Analytics and Prescriptive capabilities helps clients to evaluate options and recommend plan of actions," says Boris Zibitsker, PhD, CEO, BEZNext. The company addresses the big data Application Performance Management (APM) inadequacies, by offering Performance Assurance services assisting with design and proactive performance management during the entire application life cycle.

"Our Performance Assurance solutions incorporate Software Performance Engineering and Dynamic Capacity Management technologies, to continuously monitor and manage the big data environment," delineates Zibitsker. During testing of new applications, the firm builds the new model in a small testing environment with low volume of data and just a few concurrent users. Further, it builds a model of the production environment and predicts the impact of moving the new workload to the production environment assuming that it will have access to the increased volume of data and more concurrent users. The prediction results show if the new application will be able to satisfy business requirement and how it will affect current production workloads. "If necessary we provide recommendation of what should be proactively changed to reduce the risk of unexpected performance outcomes," says Zibitsker. Prediction facilitates verification of results by comparing actual results with expected. It enables organization of collaborative performance assurance process between business leaders, developers and IT.
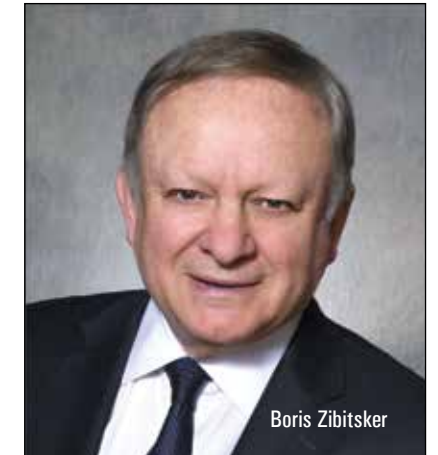
Boris Zibitsker

> ❝
> **Our Performance Assurance solutions incorporate Software Performance Engineering and Dynamic Capacity Management technologies to optimize design and management of the big data applications**
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BEZNext also offers big data performance assurance solutions which are based on the application of advanced analytics. The company incorporates Descriptive Analytics to identify resource consumption and workload contention patterns. "These insights can be used to adjust YARN parameters, to ensure that the appropriate priority and resource allocation is given to each workload when it requires the most," illustrates Zibitsker. Additionally, the firm's Diagnostic Analytics incorporates machine learning algorithms to identify performance anomalies and their root

causes. For short term predictions, the firm provides Predictive Analytics to support tactical performance management and operational workload management. The results of all these analytics are used by Prescriptive Analytics to develop proactive recommendations.

A staunch believer of constant innovation, Zibitsker is always enthralled to try new things. Carrying the same conviction in his work at BEZNext, he strives to stay informed about latest changes in technology to be able to model and evaluate the impact of new features and options. In the current year, the firm has organized academic and industry conference on Big Data Advanced Analytics.

For the future, the company aims to apply Control Analytics and optimization technology to automate workload management, performance management and resource allocation to different workloads. Additionally, the company aims at expanding their services from analysis, prediction and prescription to full automatic control. "Hands-off autonomic computing can help customers to more effectively manage Big Data environment," concludes Zibitsker. **CR**