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100 Most Promising Technology Companies

Entrepreneurs across the globe are regarded as key drivers of economic and social progress. The current scenario has evolved and carries quite a lot of untapped potential, which if utilized strategically would result in successful outcomes. The evolution of technology has led to fundamental changes in the way organizations used to function. With the urgent need to adapt to these technologies, organizations worldwide are forced to deviate from the conventional ways of doing business. Along with incorporating new technologies, business leaders have to tackle the centuries-old challenges of limited budget, finding the right strategies, hiring and retaining talent and others. In short, current entrepreneurs have the tough task to take an organization through these challenging times, which require out-of-the box strategies.

However, it should be noted that these challenges are potential opportunities in disguise. For instance, the emergence of cloud, big data, mobile, Internet of Things and other technologies have been instrumental in enhancing business growth at all levels. The global economic dynamic

calls for strategic use of these technologies to maintain an edge over others in the highly competitive world. Therefore, the focus should be on unearthing the potential hidden in these challenges.

In order to help enterprises across the globe gain useful insights into the latest technologies, keeping pace with these trends, the critical challenges, overcoming these roadblocks, future-oriented approach and other vital aspects on running an enterprise, CIOReview presents the 'CIOReview 100'. This is an annual honor for the best 100 technology companies in the U.S.

To address the burning need of CIOs to find cost-effective and flexible solutions, the CIOReview100 list brings successful companies together at one place. These companies have gained momentum, beating the current challenges, and would be sharing helpful information on how they achieved it. A distinguished panel comprising of CEOs, CIOs, Analysts and CIOReview editorial board scrutinized several companies to finalize the 100 best technology companies.



Company:
Argyle Data, Inc.

Key Person:
Tom Ryan,
President & CEO

Website:
www.argyledata.com

Description:
A provider of real-time analytics at network speed and Hadoop scale for data-driven organizations in telecom, finance, and e-commerce

Argyle Data: Re-Writing the Book on Fraud Analytics

By Joe Philip

Fraud has become both front page news and part of the board level agenda. The Association of Certified Fraud Examiners (ACFE) found that a typical organization loses 5 percent of revenues to fraud each year. The more connected the industry the more potential there is for fraud. The mobile industry alone loses over \$40 billion annually to fraud. When it comes to detecting fraud in the financial services industry 16 percent take up to 8 hours to detect it and 22 percent do not know the average time for detection. Fraud is often described as a triple whammy: (1) You lose money on the fraud itself. (2) You lose money on the fines and (3) You lose money due to brand damage. Traditional approaches, designed to combat fraud, often bring together a patchwork quilt of database, ETL (Extract, Transform and Load) and BI technologies working in a batch mode. The problem is this delivers insights that are hours or days behind. Unfortunately fraudsters work in real time and often complete their job in under a day.

Coming to the aid of such companies is California based Argyle Data, which uses state-of-the-art machine learning on a Hadoop stack to deliver fraud analytics applications, that can ingest data and analyse it in real time, reducing the window for risk or fraud from hours (or days) to minutes. Under the leadership of Tom Ryan, President and CEO, Argyle Data has built a team of experts on applying machine learning on Hadoop at massive scale complemented by industry fraud experts. Prior to Argyle, Tom was president and CEO of Alpine Data Labs, a leader in predictive analytics for big data.

“**Argyle uses technology pioneered at Facebook and NSA to deliver machine learning to identify fraud and anomalous behaviour**”

Delivering Fraud Specific Solutions to Mobile Communications, Finance and eCommerce

Working with some of the biggest players in mobile communications, financial services and eCommerce, Argyle's products, use technology pioneered at Facebook and the NSA to deliver machine learning at petabyte scale to identify fraud and anomalous behaviour. Tom Ryan uses the phrase “When minutes means millions” to drive the prioritization of the company's fraud analytics strategy.

ArgyleDB is an integrated solution that brings together all of the critical components to drive fraud analytics from the 1990's to the era of machine learning and big data. They identified packet



Tom Ryan,
President & CEO

ingestion, schema-less indexing with time-series support, anomaly detection with machine learning and querying at petabyte scale as key requirements. ArgyleDB Ingest is able to non-invasively tap into the network and perform Deep Packet Inspection (DPI) and stream live network packets, or log files into a “Data Lake”. The data is stored in a key value database developed at the NSA that indexes the data in a schema-less way with time series support. ArgyleDB Machine Learning is able to access streaming data and perform anomaly detection using multiple algorithms that learn online against the full data set (both streaming and historical). This is critical to identifying fraud patterns where comparisons to a previous year/season is critical. ArgyleDB Query is a native Hadoop real-time SQL database that supports schema on read and queries the data lake through ANSI SQL. Complex joins, aggregation and windowing functions, that are critical to identifying fraud, are supported across 1000's of nodes.

Roadmap for Argyle Data

Looking towards the future, Argyle Data's mission is to re-write the book on fraud analytics and create a data lake on which to build a suite of related applications. The company also intends to take their unique ability to counter fraud, to additional customers in U.S.A and Europe, and plans to expand in Asia as well.