

BUSINESS ANALYTICS USING HADOOP TOGETHER WITH ENTERPRISE DATA WAREHOUSE

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Abstract

The success of any managerial development programme largely depends upon the selection of method. The objectives of the programme should be kept in mind while choosing a particular method. No single technique may prove to be sufficient, but only a suitable combination of techniques may yield results.

In this big data era the business data is big and it is only growing. It's complex, unstructured, fast and siloed. To turn for a cure, take ongoing big data hassles and turn them into golden opportunities to business organisations with new approaches to data management analytics. A data warehouse and hadoop are both well-suited to different tasks.

Key words: High performance analytics (HPA), sand box, hybrid approach, structured data, ubiquitous.

Introduction

Large number of organisations typically starting out their hadoop implementation at a far more modest scale. The growing appetite to maximize insight and business value out of untapped data stores is the most significant strategy with hadoop. They have to step forward to maximize the value of hadoop together with enterprise data warehouse. They would keep their data warehouse and deploy hadoop alongside it, the best approach is to utilize both in complementary fashion. Enterprise data warehouse should contain structures and curated data, while hadoop should serve as sandbox for experiment with new types of data like weblogs, texts, email and machine data. When combined with traditional data types found in the enterprise data warehouse, these new data types can offer users new insights.

Focus on data

Hadoop can also be used as a staging area for data to be cleansed and structured prior

to populating the enterprise data warehouse. This allows the enterprise data warehouse to focus on the data that is highly valued by business users. This hybrid approach makes it possible for the business analyst to discover some important strategic insights. Which could tend the analyst to acquire knowledge and capable to make better decisions.

High performance analytics (HPA)

Critical analysis is necessary to ensure that the firm makes the correct decisions. Ultimately, that analysis can generate a number of different rationales or arguments used to substantiate techniques like mapreduce, and other strategic methods with EDW adaptation.

In the technological category, acquisition of EDW analytical methods with Hadoop is motivated by the need for new information technology and mainly aims to support the current way of doing business.

This category also includes the information technology investments mainly aimed for efficiency improvements, i.e. cost reductions.

The specific technological drivers might be desired to outsource software maintenance and development when vendor support for the existing software system has ended, the need for clean slate approach in order to achieve improved software systems to deal with the need for a common technology platform and increased standardization in technologies used across the organisation.

Data integration and architecture

Data integration involves combining data from several disparate sources, which are stored using various technologies and provide a unified view of the data.

Big data experts explain that companies that augmented "small data" projects with Hadoop big data initiatives to achieve dramatic results.

Globalization

Some times the existing information technology may be an obstacle prohibiting necessary and strategically important change in the enterprise. In this case, new Information technology like Hadoop with enterprise datawarehouse is acquired not simply to reduce costs but to facilitate change in the way of doing business and thus, to improve effectiveness or to gain strategic advantage. Specific drivers to adopt Hadoop together with enterprise datawarehouse based on business reasons can be desired in order to move to a standardized Information technology and organizational blueprint to deal with merger acquisition or globalization. A desire to adopt best practice business models and new ways of doing business, and to conduct business process reengineering, need for increased flexibility and agility in doing business, and to conduct visibility and integration aiding managerial decision-making and operations, pressure from the value chain and need for electronic networking and collaboration with customers, suppliers and other business partners.

Data lake

A data lake is a storage repository that holds an enormous amount of raw or refined data in native format until it is accessed with Hadoop-oriented object storage in which an organization's data loaded into the Hadoop platform and then business analytics and data-mining tools are applied to the data where it resides on the Hadoop cluster. However, the data lakes can also be used effectively without incorporating Hadoop depending on the needs and goals of the organization. The term data lake is increasingly being used to describe any large data pool in which the schema and data are queried.

Data Integration and architecture.

Data integration involves combining data from several disparate sources, which are stored using various unified view of data.



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