

# Topical Feature: Big Data Analytics Discovery

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July 2017

## ALGORITHMS

### Hazy: Making It Easier to Build and Maintain Big-Data Analytics



This article presents the Hazy project for algorithm management and discusses a wide variety of topics relevant to big data. Topics include GeoDeepDive application to statistically analyse geological research papers and algorithm- systems interfaces.

Source: [Communications of the ACM](#) (March 2013)

## AUDITING

### Big Data Analytics in Financial Statement Audits



Source: FEI Daily

Read about how the efficiency and adequacy of financial statement audits is currently under-utilized and can be enhanced through the use of big data analytics.

Source: [Accounting Horizons](#) (June 2015)

## COMPANY MANAGEMENT GUIDE

### Big Data Analytics A Practical Guide for Managers



This book provides managers with the resources to make enlightened choices regarding big data purchasing initiatives. Resources include open source and proprietary systems

Source: [Auerbach Publications](#) (2015)

## EDUCATIONAL CHANGE

### Problems in Big Data Analytics in Learning



Big data analytics can change the nature of learning and education. However, the time lapse between collecting data from students and transforming it into actionable intelligence is currently viewed as a hurdle to writing about the principles of big data in engineering education.

Source: [Journal of Engineering Education](#) (January 2016)

## EMERGING ARCHITECTURE

### Real-Time Big Data Analytics: Emerging Architecture

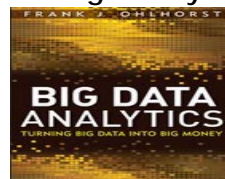


Big data analysts are now able to obtain answers to queries within minutes with the use of Hadoop and other tools. There is increasing demand for immediate query results. This book analyses tools and technologies for real-time big data analytics.

Source: [O'Reilly Media, Inc.](#) (24 June 2013)

## FINANCIAL BENEFITS

### Big Data Analytics Turning Big Data into Big Money

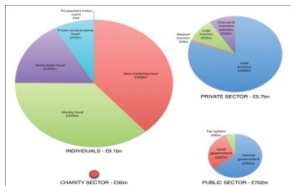


Read about how big data analytics can be used to help businesses make money. Details on the financial value of big data analytics in detail and also tools and best practices for working with big data in this book.

Source: [Wiley and SAS Business Series](#) (15 November 2012)

## FRAUD INVESTIGATION

### Smarter fraud investigations with big data analytics



Big data intelligence analytics technology helps companies to identify fraud risk earlier and also aids in data visualization for litigation procedures if a fraud is detected and it enhances collaborations between various agencies and departments to work on fraud investigations.

Source: [Network Security](#) (December 2013)

## FRONTLINE EMPLOYEE TYPOLOGY

### Does big data analytics influence frontline employees in services marketing?

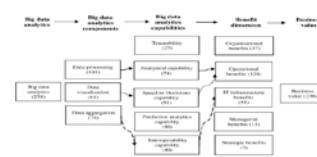


Big data analytics can aid in dynamically managing customer value over time, enhancing customer experience by customizing services, improving the customers' relationships with the frontline employees, innovating services and in designing advertisements. Also read about challenges of using it.

Source: [Business Process Management Journal](#) (6 May 2017)

## HEALTHCARE INDUSTRY

### Exploring the path to big data analytics success in healthcare



The authors employed the resource-based theory (RBT) and capability building view to elaborate on how to enhance capabilities of big data analytics and the benefits of this in the health care industries in a business value model made possible by big data analytics.

Source: [Journal of Business Research](#) (15 August 2016)

## INTELLIGENT SHOP FLOORS

### Big Data Analytics for Physical Internet-based intelligent manufacturing shop floors

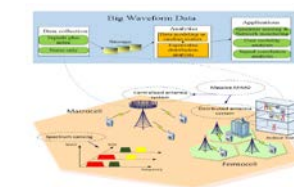


The physical Internet concept was used in manufacturing shop floors, logistics and supply chain management, to make a RFID-enabled intelligent shop floor environment possible. Enabling the collection of a vast amount of RFID data.

Source: [International Journal of Production Research](#) (11 September 2015)

## MOBILE CELLULAR NETWORKS

### Big Data Analytics in Mobile Cellular Networks



Cellular networks can use big data analytics to help boost profits by enhancing mobile cellular networks operations. A data model and its application is detailed by the authors.

Source: [IEEE Access](#) (9 March 2016)

## PRIVACY MANAGEMENT

### Big data analytics and the limits of privacy self-management



Source: NetScout

Traditional data protection for privacy may not be as sufficient as we think. Data is being collected real time as we move around cyber space to offer us products and solutions to meet our needs. Is our privacy really protected?

Source: [New Media & Society](#) (2 November 2015)

## SECURITY MANAGEMENT

### Big Data Analytics for Security

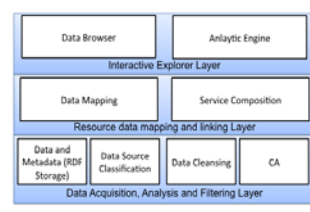


The applications and benefits are detailed by the author such as use in advanced persistent threat (APT) detection and forensics and for fraud detection. The challenges in realizing the potential of big data analytics in security like data provenance problem and lack of privacy.

Source: [IEEE Security & Privacy](#) (12 December 2013)

## SMART CITIES

### Towards cloud based big data analytics for smart future cities



A vast amount of data is produced by cities, creating a need for an integrated view to cope with and study the big data to enhance decision making for smart cities. The authors suggested a cloud-based analytics service for big data management in smart cities.

Source: [Journal of Cloud Computing Advances, Systems and Applications](#) (18 February 2015)

## SUSTAINABLE PRODUCTION

### A big data analytics architecture for cleaner manufacturing and maintenance processes of complex products



This [article](#) presents a big data analytics architecture for product lifecycle. It can be useful for manufacturers, environment, product design and service, as it provides high access to data and knowledge related to product lifecycle.

Source: [Journal of Cleaner Production](#) (21 July 2016)

## TOURIST BEHAVIOUR

### A Big Data Analytics Method for Tourist Behaviour Analysis



The authors presents a 'big data analytics' technique that helps with decision-making in tourism destinations. The technique helped tourism companies study and predict tourist behavioral patterns at specific destinations, through geotagged photos uploaded to the photo-sharing social media site, Flickr.

Source: [Information & Management](#) (13 December 2016)

## TRENDS

### Trends in big data analytics



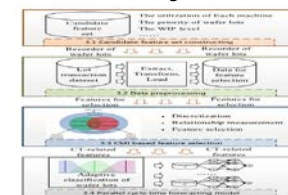
Source: Happiest Minds

Provides an overview of the current state of data analytics and emphasizes trends illustrating the hardware, software, and applications of big-data analytics. Also elaborates of areas for future work in big data.

Source: [Journal of Parallel and Distributed Computing](#) (2 February 2014)

## WAFER FABRICATION

### Big data analytics for forecasting cycle time in semiconductor wafer fabrication system



A big data analytics (BDA) system was established to enhance the reliability of the semiconductor wafer fabrication system, to determine cycle time (CT). Prediction of CT with BDA was shown to be enhanced with increasing data size.

Source: [International Journal of Production Research](#) (22 April 2016)

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