



## BIG DATA ANALYTICS SERVICES FOR ENHANCING BUSINESS INTELLIGENCE

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### Abstract

**Business Analytics (BA) have provided remarkable opportunities for organizations to implement new techniques to face competitive challenges. However, the effect of BA's contribution would be increased through the mediation role of data-driven culture in the organization. Business analytics have gained popularity in recent times to analyse complex data and derive meaningful solution. It is an emerging science and technology which involves multidisciplinary information in diversified areas. An optimum strategy is possible for any company through big data analytics. This paper focus on how business intelligence can be enhanced through big data analytics.**

**KEYWORDS: Business analytics, Descriptive analytics, Predictive analytics, Business intelligence**

### Introduction

In today's world analyzing the big data is highly a challenging task for higher and lower level organizations. Analyze the data from the

stored information is a big task for an organization to derive a meaningful information and conclusion. Critical and fruitful decisions will be made by the business leaders based on the knowledge gained from the analysis to gain profit. Business analytics serve as a tool to develop solutions to the complex problems and optimize business and projects leverage and possibility of extensive computation.

Business analytics help companies to prepare for the future, and thus capitalize on new opportunities that deliver competitive advantage. The term business intelligence is the human intelligence in relation to business and understanding the facts provided by big data through perceiving efficiently and adapting to change. Big data analytics plays a key role for developing BI from a technological viewpoint and data viewpoint. Based on technological view big data analytics is a business-oriented technology which facilitates business decision making and helps in modifying and improving business intelligence. Big data have become a strategic natural resource for every organization, e-commerce and e-services.



**TOOLS USED IN BIG DATA ANALYTICS**

**Hadoop** allows processing of large data to scale up to thousands of machines from single server. Data processing is highly flexible and fast. It facilitates to meet the analytical requirements of developer.

**HPCC** is suitable for complex data processing and it optimizes the code for parallel processing and it enables to accomplish big data tasks efficiently.

**Storm** is open source big data computation system benchmarked by processing one million 100 byte messages per second per node and it is the easiest tool for analysis even if the node dies it can be retrieved from another node.

**Qubole** is self-managed, self-optimizing tool which allows the team to concentrate on business outcomes. It is highly secured and it optimizes reliability, performance, and costs and it helps in preventing repetitive actions.

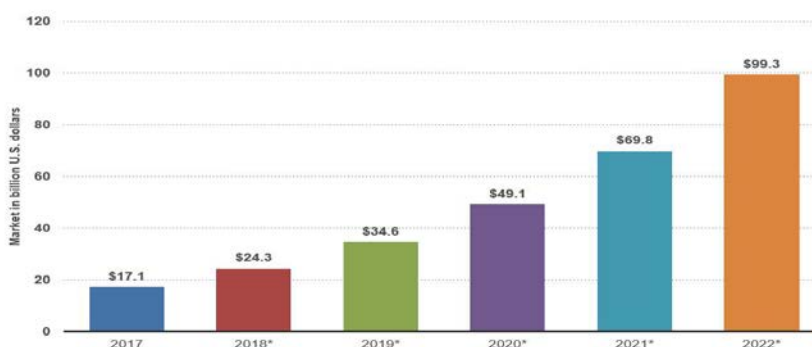
**Statwing** is an easy statistical tool for big data analysts. Its modern interface chooses statistical tests on its own and creates charts and diagrams in seconds to simplify data.

**Pentaho** offers to blend extract visualizations and analytics that change the way to run any business. It enables integration for effective data reporting and visualization offering capabilities in unique form.

**Cloudera** is easiest and highly secure and fast big data platform. It allows any person to get data from anywhere. It offers multi-cloud provision and it helps in detecting and monitoring real time insights.

**Open Refine** is the powerful tool helps in working with messy data, transforming it in different formats, explore data and Perform advanced data operations.

Big Data and Hadoop Market Size Forecast Worldwide 2017-2022  
**Size of Hadoop and Big Data Market Worldwide From 2017 To 2022**  
 (in billion U.S. dollars)

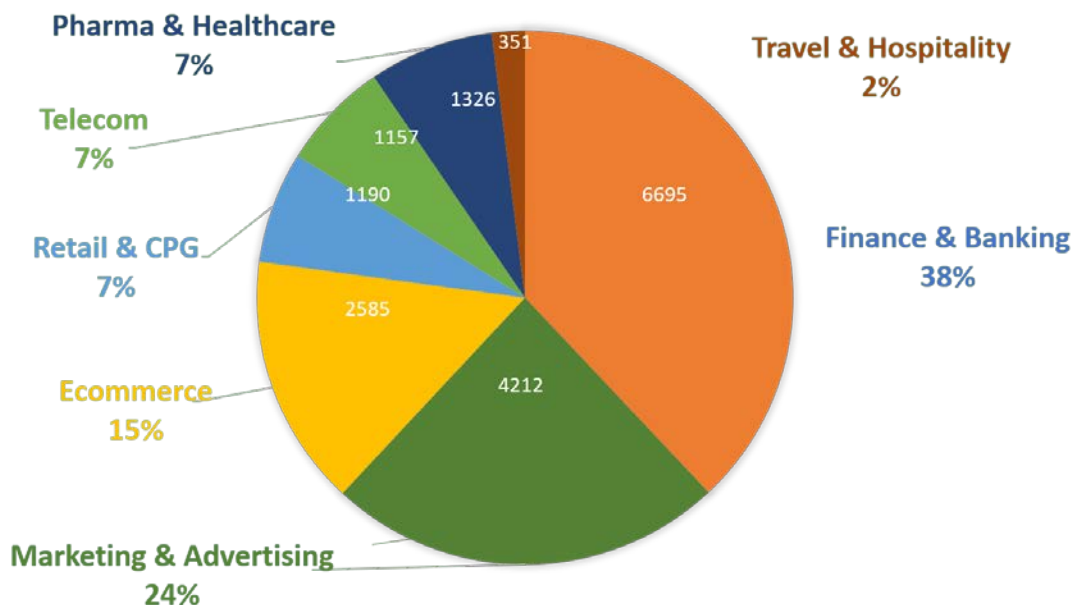


## SIGNIFICANCE OF BUSINESS ANALYTICS

- It helps to increase the profitability of the organization, better return on investment and facilitates in boosting the market share of the organization.
- Enables to analyze the data in a comprehensive manner to take an appropriate decision.
- Possibility to implement competitive edge and it incorporates and interprets the data available through various statistical models to enhance business decisions.
- Enhancing the data to attain valuable information to attain the better results and
- to attain the desired outcome for the organization.
- Huge difference can be made in the business growth through business analytics tools if there are any obstacles in the smooth running of business activities.
- Curtailing risks is possible by making right choices considering the customer preferences, change in trends.
- Business performance can be consistently improved through business analytics as it enables to obtain volume of information in seconds to achieve goals and to decide on better choices to move forward.

### Biggest Spenders on Business Analytics (Sector Wise)

ANALYTICS MARKET SIZE BY SECTOR, IN RS. CRORES



## TRANSFORMATION OF BUSINESS LANDSCAPE THROUGH BUSINESS ANALYTICS

### *Transformation of Customer Relationship*

Identification of business is based on more the data collected more the analysis is possible to derive the critical behaviour of the customers and take steps to retain them by service offerings to maintain loyalty.

### *Smart decisions*

Big data analytics have made a big transformation in planning out expansion of business replacing the conservative techniques which include maintenance of asset delivery schedule and so on. These tools enable to view

the data graphically to understand better to take apt and timely decision. This helps the organizations to survive in the cut throat competition.

### *Business Intelligence in a better form*

Business analytics made a tremendous rise to business intelligence in a competitive business environment by taking the enterprise to the level by which customers can have centralized access to all the details they require to take decisions.

### *Innovative and Effective Branding Strategies*

The cost of advertisement and personal campaign may be avoided through analytics tools and steps can be initiated to create brand

awareness through innovative design to capture customers mind and induces them to buy online. New methodologies can be implemented to yield productivity and to enhance digital transformation.

### ***Efficient Risk management***

To foresee the risk in business analytics technology can be used to derive risk management solutions and also to manage and handle the risks that occurs every day in business. So quality of risk management solutions is possible through business analytical techniques.

### **Innovation in development of product**

Additional revenue can be generated through redesigning of existing product and also innovation in the new product development through business analytics transformation.

### **Future plan strategy**

Analytics enables predictive insights, the enterprise can plan and execute strategies for future its future. The business tools incorporate big data to identify trends in market trends.

### **Improve Efficiency in financial plan**

Operational efficiency is required for the success of business and analytic technique pinpoints the enhancement of efficiency to perform the operations more flexible and it supports to allot the funds resourcefully to attain optimum level of operations which minimizes embezzlement of funds and leads to efficiency.

### **Conclusion**

Data is being generated at a volume and velocity of extreme intensity and business analytics is making it possible for companies to meet emerging business demands that allow them to stay ahead of the competition. Enterprises that are serious about their business transformation need to make an investment in analytics to realize the advantages of data utilization that drives new internal as well as customer facing strategic edges.

### **REFERENCES:-**

1. A. Gandomi Beyond the hype: Big data methods, analytics and Information Management, 35(2) (2018), pp.139-144.
2. X. Jin, B. W.Wah, X. Cheng and Y. Wang, Significance and challenges of

business analytics research, Big Data Research, 2(2) (2017), pp.69-74.

3. R. Kitchin, Big Data, new epistemologies and paradigm shifts, Big Data Society, 1(1) (2016), pp.1-12. [6] C. L. Philip, Q. Chen and C. Y. Zhang, Data-intensive applications, challenges, techniques and technologies: A survey on big data, Information Sciences, 275 (2016), pp.414-447.
4. K. Kambatla, G. Kollias, V. Kumar and A. Gram, Trends in business analytics, Journal of Parallel and Distributed Computing, 74(7) (2014), pp.2561-2573.
5. MH. Kuo, T. Sahama, and D. K. Grunwell, current perspectives, challenges and potential solutions, International Journal of business Intelligence, 1 (2015), pp.114-126.
6. R. Nambiar, A. Sethi, R. Bhardwaj and R. Vargheese, A look at challenges and opportunities of big data analytics in healthcare, 2016, pp.17-22.
7. E. Lim, "Business Intelligence and Analytics: Research Directions," ACM Transactions on Management Information Systems, vol. 3, no. 4, pp. 1-10, 2017.