



Entrepreneurship, Technology and Innovation

Big Data Opportunities Challenges and Implications in Finance

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OUTLINE





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BACKGROUND



Definition of Big data

• A discipline that draws out precise information from large and, or sophisticated sets of data.

Examples of Big data

- Internet of Things (IoT), Cloud computing, Machine learning and Natural language processing(NLP)
- Widely adopted big data analytics inform better investment decisions with consistent returns.
- By analyzing big data, industry players can enhance organizational efficiency, improve customer experience, increase revenue, improve margins, forecast risk better, and can find insight into entering new markets. (Yin et al., 2015) quotes big data improves operational efficiency by 18%

PROBLEM STATEMENT



- The financial field is deeply involved in the calculation of big data events resulting from millions
 of financial transactions on data management and analytics of different financial products and
 services.
- In a day, data over 1826 petabytes are handled by the internet, traditionally number crunching
 was done by humans, and decisions were made based on inferences drawn from calculated risks
 and trends.
- The exponential growth of technology and increasing data generation are fundamentally transforming the way industries and individual businesses are operating, (Hariri, Fredericks, & Bower, 2019)
- While big data is an exciting fields there is a danger that we get carried away by the novelty of the topics but pay less attention to the reliability of the academic evidence.
- Based on these developments, this paper sought to bring reliability and academic evidence on the opportunities, challenges and implications of big data in finance.

OBJECTIVES



The study sought to answer below questions.

- 1. What are the available big data opportunities in finance?
- 2. What challenges are experienced in embracing big data space?
- 3. What are the big data implications for finance?

FINDINGS



- The market for big data technology in finance offers inordinate potential and is one of the most promising.
- Globalization, global economy and big data walk hand-in-hand.
- Inability to connect data across organizational and department silos is a major business intelligence challenge.
- The more companies characterize themselves as data-driven, the better they
 perform on objective measures of financial and operational results.
- Big data is completely revolutionizing how stock markets across the world are functioning and how investors are making their investment decisions.

CONCLUSION



- Big data is swiftly fueling the financial sector towards digitization.
- Organizations are embracing these new technologies to bolster profits
- Therefore, the findings of this study are reasonable to conclude that big data has revolutionized finance industry by changing decision making trajectories thus influencing trade.
- Big data is increasing revenue and customer satisfaction, accelerating manual processes, analyze financial performance and growth prediction
- The Institute of Certified Public Accountants of Kenya will be cutting edge if the Accountant curriculum includes big data analytics and interpretation towards financial risk assessment
- Further research recommended on handling high costs for big data implementation processes



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