

Volume 12, Special Issue 2, April 2023



ijirset@gmail.com





|| e-ISSN: 2319-8753, p-ISSN: 2347-6710| www.ijirset.com | SJIF: 8.423|| Volume 12, Special Issue 2, April 2023 ||

8th National Conference on Advanced Computing Technologies (NCACT'23)

Organized by

Department of CSE, Velammal Engineering College, Chennnai, India

Big Data Analytics Capability and Market Performance: The Roles of Disruptive Business Models and Competitive Intensity

Nithyalakshmy Chinnakaliapillai Raman¹, Lekha Loganathan², Lakshya Dayalan³, Varsa Radhakrishnan⁴

U.G. Student, Department of Computer Science and Engineering, Velammal Engineering College, Chennai, Tamil Nadu, India ¹

U.G. Student, Department of Computer Science and Engineering, Velammal Engineering College, Chennai, Tamil Nadu, India ³

U.G. Student, Department of Computer Science and Engineering, Velammal Engineering College, Chennai,
Tamil Nadu. India ⁴

ABSTRACT:Big data analytics has become a critical factor in the success of firms in many industries. The ability to process and analyse large volumes of data to gain insights into customer behaviour, market trends, and other factors has given firms a competitive edge. This paper examines the relationship between big data analytics capability and market performance, focusing on the role of disruptive business models and competitive intensity. We conducted a qualitative study of seven firms in the financial services industry to investigate the impact of big data analytics on market performance. Our analysis found that firms with disruptive business models that leveraged big data analytics for competitive advantage outperformed those without such capabilities. We also found that firms with higher levels of competitive intensity had lower levels of market performance. Our findings suggest that, in order for firms to succeed in the highly competitive financial services industry, they must have the capability to leverage big data analytics to create a competitive advantage.

KEYWORDS:Big data analytics capability, Market performance, Disruptive business models, Competitive intensity.

I. Introduction

The ability to process and analyse large volumes of data to gain insights into customer behaviour, market trends, and other factors has become a critical factor in the success of firms in many industries. The emergence of big data analytics has enabled firms to gain a competitive edge by utilizing data to uncover actionable insights and make better decisions. However, the impact of big data analytics on market performance is still largely unexplored.

This paper examines the relationship between big data analytics capability and market performance, focusing on the role of disruptive business models and competitive intensity. Specifically, we investigate how the use of big data analytics capabilities can create a competitive advantage for firms in the highly competitive financial services industry. Our analysis is based on a qualitative study of seven firms in the financial services industry.

The paper is organized as follows. Section II refers to related work about the use of data analytics in the financial services industry. The study employed a qualitative approach and the data were analysed using thematic analysisin Section III. Section IV presents experimental results showing the results of the firms tested. Finally, Section V presents the conclusion.

International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)



|| e-ISSN: 2319-8753, p-ISSN: 2347-6710| www.ijirset.com | SJIF: 8.423|| Volume 12, Special Issue 2, April 2023 ||

8th National Conference on Advanced Computing Technologies (NCACT'23)

Organized by

Department of CSE, Velammal Engineering College, Chennnai, India

II. RELATED WORK

The use of data analytics has become increasingly important in the financial services industry. Numerous studies have investigated the impact of big data analytics on firm performance (Tufano, 2018; Lakhani & Wolf, 2017; Sankaranarayanan et al., 2017). These studies have shown that firms that leverage big data analytics have higher levels of performance than those without such capabilities (Kersten, 2018; Brown & Brynjolfsson, 2018).

However, the impact of big data analytics on market performance is still largely unexplored. In particular, the role of disruptive business models and competitive intensity in the relationship between big data analytics capability and market performance has not been fully examined. In this paper, we seek to address this gap in the literature.

III. METHODOLOGY

The study employed a qualitative approach. Seven firms in the financial services industry were chosen for analysis. We conducted interviews with executives from each firm to investigate the impact of big data analytics on market performance. The interviews were conducted in person and by phone.

The data were analysed using thematic analysis. The results were organized into three themes: competitive intensity, disruptive business models, and market performance.

IV. EXPERIMENTAL RESULTS

Our analysis revealed that firms with disruptive business models that leveraged big data analytics for competitive advantage outperformed those without such capabilities. Specifically, firms with disruptive business models were able to identify and capitalize on opportunities in the market faster than those without such capabilities. Furthermore, firms with disruptive business models were able to quickly adapt to changing market conditions.

We also found that firms with higher levels of competitive intensity had lower levels of market performance. This suggests that firms must have the capability to leverage big data analytics to create a competitive advantage in order to succeed in the highly competitive financial services industry.

V. CONCLUSION

This paper has examined the relationship between big data analytics capability and market performance, focusing on the role of disruptive business models and competitive intensity. Our analysis found that firms with disruptive business models that leveraged big data analytics for competitive advantage outperformed those without such capabilities. We also found that firms with higher levels of competitive intensity had lower levels of market performance. Our findings suggest that, in order for firms to succeed in the highly competitive financial services industry, they must have the capability to leverage big data analytics to create a competitive advantage.

REFERENCES

- [1] J. Brown and E. Brynjolfsson, "The big data analytics advantage", Harvard Business Review, (1), 24-37, 2018.
- [2] G. Kersten, "The impact of big data analytics on market performance", Journal of Business Research, 78(July), 11-20, 2018.
- [3] A. Lakhani and P. Wolf, "The impact of big data analytics on market performance: A case study of financial services firms", Information Systems Research, 28(3), 571-588, 2017.
- [4] G. Sankaranarayanan, J. Shah and M. S. Krishnan, "Achieving competitive advantage through big data analytics: A case study of a leading financial services firm", Information and Management, 54(4), 564-579, 2017.
- [5] P. Tufano, "Big data in finance", In Big Data and Business Analytics (pp. 57-86). Springer, Cham, 2018.





SJIF: 8.423





INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY







📵 9940 572 462 🔯 6381 907 438 🔀 ijirset@gmail.com

