

The impact of business analytics capability on data-driven culture and exploration: achieving a competitive advantage

Business
analytics
capability

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Abstract

Purpose – In today's business setting, the business analytic capability, data-driven culture and product development features are highly pronounced in light of the firm's competitive advantage. Though widespread attention has been given to the above concepts, there hasn't been much research done on how it could support achieving competitive advantage.

Design/methodology/approach – This research strongly lies on the theoretical background and empirically tests the hypothesized relationships. The primary survey of 272 responses was analysed by using the partial least squares structural equation modelling (PLS-SEM).

Findings – The findings of this study show a significant relationship for the constructs in the research model except for the third hypothesis. Accordingly, the firm's data-driven culture does not have a significant impact on new product newness.

Originality/value – This study empirically tests the business analytics capability, data-driven culture, and new product development features in the context of a firm's competitive advantage. The findings of this study contribute to the theoretical, practical and managerial aspects of this field.

Keywords Business analytics capability, Data-driven culture, Product development, Competitive advantage

Paper type Research paper

1. Introduction

Business analytics is “the use of data, information technology, statistical analysis, quantitative methods, and mathematical or computer-based models to help managers increase improved insight about their operations, and make better, fact-based decisions” (Appelbaum *et al.*, 2017). Today, big data and business analytics seem to be the most important technique that has become crucial in the business phenomenon. Big data and business analytics help to learn more about customers, suppliers, inventories and market trends through precise information on where the customers live, the type of devices they use, their search habits and other behavioural metrics to explore more insights. Data analytics has received noteworthy attention in recent years on the corporate agenda of the firm. According to Gartner, by 2025, 70% of firms will focus from big to small and wide data, giving analytics greater context (Goasduff, 2021). Hence, big data and business analytics now impact almost every aspect of organizations' decision-making, strategic analysis and forecasting

