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EXPLORING THE MEDIATING ROLE OF ORGANISATIONAL INNOVATION AND BUSINESS INTELLIGENCE ANALYTIC CAPABILITIES IN THE DYNAMIC CAPABILITIES-PERFORMANCE NEXUS

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Abstract. This study examines how Dynamic Capabilities (DCC) influence Market Performance (MARKPERF) and investigates the role of Business Intelligence Analytic Capabilities (BIAC) as a mediator in this relationship. The study applies the PROCESS Macro Model 4 developed by Hayes (2022) to test the hypotheses and examine how dynamic capabilities influence market performance through business intelligence. Data gathered from 415 managers in the IT and ITES sectors in Chennai, Tamil Nadu. The results reveal that while DCC has a negative direct effect on market performance, its positive indirect effect through BIAC significantly enhances market performance. The study highlights the importance of building business intelligence infrastructures to leverage dynamic capabilities for improved organizational performance. This paper offers valuable insights into the mechanisms that link organizational capabilities to performance outcomes and discusses the implications for both theory and practice.

Keywords: Business Intelligence Analytic Capabilities, Dynamic Capabilities.

Introduction

Contemporary business environments are characterized by rapid technological shifts and market instability, requiring firms to repeatedly renew their competencies to remain competitive. The present study focuses on studying the interplay between Dynamic Capabilities (DCC) and Market Performance (MARKPERF) mediated by Business Intelligence Analytic Capabilities (BIAC). The construct forms the foundation for organisational adaptability and competitive advantage. Dynamic Capabilities refer to an organisation's capacity to continuously identify emerging opportunities, mobilise appropriate responses, and realign internal resources in response to environmental change. Dynamic Capabilities has gained prominence in strategic management literature as it focuses on addressing environmental uncertainty (Teece, 2007; Eisenhardt & Martin, 2000). The mechanisms through which these capabilities translate into market outcomes remain underexplored, particularly in the context of enabling technologies like business intelligence systems.

Business Intelligence Analytic Capabilities (BIAC) describe an organization's proficiency in converting data assets into actionable managerial insights through analytical tools, technological infrastructure, and skilled personnel (Davenport & Harris, 2007). BIAC in its fullest represents the firm's business intelligence infrastructure quality, the expertise of the management in driving such decisions and the capabilities of the personnel in managing business intelligence infrastructure. Business intelligence analytic capabilities collectively enhance the organizations' ability to analyse market trends, optimising operations and bring in

innovation in the organisation. Organisations can achieve superior market performance, enhanced market share, profitability and customer satisfaction by integrating Dynamic Capabilities (DCC) and Business Intelligence Analytic Capabilities (BIAC) (Popovič et al., 2012). By exploring the gap in the literature on BIAC not only as a mediator in enhancing the effects of DCC on organizational performance, the study approaches also BIAC as a moderator in shaping the strength of the relationship. IT and ITES firms operate in a dynamic environment, and these organizations must continuously innovate to sustain competitive advantage and hence it is required that organisations have a seamless integration of their dynamic capabilities with analytical tools. This integration will enable organisations to align their strategic actions with market demands.

The existing literature review provides evidence of the role of DCC and BIAC in influencing market performance. In adapting to the changes in market conditions, organisations reconfigure their resource base and dynamic capabilities provide organisations the opportunity to promote innovation and long-term competitiveness (Ambrosini & Bowman, 2009; Winter, 2003). Data driven decision making is facilitated by Business Intelligence Analytic Capabilities (BIAC) by providing actionable insights that improve operational efficiency (Wixom & Watson, 2010). There has been very little attention towards understanding the synergistic interaction between Dynamic Capabilities and Business Intelligence Analytic Capabilities and the combined influence of these variables on Market Performance. The present study investigates the mediating and moderating effects of BIAC between DCC and MARKPERF and thereby offers insights in understanding the interplay between organisational capabilities and analytics.

IT and ITES industries are operating in high levels of uncertainty and rapid technological advancements and are more suitable for the proposed study. As business faces constant pressure for innovation Dynamic Capabilities and Business Intelligence become the critical enablers for their success. The research focuses towards obtaining a region-specific perspective by conducting a wider study to understand these variables in the context managers working IT and IT Enabled Service firms in Chennai, Tamil Nadu.

Review of Literature

Dynamic Capabilities and Market Performance

Ever since Teece, Pisano and Shuen (1997) introduced Dynamic Capabilities, the concept has undergone significant evolution over the past few decades. It originates from the Resource Based View (RBV, that focuses on strategic value of resources. According to David Teece, “dynamic capabilities are the processes through which firms modify their resource base to adapt to the changing environments, while RBV emphasizes on static resources” (Teece,2016). Dynamic Capabilities highlights the company’s capacity to identify, seize and modify its resources to adjust to the changes in the market conditions (Teece, 2007; Eisenhardt & Martin, 2000). According to Barney, “Organisations need to refine their capabilities to in order to remain competitive” (Barney,1991). Among other organisational factors, Business Intelligence Analytic Capabilities play a contingent role by influencing dynamic capabilities in improving organisational performance.

Scholars conceptualize dynamic capabilities as a set of higher-order processes that allow firms to detect environmental shifts, act on emerging opportunities, and reconfigure operational resources to sustain competitiveness. The process of detecting and evaluating external trends and changes is known as sensing. Taking advantage of these opportunities requires deploying resources. Transforming requires the reconfiguration of resources and capabilities to sustain long-term competitiveness (Teece, 2016). The plural form, "dynamic capabilities," underscores the necessity of a combination of multiple capabilities for firms to adequately and timely react

to external changes. The dynamic capabilities framework is built on the premise that firms should leverage on their basic competencies to develop their short-term competitive positions, which can help them develop into long-term competitive advantage (Feiler & Teece, 2014). In an extensive analysis of dynamic talents and entrepreneurship Dynamic capabilities are defined clearly by Zahra, Sapienza, and Davidsson (2006), also highlight the importance of these competencies in preserving a company's competitive edge in uncertain and complicated situations.

Business Intelligence Analytic Capabilities (BIAC)

The studies conducted by Wixom & Watson conclude that Business Intelligence Analytic Capabilities (BIAC) enhance data driven decision-making and improve organisational performance. Business Intelligence (BI) includes the use of data, technologies, and analytical tools to support decision-making processes (Wixom & Watson, 2010) and Analytical Capabilities (AC), refer to the ability to process and interpret data in order to derive insights that inform strategic actions (Davenport & Harris, 2007). Business Intelligence Analytic Capabilities closely associated with dynamic capabilities, by enabling firms to transform in response to changing conditions in the market (Teece, 2007; Mikalef et al., 2019). The ability to collect, analyze, and apply data-driven insights effectively referred to as Business Intelligence Analytic Capabilities (BIAC) is therefore crucial for improving organizational agility and performance (Shanks et al., 2010; Mikalef et al., 2018).

Business Intelligence Analytic Capabilities enable firms to transform raw data into strategic insights and thereby support in the decision making processes that align with the organisational goals (Zahra & George, 2002). According to Barney the previous studies have studied BIAC as a facilitator to organisations in leveraging their dynamic capabilities more effectively (Barney,1991). Organisations with Business Intelligence infrastructure have the necessary tools to transform their dynamic capabilities and improve their performance outcomes . Chaudhuri, Dayal, and Narasayya's (2011) work on Business intelligence emphasizes how BIAC is crucial in achieving operational efficiency and improved customer experiences in organizations, as they contend that these constructs help organizations in identifying opportunities and threats and making informed decisions.

Davenport and Harris in their 2007 study, investigate how analytics is used to achieve competitive advantage. The study outcomes reveal that companies possessing robust analytical skills use data to understand customer behaviour, industry trends and patterns and align business operations. The authors conclude that analytics plays a crucial part in dynamic capabilities as it allowes business to modify their resources and processes in retort to the shifting circumstances. The impact of analytics on organizational performance is examined by Lavalle, Lesser, Shockley, Hopkins, and Kruschwitz (2011). The study reveals that business can perform better and satisfy customers and innovate better that their competitors when they are equipped with sophisticated analytic tools and infrastructure. Further the authors contend that anlytics provide the required insights to align their strategic decision in accordance to the market changes and remains to be a critical enables of dynamic capabilities. The development of business intelligence and analytics in the big data era is examined by Chen, Chiang, and Storey (2012). They contend that as big data has proliferated, organizations now have more ways than ever to use analytics to gain a competitive edge. The authors claim that companies possessing robust business intelligence and analytical skills can leverage big data to augment their dynamic capabilities and attain exceptional outcomes.

Sharma, Mithas and Kankanhalli study on analytics reveal in 2014 Business Intelligence help organisations in improving business agility in early detection of changes in industry trends and patterns and react to changes in the market environment. The study also contends that BIAC offer the data required to reorganize the resources and procedures. The relationship between BI, analytics, and organizational performance is examined by Wixom, Yen, and Relich (2013) and the authors discover that businesses with robust BI and analytical skills outperform others, especially when it comes to making quick and accurate decisions. Although BIAC's impact on organizational performance has been acknowledged, little is known about how it mediates between dynamic capabilities and performance. Past research has concentrated on the direct effects of BIAC on performance, but it has not thoroughly examined the ways in which BIAC mediators the connection between dynamic capacities and performance outcomes. Studies by Davenport and Harris (2007) and Chen, Chiang, and Storey (2012) studied the significance of BIAC in utilizing big data for enhanced performance. But rather than emphasizing BIAC's function as a mediator, their research focuses more on the substance's immediate advantages. Wixom and Watson (2010) and Elbashir, Collier, and Davern (2008) also shed light on how BIAC affects performance, however they do not investigate how BIAC mediates the connection between dynamic capacities and performance.

Future research should focus on how BIAC plays a role in that relationship. It would be interesting to see if using BIAC well can boost the effects of dynamic capabilities on a company's performance. Studies could check if companies with strong BIAC skills have a better connection between their dynamic capabilities and performance than those with weaker BIAC.

Research Framework:

Based on the theoretical foundations of DCC and RBV, the study attempts to understand how organisational resources and skills play a major role in achieving competitive advantage and keeping up to changes in business environment. RBV suggests that as the market evolves it is not enough for business to have strong resources, but organisations should be able to adapt and change their resources and skills.

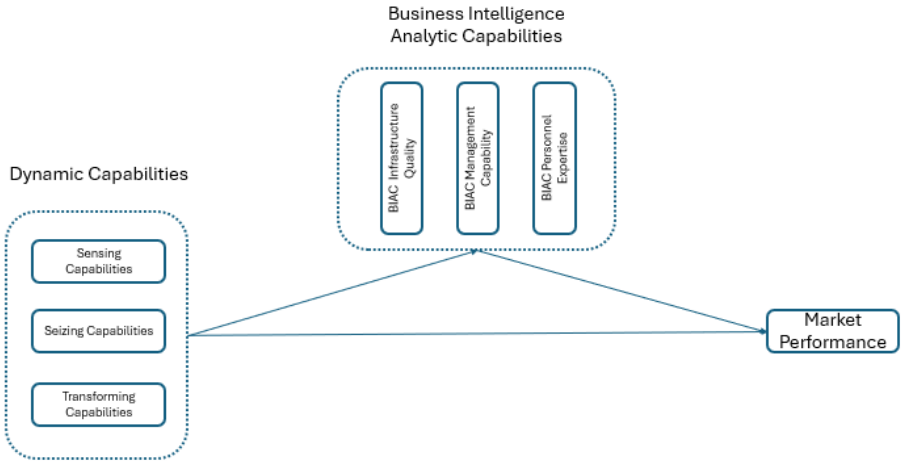
Research shows there's a link between how well a company performs and how good it is at developing these dynamic capabilities. However, we don’t know much about exactly how these capabilities impact performance. This is a tricky spot for both researchers and businesses trying to fully understand and use dynamic capabilities effectively.

We have considered dynamic capabilities as valuable tool that help organizations to adapt and succeed in volatile environments and Business Intelligence Analytic Capabilities (BIAC), play an role in linking dynamic capabilities to business performance. The ability of the company's BIAC setup in sensing changes, taking advantage of opportunities, and pivot them when needed, impacts how well dynamic capabilities work.

As big data and advanced analytics take more prominence in organisational decisions, Business Intelligence Analytic Capabilities (BIAC) have become necessary for companies to handle large amounts of data. These capabilities help organizations make better decision and work more efficiently. However, there has been very limited research on how BIAC connects dynamic capabilities to organizational performance. It becomes more important to study how Business Intelligence and Analytics help businesses find opportunities and threats, react to

market changes, and adjust their resources. Doing this can really boost both strategic agility and overall business performance.

Fig. 1. Research Framework



Research Objectives:

The intent of the study is to look into the interplay between dynamic capabilities (DCC), business intelligence analytic capabilities (BIAC), and market performance (MARKPERF) . First, we examine the direct link between DCC and MARKPERF to understand abilities like sensing, seizing opportunities and transforming resources affect the organisational outcomes like market share, profits, and being competitive. Further we try to know how BIAC plays a part in this relationship. By seeing BIAC as a way to turn dynamic capabilities into useful insights, the study attempts to show its role in using DCC to boost market performance.

Next, the study evaluates how BIAC might affect the relationship between DCC and MARKPERF. The objective here is to find out if organizations with better BIAC get more advantages from their dynamic capabilities. The research also attempts to understand on how companies can align their dynamic capabilities with solid BI systems that can enhance their market performance. These objectives address a key gap in understanding how analytics can help organizations adapt and compete in changing markets.

Research Hypothesis:

This study aims to study if there's a positive link between DCC and MARKPERF, Dynamic capabilities allow businesses to adjust to fast-changing market conditions, which is key to staying ahead of the competition. Sensing capabilities allow organizations to identify risks and opportunities in their external environment, changing capabilities entail realigning resources to preserve competitiveness, and grabbing capabilities entails mobilizing resources to take advantage of these opportunities. Eisenhardt & Martin in their study contends that market performance, includes metrics like market share, customer retention, and profitability, and these metrices are highly dependent on a firm's capability to adapt to market dynamics (Eisenhardt & Martin, 2000). Ambrosini and Bowman in their study state that organizations with strong dynamic capabilities outperform their competitors by rapidly responding to changes in the business environment (Ambrosini & Bowman, 2009). It is also found that firms with advanced capabilities could continuously reconfigure their resources to align with market demands, leading to superior market outcomes (Helfat and Peteraf 2003). It light of these studies it becomes important to hypothetically test to confirm the role of Dynamic Capabilities in driving market performance.

There is a mediation link of Business Intelligence Analytic Capabilities (BIAC) between Dynamic Capabilities (DCC) and Market performance (MARKPERF). This hypothesis attempts to understand how BIAC plays a connecting role between market performance with dynamic capabilities. Dynamic Capabilities gives the organisation the ability to sense, grab, and adjust their resources, while BIAC provides insights for data driven decision making. BIAC includes the quality of infrastructure, management skills, and expertise of staff, that leads organizations to handle large volume of data to create useful insights. Research by Popovič et al. (2012) showed that BIAC helps companies turn their dynamic capabilities into real performance gains. The study by Elbashir revelas that without BIAC, DCC might not fully help the organisations to stay competitive. BIAC acts as a crucial link by helping DCC turn into better market performance, allowing firms to match their capabilities with what customers need and what competitors are doing (Elbashir et al., 2008). Testing this hypothesis shows how DCC and BIAC work together, showing that companies can use their analysis skills to boost the positive impacts of their dynamic capabilities on market results.

Research Methodology:

A quantitative approach is used for the study by deploying survey-based data collection process following a purposive sampling approach, where data was collected from managers working in IT and ITES companies in Chennai, Tamil Nadu. The target respondents were 415 middle- and senior-level managers working in IT and IT Enabled Service companies. Measurement items for the study variables were operationalized using previously validated scales and administered through a structured survey instrument. The questionnaire was created by looking at several adoption measures and scales that have been discussed in the literature. The items on the questionnaire were scored on a Likert scale from 1 to 5. Several techniques were used to determine the necessary sample. The minimum required sample size for the research was determined using the G*Power sample size analysis program using the recommendations of Cohen (1992) : the effect size (f2) being medium at 0.15, the error type (α) at 0.05 and using the number of predictors in the study at 3 and the study showed a minimum required sample size can be 77 as shown in the below figure, and the study was conducted using a sample size of 415 respondents. The study also used the Cochran's formula suitable for larger population size, where n0 is the sample estimate, Z score is 1.96 for 95% confidence level, p is the population estimated proportion with the attribute of interest, q represented as 1-p, and the margin of error value (e = 0.05) and thus determining the sample size at 384.

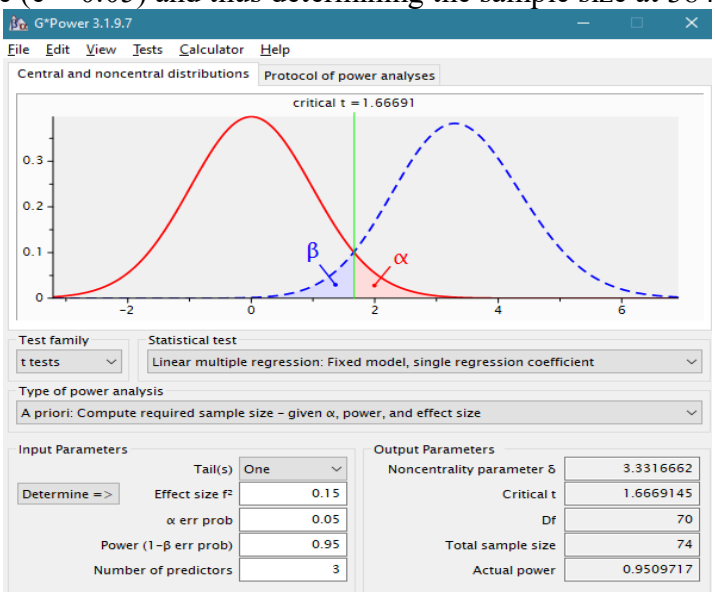


Fig. 2. G*Power Sample Determination

Data Analysis:
SPSS and PROCESS Macro Model 4 for were used for data analysis and hypothesis testing. The analysis involved descriptive statistics, reliability testing, and SEM. The bootstrapping method was employed to assess the indirect effects and confirm the mediating role of BIAC. Descriptive Statistics of the study reveal that the data collected has a balanced representation of middle level and senior level managers along with a equal distribution of respondents from different sectors with the IT and ITES industry.

Convergent Validity and Reliability:
The Cronbach's Alpha values confirms the internal consistency among the constructs and are above the acceptable threshold of 0.7. Average Variance Extracted (AVE) is used to evaluate the convergent validity, which exceeds the recommended value of 0.50 for all constructs (Fornell & Larcker, 1981). High AVE values indicated that the constructs—Dynamic Capabilities (DCC), Business Intelligence Analytic Capabilities (BIAC), and Market Performance (MARKPERF)—adequately captured the variance of their respective items. and reliability of this study were established through rigorous analysis of the measurement model. Convergent validity assesses whether the items that are theoretically related to a construct correlate strongly with it. We checked how reliable our measurements were using Cronbach's alpha and Composite Reliability (CR). Both exceeded the recommended mark of 0.70, which shows that the items in our scale are consistent (Nunally, 1978). The Cronbach's alpha for DCC, BIAC, and MARKPERF was between 0.88 and 0.92, meaning they're quite reliable. Overall, this means our measurements are solid and trustworthy, helping us understand the connections between the main variables in this study.

Hypothesis Testing:
Haynes PROCESS Macro (Model 4) has been used to study the mediation and moderation effects of Business Intelligence Analytic Capabilities (BIAC), between the Dynamic Capabilities (DCC), and Market Performance (MARKPERF) .

H1: The Direct Effect of DCC on MARKPERF
The first hypothesis checked if DCC positively impacts MARKPERF. The results showed a -ve direct effect of DCC on MARKPERF ($\beta = -0.495$, $p = 0.029$). This means that even though we expect dynamic capabilities to boost performance, their immediate effect might be limited due to operational issues, lack of resources, or being out of touch with market needs. This finding reveals that having dynamic capabilities doesn't guarantee better performance, but would be beneficial to the organisation only when those capabilities aren't being used effectively or aligned with decisions.

H2: The Mediating Role of BIAC
The second hypothesis looked at BIAC as a mediator between DCC and MARKPERF. The results reveal that BIAC mediates the relationship, with an indirect effect of $\beta = 1.474$ (BootLLCI = 1.048, BootULCI = 1.904). The results can be understood that Dynamic Capabilities only boosts performance when BIAC helps organizations make sense of data. Business Intelligence Analytic Capabilities links adaptability (DCC) to practical strategies, by making sure that the Dynamic Capabilities matches the market needs. Having a solid Business Intelligence setup helps companies spot trends, predict market changes, and make well-informed decisions. This mediation effect shows just how important analytics are for using dynamic capabilities to get the best market results.

H3: The Moderating Role of BIAC

The third hypothesis of the study is that Business Intelligence Analytic Capabilities plays a moderation role between DCC and MARKPERF. The analysis results reveal that the interaction effect is non-significant ($p = 0.083$), indicating that BIAC does not alter the strength of the relationship between DCC-MARKPERF. The result also suggests that Business Intelligence Analytic Capabilities function as an effective mediator than as a moderator. The results directly facilitate the translation of dynamic capabilities into performance gains rather than influencing the fundamental strength of their relationship. While BIAC enhances the process of capability utilization, its role as a moderator may be overshadowed by other contextual factors such as organizational culture, leadership, or market conditions (Wixom & Watson, 2010). There exists a +ve and significant ($\beta = 0.979$, $p < 0.0001$) total effect of DCC on MARKPERF. The results reveal the influence of dynamic capabilities towards market performance when mediated by BIAC. The positive indirect effect through BIAC results in a relationship between DCC and MARKPERF. The negative direct effect of DCC highlights the resource-intensive nature of dynamic capabilities, suggesting that firms must overcome short-term inefficiencies to realize long-term benefits. The significant mediation by BIAC confirms its critical role as an enabler of organizational adaptability, demonstrating that firms must integrate advanced analytics into their decision-making frameworks to fully leverage dynamic capabilities.

Mediation Analysis:

Haynes PROCESS Macro (Model 4) mediation analysis gives insights on how Dynamic Capabilities (DCC), Business Intelligence Analytic Capabilities (BIAC), and Market Performance (MARKPERF) are related. The results show that DCC has a direct -ive impact on MARKPERF ($\beta = -0.495$, $p = 0.029$), and the indirect effect through Business Intelligence Analytic Capabilities (BIAC) is positive and strong ($\beta = 1.474$, BootLLCI = 1.048, BootULCI = 1.904). This indicates that BIAC plays a mediating role between DCC and MARKPERF, amplifying the positive impact of dynamic capabilities on market performance. The analysis also confirms the role of BIAC in translating the adaptability offered by DCC into actionable market strategies. Moreover, the total effect of DCC on MARKPERF ($\beta = 0.979$, $p < 0.0001$) is positive and statistically significant. It also indicates that the overall influence of DCC, when mediated by BIAC, is beneficial. However, the interaction analysis showed no significant moderation effect ($p = 0.083$), implying that the strength of the DCC-MARKPERF relationship does not depend on varying levels of BIAC. These results underscore the importance of BIAC as a mediator rather than a moderator, highlighting its role as a facilitator in enhancing organizational performance by effectively leveraging dynamic capabilities. This interpretation contributes to a deeper understanding of the mechanisms linking organizational adaptability to market success.

Findings and Interpretations:

Dynamic Capabilities and its Direct Effect

DCC and MARKPERF were tested to evaluate whether dynamic capabilities, by themselves, positively influence market performance. The results indicate a DCC has a negative direct effect on MARKPERF ($\beta = -0.495$, $p = 0.029$). The values challenge the common assumption DCC universally enhances performance and the direct implementation of DCC without adequate analytical support or operational alignment may not immediately translate into improved market outcomes. Dynamic capabilities are inherently resource-intensive, requiring investments in sensing, seizing, and transforming processes. The negative direct effect may reflect the short-term costs or inefficiencies associated with building and deploying these capabilities. For example, organizations may face resistance to change, implementation delays,

or inefficiencies in reallocating resources (Ambrosini & Bowman, 2009). These challenges can overshadow the potential performance benefits in the absence of enabling mechanisms like BIAC.

Hypothesis Testing: Direct, Indirect, Total, and Moderation Effects

Relationship Tested	Path Coefficient (β)	p-value	BootLLCI	BootULCI
DCC → MP (Direct)	-0.495	0.029 *	—	—
DCC → MP (Indirect via BIAC)	1.474	—	1.048	1.904
DCC → MP (Total)	0.979	<0.0001 **	—	—
DCC × BIAC → MP(Moderation)	—	0.083 (ns)	—	—

Note. DCC = Dynamic Capabilities; BIAC = Business Intelligence Analytic Capabilities; MARKPERF = Market Performance.
**p < .05, **p < .001, ns = not significant.*

Mediating Role of Business Intelligence Analytic Capabilities

The analysis reveals that BIAC has a mediating role between DCC and MARKPERF. Indirect effect of DCC on MARKPERF through BIAC was significantly positive (β = 1.474, BootLLCI = 1.048, BootULCI = 1.904). This mediation results can be understood that BIAC plays a critical role that helps organisation translate the adaptive potential of DCC into actionable strategies and in turn enhance market performance. The results correlate with the findings of Popvic that BIAC serves as a bridge between DCC and MARKPERF by enabling firms to process real-time data, derive actionable insights, and align their dynamic capabilities with market demands (Popovič et al., 2012). Wixom and Watson contend that sensing capabilities allow organisations with robust BIAC systems to better identify emerging trends, while seizing capabilities benefit from BIAC's ability to forecast the potential outcomes of strategic decisions and Transforming capabilities, supported by BIAC, can ensure efficient reconfiguration of resources in alignment with market needs (Wixom & Watson, 2010). This finding transcends that organisations should invest in building their analytical infrastructure and expertise to ensure that dynamic capabilities are effectively operationalized. Firms that fail to integrate BIAC into their strategic processes may struggle to realize the full potential of their dynamic capabilities, limiting their impact on performance outcomes.

Total Effect of DCC on MARKPERF

The total effect of DCC on MARKPERF is significantly positive (β = 0.979, p < 0.0001). Despite the negative direct effect, the mediation by BIAC enhances the overall impact of DCC, indicating that dynamic capabilities can drive performance when supported by strong analytical capabilities. The positive total effect suggests that dynamic capabilities, when effectively mediated by BIAC, contribute to superior market performance by fostering organizational adaptability, operational efficiency, and customer responsiveness. This aligns with the broader literature on RBV, emphasizing complementary resources and capabilities in achieving competitive advantage (Barney, 1991; Teece, 2007).

Moderating Role of Business Intelligence Analytic Capabilities

The study also tested the moderating relationship of BIAC between DCC and MARKPERF. The interaction term was found to be non-significant (p = 0.083), suggesting that the strength of the DCC-MARKPERF relationship does not depend on the varying levels of BIAC. The absence of a moderation effect indicates that BIAC functions more as a mediator than a

moderator in this context. While BIAC facilitates the translation of dynamic capabilities into market performance, its level does not alter the fundamental relationship between these variables. This finding may be attributed to the fact that BIAC is a process-oriented capability that directly integrates with DCC rather than acting as an external contextual factor.

Theoretical Implications

By demonstrating the nuanced role of BIAC in the Dynamic Capabilities framework the study contributes to existing literature. Specifically:

Mediation Role: BIAC emerges as an enabler that amplifies the effectiveness of DCC, supporting the view that analytics is critical for operationalizing organizational adaptability (Elbashir et al., 2008).

Indirect Pathways: The study highlights that the performance benefits of DCC are not automatic but depend on supporting mechanisms like BIAC to mitigate the short-term inefficiencies associated with capability deployment.

Integration of RBV and Analytics: The findings extend the RBV by emphasizing BIAC as a complementary resources that enhances the value of DCC.

Practical Implications

The study gives useful tips for managers in fast-changing industries:

Investment in BIAC: Companies should focus on building strong BIAC systems with good infrastructure, skilled staff, and solid management practices. This will help use DCC better to improve market results.

Managing Dynamic Capabilities Deployment: Businesses need to be aware of the short-term costs of setting up DCC and try to match these new tools with their analytical abilities to cut down on waste.

Data Driven Decision Making: Business Intelligence Analytic Capabilities can help companies in identifying market trends, predict opportunities, and reconfigure their resources more easily, making it a key in framing organisational strategies that depends on adapting to change.

The research points out how important business intelligence analytic capabilities (BIAC) are for boosting the dynamic capabilities (DCC) on market performance. DCC by itself doesn't guarantee better results, but when paired with BIAC, it helps companies to adapt into real market success. Organizations need to link their dynamic capabilities with analytical tools and techniques to handle the challenges of volatile markets in order to stay competitive.

Discussions:

The study adds to the body of knowledge on business intelligence and dynamic capabilities by emphasizing the function of BIAC in a mediating role between DCC and market performance. The negative direct effect of DCC on market performance suggests that organizations may face initial challenges in implementing dynamic capabilities, which is consistent with the notion that these capabilities require time to mature and yield positive results (Teece, 2007). However, the significant indirect effect through BIAC indicates that organizations can leverage their business intelligence systems to enhance the effectiveness of dynamic capabilities, aligning with the resource-based view and emphasizing on organizational capabilities (Barney, 1991).

Correlation Analysis:

A significant relationship is observed by the correlation analysis between Market Performance (MARKPERF), Business Intelligence Analytic Capabilities (BIAC), and Dynamic Capabilities

(DCC). MARKPERF shows a highly positive correlation with both BIAC (0.875) and DCC (0.863). The correlation value indicates that organisations that make significant improvements in their BIAC and DCC can achieve better market outcomes. Further, the strong correlation between BIAC and DCC (0.993) suggests that organisations with advanced BIAC capabilities are likely to possess strong dynamic capabilities. These findings support the importance of integrating both BIAC and DCC for sustained competitive advantage and improved organizational performance (Teece, 2007; Trkman et al., 2010).

Table 1. Correlation Matrix

	MARKPERF	BIAC	DCC
MARKPERF	—		
BIAC	0.875***	—	
DCC	0.863***	0.993***	—

Note: Significant at the 0.01 level (2-tailed).

Market Performance and Business Intelligence Analytic Capabilities:

From the above table it is inferred that the Pearson correlation between MARKPERF and BIAC is 0.875 and is significant at $p < 0.01$ level and indicates that as businesses improve their analytics capabilities, their market performance also improves. The results of the correlation analysis match up with the study by Trkman et al., 2010; Popovič et al., 2012 that contends companies with solid BI systems make better data-driven decisions, which helps them do well in the market. Good BI systems allow firms to gather useful insights, react to market changes, and boost overall performance.

Market Performance and Dynamic Capabilities:

The table values also indicate the Pearson correlation between MARKPERF and DCC is 0.863 and is significant at $p < 0.01$ level. The values indicate a positive relationship between the variables and means that dynamic capabilities, which help businesses adjust to shifting market conditions, are linked to better market performance. These finding align with the earlier study by Teece, 2007; Helfat & Peteraf, 2003 that emphasizes how important dynamic capabilities are for driving performance, allowing companies to innovate, take chances, and stay ahead of the competition.

Business Intelligence Analytic Capabilities and Dynamic Capabilities:

The correlation coefficients between BIAC and DCC is at 0.993 at significance of $p < 0.01$level. This value indicates a strong positive correlation indicating that companies with better business intelligence capabilities tend to have strong dynamic capabilities. BIAC helps make dynamic capabilities more effective by providing insights for adjusting resources based on market demands (Wixom & Watson, 2010; Davenport & Harris, 2007). These strong correlations back up the idea that both BIAC and DCC are important for improving market performance. They also show that these skills can work well together in a company, boosting overall performance.

Reliability Analysis:

To guarantee the consistency and dependability of the study items Cronbach's alpha was used to analyse the constructs used in the study to evaluate internal consistency. A Cronbach's **α** value of 0.7 or greater was deemed appropriate. The alpha value obtained is presented in the table below. The consistency of the study instrument is tested with the reliability analysis conducted using SPSS. The mean score is 4.43 and it indicates a high level of agreement or favorable perception among respondents. The standard deviation (SD = 0.420), which is low reflects minimal variability in the responses, suggesting consistency among the participant feedback. Cronbach's alpha value is 0.945 and McDonald's omega value is 0.945 and both are higher than the generally accepted threshold of 0.7 for reliability, and that indicates excellent

internal consistency (Nunnally, 1978; Revelle & Zinbarg, 2009). The equivalence between the two reliability coefficients further strengthens the testimony that the scale items measure the same underlying construct. High reliability ensures that the data is robust for further statistical analyses and contributes to the validity of the study's findings.

Table 2. Scale Reliability Statistics

	Mean	SD	Cronbach's α	McDonald's ω
scale	4.43	0.420	0.945	0.945

Kaiser-Meyer-Olkin and Bartlett's Test:

The sampling adequacy value was assessed to be 0.820 for the entire sample. Bartlett's sphericity test reveals a significant correlation between the variables (p=0.000). The KMO and Barlett's tests prove that the data is suitable for factor analysis. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity indicate that the data is highly suitable for Exploratory Factor Analysis (EFA). According to Kaiser's (1974) interpretation the values between 0.8 and 0.9 are considered meritorious and the value achieved in the analysis is 0.820 which is greater that the acceptable threshold.

Table 3. KMO and Bartlett's Test

KMO Measure of Sampling Adequacy.		.820
Bartlett's Test of Sphericity	Approx. Chi-Square	2790.210
	df	276
	Sig.	0.000

The suggestions of Hair et al., 2014 indicate the study data is suitable for conducting factor analysis. This result suggests that the dataset exhibits sufficient correlations among the variables, indicating that the sample is adequate for factor analysis (Hair et al., 2014). The Bartlett's Test of Sphericity with a Chi-Square value of 2790.210 in a p-value of 0.000. The strong KMO value and significant Barlett's test confirms the data is suitable for conducting Exploratory Factor Analysis, suggests the variables are sufficiently correlated providing confidence in the model's ability to explain the variance among the study variables.

Conclusion:

The data analysis and the study findings reveal the relationships between Dynamic Capabilities (DCC), Business Intelligence Analytic Capabilities (BIAC), and Market Performance (MARKPERF). The hypothesis tests confirm the critical associations among the vairables and provides practical implications to improve organizational performance and innovation. The results emphasize the importance of dynamic capabilities in enhancing firms' ability to in transforming opportunities within volatile business environments (Teece, Pisano, & Shuen, 1997). This study highlights that dynamic capabilities positively influence market performance, while also shedding light on the mediating and moderating roles of business intelligence analytic capabilities. The correlation analysis reveals that Dynamic Capabilities (independent variable) and Business Intelligence Analytic Capabilities (mediating variable) are significantly associated with Market Performance (dependent variable). The correlation value (r = 0.875) between BIAC and MARKPERF indicates strong corrlation among the variables ; r = 0.863 between DCC and MARKPERF indicates that the variables are highly interrelated. This indicates that firms with superior dynamic capabilities and advanced BIAC infrastructure exhibit a higher likelihood of achieving improved market performance (Mikalef et al., 2019).

The study also provides reliability and validity of the scales, as indicated by Cronbach's alpha and McDonald's omega values (0.945), that confirm the internal consistency and reliability (Nunnally & Bernstein, 1994).
Exploratory Factor Analysis (EFA) test results also validated the dimensionality of the constructs, supported by the KMO measure of 0.820 and a significant Bartlett's test ($p < 0.001$), indicating the suitability of the data for factor extraction. The model fit indices—although requiring further refinement—offered foundational evidence for the overall robustness of the relationships hypothesized. Such findings align with previous studies asserting that dynamic capabilities alone may not fully translate into superior performance outcomes unless mediated by advanced analytical capabilities (Tallon, 2011; Teece, 2018).
Theoretically, the research extends the Dynamic Capabilities View (DCV) framework by integrating Business Intelligence Analytic Capabilities as a critical enabler of performance outcomes. This aligns with the evolving discourse that organizational innovation and competitive advantage are driven by firms' ability to leverage big data analytics and BI systems to make data-driven decisions (Chen, Preston, & Swink, 2015). Practically, the study provides actionable insights for managers in IT and ITES industries, emphasizing the importance of developing BI infrastructure, management expertise, and personnel capabilities to enhance market performance.

The study points out some limitations, like issues with how well the model fits and some unexpected relationships that need more digging into. Future research could tackle these by using bigger sample sizes, trying out different modeling methods, or looking at the data over a longer time to confirm the findings. By bridging the gap between dynamic capability theory and BI analytics, the study makes a meaningful contribution to organizational performance literature, offering both researchers and practitioners an understanding of how firms can innovate and thrive in today's competitive landscape.

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